

GBC GLOBAL BUSINESS CONFERENCE

Global Business Conference 2019 Proceedings

Doing Business in a Turbulent Environment

ISSN 1848-2252



Editors:

Joe Hair, PhD

Zoran Krupka, PhD

Goran Vlašić, PhD

Sep 25th – 28th, 2019
Sibenik, Croatia



10th ANNUAL GLOBAL BUSINESS CONFERENCE
Sibenik, September 25th – 28th, 2019

Editors:

Joe Hair, PhD
Zoran Krupka, PhD
Goran Vlašić, PhD

Program Committee:

Goran Vlašić (University of Zagreb, Croatia), Program Committee Co-Chair
Zoran Krupka (University of Zagreb, Croatia), Program Committee Co-Chair
Amaryllis Audenaert (University of Antwerpen, Belgium)
Monika Bédiová (Mendel University in Brno, Czech Republic)
Mária Bláhová (University of Economics in Bratislava, Slovakia)
Carlos Burcio (ISCTE-IUL, Portugal)
Ronel Du Preez (Stellenbosch University, South Africa)
Joe Hair (University of South Alabama, USA)
Bradley Kalgovas (University of New South Wales, Australia)
Daniela Martinez Laureiro (ETH Zurich, Switzerland)
Jürgen Moormann (Frankfurt School of Finance & Management, Germany)
Pat Obi (Purdue University Northwest, USA)
Iwona Otola (Czestochowa University of Technology, Poland)
Jurica Pavičić (University of Zagreb, Croatia)
Norman Peng (Glasgow Caledonian University, UK)
Cristina Helena Pinto de Mello (ESPM, Brazil)
Aušra Repečkienė (Kaunas University of Technology, Lithuania)
Mario Situm (University of Applied Sciences Kufstein, Austria)
Veronika V. Tarnovskaya (Lund University, Sweden)
Gabriele Troilo (Bocconi, Italy)

Organizing Committee:

Filip Vrhovnik, Organizing Committee chair
Krešimir Kežman
Lidija Majer
Fran Živković

Publisher:



Innovation Institute
Zagrebačka cesta 192, Zagreb

For Publisher:

Lidija Majer

All contributions were subjected to the double blind review process by two expert reviewers.

Copyright © 2019 by Innovation Institute. All rights reserved including the right of reproduction in whole or in part in any form.

ORGANIZER



GENERAL PARTNER



Content

The Case for Using Neuro-Physiological Measures to Better Understand Sub-Conscious Emotional Responses to Marketing Stimuli <i>Christo Boshoff</i>	5
Exploring the Structure of Citizenship Behaviors Within an Online Community on Facebook <i>Mia Bothma, Estelle van Tonder</i>	6
The Influence of Private Social Media Usage by Employees on the Reputation Risk of Companies <i>Alexandra Brunner-Sperdin, Mario Situm</i>	7
Shopping Malls in South Africa and Germany – Changing Use and Customer Concerns <i>Thomas Dobbstein, Roger B. Mason, Karen M. Corbishley</i>	8
EU Regional Policy and Development in Spain: Capital Widening and Productivity Stagnation Over 1989-2010 <i>Andres Faiña, Jesus Lopez-Rodriguez, Paulino Montes-Solla</i>	10
A Simpler View of Cultural Attributes and its Application to International Management <i>Kamal Fatehi, Reza Vaezi</i>	29
National Culture, Corruption, and Contract Enforcement: A Mediated model <i>Ryann McLeod Glushek, Robert L. Engle</i>	41
Tourism as an Important Factor for Creating Nominal Effective Exchange Rates: How Does it Impact on Exports and Imports of Services in the Czech Republic? <i>Tomáš Heryán</i>	42
Pet Consumer Values: Values Between Consumers and Companion Animals <i>Marcos Iazzetti, Vivian Iara Strehlau</i>	54
HRM in SMEs – A Literature Review and Suggestions for Future Studies <i>Christiane Ksienzyk</i>	55
Income Disparities in Ecuador Over 2007-2014: A Geographical Economics Approach <i>Jesus Lopez-Rodriguez, Jorge Guido Sotomayor-Pereira</i>	56
Innovation and Culture as Dynamic Capabilities: The Case of a Vertically Integrated Sawmilling Company <i>Tshepo Malumane, Suzaan Hughes</i>	77
Evolution of the Challenges of Internationalization of Emerging Market SMEs in a Digitized Global Economy: A Bibliometric Analysis <i>Bernardo Muñoz Angosto, Rosario García Cruz, Jesús García de Madariaga</i>	94
Mechanisms of Corporate Culture Transformation in Companies and State Corporations in the BRICs Countries <i>Sergey Myasoedov, Emil Martirosyan, Anastasia Sergeeva, Yulia Bronnikova</i>	106

Smart Destinations as Method to Rethink Tourism Marketing: A Simplified Method That Any Business or Destination Can Implement It! <i>Fernando Nahat Jardim, Cristina Helena Pinto de Mello</i>	115
Determinants of Dynamic Banking Efficiency in Central and Eastern Europe Countries <i>Iveta Palečková</i>	127
Selected Approaches to Sustainable Development of Corporate Reputation – The Reputation of Family Owned Businesses in the Face of Turbulent Environment <i>František Pollák, Nella Svetozarovová, Jozef Simko</i>	128
The Influence of Online Marketing Communication Tools to Consumers' Perception and Purchase Decision via Online Stores <i>Santidhorn Pooripakdee</i>	139
Evaluation of Expense Ratio of Selected Insurance Companies Operating on the Czech Insurance Market in 2004-2017 <i>Lenka Přečková</i>	151
Usefulness of Comprehensive Income Reporting in Selected Polish Companies <i>Artur Sajnóg</i>	152
Navigating Institutional Voids: A Managerial Perspective on the Competitiveness of Selected African Countries <i>Frances Scholtz, Suzaan Hughes</i>	164
The Use of Controlling for Corporate Management in Western Austrian Companies: An Empirical Analysis <i>Mario Situm, Stefan Märk</i>	179
Leadership as a Core Competence to Productive Service Delivery in a South African Municipality <i>Kariena Strydom, Zimkhitha Katywa</i>	180
Common Challenges Faced by SMEs Within a South African District <i>Louis Jacobus Van Staden, Jan J. H. Myburgh</i>	181
Operational Risk Disclosure and Ownership Structure: A Study on Banking Industries <i>Surya Widyaningsih, Doddy Setiawan</i>	182

The Case for Using Neuro-Physiological Measures to Better Understand Sub-Conscious Emotional Responses to Marketing Stimuli

Christo Boshoff

Stellenbosch University

South Africa

E-mail: cboshoff@sun.ac.za

Abstract

The purpose of this paper is to review contemporary neurophysiological research methodologies, and secondly to explore its potential value and contribution as a research methodology that can be used in a variety of marketing-related research.

Exploring the Structure of Citizenship Behaviors Within an Online Community on Facebook

Mia Bothma

Faculty of Economic and Management Sciences
North-West University
Private Bag X6001, Potchefstroom 2520, South Africa
E-mail: mia.bothma@nwu.ac.za

Estelle van Tonder

Faculty of Economic and Management Sciences
North-West University
Private Bag X6001, Potchefstroom 2520, South Africa
E-mail: 25621610@nwu.ac.za

Abstract

In the existing turbulent business environment, online communities provide various benefits to members and organizations (Park et al., 2018; Cunha et al., 2019, Chiu et al., 2019). However, to receive and provide benefits, online communities need to be effective and successful. Extant research established that voluntary participation also known as online community citizenship behaviors (OCCB) is key to the successful functioning of online communities. Although various OCCB dimensions have been identified, helping intentions, policing and feedback intentions seem to be the most relevant dimensions in online communities, which include city residents. However, an in-depth understanding of these dimensions is lacking. The study therefore aimed: 1) to explore the underlying structure of the dimensions; and 2) to determine whether these dimensions are directed towards administrators or towards members of online communities. A descriptive research design was followed, where 500 usable questionnaires were obtained through online surveys among active members of residential online activity communities on Facebook. Data analysis included exploratory (EFA) and confirmatory factor analysis (CFA). The EFA determined the underlying structure of the OCCB dimensions while the CFA confirmed discriminant, convergent and construct validity of the measurement instrument. Ultimately, the research findings provided: 1) an original and in-depth understanding of OCCB dimensions as measured by the three sub dimensions; 2) an empirical explanation of the aspects that are included in each of the dimensions; and 3) an advanced knowledge of the receivers of these behaviors, which can guide administrators to develop targeted strategies to improve the functioning of the community.

Keywords

Online communities, online community citizenship behaviors, helping intentions, feedback, policing

The Influence of Private Social Media Usage by Employees on the Reputation Risk of Companies

Alexandra Brunner-Sperdin

University of Applied Sciences Kufstein
Andreas Hofer-Straße 7, 6330 Kufstein, Austria
E-mail: alexandra.sperdin@fh-kufstein.ac.at

Mario Situm

University of Applied Sciences Kufstein
Andreas Hofer-Straße 7, 6330 Kufstein, Austria
E-mail: mario.situm@fh-kufstein.ac.at

Abstract

The future sustainability of companies nowadays depends on a proper management of its corporate reputation. Reputational risk caused by employees thus negatively impacts corporate reputation and corporate financial performance. The aim of this study was to analyze, whether the reputational risk inherent in the private usage of social media by employees negatively impacts the reputation of companies. Additionally, the study addresses the awareness of this reputational risk and strategies how to measure and manage this risk accordingly. We empirically examine the effect of private social media use on corporate reputation with 15 experts, who are experienced in the field of marketing and risk management. The transcribed interviews had been finally analyzed using qualitative content analysis. The results show that the social media behavior of employees plays a crucial role for the reputation of a company. However, the respondents were not always aware that the reputational risk caused by private usage of social media of their employees could have a negative effect on corporate reputation. We conclude that the current risk management systems in use do not consider and cover this risk. Additionally, the experts struggled to estimate the likelihood of occurrence and the impact of this reputational risk on corporate performance. These results indicate, that there is a lack of experience for this relatively new type of risk and that actually the number of cases is at a low level. The experts realize the problem and expect that this type of risk may occur more often in the future, so that specific measures must be taken into consideration to manage the risk. This research contributes to the better understanding of managing and measuring reputational risk through social media use of employees.

Keywords

Risk management, social media

Shopping Malls in South Africa and Germany – Changing Use and Customer Concerns

Thomas Dobbelstein

Baden-Württemberg Cooperative State University
Ravensburg, Germany
and
Department of Marketing & Retail Management
Durban University of Technology
Durban, South Africa
E-mail: Dobbelstein@cr42.de

Roger B. Mason

Department of Marketing & Retail Management
Durban University of Technology
Durban, South Africa
E-mail: rogerm@dut.ac.za

Karen M. Corbishley

Department of Marketing & Retail Management
Durban University of Technology
Durban, South Africa
E-mail: karenc@dut.ac.za

Abstract

Based on the decline in development of new, and the use of existing, shopping malls that is happening in the USA due mainly, it seems, to e-shopping, a comparative study was conducted to investigate perceptions of shopping malls and their use in Germany (a developed country) and South Africa (a developing country). Are attitudes towards mall shopping changing, or are there other factors influencing changes in mall shopping, e.g. increase in e-shopping, lack of security (especially effect of crime in South Africa), preference for localized shopping, etc.?

The results are grounded on 819 online interviews (403 South Africa, 416 Germany) based on an online access panel. Quotas for gender, age and income for Germany and Living Standards Measures 7 to 10 for South Africa were given to ensure that the countries' populations are represented.

The single items are measured on 7-point Likert-type scales and checked with a factor analysis showing environment, change in use, internet, economic reasons, general attitude and location as the main independent factors. Cronbach's Alpha coefficients are 0.84 or higher.

The main findings are that South African consumers are increasingly using shopping malls, whereas German consumers are using malls slightly less than they did 2 to 3 years ago.

Recommendations for shopping malls are that South Africans would like to see better entertainment and unique experiences in malls, while Germans would like to see malls developing a stronger identity, integrating themselves more into their communities and acting for the good of the communities they serve.

Keywords

Malls, shopping center, shoppertainment, shopping experience, mall patronage

EU Regional Policy and Development in Spain: Capital Widening and Productivity Stagnation Over 1989-2010¹

Andres Faiña

Universidade da Coruña
Grupo Jean Monnet de Competitividade e Desenvolvemento na Unión Europea (C+D)
Facultade de Economía e Empresa
Campus de Elviña, 15071 A Coruña, Spain
E-mails: fai@udc.es

Jesus Lopez-Rodriguez

Universidade da Coruña
Grupo Jean Monnet de Competitividade e Desenvolvemento na Unión Europea (C+D)
Facultade de Economía e Empresa
Campus de Elviña, 15071 A Coruña, Spain
E-mail: jesus.lopez.rodriguez@udc.es

Paulino Montes-Solla

Universidade da Coruña
Grupo Jean Monnet de Competitividade e Desenvolvemento na Unión Europea (C+D)
Facultade de Economía e Empresa
Campus de Elviña, 15071 A Coruña, Spain
E-mail: paulino.montes.solla@udc.es

Abstract

Total Factor Productivity (TFP) in Spain over 1989-2010 has followed a decreasing trend. This paper seeks to answer to what degree the investments in transport infrastructure supported by the European Union Regional and Cohesion policy (EUINFP) prevented TFP over this period from falling further. Using an augmented Mankiw-Romer-Weil (1992) model we derive an econometric specification for the value added per worker where, besides the traditional factors of productions, it incorporates as TFP growth enhancing drivers EUINFP, Research and Development expenditures (RD), the interactions between EUINFP and business capital and the interactions between EUINFP and the labor market.

We estimate this specification for the 17 Spanish regions over the period 1989-2010 and find positive marginal contributions on the TFP growth rate for EUINFP, RD, and the interdependencies between EUINFP and private capital. These factors partially offset the dismal TFP performance of Spain over this period.

¹ The second author acknowledges the support received from the Spanish Ministry of Economy and Competitiveness and the European Regional Development Fund (ERDF) [project ECO2015-68597-P (MINECO/FEDER)]. The third author would like to acknowledge the financial support of scholarships UDC-Inditex 2014 for his predoctoral stay at the IC2 Institute (University of Texas at Austin). The usual disclaimer applies.

Key Words

Regional development, infrastructures, European regional development fund, cohesion fund, Spain, total factor productivity

1. Introduction

The economic path followed by Spain in the 1990s and 2000s led to an economic growth process mainly characterized by a large investment effort in human capital, business capital and environmental, social and transport infrastructure projects. Despite the important increases in the capital stocks associated to these investments, the intense process of jobs creation of the Spanish economy over the 90s up until the onset of the so-called *great recession* (end of 2007, beginning of 2008) came at the cost of keeping capital and output per worker (labor productivity) stagnated or even with slight decreases (particularly labor productivity) from the mid-nineties until 2007. In sum, during this period Spain featured a growth model based on factor accumulation rather than productivity gains. To put some figures, for instance during the 1995-2007 Spanish expansion prior to the *great recession*, while GDP grew at 3.5% per year, Total Factor Productivity (TFP henceforth) fell at an annual rate of 0.7%². Understanding the causes of the low productivity and finding the ways of boosting it is key to overcome the vulnerabilities of the Spanish economy and became one of the priorities of the investments carried out by the European Union (EU) regional and cohesion policy. A very recent research on the sources of this productivity stagnation in Spain was carried out by Garcia-Santana et al. 2016. These authors using a firm-level dataset over the period 1995-2007 from the Central Balance Sheet *data (Central de Balances Integrada (CBI) in Spanish)* computed different measures of allocative efficiency pointing out that an increase in misallocation of capital and labor across firms within each industry is at the root of this negative TFP growth. Using roughly the same time frame (1995-2008), Escribá and Murgui (2011) analyzed the regional and sectoral determinants that explain the heterogeneity of TFP growth across 10 branches of economic activity in the manufacturing and private services sector of the 17 Spanish regions (*Comunidades Autonomas*). Escribá and Murgui (2011) regress regional TFP levels on a series of explanatory variables that take into account the levels of sectoral specialization, market size, diversification, human capital, infrastructures and technological capital (share of private RD stocks on private capital stock). From their results they emphasize as policy recommendations the need to improve the skills and research and development expenditures (RD) at sectoral level.

The intense process of capital accumulation experienced by the Spanish economy during the nineties and 2000s took place with the support of the EU regional and cohesion policy. Spain was one of the main recipients of Structural and cohesion funds over this period since many of its regions were under the category of *objective 1 regions*³ and the allocations of funds were mainly to support agriculture and rural development, business and tourism, investment in education and various measures that improve human capital, investments in infrastructure, transport and environment. However, the increasing number of studies focusing on the estimation of the impact of EU regional policies that appeared after the second half of the 90's had mixed results. Indeed, some studies do not find significant impact of the funds (Crescenzi, Fratesi & Monastiriotis, 2017; Dall'erba & Le Gallo, 2008), others find very modest impacts (Rodriguez-Pose & Fratesi, 2004) and some others find positive impacts (Brandsma et al., 2014).

² This is in sharp contrast to the results on TFP growth over the same period for the United States (+0.6%) and the European Union (+0.4%).

³ NUTS level II areas in the Nomenclature of Territorial Units for Statistics developed by Eurostat with a per capita gross domestic product (GDP) lower than 75 % of the Community average. Objective 1 regions were the recipients of the highest amount of structural and cohesion support.

In this context, this paper relates to these two strands of the literature, Spanish TFP dismal performance during the fast factor accumulation decades before the crisis and the impact of EU regional policies on regional and local development, by seeking to answer to which extend RD expenditures and the investments in transport infrastructure supported by the EU regional and cohesion policy contribute to preventing the negative trend of Spanish TFP over this period from falling further. The originality of our approach does not rely on the type of model we use for our purposes. Indeed, we base our theoretical framework on the famous Mankiw, Romer and Weil (1992) growth model. However, unlike previous contributions we incorporate among the TFP drivers of the model the transport infrastructure investment in programs supported with EU and national funds (EUINFP)⁴. The second originality of our paper consists of incorporating as an additional TFP driver in the growth model the interactions between private investments and cohesion policy investments borrowing the ideas put forward by Redding (1996) in his analysis of the synergies between RD and skills in an endogenous growth model. With this TFP-augmented function we want to test for the existence of potential coordination failures and incentives to invest problem. In other words, we want to test whether the argument that the type of private investment changed (or improved) because the presence of the right public investments holds. Finally, the third originality that is incorporated in our TFP function is the effect of transport investments financed with EU and national funds (EUINFP) in the labor market. The idea behind this argument is to check whether the contribution of labor to the production function is enhanced by the EUINFP funded transport investments, i.e. if we can find additional marginal increases in labor productivity due to better matching.

Our results show that despite the productivity stagnation of the Spanish economy during the 1990s and 2000s, the contributions made by the transport infrastructure investments (EUINFP) and the expenditures carried out on Research and Development (RD) have partially prevented the Spanish TFP growth from falling further. Our results also point to the existence of synergies between private investments and transport infrastructure investments (EUINFP). Finally, the results do not support the argument of increases in labor productivity due to synergies between transport infrastructure investments (EUINFP) and the labor market.

The remainder of the paper is organized as follows: section 2 sets out the theoretical growth model and the empirical counterparts that account for the impact of transport infrastructure EU funding and the interdependencies between this funding and private investments as well as interdependencies in the labor market in a Mankiw-Romer-Weil world. Section 3 explains in detail the procedures we follow to compile the ERDF, CF and national funding data in transport infrastructure projects as well as the data and sources on the other variables we use to estimate the empirical specifications. Section 4 presents the results. Finally, section 5 concludes by very briefly framing our analysis and conclusions within the literature of the regional determinants of the economic crisis in Europe and paying special attention to the literature on regional resilience and the regional determinants of the recession (Crecenzi et al., 2017; Cuadrado-Roura, Martin & Rodriguez-Pose, 2016; Cuadrado-Roura & Maroto, 2016) and outlining some policy implications.

⁴ EUINFP includes national funding from the central and regional governments in transport infrastructure projects

2. A Growth Model for the Spanish Economy

The Model

We start our theoretical discussion by resorting to Mankiw-Romer-Weil (1992) model who augments the Solow model by including accumulation of human as well as physical capital. Additionally, and for the specific reasons related to our research goals- estimating the marginal contributions to the value added per worker of the different production factors- we break down physical capital into business capital and public capital (stock of infrastructures). Let us denote regions and years by the subindexes i and t , respectively. The starting point in our framework is based on the fact that total output of region i at time t , Y_{it} , is given by an aggregate Cobb-Douglas production function exhibiting constant returns to scale⁵ in the reproducible physical and human capital-augmented labor:

$$Y_{it} = A_{it} \cdot H_{it}^{\delta_h} \cdot K_{biz\ it}^{\delta_k} \cdot K_{inf\ it}^{\delta_g} \quad (1)$$

Where Y measures the total production of goods and services, H denotes the human capital-augmented labor used in production, K_{biz} denotes the stock of business aggregate capital, K_{inf} denotes the stock of public infrastructures, and finally, A stands for the aggregate level of technology or the so called total factor productivity (TFP). The coefficients $(\delta_h, \delta_k, \delta_g)$ denote the output elasticities with respect to human capital-augmented labor, business aggregate capital and the stock of transport infrastructures respectively. We assume that the sum of these output elasticities is equal to one, which implies that there are decreasing returns to both types of capital. By assuming that $H = hL$, where h represents the amount of human capital per worker and L represents the amount of labor (which is assumed to be homogenous across the regions of a country), the production function can be rewritten as:

$$Y_{it} = A_{it} \cdot (h_{it}L_{it})^{\delta_h} \cdot K_{biz\ it}^{\delta_k} \cdot K_{inf\ it}^{\delta_g} \quad (2)$$

Letting lower case letters denote variables normalized by the size of the labor force (so that $y_{it} = Y_{it}/L_{it}$ for example), then the production function in intensive form may be written as:

$$y_{it} = A_{it} \cdot h_{it}^{\delta_h} \cdot k_{biz\ it}^{\delta_k} \cdot k_{inf\ it}^{\delta_g} \quad (3)$$

Following Barro and Lee (2010), human capital per worker is assumed to have a relation to the number of years of schooling as follows⁶:

$$h_{it} = e^{\varphi(s_{it})} \quad (4)$$

Where $\varphi_{s_{it}}$ reflects the efficiency of a unit of labor in region i at year t with s_{it} years of education relative to one with no schooling $\varphi(0)=0$. Therefore, the derivative $\varphi(s)$ is the return to schooling estimated in a Mincerian wage regression (Mincer, 1974): an additional

⁵ Even though there is a huge amount of research on agglomeration economies and how important are increasing returns to scale to model this phenomenon, for the Spanish economy the assumption of a production function exhibiting constant returns to scale is compatible with estimations based on Spanish data (see for instance Escribá and Murgui (2011))

⁶ See also Klenow and Rodriguez-Clare (1997) and Hall and Jones (1999)

year of schooling raises a worker's efficiency proportionally by $\varphi(s)$. Note that if $\varphi(0)=0$ for all s , Eq. (3) is a standard production function with undifferentiated labor.

We further assume that $\varphi(s_{it})$ is linear,

$$h_{it} = e^{\varphi s_{it}} \quad (5)$$

The final factor in the production of output is the stock of technology, A . We assume that the aggregate level of technology in region i at time t is a function that depends of the following factors:

$$A_{it} = F(\Omega_t, rd_{it-1}, euinfp_{it-1}, K_{biz,it-1} euinfp_{it-1}, L_{it-1} euinfp_{it-1}) \quad (6)$$

Where all the determinants of the stock of technology are lagged one period to reflect that they normally affect technology in the following period.

- a) Ω_t which represents some amount of technological knowledge identical in all regions and grows at a constant rate λ in all regions. This part of the technological progress is a traditional assumption of the neoclassical growth model.
- b) rd_{it} which represents the yearly regional share of aggregate RD expenditures relative to regional output. Investment in RD has been thought to be one of the major sources of growth in output per worker. The empirical literature often uses RD expenditures to capture the observed growth in productivity (see for instance Escribá & Murgui, 2011; Lopez-Rodriguez & Martinez 2017)
- c) $euinfp_{it}$ which represents the yearly European Union and National Funding in Transport Infrastructure projects (% over transport infrastructure capital stock, $K_{inf_{it}}$). This boosting factor of the technological progress has also been used in the empirical estimations of the main drivers of TFP (see for instance Escribá & Murgui, 2011). The economic rationale behind this factor lies in the fact that the improvement in stock of infrastructures leads to an increase in firms' productivity
- d) $k_{biz,it} euinfp_{it}$ the theoretical rationale for including this argument in the functional form of the level of technology is based on Redding (1996) who produced a formal model of endogenous growth capturing the interplay between workers who invest in human capital and firms that invest in quality-augmenting RD. Borrowing Redding's ideas we add the synergies between private investments (changes in business capital stocks) and cohesion policy investments as an additional TFP growth driver so as to corroborate if the argument that the type of private investment changed (or improved) because the presence of the right public investments holds. In other words, with this additional argument in the TFP function we try to proxy the existence of a coordination failure and incentives to invest problem.
- e) $L_{it} \cdot euinfp_{it}$ Which proxies the existence of a better matching in the labor market thanks to the EU funded transport infrastructures. We expect a positive contribution of EU funds to the matching between demand for labor and supply of labor.

The factors we have defined in expression (6) are incorporated to our growth model (Eq. 7) by assuming they impinge on the TFP growth rate temporal trend. Therefore, the following functional form for the level of technology in region i at time t is defined:

$$A_{it} = \Omega_i \exp[(\beta_1 rd_{it-1} + \beta_2 euinfp_{it-1} + \beta_3 (K_{biz,it-1} euinfp_{it-1}) + \beta_4 (L_{it-1} euinfp_{it-1})) t] \quad (7)$$

Where $\Omega_i = \Omega_{0i} \exp(\lambda t)$ with Ω_{0i} denoting initial technology and λ standing for the average cumulative rate of growth of technology and $\beta_1, \beta_2, \beta_3$ and β_4 representing the boosting effects generated by RD expenditures, transport infrastructure ERDF and CF expenditures, the synergies between private investments and transport infrastructure EU funding and between the labor markets and transport infrastructure EU funding respectively on the average growth rate of TFP.

Substituting expressions (5) and (7) into equation (3) and taking into account the definition of Ω_i , the production function in intensive form may be rewritten as:

$$y_{it} = \Omega_{0i} \exp(\lambda t) \exp[(\beta_1 rd_{it-1} + \beta_2 euinfp_{it-1} + \beta_3 (K_{biz,it-1} euinfp_{it-1}) + \beta_4 (L_{it-1} euinfp_{it-1})) t] (\exp(\varphi s_{it}))^{\delta_h} (k_{biz,it})^{\delta_k} (k_{inf,it})^{\delta_g} \quad (8)$$

Taking logs in Eq. (8) the value added per worker is given by:

$$\ln y_{it} = \ln \Omega_{0i} + \lambda \cdot t + \beta_1 \cdot rd_{it-1} \cdot t + \beta_2 \cdot euinfp_{it-1} \cdot t + \beta_3 k_{biz,it-1} \cdot euinfp_{it-1} \cdot t + \beta_4 L_{it-1} \cdot euinfp_{it-1} \cdot t + \delta_h \cdot \varphi s_{it} + \delta_k \cdot \ln k_{biz,it} + \delta_g \cdot \ln k_{inf,it} \quad (9)$$

Empirical specification

In accordance to Mankiw, Romer and Weil (1992) we argue that the term Ω_{0i} should be interpreted as reflecting not just technology but as reflecting region-specific influences on growth such as resource endowments, climate, and institutions. Hence, we may assume that these differences vary randomly in the sense that:

$$\ln \Omega_{0i} = \gamma_i + \varepsilon_{it}$$

Where γ_i is the region-specific component and ε_{it} is the random component of Ω_{0i} . Eq. (9) therefore can be used to justified an error term. Hence the empirical counterpart of the theoretical growth model in Eq. (9) can be expressed as follows:

$$\ln y_{it} = \gamma_i + \lambda \cdot t + \beta_1 \cdot rd_{it-1} \cdot t + \beta_2 \cdot euinfp_{it-1} \cdot t + \beta_3 k_{biz,it-1} \cdot euinfp_{it-1} \cdot t + \beta_4 L_{it-1} \cdot euinfp_{it-1} \cdot t + \delta_h \cdot \varphi s_{it} + \delta_k \cdot \ln k_{biz,it} + \delta_g \cdot \ln k_{inf,it} + \varepsilon_{it} \quad (10)$$

The effects of the stock of regional public infrastructures on value added per worker captured by (K_{inf}) does not properly reflects a region's needs for transport infrastructures (Crescenzi et al., 2017). These depends on two crucial factors. On the one hand, a good measure of transport infrastructures endowments must consider the real regional need of transport infrastructures endowments on account of its size and population. Densely populated areas as well as very large regions need higher transport infrastructures endowments. To account for this, we weight stocks of regional public infrastructures (K_{inf}) by the geometric mean of both regional population and regional area. On the other hand, this measure must also consider how close a region is to its saturation level were transport infrastructure investments would eventually lose their capabilities to generate further growth and value added per worker increases⁷. We approach this saturation level by means of a comparing the region's transport infrastructure stock with a benchmark given by the best endowed region at the end

⁷ For regions with poor endowments of transport infrastructures, transport infrastructure investments have significant effects in output growth and value added per worker. As regions approach to adequate levels of transport infrastructure endowments, their capabilities to boost growth and value added per worker go through a decreasing path eventually reaching a saturation point.

of the period. These two features are taken into account by proposing an alternative measure of capital endowments (k_{infsat}) which mathematically is defined as follows:

$$K_{inf\ satit} = \frac{\frac{K_{inf,it}}{\sqrt{pop_{it} \cdot area_{it}}}}{\text{Max}_t \left(\frac{K_{inf,it}}{\sqrt{pop_{it} \cdot area_{it}}} \right)} \times 100 \quad (11)$$

The index varies in the range (0,100] taking the value 100 for the best-endowed region (the benchmark) and diminishing as we move towards the worst-endowed region. Substituting in Eq. (10), K_{inf} for this alternative measure of capital endowments (k_{infsat}) given by Eq. (11), yields to our second empirical counterpart:

$$\ln y_{it} = \gamma_i + \lambda \cdot t + \beta_1 \cdot rd_{it-1} \cdot t + \beta_2 \cdot euinf_{it-1} \cdot t + \beta_3 \cdot k_{biz,it-1} \cdot euinf_{it-1} \cdot t + \beta_4 \cdot L_{it-1} \cdot euinf_{it-1} \cdot t + \delta_h \cdot \varphi s_{it} + \delta_k \cdot \ln k_{biz,it} + \delta_g \cdot \ln k_{infsatit} + \varepsilon_{it} \quad (12)$$

Finally, a third measure ($k_{infarea}$) of the infrastructure capital stocks that takes into account the yearly regional endowment per km² relative to the yearly total national per square Km has been used⁸. Mathematically, the $k_{infarea}$ can be defined as follows:

$$k_{infareait} = \frac{\frac{K_{inf,it}}{Km_i^2}}{\sum_{i=1}^{17} \frac{K_{inf,it}}{Km_i^2}} \quad (13)$$

Substituting in Eq. (10), K_{inf} for this third measure of capital endowments ($k_{infarea}$) given by Eq. (13) and controlling also for the regional level of population yields to our third empirical counterpart:

$$\ln y_{it} = \gamma_i + \lambda \cdot t + \beta_1 \cdot rd_{it-1} \cdot t + \beta_2 \cdot euinf_{it-1} \cdot t + \beta_3 \cdot k_{biz,it-1} \cdot euinf_{it-1} \cdot t + \beta_4 \cdot L_{it-1} \cdot euinf_{it-1} \cdot t + \delta_h \cdot \varphi s_{it} + \delta_k \cdot \ln k_{biz,it} + \delta_g \cdot \ln k_{infareait} + pop_{it} + \varepsilon_{it} \quad (14)$$

All equations have been estimated by OLS using the fixed effects (FE) estimator (within estimator) to control for regional unobserved heterogeneity and to allow for arbitrary correlation between the regional fixed effects and the explanatory variables.

3. Data

This paper combines several sources of information to gather the data we need to carry out our estimations. Mainly four data sources, the Valencian Institute of Economic Research, (IVIE), the Spanish National Statistics Institute, (INE), The Spanish ministry of Education, Culture and Sports (MECS) and the former Spanish Ministry of Economics and Finance (MEF), have been used for the data regarding the main macroeconomic variables of the model (Value added per worker, human capital augmented-labor, business capital, infrastructure capital and research and development expenditures).

Data on the variable that proxies the transport infrastructures EU funding (euinf) has been obtained from the *European regional policy annual reports* issued from 1989 until 2010 by the Directorate General of Community funds of the Spanish ministry of Economics and Public

⁸ We thank a referee for suggesting us the estimation of this third alternative.

Finance (Known in the Spanish jargon as DG Fondos). Within the time frame of our empirical exercise we analyzed the information contained in the annual reports issued over the four *programming periods* since the Spanish adhesion to the EU, (1989-1993), (1994-1999), (2000-2006) and (2007-2013) on the amounts invested by region and year in transport infrastructures financed by the ERDF and Cohesion Fund, as well as central and regional governments funding (see more details in the data appendix). Table 1 describes variables, definitions and data source.

Table 1: Variables definition and sources

Variable	Definition	Source
lny_{it}	Log of Value added per worker of region i in year t between 1989 and 2010	IVIE
φs_{it}	Efficiency of a unit of labor in region i at year t with sit years of education relative to one with no schooling t between 1989 and 2010 (see computation details in the data appendix)	IVIE and MECS
$lnk_{bc,it}$	Log of private capital (non-housing business capital) in region i at year t between 1989 and 2010	IVIE
$lnk_{inf,it}$	Log of infrastructures capital in region i at year t between 1989 and 2010	IVIE
$lnk_{infsat,it}$	Log of k_{infsat} in region i at year t between 1989 and 2010 $k_{infsat,it} = \frac{K_{inf,it}}{\sqrt{pop_{it} \cdot area_{it}}} \cdot 100$ $Max_t \left(\frac{K_{inf,it}}{\sqrt{pop_{it} \cdot area_{it}}} \right)$	Own elaboration based on IVIE
$lnk_{infarea,it}$	Log of $k_{infarea}$ in region i at year t between 1989 and 2010 $k_{infarea,it} = \frac{K_{inf,it}}{Km_i^2}$ $= \frac{\sum_{i=1}^{17} k_{inf,it}}{\sum_{i=1}^{17} Km_i^2}$	Own elaboration based on IVIE
rd_{it-1}	Research and development expenditures of region i in year t as percentage of gross domestic product (at constant 2000-euro) between 1989 and 2010, constant 2000-euro	INE
$euinf p_{it-1}$	ERDF, CF and national funding regional investments in transport infrastructures relative to regional transport infrastructures capital stocks ($k_{inf,it-1}$) of region i in year t between 1989 and 2010 (%)	MEF and IVIE
L_{it-1}	Employed people of region i in year t between 1989 and 2010	INE
pop_{it}	Population of region i in year t between 1989 and 2010	INE
$k_{bc,it-1} \cdot euinf p_{it-1}$	Interaction term to test the interdependencies (synergies) between business capital and euinf p	MEF, IVIE and INE
$L_{it-1} \cdot euinf p_{it-1}$	Interaction term to test the interdependencies (synergies) between employment and transport infrastructure (euinf p)	MEF, IVIE and INE

Note: 1) The variables log of value added per worker, log of private capital, log of infrastructures, research and development expenditures and European funds' investments in transport infrastructures are measured at constant 2000 euro. 2) IVIE (The Valencian Institute of Economic Research), INE (Spanish National Statistics Institute), MEF (Spanish Ministry of Economics and Finance), MECS (Spanish Ministry of Education, Culture and Sports)

4. Results

We start this section by first presenting the descriptive statistics of the variables, their pairwise correlations, the aggregate data on transport infrastructures EU funding jointly with

several graphs that offer a visual inspection of the variables that are important in explaining the growth process followed by the Spanish economy. Then, we continue with the results of the estimations. Table 2 shows the descriptive statistics of the variables and their pair-wise correlations. The database we build is a strong balanced panel with 372 observations which correspond to the 17 Spanish regions observed over the period 1989-2010.

Table 2: Summary statistics and pair-wise correlation among variables

Variables	Obs	Mean	Std. D.	Min	Max
y_{it} (value added per worker)	372	39294.1	5524.98	25218.1	51827.2
rd_{it} (Research and development expenditures -%)	372	0.78042	0.46894	0.09000	2.41000
$euintfp_{it}$ (ERDF, CF and national funding invests in regional transport inf. -% $k_{inf_{it}}$)	372	0.02615	0.02264	0.00000	0.11248
ϕs_{it} (Efficiency of a unit of labor)	372	1.05701	0.07708	0.82494	1.22577
$k_{biz_{it}}$ (Business capital per worker)	372	54501.8	9807.98	26148.6	84418.4
$k_{inf_{it}}$ (Capital stock in transport infrastructure per worker)	372	8068.87	3248.46	2220.36	17036.8
$k_{infsat_{it}}$ (Inf. endowment weighted by population and area relative to the best- endowed region)	372	33.6462	16.9396	7.54389	100.000
$k_{infare_{it}}$ (Inf. endowment per km2 relative to the yearly total national per square Km)	372	0.05880	0.05556	0.00975	0.26913

Pair-wise correlations	$\ln y_{it}$	rd_{it}	$euintfp_{it-1}$	ϕs_{it}	$\ln k_{biz_{it}}$	$\ln k_{inf_{it}}$	$\ln k_{infsat_{it}}$	$\ln k_{infare_{it}}$
$\ln y_{it}$	1.0000							
rd_{it}	0.3914	1.0000						
$euintfp_{it-1}$	-0.2832	0.1676	1.0000					
ϕs_{it}	0.4966	0.8038	0.2968	1.0000				
$\ln k_{biz_{it}}$	0.5417	0.5701	0.1230	0.6159	1.0000			
$\ln k_{inf_{it}}$	0.0123	0.2027	0.1667	0.0983	0.4277	1.0000		
$\ln k_{infsat_{it}}$	0.5543	0.6688	0.1470	0.7248	0.5006	0.3446	1.0000	
$\ln k_{infare_{it}}$	0.5594	0.2881	-0.1266	0.3551	0.0896	-0.2363	0.7327	1.0000

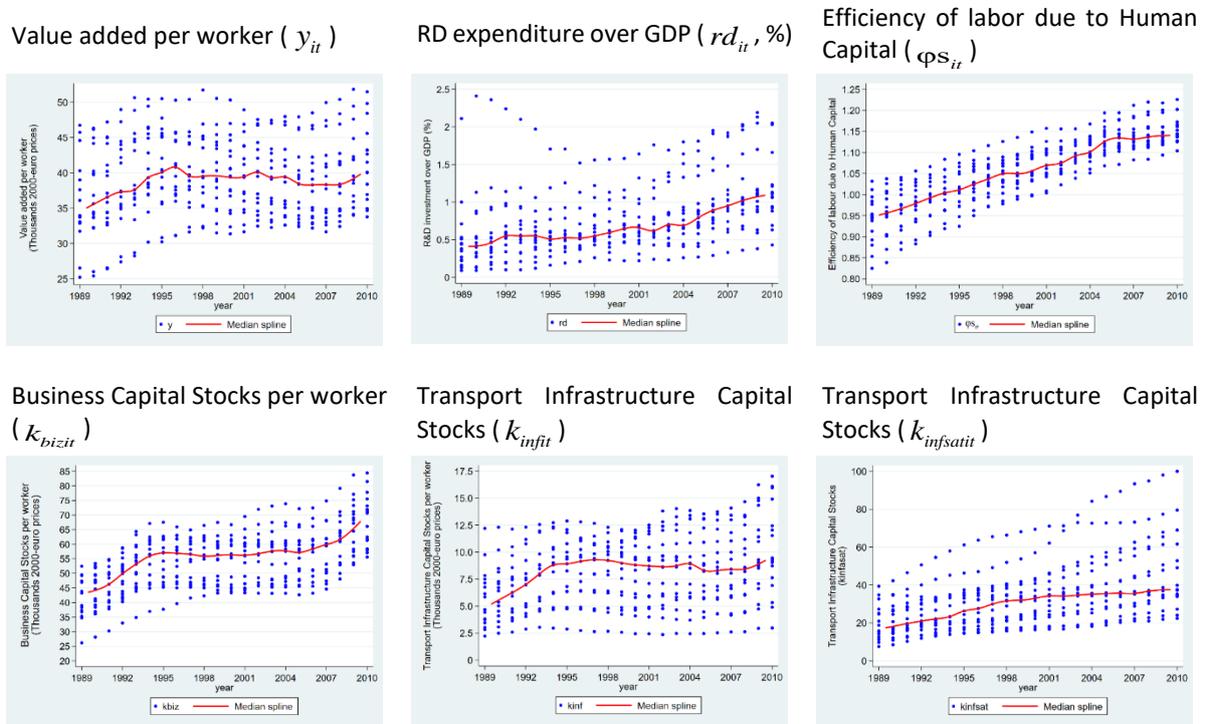
Source: Own elaboration

It can be observed that all the pair-wise correlations have the expected signs. It is worth highlighting the negative correlation between value added per worker and European investments in transport infrastructures since EU funds are mainly channeled to backward regions.

Figure 1 provides a visual image of the main features of the pattern of growth process followed by the Spanish economy over the period 1989-2010. In the upper part of Figure 1 we plot the evolution of value added per worker (y_{it}), the patterns followed by the expenditures on research and development relative to GDP (rd_{it}) and the evolution of the efficiency of labor due to human capital investments (ϕs_{it}). With regard to y_{it} we observe that after a first period (1989-1996) of important increases, the following years up to the irruption of the so called *great recession* are characterized by a mild declining and from 2008 onwards value added per worker gains momentum mainly due to the sharp adjustments in the labor market caused by

the *great recession* (the unemployment rate began an uninterrupted increase that by the start of 2014 reached 25.7% of the active population). With regard RD expenditures they were very low until the late 90s (around 0.5%). Nonetheless they started to grow from the late 90s onwards reaching a value slightly above 1% in 2009. The upper-right part of Figure 1 plots the evolution of (φs_{it}) . It can be seen the important increases experienced by the efficiency of labor until 2006-2007 which were followed by a stagnant path after the irruption of the *great recession* that might be attributed to the sharp fall of new graduates getting a job and the migration of highly skilled people to other countries. The bottom-left part of Figure 1 plots the evolution of the per worker business capital stocks (k_{bizit}) – that show important increases up to 1995, stagnation from 1996-2007 and again important increases after the onset of the *great recession*.

Figure 1: Value added per worker, RD expenditure over GDP, Efficiency of labor due to Human Capital and Business capital per worker and Transport Infrastructure Capital Stocks (Spain, 1989-2010, Thousand € at constant 2000 prices)



Source: Own elaboration from our database

The bottom-middle part of Figure 1 provides the pattern followed by the per worker transport infrastructure capital stocks (k_{infit}). The graph shows a mild decrease because of the large transport infrastructure investments boosted by EU funding up to 2003-2004 (see Figure 1A in the data appendix) were compensated by even faster increases in employment (capital widening process). Finally, the bottom-right part of Figure 1 plots $k_{infsatit}$ which is intended to capture the true needs a region might have on account of the large differences in size and population density of the Spanish regions as well as how close a region is to the benchmark of transport infrastructure saturation level⁹.

⁹ Following a suggestion made by a referee we have also defined another alternative metric for transport infrastructures capital stocks, $k_{infarea_{it}}$. See data appendix

Tables 3, 4 and 5 summarize the estimation results of specifications given by Eq. 10, 12 and 14 applying the fixed-effects estimation technique. Several indications can be extracted from columns 1 to 7 (8-13, and 14-19) of Table 3 (4 and 5). First of all, the variables with the greatest influence on the level of productivity per worker over the period of analysis are the investments in human capital with elasticity estimates in the range 0.393-0.638 (0.465-0.622 and 0.331-0.498) and per worker business capital stocks with elasticity estimates in the range 0.241-0.547 (0.508-0.547 and 0.474-0.547). The estimated elasticities for the transport infrastructures capital stocks on productivity per worker are much lower. They are in the range 0.124-0.166 (Columns 1-6) for $k_{inf\text{it}}$ and (0.0383-0.071 and 0.0145-0.0669) for $k_{inf\text{satit}}$ and $k_{inf\text{areait}}$ respectively. The signs of the estimated coefficients for these variables, with the exception of the coefficient estimates for the alternative measures of transport infrastructures capital stocks $k_{inf\text{areait}}$ in column 15 (Table 5), are in line with the theoretical expectations (positive) and they are statistically significant at the standard significant levels. When we additionally control for the interaction between $k_{inf\text{it}}$ and the distance to the benchmark given by Eq. 11 ($1 - k_{inf\text{satit}}$) (Column 7) the coefficient estimate is positive and statistically (0.0702). It shows that the larger the gap to the benchmark the higher the impact on productivity.

Table 3: Regression Results for Log Output per Worker (Eq. 10)

	1	2	3	4	5	6	7
t	-0.0112*** (0.0017)	-0.00967*** (0.0016)	-0.0149*** (0.0019)	-0.0153*** (0.0019)	-0.0158*** (0.0019)	-0.0157*** (0.0019)	-0.0148*** (0.0018)
φS_{it}	0.498** (0.1480)	0.393** (0.1403)	0.623*** (0.1435)	0.579*** (0.1453)	0.638*** (0.1476)	0.634*** (0.1485)	0.536*** (0.1380)
$\ln k_{bizit}$	0.547*** (0.0328)	0.385*** (0.0392)	0.312*** (0.0416)	0.328*** (0.0424)	0.318*** (0.0425)	0.314*** (0.0455)	0.241*** (0.0433)
$\ln k_{inf\text{it}}$		0.124*** (0.0184)	0.166*** (0.0194)	0.157*** (0.0199)	0.156*** (0.0198)	0.156*** (0.0201)	0.149*** (0.0187)
rd_{it-1}			0.00294*** (0.0006)	0.00318*** (0.0006)	0.00317*** (0.0006)	0.00318*** (0.0006)	0.00522*** (0.0006)
$euinf\text{p}_{it-1}$				0.0168 (0.0095)	-0.0851 (0.0516)	-0.0552 (0.1157)	-0.0717 (0.1071)
$k_{biz} euinf\text{p}_{it-1}$					0.00000176* (8.77e-07)	0.00000171 (8.97e-07)	0.00000161 (8.29e-07)
$Leuinf\text{p}_{it-1}$						-0.0310 (0.1075)	-0.0103 (0.0996)
$\ln k_{inf} (1 - k_{inf\text{sat}})_{it}$							0.0702*** (0.0101)
Observations	372	372	355	355	355	355	355
Estimation method	FE	FE	FE	FE	FE	FE	FE
Annual average contribution to TFP growth:							
rd			0.00223	0.00249	0.00248	0.00249	0.00408
Within R-squared	0.4929	0.5509	0.5647	0.5687	0.5739	0.5740	0.6383
F-Statistic	114.05	107.64	86.40	72.97	63.70	55.59	64.32
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: Table shows standard errors between brackets (* $p < 0.1$, ** $p < 0.01$, *** $p < 0.001$)

Table 4: Regression Results for Log Output per Worker (Eq. 12)

	8	9	10	11	12	13
<i>t</i>	-0.0112*** (0.0017)	-0.0121*** (0.0017)	-0.0170*** (0.0222)	-0.0173*** (0.0022)	-0.0179*** (0.0022)	-0.0180*** (0.0022)
φs_{it}	0.498*** (0.1480)	0.465** (0.1486)	0.618*** (0.1562)	0.542*** (0.1569)	0.617*** (0.1592)	0.622*** (0.1602)
$\ln k_{bizit}$	0.547*** (0.5466)	0.530*** (0.0340)	0.508*** (0.3622)	0.523*** (0.0362)	0.506*** (0.0367)	0.510*** (0.0400)
$\ln k_{infstatit}$		0.0383* (0.0213)	0.0711** (0.0229)	0.0571* (0.0232)	0.0595* (0.0230)	0.0579* (0.0239)
rd_{it-1}			0.00215** (0.0007)	0.00257*** (0.0007)	0.00258*** (0.0007)	0.00257*** (0.0007)
$euinfp_{it-1}$				0.0288** (0.1029)	-0.0988 (0.5589)	-0.128 (0.1258)
$k_{biz} euinfp_{it-1}$					0.00000220* (9.46e-07)	0.00000224* (9.64e-07)
$Leuinfp_{it-1}$						0.0309 (0.1183)
Observations	372	372	355	355	355	355
Estimation method	FE	FE	FE	FE	FE	FE
Annual average contribution to TFP growth:						
rd			0.00168	0.00201	0.00203	0.00201
euinfp				0.00075		
kbizeuinfp (t-1)					0.00305	
Within R-squared	0.4929	0.4975	0.4846	0.4965	0.5046	0.5047
F-Statistic	114.05	86.89	62.62	54.56	48.15	42.03
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: Table shows standard errors between brackets (* $p < 0.1$, ** $p < 0.01$, *** $p < 0.001$)

Table 5: Regression Results for Log Output per Worker (Eq. 14)

	14	15	16	17	18	19
t	-0.0112*** (0.0168)	-0.00540** (0.0016)	-0.0102*** (0.0018)	-0.0111*** (0.0018)	-0.0113*** (0.0018)	-0.0109*** (0.0019)
φs_{it}	0.498*** (0.1480)	0.227 (0.1359)	0.421** (0.1370)	0.331* (0.1366)	0.352* (0.1401)	0.340* (0.1412)
lnk_{bizit}	0.547*** (0.0328)	0.513*** (0.0300)	0.474*** (0.0313)	0.487*** (0.0391)	0.484*** (0.0313)	0.474*** (0.0341)
$lnk_{infareait}$		0.0145 (0.0208)	0.0669** (0.0219)	0.0530* (0.0218)	0.0521* (0.0218)	0.0562* (0.0225)
pop_{it}		-0.000110*** (1.19e-05)	-0.000132*** (1.19e-05)	-0.000130*** (1.17e-05)	-0.000128*** (1.19e-05)	-0.000130*** (1.22e-05)
rd_{it-1}			0.00356*** (0.0006)	0.00405*** (0.0006)	0.00402*** (0.0006)	0.00408*** (0.0006)
$euinfp_{it-1}$				0.0327*** (0.0088)	-0.0000831 (0.4893)	0.0739 (0.1116)
$k_{biz} euinfp_{it-1}$					0.000000566 (8.31e-07)	0.000000424 (8.54e-07)
$Leuinfp_{it-1}$						-0.0759 (0.1029)
Observations	372	372	355	355	355	355
Estimation method	FE	FE	FE	FE	FE	FE
Annual average contribution to TFP growth:						
rd			0.00278	0.00316	0.00315	0.00320
$euinfp$				0.00085		
Within R-squared	0.4929	0.5964	0.6127	0.6283	0.6288	0.6294
F-Statistic	114.05	103.43	87.53	79.93	69.88	62.09
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: Table shows standard errors between brackets (* $p < 0.1$, ** $p < 0.01$, *** $p < 0.001$)

Second, the coefficient of the temporal trend (t) which proxies the average TFP growth rate in the period is negative and statistically significant in all the estimations. This result is in line with Mas and Quesada (2006), Escribá and Murgui (2011) and Garcia-Santana, Moral-Benito, Pijoan-Mas and Ramos (2016) findings for the Spanish economy. Third, the marginal estimated impacts on the growth rate of TFP of the expenditures in research and development (rd) are positive in all the estimations and statistically significant at the usual significance levels. When we additionally control for the contribution of ERDF, CF and national funding investments in transport infrastructures ($euinfp$) -columns 4-7 (11-13 and 17-19) the estimated marginal boosting effects of rd and $euinfp$ on the TFP growth rates are both positive and statistically significant only for Eq. 12 and 14 (Columns 11 and 17). The implied contributions¹⁰ of rd and euf to the annual TFP growth rate are in the range of 0.2% and 0.32% (rd) and 0.075%-0.085% ($euinfp$). The main reason for the positive contribution of $euinfp$ to TFP growth comes from the idiosyncratic features of the Spanish economy in the period. Most Spanish regions were lagging behind at the beginning of our period of analysis with major gaps in transport infrastructures which were largely narrowed down during the 90s and 2000s thanks to the important aid from ERDF and CF investments. It is worth remarking that the expenditures in research and development (rd) have a greater boosting effect on TFP growth than the investments associated to ERDF, CF and national funding ($euinfp$). Net of these positive

¹⁰ This value is computed by multiplying the estimated coefficient of " rd " by the average value for this variable.

contributions, the growth rate of TFP in the period is negative with an average cumulative rate (λ) between -0.71%, -0.78%. These results are similar to those obtained by Garcia-Santana et al. (2016) and signal the process of decreasing labor productivity followed by the Spanish economy in most of the years of our time frame as was highlighted in Figure 1.

Fourth, we include in our estimations additional boosting drivers on the TFP growth rates to control for the existence of a coordination failure and incentives to invest problem ($k_{bizit} euinf_{p_{it}}$) columns 5-7 of Eq. 10 and (11-13 and 18-19) of Eq. 12 and Eq. 14. The estimated impact of this interaction term is positive in all estimations and statistically significant in Eq. 10 column 5 and Eq. 12 columns 12 and 13 with and implied contribution to TFG growth of 0.3%. Controlling for this interaction term the $euinf_{p}$ coefficient becomes not significantly different from zero, since its effect is captured and reinforced in the interaction (0.07% versus 0.3%). These results point to the fact that regional private investments might improve if the regions count with the right amounts of public ones. It is important to highlight that transport infrastructure EU funding enhances the credibility of programmed transport infrastructure investments due to two important factors: a) EU funding alleviates the usual budget constraints linked to huge investments associated to transport infrastructures; b) EU funding is framed within a binding agreement between the EU commission and the governments (Community support frameworks-CSF- and the corresponding operational programs- Ops-) which significantly reduces the uncertainties about the right implementation of these projects. This positive effect of the interaction captures the positive private investors' reactions to a credible commitment about reaching the right amounts of transport infrastructure endowments. To some extent the mechanism behind our results resembles the one put forward by Redding (1996) in his multiple growth equilibria model which features that an economy can be trapped in a low-skills equilibrium because of a coordination failure between investments in human capital and RD. Despite the similarities in the coordination failure mechanism, transport infrastructures, unlike RD, are not endogenous growth drivers and therefore their growth boosting effect is fading away as transport infrastructures endowments approach to the neighborhood of saturation levels, i.e. this positive interaction works as long as regions are suffering from sizeable gaps in transport infrastructures and they are far enough from reaching adequate levels.

Despite achieving high growth per capita rates, the Spanish economy was unable to solve the coordination failure implied in the RD-Skills interaction and remained trapped in the low-productivity-low skills equilibrium (Redding, 1996). The recent literature on resilience (Crescenzi et al., 2016; Cuadrado-Roura et al., 2016; Cuadrado-Roura & Maroto, 2016) highlights the crucial role of productivity as one of the main driving factors of regional resilience. For the Spanish case, Cuadrado-Roura and Maroto (2016), show that the most resilient regions (those which adjusted productivity with less severe employment adjustments) feature a productive specialization in higher value-added industries as well as better productivity records before and after the onset of the crisis. Crescenzi et al., 2016, in their analysis for the EU15, find out that the resilience at the regional level is not only based on "technology-driven innovation (formal RD investments) but rather a generally innovation-prone environment (abundance of human capital)". In the Spanish case (with already high human capital endowments) additional factors must be considered. A creative class à la Florida (2005) and a better matching both in the innovation system (Redding, 1996) and in the labor market (Rodriguez-Pose & Vilalta-Bufi, 2005) to boost entrepreneurial and business

models innovation to generate activities of higher value added per worker will be necessary conditions to strengthen the position of the Spanish regions.

Fifth, we include a last boosting driver on the TFP function to control for a potential better matching in the labor market due to the presence of the right public funding ($L_{it}e_{it}p_{it}$) in columns 6-7 of Eq. 10 and 13 and 19 of Eq. 12 and Eq. 14. The results of the estimations show non-significant impacts. One potential explanation for these results is that the variables that better capture the matching in the labor market are variables like training given by the employers, Job related training, as well as motivation factors which induce work engagement (Rodríguez-Pose & Vilalta-Bufi, 2005). These variables are not related to EU funding of transport infrastructure.

Our preferred estimates correspond to Eq. 12-columns 11-13), since a) the measure we have defined to control for the transport infrastructure capital stocks k_{infst} better reflects the regional needs for improving their transport infrastructure endowments, b) The elasticities of the main production factors (human capital, business capital and transport infrastructures capital) fit better with the empirical literature on growth and the empirical evidence obtained for Spain (Escribá & Murgui, 2011). Moreover, the results related to the effect of transport infrastructures capital on the levels of regional development in Spain are also in line with previous specific empirical studies on the subject (Alvarez-Ayuso & Blazquez, 2014; Alvarez-Ayuso & Delgado-Rodríguez, 2012).

In sum, the models we have estimated provide evidence on the boosting effects of both the transport infrastructure investments financed with EU and national funding and the expenditures in research and development on the TFP growth rates and also on the synergies between business capital and transport infrastructure capital. The channel through which this synergy operates is by solving a “coordination failure” resembling the one put forward by Redding (1996) for the interaction between RD and skills but lacking its endogeneity nature and cumulative effects (the boosting effects of transport infrastructures are vanishing as regions approach to an adequate endowment level). A region may become trapped in a “poor-transport infrastructures” equilibrium because of the coordination failure that often occurs when the public investment plans by governments, especially in transport infrastructures, are not able enough to raise credible business expectations for enhancing private investors’ engagement.

Finally, despite the net positive contributions of these productivity drivers they were not able to offset the overall negative downward trend of TFP and the stagnant levels of value added per worker.

5. Conclusions and Policy Implications

This paper has analyzed the role played by transport infrastructure investments in projects financed with EU and national funding in preventing Spanish TFP from falling farther. We have based our analysis in the estimation of a Mankiw-Romer-Weil (1992) growth model augmented with a TFP function which depends on research and development, transport infrastructure investments financed with EU and national funding and controlling for the

interdependencies between EU funding and national funding and both private business capital and a better matching between the demand for labor and supply of labor. Our results provide evidence on the positive role played by transport infrastructure investments financed with ERDF, CF and national funding in partially offsetting (positive marginal contributions) the negative trend followed by TFP in Spain over the 1989-2010 period. The channel through which these investments positively impact TFP growth is by solving a coordination failure which would prevent on the one hand private investors' to take the right decisions to reach an optimal capital allocation and on the other to set in motion a process reinforcing the productivity levels of the economy. Although this mechanism is effective to improve the productivity levels of the Spanish economy when a poor transport infrastructures endowment acts as a binding growth bottleneck, its impact is not as large and long-lasting as the one associate to the effect of RD.

Even though private business capital investments accompanied and fueled the high growth rates of both per capita GDP and employment levels, the Spanish growth model was mainly based on a strong process of jobs creation by absorbing the large number of structural unemployment¹¹ along with a capital widening. The Spanish economy was unable to improve the resource allocations towards activities generating higher value added per worker. The main reason for this resides in the difficulties to solve the coordination failure when the economy is trapped in a "low-skills-low RD" equilibrium. Our results support the important boosting effects of RD on TFP growth however they were not enough to offset the negative TFP growth trend on account of the low investments in RD and in particular the strong imbalance between business and public RD expenditures. The business efforts in RD were very limited and the business sector was not able to undertake a path towards a better reallocation of its resources preventing the economy to increase value added per worker and to keep it with a dismal TFP performance. Our results are in line with the recent literature on resilience (Cuadrado-Roura & Maroto, 2016; Crescenzi et al., 2016) which emphasizes the crucial role played by productivity and innovative business environments to face the challenges posed by economic downturns.

The prescription of this paper from the point of view of future EU regional policy design is to focus on overcoming the coordination failures envisage in Redding (1996) multiple growth equilibria model that hamper regional transitions to a high skills-high productivity growth equilibria. This policy design implies a place-based oriented policy boosting the entrepreneurial discovery process which is at the core of the regional innovation smart specialization strategies. To this regard, and particularly for Spanish regions, it is crucial to reinforce the EU regional policies to have a better matching between innovative business ideas, new types of activities and the skills and managerial capacities demanded for them.

Interesting further research avenues along the lines of the research carried out in this paper will be to control for potential problems of spatial autocorrelation by means of spatial econometric techniques and also dealing with endogeneity problems. The extension of this analysis to the EU regions or to a much larger sample set than the one used in this paper would allow on the one hand to handle the later problem in an accurate way and on the other to have a more in-depth knowledge on the effects of transport infrastructures investments

¹¹ The average unemployment rate for the period 1980-1987 was 17.8%

financed with EU and national funds on productivity levels, not only transport infrastructures but also along the other objective/axis of EU regional policy.

Literature

1. Alvarez-Ayuso, I. C., & Blazquez, R. (2014). The influence of the road network on private productivity measures using Data Envelopment Analysis: A case study from Spain. *Transportation Research Part A: Policy and Practice*, 65, 33-43.
2. Alvarez-Ayuso, I. C., & Delgado-Rodriguez, M. J. (2012). High-capacity Road Networks and Spatial Spillovers in Spanish Regions. *Journal of Transport Economics and Policy*, 46(2), 281-292.
3. Barro, R. J., & Lee, J. W. (2010). A New Data Set of Educational Attainment in the World, 1950-2010. *NBER Working Papers 15902*, National Bureau of Economic Research, Inc.
4. Brandsma, A., Di Comite, F., Diukanova, O., Kancs, d'A., Lopez-Rodriguez, J., Persyn, D., & Potters, L. (2014). Assessing policy options for the EU Cohesion Policy 2014-2020. *Investigaciones Regionales*, 29, 17-46
5. Crescenzi, R., Fratesi, U., & Monastiriotis, V. (2017). The EU cohesion policy and the factors conditioning success and failure: evidence from 15 regions. *Regions Magazine*, 30 (1), 4-7.
6. Cuadrado-Roura, J. R., & Maroto, A. (2016). Unbalanced regional resilience to the economic crisis in Spain: A tale of specialisation and productivity. *Cambridge Journal of Regions, Economy and Society*, 9, 153-178.
7. Cuadrado-Roura, J. R., Martin, R., & Rodriguez-Pose, A. (2016), The economic crisis in Europe: Urban and regional consequences. *Cambridge Journal of Regions, Economy and Society*, 9, 3-11.
8. Dall'erba, S., & Le Gallo, J. (2008). Regional convergence and the impact of structural funds over 1989-1999: a spatial econometric analysis. *Papers in Regional Science*, 87, 219-244
9. De la Fuente, A. (2010). Infrastructure Investment, Growth, and Regional Convergence in Spain. In: J. R. Cuadrado (ed.), *Regional Policy, Economic Growth and Convergence: Lessons from the Spanish Case* (pp. 171-185). Berlin: Springer-Verlag.
10. Escribá, F. J., & Murgui, M.J. (2011). *Determinantes regionales de la Productividad Total de los Factores en la economía española 1995-2008* (Issue Brief no. D-2011-01). Madrid: Spanish Ministry of Finance and Public Administration.
11. Florida, R. (2005). *Cities and the Creative Class*. London: Routledge.
12. Garcia-Santana, M., Moral-Benito, E., Pijoan-Mas, J., & Ramos, R. (2016). *Growing like Spain: 1995-2007* (Issue Brief no. 11144). London: Centre for Economic Policy Research.
13. Hall, R. E., & Jones, C. I. (1999). Why Do Some Countries Produce So Much More Output Per Worker Than Others?. *Quarterly Journal of Economics*, 114(1), 83-116.
14. Klenow, P., & A. Rodriguez-Clare. (1997). The Neoclassical Revival in Growth Economics: Has It Gone Too?. In: B. Bernanke & J. Rotemberg (eds.), *NBER Macroeconomics Annual 1997* (pp. 73-103). Cambridge, MA: MIT Press.
15. Lopez-Rodriguez, J., & Martinez, D. (2017). Looking beyond the R&D effects on innovation: The contribution of non-R&D activities to total factor productivity growth in the EU. *Structural Change and Economic Dynamics*, 40, 37-45.
16. Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics*, 107(2), 407-437.

17. Mincer, J. (1974). *Schooling, Experience, and Earnings*. New York, NY: Columbia University Press.
18. Mas, M., & Quesada, J. (2006). *The Role of ICT on the Spanish Productivity Slowdown* (Issue Brief no. 15828). Munich: Munich Personal RePEc Archive.
19. Redding, S. (1996). The Low-Skill, Low-Quality Trap: Strategic Complementarities between Human Capital and R&D. *Economic Journal, Royal Economic Society*, 106, 458-470.
20. Rodriguez-Pose, A., & Fratesi, U. (2004). Between Development and Social Policies: The Impact of European Structural Funds in Objective 1 Regions. *Regional Studies*, 38(1), 97-113.
21. Rodriguez-Pose, A., & Vilalta-Bufi, M. (2005). Education, migration and job satisfaction: the regional return of human capital in the EU. *Journal of Economic Geography*, 5(5), 545-566.

A Simpler View of Cultural Attributes and its Application to International Management

Kamal Fatehi

School of Management, Entrepreneurship and Hospitality
Coles College of Business
Kennesaw State University
Kennesaw, GA 30152, USA
E-mail: kfatehi@kennesaw.edu

Reza Vaezi

Coles College of Business
Kennesaw State University
560 Parliament Garden Way, Kennesaw, GA 30144-8599, USA
E-mail: svaezi@kennesaw.edu

Abstract

Research studies that have utilized complex models of cultural dimensions have contributed much to our understanding of cultural differences. A simpler model, however, could be more practical and convenient. This paper offers such a model. Through the use of a framework consisting of two dimensions, Grid and Group, a typology of cultures is introduced. Within the framework of this typology, managerial implications of cultural differences are discussed. To illustrate its application to international management, juxtaposition of a modified version of the Likert's Four Systems on this model is presented.

Keywords

Cultural variation, typology of cultures, cultures and international management, simpler cultural model, Group Grid dimensions

1. Introduction

Although there are similarities among cultures, no two cultures are alike. The study of cultural phenomenon is the study of cultural variation which in turn is inter-twined with the application of cultural dimensions. There are a number of cultural dimensions. Twenty-two major cultural dimensions were identified by Osland and Bird (2000). Studying and examining 22 dimensions is very challenging. As a matter of convenience and practicality, however, most studies have applied four cultural dimensions (e.g. Hofstede, 1984). Later on, these dimensions were expanded to five (Hofstede & Bond, 1988). GLOBE project (House, Hanges, Javidan, Dorfman & Gupta, 2004) further expanded these dimensions to nine. Others have offered yet different ways for distinguishing cultural features (e.g. Trompenaars & Hampden-Turner, 1988).

Among all cultural dimensions, individualism and collectivism have received the most attention (Kirkmann, Lowe & Gibson, 2006; Tsui, Nifadkar & Ou, 2007). In a further refinement of these dimensions, Singelis, Triandis, Bhawuk and Gelfand (1995), and Triandis and Gelfand (1998) proposed a distinction between vertical and horizontal individualism and collectivism adding another layer of complexity to the analysis of cultural variations.

Singelis et al. (1995: 246) suggested that both individualism and collectivism may be horizontal (emphasizing equality) or vertical (emphasizing hierarchy). They suggested that “extreme H-C is the pattern of theoretical communism, whereas moderate H-C is the pattern found in the Israel Kibbutz. Extreme V-C is the case of Nazi Germany, whereas moderate V-C can be found in most traditional Greece villages”, furthermore “individuals could exhibit each of these patterns at different times or different situations”.

The scale by Singelis et al. (1995) that measured social relationships at the individual level of analysis was quickly adopted by a large number of studies and resulted in a flurry of scholarly publications. Many studies were undertaken on a wide range of topics. Some, for example, used the scale for comparing various psychological and social constructs among the United States people and other countries (e.g. Chiou, 2001; Cukur, De Guzman & Carlo, 2014; Gouveia, Clemente & Espinosa, 2003; Nelson & Shavitt, 2002). Others used this new scale to explain cultural orientation among various ethnic groups in the U. S. (Vargas & Kemmelmeier, 2013). A number of studies examined the relationship between horizontal and vertical individualism and collectivism with organizational commitment (Abraham, 1997), and cultural distance (Chirkov, Lynch & Niwa, 2005). In short, the new scale started a wide variety of scholarly inquiries similar to the developments after the introduction of cultural dimensions by Hofstede in the 1980s.

There are, however, some questions whether individualism-collectivism (IND-COL) form the opposite ends of a single continuum – as Hofstede (1984) had assumed- or two independent constructs. Additionally, there are reservations regarding the validity of IND-COL due to its ambiguity of the boundaries and its scope (Kim & Sharkey, 1995; Levine et al., 2003; Voronov & Singer, 2002). For clarification, Taras et al. (2014) undertook seven different tests using original data from 50 studies and meta-analytic data from 149 empirical publications yielding a total of 295 sample level observations. They were unable to answer the question clearly.

Their conclusion was that the dimensionality of I-C depends on (a) the specific instrument used, (b) the sample characteristics, and (c) the cultural region, and the level of analysis.

Therefore, it appears that additional complexity has caused some concerns. It seems that the question of cultural dimensions is becoming so complex that may take a very long time to sort out their intricacy and practical use. In the meantime, managers go about their daily work and get by with the use of some crude approximation of cultural dimensions. To make such a job easier, this paper attempts to provide a simplified version of cultural dimensions that could be more practical.

If a simple model has a reasonable explanatory power in dealing with the issues that complex models are trying to explain, it should be considered as an alternative, even it may be preferred. Particularly, in the daily business activities, managers are served better with the application of simpler models that do not demand the time and efforts of more complex models. Therefore, a simpler model of cultural characteristics with only two dimensions, namely Grid and Group is introduced.

2. Grid-Group Dimensions

A decade before Hostede introduced, the now well-known cultural dimensions in cross-cultural research, Mary Douglas (1970), the British anthropologist, offered her view of cultural attributes by the introduction of Grid-Group model, and with modifications in the subsequent years (Douglas, 1978, 1982, 1992). Later on, more elaboration on this model was presented by Thompson, Ellis and Wildavsky (1992). From 1970 to 1992, Douglas's writings on Grid-Group progressed and formed the basis for a number of studies in various fields as diverse as the analysis of the history of nineteenth century electromagnetism (Caneva 1981), geology (Rudwick, 1982), scientist attitudes toward science and their social formation (Bloor and Bloor, 1982), occupational crime (Mars and Gerald, 1982), industrial safety (Gross and Rayner, 1985), information processing (Thompson & Wildavsky, 1986), and public policy (Kahan & Braman, 2006). The usefulness of the model for cross-cultural research and its application to organization studies have been documented (e.g. Caulkin, 1999; Mamadouh, 1999; Caulkins & Peters, 2002; Chai, Liu & Kim, 2009).

This paper, applies a version of the Grid-Group theory to international management, and relies on the work of Thompson, Ellis and Wildavsky (1992). But, it offers a slightly different interpretation of it. In the following, the two dimensions are presented. After this presentation, the differences between the present model and that of Thompson, Ellis and Waldavsky (1992) are explained.

2.1. Grid dimension

All societies have a set of rules and restrictions that governs social intercourse. Douglas (1982), and Thompson et al. (1992: 5), called these restrictions and rules Grid. Grid denotes the degree to which an individual's life is circumscribed by externally imposed prescriptions. All cultures could be placed along a continuum from low to high Grid.

2.1.1. High-Grid cultures

In high-Grid cultures the way of life is externally prescribed. Individuals do not have much freedom in their choice of manners and methods of conducting themselves. Socially sanctioned behaviors, manners, and life styles are predominant among people. There are many rules and for dealing with social situations. Even when individual's actions do not affect others and therefore should be of no concern to them, socially sanctioned options are prescribed for these actions. What to wear, eat, and enjoy, for example, could be socially imposed and more readily followed by the people.

2.1.2. Low-Grid cultures

In the low-Grid cultures, individuals are not constrained by social restrictions. They are free to find the best way of conducting their life. With no prescriptions for behavior, changes are frequent and many. Any action is acceptable as long as it serves those involved and falls within the moral framework. Low-Grid cultures are void of the formality that governs high-Grid cultures. Informality and ad-hoc characteristics are dominant features of low-Grid cultures. Any situation is handled with the principle of functionality in mind. What is functional becomes the rule of the game such that very few precedents are followed.

2.2. Group dimension

Thompson, Ellis and Wildavsky (1992: 5) defined Group as the extent to which an individual is incorporated into a bounded unit. The greater the incorporation, the more individual choice is subject to group determination. Transient groups are at one end of a continuum, and at the other end are permanent groups. Transient groups serve specific purposes, and have short duration. Permanent groups have extended life and serve multiple purposes. Most groups fall somewhere between these two extremes. On that basis, cultures are either strong-Group or weak-Group.

2.2.1. Strong-Group cultures

In strong-Group cultures, groups heavily influence people's lives. Individuals feel obligated and are compelled to abide by the group prescriptions for the conduct of their daily affairs. Groups provide protection and security to the individuals and expect their loyalty in return. Interpretation of environmental queues are predominantly the group's domain. Group provides meaning to life's phenomenon, and individuals accept them as valid. What is good, beautiful, appropriate, relevant, sufficient, just, moral, etc. is defined by the group and is accepted by the individual. Members of the group share in the success and the failure of each other, and all believe that their accomplishments are due to the support they receive from the group. Individuals give careful consideration to the group's view in making most of their decisions. In these cultures, most group memberships are permanent and closed to outsiders. Permanent membership serves as a vehicle for the continuation of norms and role that are applicable to everyday activities and transactions. Low power differentiation among members, which all considered to be natural, leaves less room for jockeying for position and control. Because members strive to maintain harmony within the group, conflict is minimum and less severe.

2.2.2. Weak-Group cultures

In a weak-Group culture, there is less pressure to conform to the group rules. Individuals abide by the group prescriptions with less devotion and fervor. Relationships between people are less prescribed and are more the results of circumstances under which they take place. Most relationships are negotiated, and individuals are free to accept or reject them. Unrestricted by cultural norms, individuals easily move from one group to another, which in turn increases the transient nature of these groups. With less demand and pressure by the groups to conform, individuals are more guided by their own values and preferences than by prescriptions of the groups. Daily life is more a search for personal fulfillment than satisfying group demands. Pursuit of personal gains and benefits become a life time preoccupation. Variations in personal values, interests, and goals among the group members give rise to the possibility of intra-group conflict. Conflict resolution becomes a campaign to enlist support from other individuals in the group for one's cause. This leads to a popularity contest, in which individual embark on gamesmanship.

3. The Difference Between the Present Model and that of Thompson et al. (1992)

While this paper uses a version of Grid-Group theory as elaborated on by Thompson et al. (1992), it presents a model that is slightly different. The difference between the two models is first, due to the focus of analysis. Unlike Thompson et al. (1992) who have utilized Grid-Group concept, to differentiate among individuals, the present analysis focuses on cultures instead of the individual persons. Second, the difference is due to the interpretation of the interaction between the two dimensions of Group and Grid that produces four types. Thompson et al. (1992), assumed much conflict in the case of Egalitarian type - one of the four types resulting from the interaction between the two dimensions of Grid and Group - due to the lack of power differentiation (high Group) and insufficient restrictive codes (low Grid). This paper, suggests that the Egalitarian culture's strong Group feature pulls all members together, leaving less room for disagreement and conflict. Also, it assumes that the low power differentiation produces minimum conflict (Hofstede, 1984) and induces members to consider the consequences of their actions, leaving less room for conflict. In the following the two dimensions are presented.

4. Culture Types

The interaction between the two dimensions of Grid and Group, creates four different cultural types. In this typology we should not expect complete uniformity and consistency, in short, we should account for cultural abnormalities. We should keep in mind that cultural values are not uniformly accepted and practiced by all members of the society, nor are they evenly distributed in all cultural institutions (Fatehi, Kedia & Priestley, 2015; Fatehi & Tate, 2014; Kirkman et al., 2009).

Group-Grid interaction creates a framework within which people relate to each other and to their surroundings. As depicted in Figure 1, by combining Grid and Group dimensions, four

cultural types are identified: individualistic, egalitarian, hierarchical, and traditional. Weak-Group and low-Grid are characteristics of individualistic cultures. Egalitarian cultures have strong-Group and low-Grid features. A mixture of high-Grid and strong-Group features create hierarchical cultures. Characteristics of traditional cultures are weak-Group and high-Grid.

Figure 1: Typology of Cultures on Group Grid Dimensions

GRID	High	Traditional (e. g., Middle Easterners)	Hierarchical (e. g., Asians)
	Low	Individualistic (e. g., U. S. A.)	Egalitarian (e. g., North Europeans)
		High	Low
		GROUP	

4.1. Individualistic cultures

Weak-Group and low-Grid identifies individualistic cultures. The people of individualistic cultures do not feel much pressure from the groups, and are not restricted by the rules and role prescriptions. They are free to negotiate the limits of their domain on a contractual basis. Transient groups dominate individualistic cultures. Whatever influence these groups exert on the individual is temporary and subject to modifications. Immediate, short term results that are the outcome of these groups form the basis for continued membership. Individuals are very mobile and move up and down the ladder of prestige and influence. “No one cares about the past or about one’s ancestry. Each person is responsible for oneself and for whomever else he or she chooses, not for the weak or the needy, unless one wishes it so (Altman & Baruch, 1998: 772)”.

In Weak-Group societies, ownership is more emphasized. The heavy emphasis on individual ownership in turn tends to distance people from one another, limit sensory stimulation, regulate accessibility, and promote privacy. People of **individualistic** cultures rely on personal judgment (Hofstede, 1984). In individualistic cultures, where changes, novelty and the exploration of new methods are accepted practices, novelty is a predominant yardstick with which events, actions, and objects are evaluated. If something is not new, it may not draw much attention. Anything old is regarded of less value whereas something new is viewed more favorably

There are limited rules and regulations governing the social interactions of individualistic societies. Whatever norms that exist are subject to modifications as functionality and practicality necessitate. Individuals compete with one another in pursuit of personal gains and advancement. Group memberships are sought primarily as a vehicle for personal pursuits. In effect, individuals rely on themselves and a network of convenient acquaintances whom they

may call friends. They rely on their own abilities and efforts and those of their network. There are limited or flexible rules that may block social mobility. Therefore, individuals move up the status ladder through personal initiatives. Personal achievements are represented by the ownership in terms of wealth accumulation, expertise and the ability to control others and their fortunes.

Given that the individuals see themselves as unique entities, independent of others, they strive to express their uniqueness and individualism through innovative means. Because individual accomplishments are highlighted and rewards are bestowed on individuals, innovations and inventiveness takes place through the efforts of creative individuals. The U.S. could be regarded as an example of an individualistic type culture.

4.2. Traditional cultures

Traditional cultures (Douglas and others have called this type of individuals *Fatalistic*) are those with high-Grid and weak-Group. In traditional cultures individualistic tendencies are restricted by external prescriptions. Therefore, those who may have individualistic tendencies need to suppress them. Individuals find the confinement of high-Grid social requirements restrictive to the pursuit of personal goals. Their sense of individuality compels them to seek ways of overcoming social restrictions, but the tradition and social taboos are strong deterrence. Unable to express their individuality and pursue their personal goals, they become resentful of social restrictions and rules governing their behavior. With no way to escape the high-Grid demands of rules and tradition that social interaction requires, they resign to their faith in a fatalistic defensive move. They are individualists who are restricted by rules and tradition from which no realistic escape is possible. They, therefore, accept their faith in a resigned submission, belief in faith, and the predetermined destiny.

In a traditional culture, changes are very seldom accepted and the continuity of old practices are admired. Because there is not much novelty to satisfy the individual's tastes for variety, past historical sagas become models of behavior to emulate. The expression of individualistic tendencies takes the form of meddling in others' lives. This takes the form of reminding others what the society is expecting of them, and how they should behave or manage their personal affairs. This falls in line with high-Grid requirements to obey rules by limiting the roles of the individuals.

Due to Weak-Group characteristics, people of traditional cultures do not form many social or political organizations. Only small nuclear groups (e.g. families, friends, and friends of families) are trusted, therefore, there are not many effective social organizations or institutions. Formal institutions that exist do not experience serious, organized challenges and face limited pressure for change. Individualistic tendencies craving for change have no recourse and find no viable medium to initiate change. When fatalistic resignation no longer can maintain precarious equilibrium, chaotic, haphazard and destructive forces take the form of social upheaval. The destruction of the old system brings in temporary novelty that soon buckles under the requirement of high-Grid, and traditional practices creep in. The same old but with a new facade that covers the resemblance to the past replaces the old. Essentially, nothing seems to be different, only a veneer of newness hides the similarity to the past that lies

beneath. Consequently, the fatalistic tendencies are reinforced and re-instituted. Most Middle Eastern countries could be placed in this category.

4.3. Hierarchical cultures

Strong-Group, high-Grid are characteristics of hierarchical cultures. In the hierarchical cultures people develop identity through group affiliations and seek fulfillment and happiness in the harmony of the groups. Groups provide security in exchange for their complete loyalty. In short, individuals rely on groups, rules, and traditions.

To keep harmony and to enable group to succeed, individuals learn to cooperate with others and rely on collective judgment. Because work and play are group activities, and because group harmony must be maintained, there are extensive rules and procedures to assure the proper conduct by the individuals. Internally, groups are organized by seniority and members are trained to assume their proper place within the group and follow prescribed rules and roles. Externally, groups are closed to outsiders and gaining membership is a time consuming and involved undertaking.

In a High-Grid characteristic a lot of rules and norms governs daily lives of all members. No aspect of life is left without prescriptions for behavior. Members have to follow certain ways of dealing with each other and with events and activities. Socially sanctioned methods – basically traditional ways- dominate interactions among members. Authority positions are respected and listened to with limited individual choices. Examples could be South Korea and Japan.

4.4. Egalitarian cultures

Strong-Group, Low-Grid are characteristics of the egalitarians. A strong sense of belonging and being a part of the larger unit leads individuals to consider the ramifications of their actions on others. Minimum restrictions of low Grid social interaction fosters personal initiatives while strong group characteristic compels individuals to accept group norms, and take into consideration the impact of their actions on others. In short, egalitarians rely on groups and share with them their gains. People in an egalitarian culture are more amenable to power sharing and are hesitant to flaunt their power and status. For example, a Swedish university president was quoted as saying that in order to use his authority effectively, he tries not to look powerful (Hofstede, 1984: 94). Northern European countries such as Denmark and Sweden can be considered Egalitarian type.

5. The Application of Typology of Cultures

To illustrate the application of Grid-Group to management, the paper introduces a modified version of Likert's Four Systems. Rensis Likert (1967) proposed that there are four prevailing management practices. He labeled the four management systems as: (1) exploitative authoritative, (2) benevolent authoritative, (3) consultative, and (4) participative. These systems are based on varying degrees of trust and confidence that managers exhibit toward the subordinates.

Applying Group-Grid model to a modified version of Likert's (1967) suggests four systems as follows: (1) Active Authoritative, (2) Passive Authoritative, (3) Consultative, and (4) Participative (Figure 2). This suggestion does not attribute superiority to any one system/model. These models are managerial practices matching four cultural types identified in this paper.

Figure 2: Juxtaposing Group- Grid Dimensions on Likert's System 4 and Different Cultures

GRID	High	Traditional Passive Authoritative (Middle Easterners)	Hierarchical Active Authoritative (Asians)
	Low	Individualistic Consultative (U. S. A.)	Egalitarian Participative (North Europeans)
		High	Low
		GROUP	

Model One is **active authoritative** and seems to be matching with the **hierarchical cultures**. In this model there is less confidence and trust in subordinates. It relies on centralized decision making from the top of the organization, with provisions that the lower level groups participate in reaffirming the volitions of the authorities. Subordinates are not individually involved in any important decision making. In model one, loyalty, fear, threats, banishment from the group, and occasional rewards are major instrument of motivation. Superior-subordinate relationship is limited to and is based on expectations of obedience and loyalty. An informal organization develops which is parallel to formal organization. It usually mimics the goals of formal organization. Common norms and group pressure are used in reaffirming managerial practices. Lower participants become the instrument of formal organization that relies on authority. Seniority is very much honored in this model. Seniors usually control much of the activities of the juniors. All members accept their roles and places within the organization and all follow prescribed rules. Group norms allow for the use of authority without subordinates resisting it. Within the limits set by the authority, group monitors and sanctions adherence to the mandates that are directly given by the higher authorities or surmised by the group that complies with the high Grid requirements.

Model Two is **passive authoritative**. The relationship between superior and subordinate in Model Two resembles that of master-servant. Managers express a condescending confidence and trust toward subordinates. Superior-subordinates relationship is characterized by patronizing behavior by superiors and cautious approach by subordinates. Although most decisions are centralized at the top of the organization, within a prescribed framework some decisions are made by the people at the lower levels. Rewards and punishment are used for motivating subordinates. An informal organization may develop that does not always oppose formal organizational goals, but recognizes the fact that there are no alternatives.

Individuals in Model Two accept authority because there is no choice. Weak-Group norms allow individuals to avoid authority. Superiors do not have too much authority or cannot use it because of weak Group norms. Therefore, they rely on rules. The High Grid forces individuals to accept the orders cautiously if appropriate rewards are offered. This model seems to be prevalent in **traditional cultures**.

Model Three is **consultative** and matches the **individualistic cultures**. While managers have confidence in subordinates, still they prefer to maintain control over most decisions. Strategic decisions are made by the top-level managers. Subordinates, however, are allowed to make many of the decisions affecting the lower levels. Communication flows in both directions, upward and downward. Rewards, some occasional punishment, and involvement in decision making are major motivating tools of Model Three. The informal organization that usually develops within the formal organization may have an ambivalent attitude toward the formal organizational goals.

Model Four, the **participative** model, resembles conditions in **egalitarian cultures**. Participative management system is characterized by a considerable amount of confidence and trust in subordinates. Decentralized decision making differentiates this system from the other three systems. Communication flows freely between all levels of organization horizontally and vertically. Subordinates participate in setting economic rewards, establishing goals, determining the methods of improving performance and appraising progress toward goals. Substantial and friendly interaction between subordinates and superiors create a high degree of confidence and trust. Control is decentralized throughout the organizational hierarchy. There is a great overlap between formal and informal organizations. Often, they are one and the same.

These models can be presented within the Grid-Group matrix. Each model could be matched with an appropriate cultural framework. Without cultural changes that support certain values, managerial practices that offer mismatched benefits, interactions, and behaviors could backfire. Managers, for example, acting in a participative manner in a culture that adheres to hierarchical order and tradition, in all likelihood will not be welcomed. Of course, the reverse also could create problems for managers. In an egalitarian culture, an active authoritative manager will not be able to function effectively.

6. Concluding Remarks

The two dimensions presented in this paper, Grid and Group, are similar to the rounding off of the decimal numbers that we do for practicality, convenience and expedience. These two constructs have similarities with the dimensions used in the other studies, but in a simplified and aggregated form. Grid construct presented in this paper could be thought of as having resemblance to most of the characteristics and features of the three dimensions, power distance, uncertainty avoidance and masculinity-femininity that was suggested by Hofstede's (1984). Group has similarity with collectivism of Hofstede (1984), and a combination features of horizontal and vertical individualism and collectivism proposed by Singelis et al. (1995), and Triandis and Gelfand (1998). The precision of other studies that offer several dimensions of

culture has been simplified in this study to two dimensions. This provides for a more parsimonious view and less complex analysis.

The typology of cultures just presented may conjure up Singelis et al. (1995) and Triandis and Gelfand's (1998) explanation of horizontal and vertical individualism and collectivism. However, a closer scrutiny reveals the similarity to be less germane. The apparent resemblance between the models is due to some similarity between the dimensions in this study, and horizontal and vertical individualism and collectivism of the previous studies. Horizontal and vertical individualism and collectivism differentiation is based on two dimensions of **hierarchy** (high or low), and **equality** (inequality variations, See Figure 2). **Group-Grid** typology has two dimensions of **Group** (strong or weak), and **Grid** (low or high). **Grid** (this study) and **hierarchy** (Singelis et al., 1995) concepts are similar, but **Group** (this study) and **equality** (Singelis et al., 1995) are different. Equality is just one of the characteristics of a group, not the only one. Figures 1 and 2 provide a schematic view of both presentations.

The present study is conceptual/theoretical and yet to be empirically tested. The categorization of countries and regions of this study while similar to other studies, are portrayed differently. Examples of cultures for horizontal and vertical collectivism in Singelis et al. (1995), and Triandis and Gelfand (1998), are similar as those that are used by this study (see Figures 1 & 2); but examples of cultures and countries for horizontal and vertical individualism are reversed in this study. We need to find out if these differences are indicative of yet undiscovered anomalies or hidden problems with either or both studies. Empirical examination of this model is suggested for future research.

Literature

1. Altman, Y., & Baruch, Y. (1998). Cultural theory and organizations: analytical method and cases. *Organization Studies*, 19(5), 769-785.
2. Douglas, M. (1970). *Natural symbols: Explorations in cosmology*. London: Berrie and Rockliff.
3. Douglas, M. (1978). *Cultural bias*. Royal Anthropological Institute Occasional Paper No. 35. London.
4. Douglas, M. (1982). *Essays in the sociology of perception*. Berkeley, CA: University of California Press.
5. Douglas, M. (1992). *Risk and blame*. London: Rutledge.
6. Douglas, M., & Wildavsky, A. (1982). *Risk and culture*. Berkeley, CA: University of California.
7. Fatehi, K., Kedia, B. L., & Priestley, J. L. (2015). Mindscapes and individual heterogeneity within and between cultures. *Journal of Business Research*, 68, 291-298.
8. Hofstede, G. (1984). *Culture's Consequence*, Beverly Hills, CA: Sage Publications.
9. Hofstede, G., & Bond, M. H. (1988). The Confucius Connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5-21.
10. House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.) (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage.
11. Kahan, D. M., & Braman, D. (2006). Cultural cognition and public policy. *Yale Law & Policy Review*, 149-172.

12. Kim, M. S., & Sharkey, W. F. (1995). Independent and interdependent construals of self: Explaining cultural patterns of interpersonal communication in multi-cultural organizational settings. *Communication Quarterly*, 43(1), 20-38.
13. Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies*, 37, 285-320.
14. Levine, T. R., Bresnahan, M. J., Park, H. S., Lapinski, M. K., Wittenbaum, G. M., Shearman, S. M., & Ohashi, R. (2003). Self-Construal Scales Lack Validity. *Human Communication Research*, 29(2), 210-252.
15. Likert, R. (1967). *The human organization*. New York, NY: McGraw-Hill.
16. Osland, J. S., & Bird, A. (2000). Beyond sophisticated stereotyping: Cultural sense-making in context. *Academy of Management Executive*, 14(1), 65-79.
17. Singelis, T. M., Triandis, H. C., Bhawuk, D. P., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural research*, 29(3), 240-275.
18. Sivada, E., Bruvold, N. T., & Nelson, M. R. (2008). A reduced version of the horizontal and vertical individualism and collectivism scale: A four-country assessment. *Journal of Business Research*, 61, 201-210.
19. Taras V., Sarala, R., Muchinsky, P., Kemmelmeier, M., Singelis, T. M., Avsec, A., & Sinclair, H. C. (2014). Opposite ends of the same stick? Multi-method test of the dimensionality of individualism and collectivism. *Journal of Cross-Cultural Psychology*, 45(2), 213-245.
20. Thompson, M., & Wildavsky, A. (1986). A cultural theory of information bias in organizations. *Journal of Management Studies*, 23(3),: 273-286.
21. Thompson, M., Ellis, R., & Wildavsky, A. (1992). *Culture Theory*. Boulder: Westview Press.
22. Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of personality and social psychology*, 74(1), 118.
23. Trompennars, F., & Hampton-Turner, C. (1998). *Riding the waves of culture*. New York, NY: McGraw-Hill.
24. Tsui, A. S., Nifadkar, S. S., & Ou, A. Y. (2007). Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33(3), 426-478.
25. Voronov, M., & Singer, J. A. (2002). The myth of individualism-collectivism: A critical review. *The Journal of Social Psychology*, 142(4), 461-480.

National Culture, Corruption, and Contract Enforcement: A Mediated model

Ryann McLeod Glushek

Quinnipiac University

Hamden, CT, USA

E-mail: Ryann.Glushek@quinnipiac.edu

Robert L. Engle

Quinnipiac University

Hamden, CT, USA

E-mail: Robert.Engle@quinnipiac.edu

Abstract

The purpose of this study is to examine the relationship between contract enforcement, corruption, and Hofstede's (2010) most current cultural dimensions and datasets. Using a sample of 77 countries and adding national wealth as a control variable, the data is analyzed in multiple steps with results indicating the cultural dimensions of individualism, power distance, masculinity, and long-term orientation to have significant impacts on corruption (R^2 .647), and with long-term orientation having both significant direct effects on contract enforcement, and significant indirect effects through corruption, on contract enforcement (R^2 .363). National wealth did not play a statistically significant role with the culture-corruption model but did play a significant role with the culture-corruption-contract enforcement mediated model. An important contribution of the study was that with the use of necessary condition analysis it was found that individuality and long-term orientation were necessary conditions for corruption and that lower levels of corruption were necessary conditions for higher levels of contract enforcement.

Keywords

Culture, corruption, contract enforcement, judicial process

Tourism as an Important Factor for Creating Nominal Effective Exchange Rates: How Does it Impact on Exports and Imports of Services in the Czech Republic?

Tomáš Heryán

School of Business Administration in Karviná

Silesian University in Opava

Univerzitní nám. 1934/3, 733 40 Karviná, Czech Republic

E-mail: heryan@opf.slu.cz

Abstract

The business environment has changed according to macroeconomic development, especially in a turbulent period since 2008, and its impact on the exchange rates development. However, tourism companies, hotels as well as travel agencies, in particular, are facing the exchange rate exposure just due to the basics of their business. This particular paper has focused on tourism and its possible usage in examining nominal effective exchange rates. According to its location, even the country as the Czech Republic would be an interesting destination for tourists from abroad. The aim of this paper is to examine those short- and long-term effects of exchange rate changes on international trade in services in the Czech Republic. Secondary data were obtained for a representative sample of countries according to inbound tourism in the Czech Republic. The focus variables were both, export and import of services within the balance of payment in the Czech Republic as a domestic country and its gross domestic product, then gross products of selected foreign countries and exchange rates of their currencies against the Czech Koruna. To investigate both, the long-term, as well as the short-term relationship between selected variables, it has been chosen Johansen cointegration tests and the Vector Error Correction model. Quarterly data are obtained from the OECD statistical database for ten years, the period from 2008 to 2017. The results of this study can be implemented not only within the Czech economy. According to the results, policymakers should be motivated to increase financial support to tourism nowadays.

Keywords

Balance of payments, J-curve, nominal effective exchange rates, tourism, financial management

1. Introduction

Political decisions influence business more than ever and market orientation has become crucial for companies that want to be competitive. Since 2008 when the global financial crisis affected the EU market even the business environment has become turbulent. Before the sovereign debt crisis in the EMU and the crisis of the euro currency, the unemployment rates had increased due to a higher level of uncertainty among EU financial markets and a lower level of GDP growth due to decreasing demand. Due to the euro crisis, the ECB has decided for its monetary ease through decreasing short-term interesting rates and increasing of the money supply. However, the increasing of the monetary base did not make an awaiting effect and short-term interest rates became negative in some countries. According to this unconventional monetary policy even the banks had been facing to their liquidity problem and the lending channel changed itself what is proven by several empirical studies (Matousek & Sarantis, 2009; Altunbas, Gambacorta & Marques-Ibanez, 2012; Kishan & Opiela, 2012; Heryán & Tzeremes, 2017).

Nevertheless, the euro crisis has affected also non-EMU members whose central banks had to change their monetary policy into the unconventional. The Czech Republic as one of those new member countries who have joined the EU in 2004, is still not a member of the Eurozone. For instance, the Czech National Bank depreciated the Czech Koruna (CZK) in November 2013 and had been focusing on the monetary interventions until April 2017, which supported domestic exporters. However, the impact of the end of these interventions and forthcoming appreciation of the Czech Koruna against the euro was evident in the case of inbound tourism and the Czech hotels, in particular (Heryán, 2017).

The exchange rate is one of the macroeconomic policy instruments which can improve the price competitiveness of goods in the international market (Šimáková, 2017). Surely, not only tourists from the EMU member countries come to the country. Therefore, examining the effective exchange rate of domestic currency is much more effective. Then the temporary worsening and later improvement of the international trade balance after depreciation of the domestic currency, known as the J-curve effect, would be confirmed (Šimáková, 2018). Furthermore, a positive trend of increasing level of exported services is evident within the balance of payments of the Czech Republic. All of these facts above motivate this research.

This paper aims to examine those short- and long-term effects of exchange rate changes on international trade in services in the Czech Republic. The estimation period is from the first quarter of 2008 to the last quarter of 2017. This study contributes to the current evidence by using inbound tourism for examining the nominal effective exchange rate of domestic currency within the estimation of J-curve among services in the balance of payments. Comparison of aggregated and disaggregated data is made as well. The text is structured as follows. Next Section briefly analyses recent literature, Section 3 describes data and methods used for investigation, Section 4 contains empirical results and Section 5 concludes with the discussion.

2. Development Within the Balance of Payments in the Czech Republic

It is more than important to describe a role which plays export within a small economy as the Czech Republic, and which factors would influence the balance of payments in this country. The International Monetary Fund (IMF) reported annually Article IV: Consultation, Concluding Statement of IMF Mission. Despite the sharp real appreciation of the koruna, the external position had remained strong. The trade balance is in surplus and the modest current account deficit was expected to be comfortably financed by direct investment inflows back in 2008. The effective exchange rate of the koruna, adjusted for either relative consumer prices or unit labor costs, appreciated significantly in the first half of 2008 but has weakened recently (it is obvious even in Figure 2 with the nominal effective exchange rate). Export competitiveness was adequate, especially as the recent koruna depreciation was beginning to offset the adverse impact from the earlier appreciation on profit margins (IMF, 2008).

IMF (2009) projected growth to slow sharply amid a gathering recession abroad and tightening credit at home. The shrinking demand from the euro area, and especially Germany, would have curtailed exports and direct investment inflows. Export volumes enjoyed double-digit growth for the greater part of the year, with market shares continuing to expand. The koruna was broadly in line with fundamentals despite some recent erosion of competitiveness due to the lagged effects of the earlier appreciation and rising unit labor costs. (IMF, 2009) Prior to the crisis, the Czech Republic benefited from integration with the EU, supported by strong macroeconomic policies. Large foreign direct investment inflows (FDI) fostered trade integration, underpinning an export-led expansion. The highly open Czech economy was significantly affected by the global crisis. A downturn in the euro area, especially in Germany, the Czech main trading partner, depressed exports and output fell by 4.25% in 2009. The drop-in exports were offset by a larger fall in imports, improving the trade balance. FDI more than halved and no longer fully finances the current account deficit, but rising inflows of EU funds filled the gap. The initial depreciation of the Czech koruna was subsequently reversed, and the real exchange rate remains in line with fundamentals. The revival of the Czech economy is expected to be gradual and dependent on global recovery. GDP is projected to grow by 1.5% percent in 2010, supported by exports and a build-up of inventories, while fixed capital formation will likely remain depressed (IMF, 2010).

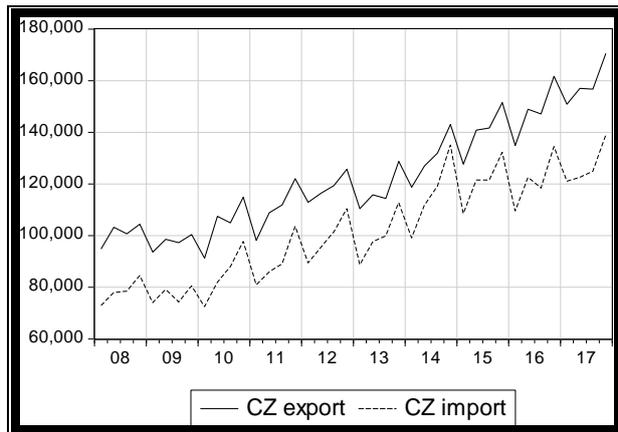
Net exports and fixed investment had been expected to drive economic activity, while private consumption growth would have likely been modest (IMF, 2011), before the end of the global financial crisis. The post-crisis recovery stalled in 2011 mainly because of deteriorating external conditions. The economy lost momentum from the second quarter, when exports, the main growth driver in the last two years, moderated in line with trends in global trade. However, the Czech economy had been facing substantial headwinds from the euro area recession and exports would continue to be affected by the euro area weakness even before the sovereign debt crisis fully influenced EU markets. Development of the export promotion strategy to support the diversification of exports to new products and markets was another important step in the right direction in 2012. Even though the implementation of these structural reforms requires sustained efforts, and the benefits have been accrued over the long run. In particular, enhancing cooperation among the ministries would have been pivotal in ensuring the success of these initiatives until nowadays (IMF, 2012a). The post-crisis recovery stalled in the second half of 2011 as exports lost momentum. The expansion since

the 2009 recession was almost exclusively driven by exports, whereas domestic demand stagnated and remains about 7% below its peak. The combination of robust export performance and restrained imports kept the external deficit unchanged from the previous year at 3% of GDP in 2011 despite an increase in the income deficit (IMF, 2012b).

Nevertheless, the export-led recovery observed in 2010-2011 subsided as the Euro area import demand slowed, and growth has noticeably underperformed trade partners and peers since the middle of 2011 mainly because of weaker domestic consumption and investment. With these disappointing export performances in 2013, the Czech economy had been facing the risk of being dragged deeper into the Euro recession before the autumn in 2013. (IMF, 2013) Fortunately, the central bank's foreign exchange intervention policy taken in November 2013 helped stem deflationary pressures. (IMF, 2014) Both exports and domestic demand were performing well, and the recovery in domestic demand was broad-based in 2015. However, an escalation of geopolitical tensions in the region or the re-emergence of sovereign stress in Europe still could affect exports and also created negative confidence effects. (IMF, 2015) Weaker-than-projected external demand, notably from the euro area but also from emerging markets, would have negatively weighed on exports in 2016. (IMF, 2016) According to IMF (2017), if market conditions become disorderly, some moderate foreign exchange intervention could be valid. However, foreign exchange interventions should not be used to counter the natural structural adjustment of the exchange rate. (IMF, 2017) Before the April 2017, the Czech National Bank had been doing the interventions for almost four years while the exchange rate oscillated close to 27,00 CZK/EUR.

From the first figure below, it is evident that both, exports and imports declined due to the GFC and its impact on the German economy in 2009, as it's been mentioned by IMF (2009), even among the services. Even though then we see an increase in both, exports and imports, it is obvious that the gap between both was decreasing in the next four years. This decreasing gap was evident especially in 2014 due to the Czech National Bank who had started with the foreign exchange interventions earlier in 2013-Q3. The peak of imports which growth rate exceeded the exports growth rate among services, is evident in 2014-Q3 in Figure 1. This peak would be caused especially by cheaper vacations abroad for those Czech residents. According to the interventions, Czech tourism agencies invested huge amounts of money into imported services in form of prepaid traveling costs as well as forthcoming stays in hotels abroad at that time. However, upcoming stress among European markets related to both, the sovereign debt crisis and newly the refugee crisis, caused that amounts of imported services into the Czech Republic have not exceeded its peak in 2014. Therefore, there is no longer growth according to annual peaks of imports during the next four years. On the other hand, exported services lead the growth after 2014 in Figure 1 with its peak in 2017-Q4.

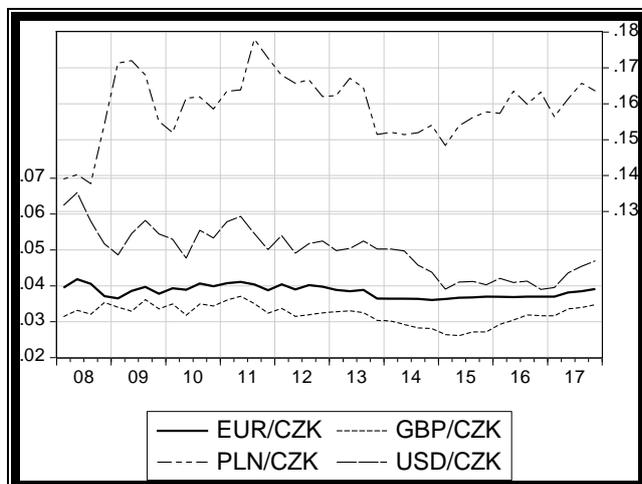
Figure 1: Exports and imports of services from the Czech balance of payments



Source: Author's illustration in EViews 10

Figure 2 illustrates the development of selected foreign exchanges and their exchange rates against CZK. First, according to this figure is obvious that PLN (right axis) is a weaker currency in comparison with EUR, GBP, and USD. Second, CZK has appreciated little bit against GBP and PLN, whereas it has depreciated little bit against to EUR and USD if we compare just the first and the last quarter of whole period from 2008 to 2017. Nonetheless, the appreciation, as well as depreciation of CZK as domestic currency, could have been influenced also thanks to particular fundamentals from abroad.

Figure 2: Exchange rates of selected foreign currencies against the CZK



Source: Author's illustration in EViews 10

Little bit surprising is the impact of the GFC on selected exchange rates. The GBC had reflected in full when Lehman Brothers bankrupted in September 2008. However, CZK started to appreciate since 2009-Q1 when we see a sharp increase in the USD/CZK exchange rate. A much earlier was the GBP/CZK decreasing when CZK started to depreciate right in 2008-Q4. Of course, the GFC impacted then also on the UK market and both rates, GBP/CZK as well as USD/CZK, had increased until its peak in 2009-Q3 when the GFC affected the Czech economy, as well. The impact of the sovereign debt crisis is evident in the development of EUR/CZK, especially according to the foreign exchange rate interventions, when the Czech National Bank

officially devaluated CZK. Before these interventions, CZK would appreciate. Due to the interventions the EUR/CZK exchange rate had fallen in 2013-Q4 and was more or less fixed till the end of these interventions in 2017-Q1 when the CZK has appreciated again. Further foreign fundamentals affected the development of selected exchange rates in Figure 2. For instance, the referendum for BREXIT depreciated GBP when the GBP/CZK exchange rate has been increasing since 2015-Q4. Presidency elections in the USA and its impact on the USD/CZK exchange rate is also obvious because of the USD depreciation since Donald Trump has been elected as the president in 2017-Q1. However, current research does not focus on the fundamentals affecting the exchange rates.

One information is evident from the text in those four paragraphs above. The Czech Republic is opened the economy and export is sometimes more important than domestic demand. In Figure 1 we have seen that this small economy is a pro-exported type whole estimated period even among the services. Even though according to Olšovský (2009), tourism had just 3% impact on GDP in 2009, it could affect the country due to taxes on services as well as related goods. Therefore, its impact can be much higher. However, the stagnation among services was caused also with decreased tourism in 2009 when more than 30% of services belongs to tourism including business (20%), and also private traveling (80%).

3. Data and Methods

Quarterly data has been obtained from the Organization for Economic Co-operation and Development (OECD) and their online statistical database, and from the Czech National Bank and its ARAD online database. The estimation period includes 40 quarters, a period from 2008-Q1 to 2017-Q4. In particular, exported and imported services from the Czech balance of payments, domestic nominal GDP in current prices as well as GDP of several foreign countries, inbound tourism divided according to tourists from these foreign countries (only one in annual frequency), all of these data have been obtained from the OECD. Nominal exchange rates of the CZK against foreign currencies of selected foreign countries (EUR, GBP, PLN, USD) have been obtained from the Czech National Bank.

Following Šimáková (2017) this study has also employed a reduced form of a trade balance model to analyze the long-run effects of changes in the exchange rate on the trade balance. On the contrary, here is analyzed a balance on services. Furthermore, the impact of the nominal effective exchange rate (NEER) for the CZK as well as weighted GDP index for foreign countries, both have been examined according to inbound tourism. We see particular weights for each country in Table 1. Countries for EUR were Germany, Italy, and Slovakia, GBP is for the UK, PLN is for Poland, and USD is for the USA as well as for China whose currency is convertible only for USD. As it was mentioned above, all data are in quarterly frequency. Just these amounts of inbound tourists have been obtained in annual frequency. It is evident that from this point of view of the inbound tourism the crucial link is with the EMU. Even in the case of the services, the Czech national bank argues the importance of the Eurozone.

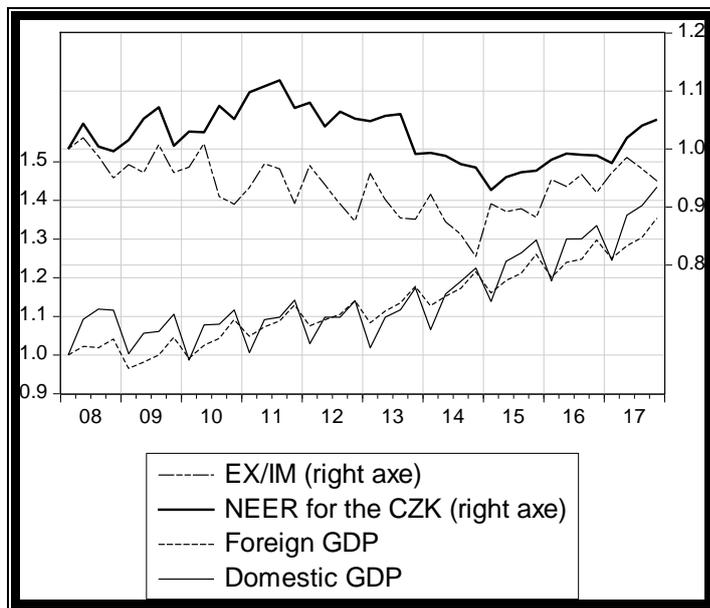
Table 1: Annual weights for examining the NEER from selected currencies (%)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EUR	64.84	67.38	65.83	67.11	63.96	62.25	61.71	61.17	60.54	59.37
GBP	14.61	12.28	12.21	10.64	10.10	10.30	10.15	9.97	9.92	9.20
PLN	11.36	11.28	11.61	12.04	11.03	11.52	11.47	10.91	11.32	11.26
USD	9.20	9.07	10.36	10.22	14.91	15.94	16.67	17.95	18.22	20.16

Source: Author's calculations

We see the development of all index-weighted variables from this theoretically described cointegration and the VEC model above in Figure 3. According to both, the left as well right axis, the description of this figure is divided into two parts. From up to down, first, the right-hand sided part describes the development of EX/IM and NEER, whereas, second, the left-hand sided part illustrates the development of index-weighted GDP abroad and GDP in the Czech Republic. First, it is evident that before the exchange rate interventions of the Czech National Bank, the index-weighted EX/IM had even oscillating above 100%, whereas during the interventions it was oscillating below that value from 2008-Q1. It has broken this barrier again after the Czech National Bank ended with this unconventional monetary policy. The index-weighted NEER has shown us very clearly that just these interventions affected CZK depreciation.

Figure 3: Weighted & indexed variables (starts at 1.00)



Source: Author's calculations and illustration in EViews 10

Second, in comparison with selected foreign countries according to the index-weighted GDP of domestic country and GDP of foreign countries, the Czech economic situation was better during times affected by the GFC. NOTE: We cannot argue that in the case of China. However, according to the only one possibility to change Chinese currency for USD, it is used only US currency as well as the GDP, which both can affect a number of incoming tourists from China. However, the situation had changed in 2012 and especially in 2013, when foreign GDP growth was exceeding the GDP of the Czech Republic. As it was argued by IMF (2013) the upcoming

recession in Europe impacted on the Czech macroeconomic situation what would have an impact on the real economic welfare in the country. Further, domestic GDP was oscillating more or less in the same positive range slightly over 100% between 2008 and 2013. Therefore, the interventions were inevitable. It obviously worked well for domestic economic growth since these interventions had started. Moreover, the Czech economic growth had exceeded the growth in selected countries in 2015 and 2016 before the end of these interventions in 2017-Q1. All of these is evident in Figure 3.

According to Šimáková (2017) it is applied a Johansen cointegration test to estimate the long-term relationship, and an error vector correction (VEC) model to estimate the short-term relationship, both described below by next equations (1) and (2):

$$BS_t = \alpha + \beta ER_{f,t} + \gamma Y_{f,t} + \delta Y_{d,t} + \varepsilon_t, \quad (1)$$

$$\Delta BS_t = \alpha + \sum_{k=1}^n \mu_k \Delta BS_{(t-k)} + \sum_{k=1}^n \rho_k \Delta ER_{f,(t-k)} + \sum_{k=1}^n \varphi_k \Delta Y_{f,(t-k)} + \sum_{k=1}^n \omega_k \Delta Y_{d,(t-k)} + \vartheta_k EC_{(t-1)} + \varepsilon_t \quad (2)$$

where BS_t means a measurement of balance in services in the Czech Republic at time t , examined as a ratio of Czech exports over Czech imports from abroad; $ER_{f,t}$ is the exchange rate measured as NEER examined as the development of foreign currencies of f countries, weighted according to inbound tourism of the Czech Republic and number of tourists incoming from these f countries; $Y_{f,t}$ is a measure of GDP of f countries, weighted in the same way as $ER_{f,t}$, and $Y_{d,t}$ means the GDP of the Czech Republic as a domestic country d . $EC_{(t-1)}$ means error correction mechanism because of EC is the disequilibrium term. Symbols α and ε_t are a constant and residuals. All variables are used as indexed time series in percentages, when Q1/2008 equals 100%.

Literally speaking, one simple example should be explored to understand long-run and short-run causality. Please, try to imagine that you belong to a group of four friends staying in the same hotel. All of you should get back to this hotel from one particular bar on foot during one night. However, you are the only one who wants to go home two hours earlier. Nonetheless, your friends have promised you to be one or two hours late at maximum. However, one of those three people who had left the bar one hour after you would like to go to another bar. Therefore, they had been drinking more alcoholic drinks the last hour before they get back to the hotel as they promised you.

Even though, that one particular friend of yours wanted to stay longer the couple was able to explain to him that it was already promised to you as a friend and therefore they should be back at the hotel two hours late at maximum. So, they did. According to the successful arrival to the hotel, there is cointegration (the same final destination). Because of the argumentation of you and your friends, finally, even this problematic friend arrived at the hotel. This friend did not affect you or your friends, either (the endogenous variable BS_t and ΔBS_t). However, due to alcoholic drinks there, could have been some errors during this journey (EC measured through the VEC model).

4. Empirical Results

Technically, the optimal number of lags (one and two quarters) had to be proven using the Wald-exclusion and Lag-length criteria tests in Vector autoregression (VAR) model for further modelling as the first thing. Furthermore, BS_t as well as ΔBS_t have been proven as endogenous by block exogeneity Wald tests in VAR (1 2) model. According to its results, for all variables the ADF unit root test has diagnosed the unit root at their levels, whereas all of them has been proven as stationary at their levels, both tested with maximum lags one and two quarters. The appendix part contains the output of all necessary tests to run both, the Johansen cointegration as well as Vector Error Correction (VEC) model to estimate both, the long- as well as short-run effects.

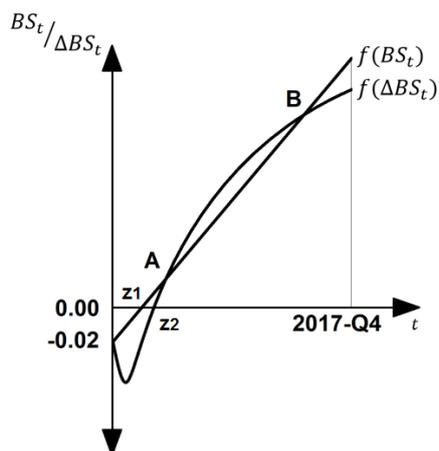
According to Šimáková (2017), it has been applied a Johansen cointegration test to estimate the long-term relationship, and the VEC model to estimate the short-term relationship. Significant results of both models are included below these next equations (3) and (4), whereas adjusted R-squared is 67.44%.

$$BS_t = -0.02 + \mathbf{0.70} ER_{f,t} - \mathbf{1.41} Y_{f,t} + \mathbf{1.58} Y_{d,t} + \varepsilon_t, \quad (3)$$

$$\begin{aligned} \Delta BS_t = & -0.02 - \mathbf{0.45} \Delta ER_{f,(t-2)} + \mathbf{1.39} \Delta Y_{f,(t-2)} - \mathbf{0.78} \Delta Y_{d,(t-1)} - \mathbf{0.98} \Delta Y_{d,(t-2)} \\ & - \mathbf{0.92} EC_{(t-1)} + \varepsilon_t. \end{aligned} \quad (4)$$

Finally, we see two functions for the estimated coefficients in Figure 4. The J-curve shape is evident within the short-term errors through $f(\Delta BS_t)$, whereas long-term relations illustrate a linear balance through $f(BS_t)$. Error terms include 32.56% of our estimation but non-correlated with the equation. This J-curve typically demonstrates negative errors in Eq. (4), with opposite signs (positive or negative), in comparison with these coefficients for long-term causality in Eq. (3). Further, this J-curve shape has been caused by a negative coefficient $-0.92 EC_{(t-1)}$ in Eq. (4), which is lagged by one quarter. Nonetheless, the errors would be also positive (the period between A and B). On the other hand, there can be many other points than just A and B, according to a possible change among errors from those negative to these positive and back, in contrary (the period after B). What should be also highlighted, these points are not points of equilibrium which is already illustrated through the function $f(BS_t)$. However, another question is elasticity of both functions, respectively, zero points (zero at the vertical axis) demonstrating which function will cross the horizontal axis as the first. If we will solve both estimated equations with zero at their left-hand side and just one unknown variable ε_t , we will have the results for both. Then we see that $-0.85 \varepsilon_t$ of $f(BS_t)$ is smaller than $1.76 \varepsilon_t$ of $f(\Delta BS_t)$. Therefore, $f(BS_t)$ should cross the horizontal axis in z1 as the first, whereas $f(\Delta BS_t)$ should break the zero in z2.

Figure 4: Estimation output for short-term and long-term effects in the graph



Source: Author's illustration

5. Discussion and Conclusion

The aim of the paper was to examine those short- and long-term effects of exchange rate changes on international trade in services in the Czech Republic. The theoretical impact described by Šimáková (2018), was proved for services among the balance of payment in this country in the short-run. According to her, currency depreciation stimulates exports and curtails imports. However, the impact of CZK appreciation is positive in the long-run. The opposite direction of the short-term effects against those long-term indicated the existence of the J-curve. In particular, after short-run deterioration, the long-run improvement of the Czech balance of payments appears (Šimáková, 2017).

Results showed that companies offering services still do react at turbulent changes in these times affected by the inflection noun, the crisis. Furthermore, for examining of indexed-weighted variables of both, the nominal effective exchange rate and GDP in foreign countries, was effective to use weights according to the inbound tourism. Nonetheless, Šimáková (2017) confirmed this J-curve in the case with the trade of agricultural goods only in the Czech Republic compared to other countries. Therefore, within future research, it should be paid more attention to the same relationship also in other European countries. It would be very interesting to estimate and compare the business of both, hotels and tourism agencies with employing an exchange rate in the form of the effective interest rate. Nonetheless, it is obvious that tourism can play a really important role in exported and imported services. Therefore, policymakers should support tourism even in the country like the Czech Republic.

Acknowledgement

This paper was financially supported by SGS/7/2018 'Analysis of the influence of selected aspects on the financial structure among enterprises in the conditions of Central and Eastern European countries'.

Literature

1. Altunbas, Y., Gambacorta, L., & Marques-Ibanez, D. (2012). Do bank characteristics influence the effect of monetary policy on bank risk? *Economics Letters*, 117(1), 220-222.

2. Heryán, T. (2017). Were the Czech Hotels Able to Confront Current Appreciation of the Czech Currency Before the End of the Exchange Rate Commitment? *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(6), 1925-1933.
3. Heryán, T., & Tzeremes, P. G. (2017). The bank lending channel of monetary policy in EU countries during the global financial crisis. *Economic Modelling*, 67, 10-22.
4. International Monetary Fund (2008). *Czech Republic: 2008 Article IV Consultation, Concluding Statement of IMF Mission*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs112408a>
5. International Monetary Fund (2009). IMF Executive Board Concludes 2008 Article IV Consultation with the Czech Republic. *Public Information Notice*, 46(9). Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/pn0946>
6. International Monetary Fund (2010). *Czech Republic: 2010 Article IV Consultation Concluding Statement*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/pn1036>
7. International Monetary Fund (2011). *Czech Republic: 2011 Article IV Consultation Concluding Statement*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs022111a>
8. International Monetary Fund (2012a). *Czech Republic—2012 Article IV Consultation Concluding Statement*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs022712>
9. International Monetary Fund (2012b). IMF Executive Board Concludes 2012 Article IV Consultation with the Czech Republic. *Public Information Notice*, 52(12). Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/pn1252>
10. International Monetary Fund (2013). *Czech Republic-2013 Article IV Consultation Concluding Statement*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs052013>
11. International Monetary Fund (2014). *Czech Republic: 2014 Article IV Consultation Concluding Statement of the IMF Mission*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs063014>.
12. International Monetary Fund (2015). *Czech Republic: Concluding Statement of the 2015 Article IV Mission*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs052015a>
13. International Monetary Fund (2016). *Czech Republic: 2016 Article IV Consultation Concluding Statement of the IMF Mission*. Available at: <https://www.imf.org/en/News/Articles/2015/09/28/04/52/mcs051616a>
14. International Monetary Fund (2017). *Czech Republic: Staff Concluding Statement of the 2017 Article IV Mission*. Available at: <https://www.imf.org/en/News/Articles/2017/05/15/ms051517-czech-republic-staff-concluding-statement-of-the-2017-article-iv-mission>
15. Kishan R. P., & Opiela, T. P. (2012). Monetary Policy, Bank Lending, and the Risk-Pricing Channel. *Journal of Money, Credit and Banking*, 44(4), 573-602.
16. Matousek, R., & Sarantis, N. (2009). The bank lending channel and monetary transmission in Central and Eastern European countries. *Journal of Comparative Economics*, 37(2), 321-334.
17. Olšovský, R. (2009). Comment on Tourism made by the director for the balance of payments division of the Czech National Bank. *Presentation at the University of Economics Prague*. Available at: <https://docplayer.cz/3797968-1-teoreticke-vymezeni-cestovniho->

ruchu-v-platebni-bilanci-2-cestovni-ruch-v-platebni-bilanci-cr-3-dopady-hospodarske-krize-na-cestovni-ruch-4.html.

18. Šimáková, J. (2017). Assessing Exchange Rate Sensitivity of Bilateral Agricultural Trade for the Visegrad Countries. *Outlook on Agriculture*, 46(3), 195-202.
19. Šimáková, J. (2018). Asymmetric Effects of Exchange Rate Changes on the Foreign Trade of Czechia. *Eastern European Economics*, 56(5), 422-437.

Appendix

Tests for a stationary process of variables at their LEVELS (H0: NON-stationary)

Lag Length: 1 (Fixed)	EX/IM		NEER		GDP_f		GDP_d	
	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.
Augmented Dickey-Fuller	-2.752	0.075	-1.477	0.534	0.465	0.983	0.084	0.960
Critic.val. 1% level	-3.616		-3.616		-3.616		-3.616	
5% level	-2.941		-2.941		-2.941		-2.941	
10% level	-2.609		-2.609		-2.609		-2.609	
Lag Length: 2 (Fixed)	(D)EX/IM		(D)NEER		(D)GDP_f		(D)GDP_d	
	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.
Augmented Dickey-Fuller	-2.066	0.259	-1.602	0.472	0.716	0.991	0.661	0.990
Critic.val. 1% level	-3.621		-3.621		-3.621		-3.621	
5% level	-2.943		-2.943		-2.943		-2.943	
10% level	-2.610		-2.610		-2.610		-2.610	

Tests for a stationary process of variables at their 1st DIFFERENCES (H0: NON-stationary)

Lag Length: 1 (Fixed)	(D)EX/IM		(D)NEER		(D)GDP_f		(D)GDP_d	
	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.
Augmented Dickey-Fuller	-6.783	0.000	-4.262	0.002	-5.909	0.000	-6.108	0.000
Critic.val. 1% level	-3.621		-3.621		-3.621		-3.621	
5% level	-2.943		-2.943		-2.943		-2.943	
10% level	-2.610		-2.610		-2.610		-2.610	
Lag Length: 2 (Fixed)	(D)EX/IM		(D)NEER		(D)GDP_f		(D)GDP_d	
	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.	t-Stat.	Prob.
Augmented Dickey-Fuller	-6.935	0.000	-4.135	0.003	-11.50	0.000	-13.60	0.000
Critic.val. 1% level	-3.627		-3.627		-3.627		-3.627	
5% level	-2.946		-2.946		-2.946		-2.946	
10% level	-2.612		-2.612		-2.612		-2.612	

Pet Consumer Values: Values Between Consumers and Companion Animals

Marcos Iazzetti

São Paulo, Brazil

E-mail: marcos.izt@gmail.com

Vivian Iara Strehlau

ESPM

São Paulo, Brazil

E-mail: vstrehlau@gmail.com

Abstract

This research objective is to identify if the relationship between consumers and their animal companion express consumer values and what are these values. The main literature references are Consumer Values expressions from Rokeach et al. (1989), Hirschman (1994) animal companion relationship and Epley, Waytz and Cacioppo (2007) and psychological phenomenon Anthropomorphism. We used a qualitative approach and a triangulation of three methods: a 30 days park observation in the city of São Paulo, 1.516 photographs documental analysis posted on Facebook and 8 exploratory interviews. We gather data in Brazil, the second biggest Pet Supplies market worldwide that have been growing constantly in the past decade, with a 74 million companion animals' population. We found that health, social recognition, family safety, real friendship, pleasure and social consciousness were the main values found in the consumer – pet relation.

Keywords

Values, pet, companion animals, consumer behavior

HRM in SMEs – A Literature Review and Suggestions for Future Studies

Christiane Ksienzyk

University of the Sunshine Coast, Brisbane

and

University of Salzburg Business school

Im Schlosspark Gern 2, 84307 Eggenfelden, Germany

E-mail: christiane.ksienzyk@gmx.net

Abstract

Over the last almost four decades HRM has gained scholarly interest. Extant research on high-performance work systems has primarily examined the link between human resource practices and organizational performance in larger companies, while neglecting the back bone of performance and economic development: small and medium sized enterprises (SMEs). With limited finance resources and less formal organizational structures, they face many challenges in developing an innovative workforce and implementing effective HRM instruments and processes to succeed in a competitive environment. This article provides a review of HRM in its wider context and later its application at an organizational level context in SMEs. The most definitive finding concerns the impact of human resource management bundles which can be firmly linked to innovation capability and financial results. The strength of a human resource management system and the role of high-commitment practice bundles appear particularly important. Employees' perception of HRM and the information pattern based on the three dimensions distinctiveness, consistency and consensus of the attribution theory seem to be important factors that determine HRM results. Some evidence points to the role of macro- and micro-level (e.g. sector and strategy) for the HRM - performance relationship and to mediators, such as employees' behavior and attitudes. This article identifies a number of areas for advancing HRM research, in particular: appropriate HRM bundle for SMEs; integrative approach (HRM content and process); leadership and features of a strong HRM system; impact of HRM through employee reactions.

Keywords

Human resource management (HRM) content and process, organizational performance, employee attitudes, commitment, innovation capability

Income Disparities in Ecuador Over 2007-2014: A Geographical Economics Approach

Jesus Lopez-Rodriguez

Universidade da Coruña

Grupo Jean Monnet de Competitividade e Desenvolvimento na União Europeia (C+D)

Spain

E-mail: jesus.lopez.rodriguez@udc.es

Jorge Guido Sotomayor-Pereira

Technical University of Machala

Ecuador

E-mail: jsotomayor@utmachala.edu.ec

Abstract

This paper focuses on the analysis of the role played by market potential in the spatial income structure observed in Ecuador over the period 2007-2014. Based on the geographical economics theory we derive the so-called nominal wage equation which establishes a relationship between nominal wages and a distance weighted sum of the volume of economic activities in surrounding locations which is usually known as market potential. The estimation of this equation using Ecuadorian provincial data over the period 2007-2014 reveals that market potential plays a crucial role in explanation of the spatial distribution of per capita income. The results of our estimations are robust to the potential endogeneity problems of market potential which have been dealt with by using historical values of market potential and instrumental variables. Finally, we have also discovered a potential channel that could be affecting the spatial structure of per capita income in Ecuador, which is human capital.

Keywords

Provincial disparities, spatial structure of income, market potential, Ecuador

1. Introduction

Differences in the levels of development across regions within countries is almost a natural feature. In the case of Europe, differences in regional income levels within countries is quite sizeable in many of them: for instance, in Italy (Northern regions versus Southern regions), Spain (Northeastern regions versus South and East regions), Portugal (North versus South) and in most Central and Eastern European countries the Western regions of these countries are more developed than the Eastern ones. These patterns have raised considerable concerns in popular debates as well as in policy circles and have led to the establishment of policies aimed at levelling out of income differences and at allowing a catch-up of peripheral regions. In the case of Ecuador, a phenomenon similar to the one described for the European countries is at work. Per capita income levels differ by significant amounts across the Ecuadorian provinces. In the year 2014, the ratio between the per capita income of Sucumbios (Oil-producing province) and the average per capita income across the Ecuadorian provinces was 1.51 or in other words, the per capita GDP of Sucumbios was 150% higher than the average per capita GDP in Ecuador. If we exclude the oil-producing provinces (Sucumbios, Orellana and Pastaza) the 2014 difference between Pichincha's per capita income and the average per capita income in Ecuador was 8151.80\$ (per capita income in Quito is 110% higher than the country's average). Even if we discard Pichincha, the ratio between the second wealthiest province in Ecuador (Guayas) and the average per capita income of the country is 0.62, which is a quite sizeable difference.

There are different approaches taken by the economic theory to explain these income differences. On the one hand we can resort to the economic growth theory to deliver potential explanations for these facts which go from differences in saving rates, investment rates to problems of technology diffusion (see Barro and Sala-i-Martin, 1991, 1995 among others). On the other hand, we can deliver other messages based on traditional development theories which put the emphasis on first nature geography characteristics of the locations, hours of sunshine, endowments of hydrocarbons, access to navigable rivers, etc. (see for instance Hall and Jones (1999)). This paper takes a different approach to the analysis of the differences in income levels across the Ecuadorian provinces. The so-called New Economic Geography (NEG) or Geographical Economics (GE) (Krugman, 1991, 1992) has provided another conceptual framework within which the geographical structure of production and income levels can be analyzed explicitly. This field has experienced rapid advances in the last two decades both from and theoretical as well as empirical side.

This paper applies the geographical economics framework in an exhaustive empirical investigation of the income structure at the level of provinces in Ecuador. Therefore, it is part of the growing literature that uses the theoretical tools from the Geographical Economics to analyze the impact of distance from markets on income levels. In a more technical way, what we will do in this paper is to test one of the main predictions of these models, the so-called nominal wage equation, for the case of the Ecuadorian provinces over the period 2007-2014. The basic idea is that in a world where regions or countries specialize in certain goods and export them, firms in locations which are further away from main consumer markets or input suppliers will have to pay more for shipping their goods and buy their intermediate inputs and therefore the value added left to remunerate their local factors of production, among them workers will be lower.

The paper finds widely support to the theoretical predictions related to the nominal wage equation of the Geographical Economics literature, i.e, the elasticity of per capita income with regard to market potential is positive, statistically significant and economic important across the different estimations carried out in the paper. Therefore, distance from markets matters and seems when looking at differences in income per capita across Ecuadorian provinces. Another important contribution of this paper lies in disentangling the channels through which market potential affects the levels of economic development in Ecuador. In particular we have included as additional control to the baseline estimation human capital, to capture the potential indirect effects of economic geography. The results of the estimations show that human capital could be important driver of per capita income levels.

The remaining of the paper is structured as follows: First in the second section, we study the dispersion of the economic development levels among provinces of Ecuador, using per capita income as a proxy for the economic development levels. The results of the spatial descriptive analysis will confirm the existence of sizeable regional disparities and strong spatial dependence in the distribution of per capita income. Next, we estimate the coefficient of a simple specification, which reveals the positive and significant effect of market potential on per capita income levels. The theoretical economic rationale from the geographical economics literature that support these empirical results is outlined in the third section. In the fourth section we carry out the estimation of the nominal wage equation (baseline model) from the provincial panel data we have built for the period 2007-2014. In the fifth section several robustness checks to the baseline estimation are taken on board. On the one hand we control for potential endogeneity problems related to market potential and on the other we try to disentangle the effects of market potential on the Ecuadorian per capita income differences by controlling for regional differences in human capita. Finally, the sixth section presents the main conclusions of the paper.

2. The Geography of Income Disparities Across Provinces in Ecuador

Preliminary Evidence

The levels of per capita income in the Ecuadorian provinces differ by significant amounts (Legarda, 2016). Excluding from the sample the oil-producing provinces the per capita income in Quito is well above the per capita income of any other Ecuadorian province. The economic evidence provided in this section of the paper was obtained from the Ecuadorian Central Bank and the Ecuadorian National Institute for Statistics using data for the twenty-three provinces of Ecuador over the period 2007-2014. We use the per capita income of each province as the standard measure of the level of economic development.

Table 1 shows the data of the nominal per capita income across Ecuadorian provinces for the years 2007, 2010 and 2014. The bottom part of the table provides some basic ratios which allow us to see how per capita income differences have evolved over the course of these years. If we pool the data for the periods (2007-2010) and (2011-2014) as it is shown in Table 1 the results show sizeable differences in terms of development levels across the Ecuadorian provinces. The computed ratios for the period 2007-2010 ($Max1/Average1=5.67$, $Min1/Average1=0.35$; $Max2/Average2=1.99$, $Min2/Average2=0.56$) show that the situation

has been worsened as we move along in time. The ratios for the period 2011-2014 are (Max1/Average1=6.97, Min1/Average1=0.27; Max2/Average2=2.07, Min2/Average2=0.44). Pooling these data show that overall we assist to a process of widening the gap in terms of per capita income across Ecuadorian provinces.

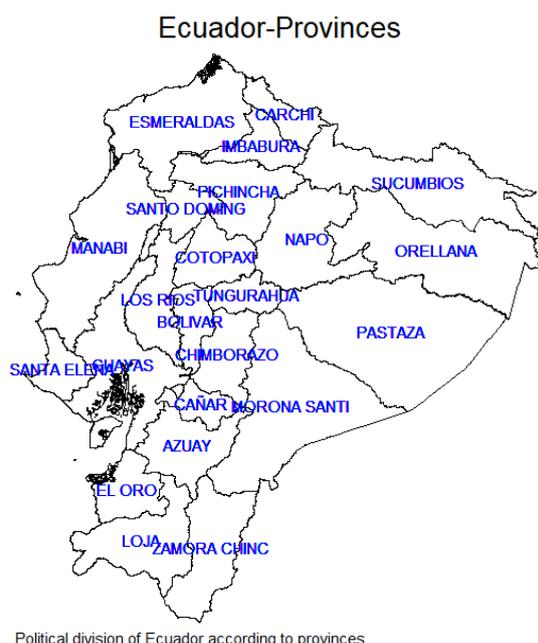
Table 1: Per capita income across Ecuadorian provinces (2007-2010, 2011-2014)

PROVINCES	2007-2010	2011-2014
<i>Azuay</i>	8.509,33	9.922,05
<i>Bolívar</i>	7.877,82	3.012,85
<i>Cañar</i>	4.301,05	6.366,16
<i>Carchi</i>	3.954,83	5.636,30
<i>Cotopaxi</i>	3.860,89	5.693,13
<i>Chimborazo</i>	3.457,17	5.075,06
<i>El Oro</i>	4.944,90	7.747,41
<i>Esmeraldas</i>	7.396,26	8.607,11
<i>Guayas</i>	8.306,36	10.114,29
<i>Imbabura</i>	4.172,85	6.841,17
<i>Loja</i>	4.019,71	5.532,16
<i>Los Ríos</i>	4.143,07	5.609,26
<i>Manabí</i>	4.367,56	6.095,79
<i>Morona Santiago</i>	3.367,27	3.850,88
<i>Napo</i>	4.958,15	4.317,02
<i>Pastaza</i>	11.443,72	15.954,44
<i>Pichincha</i>	11.219,11	14.009,25
<i>Tungurahua</i>	5.972,04	7.777,89
<i>Zamora Chinchipe</i>	3.183,73	3.969,67
<i>Sucumbíos</i>	31.424,38	26.941,61
<i>Orellana</i>	50.875,39	77.610,15
<i>Santo Domingo</i>	5.856,38	6.835,80
<i>Santa Elena</i>	8.470,65	8.240,40
Average1	8.960,11	11.119,99
Max1	50.875,39	77.610,15
Min1	3.183,73	3.012,85
Average2	5.616,96	6.762,68
Max2	11.219,11	14.009,25
Min2	3.183,73	3.012,85

Source: Own elaboration; 1 means all provinces, 2 means excluding oil-producing provinces

Figure 1 depicts f the political division of Ecuador.

Figure 1: Political division of Ecuador



Source: Banco Central de Ecuador and author's own calculations

The prediction of the core-periphery geographical economics models is that a big deal of the spatial pattern in the distribution of per capita income levels across different spatial settings has to do with the relative access to markets that the different units in the particular setting under consideration enjoy (Brakman et al., 2004, 2009; Breinlich, 2006; Bruna et al., 2015; Faiña & Lopez-Rodriguez, 2005; Fingleton, 2006; Hanson, 2005; Head & Meyer, 2006, 2011; Lopez-Rodriguez & Acevedo, 2013; López-Rodríguez & Faiña, 2006; Lopez-Rodriguez et al., 2011; Niebuhr, 2006; Overman et al., 2003; among others). This relative access to markets, or alternatively, relative remoteness, can be proxied by the so-called market potential measure suggested initially by Harris (1954)¹

Market potential: construction and summary statistics

The Harris (1954) market potential (MP) of a Ecuadorian province i is defined as the summation of markets accessible to that province divided by the distance between province i and the remaining ones². Therefore, the market potential of a province will be positively associated with the purchasing power of the remaining provinces but negatively related with the distance between each other. Mathematically, it adopts the following expression:

$$MP_{it} = \sum_{j=1}^n M_{jt} g(d_{ij}) \quad (1)$$

Where MP_{it} represents the Harris (1954) market potential function for province i in period t , M_{jt} is a measure of the purchasing power of province j in period t (usually approximated by

¹ The concept is analogous to that of population potential as proposed and mapped by Stewart (1947, 1948, 1952). It is an abstract index of the intensity of possible contact with markets. The concept is derived ultimately from physics, in which similar formulas are used in calculating the strength of a field, whether electrical, magnetic, or gravitational.

² The microeconomics grounds for the Harris (1954) market potential concept was first derived in the early nineties in the very influential Krugman's 1991 and 1992 papers on core-periphery geographical economics models.

its income level, gross value added or population), d_{ij} is a measure of the distance between two generic provinces i and j , $g(\cdot)$ is a decreasing function of the distance between two generic provinces i and j and n is the number of provinces considered. Additionally, the market potential of a given province i can be broken down into a domestic or internal component, market potential created by the province itself, (DMP_{it}) and an external or foreign one, market potentials for that province of all remaining provinces in the area under consideration, (FMP_{it}). Approximating $g(\cdot)$ by the inverse of the distance between province i and j , ($1/d_{ij}$), and taking into account the two components of the market potential, the mathematical expression (1) can be easily expanded to this one:

$$MP_{it} = \sum_{j=1}^n \frac{M_{jt}}{d_{ij}} = \frac{M_{it}}{d_{ii}} + \sum_{j \neq i}^{n-1} \frac{M_{jt}}{d_{ij}} = DMP_{it} + FMP_{it} \quad (2)$$

In making the calculations of the internal distance (d_{ii}) the standard methodology assumes that provinces are circular and the internal distance is approximated by a function that is proportional to the radius of the province. The radius of a circular-shaped province “ i ” of size equal to “ $area_i$ ” is $r_i = \sqrt{\frac{area_i}{\pi}}$. In this paper and following the work of Keeble et al. (1982), we will use $d_{ii} = 1/3r_i = 0.188\sqrt{area_i}$ as the first option. On the other hand, following other authors such as Crozet (2004), Head and Mayer (2000), and Nitsch (2000) we will use $d_{ii} = 2/3r_i = 0.376\sqrt{area_i}$ as the second option. Both formulas have been frequently used in the literature and give the average distance in a circular location under the assumption that production takes place in the centre and consumers are spread evenly across space. With regards to the variable M_{jt} we will use GDP, Gross Valued added (GVA) and population of each province as proxies. Finally, distances will be measure both in kms between the capital cities of each province and in lorry travel times. Therefore, we will build six different measures of market potential for distances measured in Kms. and other six for distances measured in Lorry travel times. The market potential measures that use distances expressed in Kms. will be labelled as PMYA (market potential based on GDP, physical distances and $d_{ii} = 1/3$), PM3YA (market potential based on GDP, physical distances and $d_{ii} = 2/3$), PMVYA (market potential based on GVA, physical distances and $d_{ii} = 1/3$), PM3VYA (market potential based on GVA, physical distances and $d_{ii} = 2/3$), PMP (market potential based on population, physical distances and $d_{ii} = 1/3$) y PM3P (market potential based on population, physical distances and $d_{ii} = 2/3$). The market potential measures that use distances expressed in lorry travel times will be labelled as PMYAT (market potential based on GDP, lorry tavel times and $d_{ii} = 1/3$), PM3YAT (market potential based on GDP, lorry tavel times and $d_{ii} = 2/3$), PMVYAT (market potential based on GVA, lorry tavel times and $d_{ii} = 1/3$), PM3VYAT (market potential based on GVA, lorry tavel times and $d_{ii} = 2/3$), PMPT (market potential based on population, lorry tavel times and $d_{ii} = 1/3$) y PM3PT (market potential based on population, lorry tavel times and $d_{ii} = 2/3$).

Tables 2 and 3 provide some information on the average composition of market potential for the years 2007 and 2014 to evaluate how it has changed over time. We calculate these access measures separately for the first and the last year of our panel data set to check if significant changes in the composition of market potential have taken place. The total market potential has been broken down according to expression (2) into a domestic component and a foreign component and according to a weighting scheme based on a distance matrix expressed in kms

(Table 2) and a distance matrix expressed in minutes of lorry travel times (Table 3). The first conclusion that can be obtained from Tables 2 and 3 is that both the average shares of market potential derived from own provinces (Domestic component) and from the rest of provinces (Foreign component) are kept roughly constant. Of course, these average shares vary quite substantially depending on the variable used to proxy the economic activity when computing market potential. When the variable that proxies economic activity is GDP the domestic share of market potential represents around 25% of total market potential versus 75% represented by the foreign component no matter how we define internal distances. However internal distances play a role in the distribution of domestic and foreign shares of market potential when we use GVA and Population as proxies for economic activity. When we proxy economic activity by GVA or population and measure internal distances by $d_{ii}=2/3r_i=0.376\sqrt{area_i}$ the domestic and foreign shares are respectively 25% and 75%. However, measuring internal distances as $d_{ii}=1/3r_i=0.188\sqrt{area_i}$ and proxying economic activity by GVA or population we get a more balanced distribution (40% domestic component versus 60% foreign one).

Table 2: Summary statistics on Market Potential (distance matrix expressed in kms)

	2007	2014
Average fraction of Market Potential derived from own province (PM3YA)	24.77(%)	24.88(%)
Average fraction of Market Potential derived from rest of provinces (PM3YA)	75.23(%)	75.17(%)
Average fraction of Market Potential derived from own province (PMVYA)	39.83(%)	39.71(%)
Average fraction of Market Potential derived from rest of provinces (PMVYA)	60.17(%)	60.29(%)
Average fraction of Market Potential derived from own province (PM3VYA)	24.86(%)	24.78(%)
Average fraction of Market Potential derived from rest of provinces (PM3VYA)	75.14(%)	75.22(%)
Average fraction of Market Potential derived from own province (PMP)	40.98%	40.87%
Average fraction of Market Potential derived from rest of provinces (PMP)	59.02%	59.13%
Average fraction of Market Potential derived from own province (PM3P)	25.77%	25.68%
Average fraction of Market Potential derived from rest of provinces (PM3P)	74.23%	74.32%

Source: Own elaboration based on market potential computations

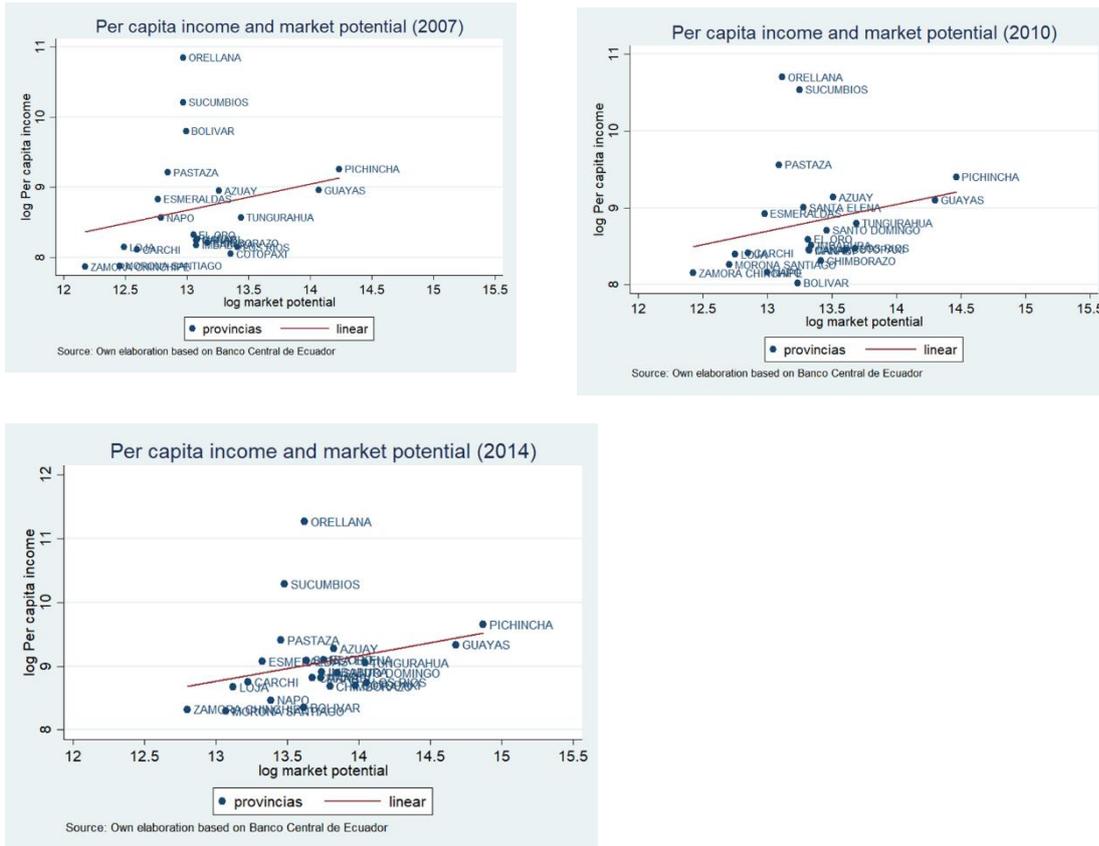
Table 3: Summary statistics on Market Potential (distance matrix expressed in minutes of travel)

	2007	2014
Average fraction of Market Potential derived from own province (PM3YA)	24.85(%)	24.91(%)
Average fraction of Market Potential derived from rest of provinces (PM3YA)	75.15(%)	75.09(%)
Average fraction of Market Potential derived from own province (PMVYA)	39.92 (%)	39.81(%)
Average fraction of Market Potential derived from rest of provinces (PMVYA)	60.08(%)	60.19(%)
Average fraction of Market Potential derived from own province (PM3VYA)	24.94(%)	24.85(%)
Average fraction of Market Potential derived from rest of provinces (PM3VYA)	75.06(%)	75.15(%)
Average fraction of Market Potential derived from own province (PMP)	41.14%	41.01%
Average fraction of Market Potential derived from rest of provinces (PMP)	89.86%	58.99%
Average fraction of Market Potential derived from own province (PM3P)	25.83%	25.80%
Average fraction of Market Potential derived from rest of provinces (PM3P)	74.17%	74.20%

Source: Own elaboration based on market potential computations

As for the relationship between the spatial distribution of per capita income and that of market potential Figure 2 reveals a connection between the two magnitudes although it is far from perfect. In general high market potential provinces are also provinces with high per capita income levels. However, figures for some provinces contradict this general statement. It can be observed that there are provinces with fairly low values of market potential (for instance the oil producing provinces of Sucumbios and Orellana) but with high per capita income levels due to oil revenues.

Figure 2: Income and market potential in the Ecuadorian provinces



Source: Banco Central de Ecuador and authors' own calculations

3. Geographical Economics Explanation: Income and Geography

The theoretical framework is a reduced version of a standard geographical economics model (multi-regional version of Krugman, 1991). We consider a regional setting composed of R locations and we focus on the analysis of the manufacturing sector. In this sector, firms produce a great number of varieties of a homogenous differentiated good (D) under increasing returns to scale and monopolistic competition. Firms face transport costs in an iceberg form in order to receive one unit of the differentiated good at location j from location i , $T_{i,j} > 1$ units must be shipped from i , so $T_{i,j} - 1$ measures the fraction of good that is melted in transit from i to j . The manufacturing sector can produce the differentiated good in different locations.

On the demand side, the final demand in location j can be obtained via utility maximization of the corresponding CES utility function:

$$\text{Max}_{m_{i,j}(z)} D_j = \left[\sum_{i=1}^R \int_0^{n_i} m_{i,j}(z)^{\sigma-1/\sigma} dz \right]^{\sigma/\sigma-1} \text{ s.t. } \sum_{i=1}^R n_i x_{ij}^D p_{ij} = E_j \quad (3)$$

where D_j represents the consumption of the differentiated good in location j . D is an aggregate of industrial varieties where $m_{i,j}(z)$ means the consumption of the each available variety z in location j and produce in location i and n_i is the number of varieties produced in location i . σ represents the elasticity of substitution among the varieties of the differentiated good where $\sigma > 1$, p_{ij} ($p_{ij} = p_i T_{ij}$), is the price of varieties produced in location i and sold in j and E_j represents the total income in location j . The consumer's problem solution gives the final demand in location j for each variety produce in location i .

$$x_{ij}^D = p_{ij}^{-\sigma} \left[\sum_{n=1}^R n_n p_{nj}^{1-\sigma} \right]^{-1} Y_j \quad (4)$$

If we define a price index for the differentiated goods³ as $P_j \equiv \left[\sum_{n=1}^R n_n p_{nj}^{1-\sigma} \right]^{\frac{1}{1-\sigma}}$, final demand in location j can be written as $x_{ij}^{\text{consD}} = p_{ij}^{-\sigma} P_j^{\sigma-1} E_j$. However, in order for x_{ij}^{consD} units of consumption to arrive at location j , $T_{i,j} x_{ij}^{\text{consD}}$ must be shipped. So, the effective demand a firm in location i faces from a consumer in location j is given by:

$$x_{ij}^D = T_{ij} p_{ij}^{-\sigma} P_j^{\sigma-1} E_j = p_i^{-\sigma} T_{ij}^{1-\sigma} P_j^{\sigma-1} E_j \quad (5)$$

On the supply side a typical firm in location i maximizes the following profit function:

$$\Pi_i = \sum_{j=1}^R \frac{p_{ij} x_{ij}^D}{T_{i,j}} - w_i^D (F + c x_i^D) \quad (6)$$

Technology in the increasing returns to scale manufacturing sector is given by the usual linear cost function: $l_{Dij} = F + c x_{ij}^D$, where l_{Dij} , represents the industrial workers used for the production of a variety in location i and sold in location j , F , represents a fixed cost of production, c , is the variable unit cost and x_{ij}^D is the amount of the differentiated good demanded in location j and produced in location i ($x_i^D \equiv \sum_j x_{ij}^D$ represents the total amount of output produced by the firm in location i and sold in the different j locations) and w_i^D is the nominal wage paid to the manufacturing workers in location i . First order conditions for profit maximization give the standard result that prices are set at a markup $\frac{\sigma}{\sigma-1}$ over

marginal costs. At this price profits will be $\Pi_i = \left(w_i^D \right) \left[\frac{c x_i^D}{\sigma-1} - F \right]$. Free of entry assures that

³ This Industrial Price Index in location j measures the minimum costs of purchasing a unit of the composed index of manufacturing goods D so it can be interpreted as an expenditure function.

in the long run firms break even, implying that $x_i^D = \bar{x} = \frac{F(\sigma-1)}{c}$. The price that is needed to

sell this amount of output is $P_i^\sigma = \frac{1}{x} \sum_{j=1}^R E_j P_j^{\sigma-1} T_{i,j}^{1-\sigma}$. If we combine this expression with the

fact that in equilibrium prices are a constant markup over marginal costs, the following zero-profit condition can be obtained:

$$w_i^D = \left(\frac{\sigma-1}{\sigma c} \right) \left[\frac{1}{\bar{x}} \sum_{j=1}^R E_j P_j^{\sigma-1} T_{i,j}^{1-\sigma} \right]^{\frac{1}{\sigma}} \quad (7)$$

This equation is the so-called *nominal wage equation* in the Geographical economics literature. Equation (6) shows that the nominal wage level at location i depends on a weighted sum of the purchasing power of the surrounding locations where the weighted scheme is a distance function that decreases as the distance between i and j increases. If we normalize output production choosing our units in such a way that $c = \frac{(\sigma-1)}{\sigma}$, and we set the fixed

input requirement as $F = \frac{1}{\sigma}$, and define market potential in location i as $MP_i = \sum_{j=1}^R E_j P_j^{\sigma-1} T_{i,j}^{1-\sigma}$

, we can rewrite the *nominal wage equation* as:

$$w_i^D = [MP_i]^{\frac{1}{\sigma}} \quad (8)$$

The meaning of this equation is that those firms in locations that have a good access to big markets (high market potential) will tend to remunerate their local factors of production (workers) with better salaries due to their savings in transportation costs.

4. Estimation of the Baseline Model

4.1. Panel data

As a first step in our study of the robustness of the estimated impact of MP on the spatial distribution of income, we estimate a simple specification of equation 8 that will be used as a benchmark:

$$\ln Yrpc_{it} = \alpha_t + \beta_1 \ln MP_{it} + \varepsilon_{it} \quad (9)$$

where $Yrpc$ denotes the column vector with the per capita income values of the Ecuadorian provinces (Per capita gross domestic product measured in thousands of 2007 constant dollars obtained from the Ecuadorian Central Bank), MP denotes the column vector with the market potential values and ε is supposed to be (so far) a well-behaved error term. β is the parameter that captures the impact of MP on per capita income. Besides the increase in the number of observations using the panel data set allows controlling for unobservable regional effects that could be shaping the spatial distribution of income across the Ecuadorian provinces.

We begin by examining how much of the variation in Ecuadorian provincial per capita income levels can be explained when only including information on market potential. We impose

constant coefficients across the time period (2007-2014) to smooth variations introduced by short-run fluctuations in GDP. The results of the ordinary least square (OLS) estimates of the parameters in equation (9) are shown in tables 4 and 5. This provides the basis for our baseline estimation (OLS estimates) where we assume that the error term is uncorrelated with the explanatory variables.

However, the models estimated in Tables 4 and 5 are marked by outlying observations as it can clearly be seen in the pictures in Figure 2. The outlying provinces do not correspond with the spatial structure of per capita income levels determined by the majority of the observations. Outliers will seriously affect the coefficient estimates, if they are influential leverage points, i.e. outlying observations with regard to our market potential measure. In order to identify outliers, we have computed the Cook's distance. Cook's distance measures the aggregate change in the estimated coefficients when each observation is left out of the estimation. Values of Cook's distance that are greater than $4/N$ may be problematic. Therefore, in our case the observations with Cook's distance greater than $4/182=0.02$ are problematic. The results of this statistic show that the provinces of Orellana and Sucumbios are behaving as outliers. In order to control for the effects of the identified outlying observations we have carried out our estimations by dropping out these two provinces from the sample.

Table 4 reports the average coefficient on market potential for this baseline specification estimated by OLS for the sample pooled across the period (2007-2014) and using the six market potential measures defined previously⁴ (PMYAR, PMVYAR, PMP, PM3YAR, PM3VYAR, PM3P). Table 4 contains six columns where the first one corresponds to the regression of log of provincial real per capita GDP against PMYAR, the second column corresponds to the regression of log of provincial real per capita GDP against PMVYAR, the third one corresponds to the regression of log of provincial real per capita GDP against PMP and the remaining three columns corresponds to the regression of log of provincial real per capita GDP against the same market potential measures but where the internal distances used for computing the domestic component of market potential followed the expression $d_{ii}=2/3r_i=0.376\sqrt{area_i}$ instead of $d_{ii}=1/3r_i=0.188\sqrt{area_i}$ (used for the first set of market potential measures).

It can be seen that all the coefficient estimates of market potential are both significant and highly economic significant at the usual standard significant levels and therefore the results are in line with the theoretical predictions of the core-periphery geographical economics model. However, there is a sizeable difference in the values of the coefficient estimates depending on the definition of market potential used in the regression. When market potential is measure using as a proxy for the economic mass of each Ecuadorian province the figures of gross domestic product (GDP) or gross value added (GVA) -estimations of columns 1, 2, 4 and 5- the elasticity estimates of real per capita income with respect to market potential are in the range of 0.42-0.45 which are 57% larger than the ones obtained with the other alternative definitions of market potential, market potential measured using as a proxy for the economic mass of each Ecuadorian province the figures of populations –columns 3 and 6- where the coefficient estimates are around 0.28-0.29. In the estimations of columns 1, 2, 4

⁴ The difference with respect to the previous measures is that in this case, for the calculation of the numerator of the market potential, GDP and GVA values expressed in constant 2007 dollars have been used instead of current dollars.

and 5, on average doubling market potential increases real per capita income by around 42%-45%, whereas with the alternative definitions the increase is much more modest, on the range 28%-29%. Moreover, these definitions of market potential definitions are more aligned with the theoretical derivation of market potential in the core-periphery geographical economics model and so this fact also explains that the explanatory power (between 13%-21%) of the regressions in columns 1, 2, 4 and 5 is much higher than in the regressions of columns 3 and 6 where the R2 are between 5%-7%.

We have repeated the estimations of Table 4 (Table 5) using an alternative metric to measure the distance between the Ecuadorian provinces. We compute a somewhat more sophisticated version of the Harris' market potential, using lorry travel times (expressed in minutes of travel) as weights instead of physical distances (we label the market potential measures by adding the letter "T" at the end of the variable). These travel times between the capitals cities of the provinces have been obtained from Google maps taken the option which reports the fastest route (the ones with the lowest time assigned).

The results of the estimations are pretty much in line with the previous ones for columns 1 to 3, whereas for columns 4 to 6 there is a considerable reduction in the elasticity estimates with also a non-significant effect of market potential on per capita income when market potential is defined from population (column 6).

Table 4: Results of the Estimation of the Baseline Model (2007-2014) (pooled OLS estimates, distance matrix for market potential computations in kms.)

Dependent variable	Log Yrpc					
	(1)	(2)	(3)	(4)	(5)	(6)
Regressors						
Constant	2.68** (0.24)	3.10** (0.5)	5.25** (1.29)	2.56** (0.75)	3.03** (0.76)	5.17** (1.46)
Log PMYAR	0.44** (0.03)					
Log PMVYAR		0.42** (0.04)				
Log PMP			0.28** (0.11)			
Log PM3YAR				0.45** (0.06)		
Log PM3VYAR					0.44** (0.06)	
Log PM3P						0.29** (0.13)
year dummies	No	No	No	No	No	No
Estimation	OLS	OLS	OLS	OLS	OLS	OLS
R2	0.21	0.19	0.07	0.14	0.13	0.05
F-statistic	140.01** [0.00]	115.46** [0.00]	5.99* [0.01]	60.54** [0.00]	50.19** [0.00]	4.90* [0.05]
Observations	166	166	166	166	166	166

Note: Table displays coefficients and Huber-White standard errors for OLS. The dependent variable is the log of per capita income (at constant 2007 dollars). log of MP1 to log of MP6 are the logs of the different definitions of market potential. Standard errors for coefficient estimates are in parenthesis. p-values for the statistics are in brackets. * and ** mean statistical significance at 10% and 5% respectively.

Table 5: Results of the Estimation of the Baseline Model (2007-2014) (pooled OLS estimates, distance matrix for market potential computations in minutes of travel times)

Dependent variable	Log Yrpc					
	(1)	(2)	(3)	(4)	(5)	(6)
Regressors						
Constant	2.66** (0.24)	3.09** (0.51)	5.25** (1.30)	6.33** (0.80)	6.22** (0.77)	8.99** (0.89)
Log PMYART	0.44** (0.04)					
Log PMVYART		0.43** (0.04)				
Log PMPT			0.28** (0.11)			
Log PM3YART				0.16** (0.06)		
Log PM3VYART					0.18** (0.06)	
Log PM3PT						-0.04 (0.08)
year dummies	No	No	No	No	No	No
Estimation	OLS	OLS	OLS	OLS	OLS	OLS
R2	0.21	0.19	0.07	0.02	0.02	0.00
F-statistic	139.10** [0.00]	115.31** [0.00]	5.88* [0.01]	7.04** [0.00]	8.53** [0.00]	0.36 [0.54]
Observations	166	166	166	166	166	166

Note: Table displays coefficients and Huber-White standard errors for OLS. The dependent variable is the log of per capita income (at constant 2007 dollars). log of MP1 to log of MP6 are the logs of the different definitions of market potential. Standard errors for coefficient estimates are in parenthesis. p-values for the statistics are in brackets.. * and ** mean statistical significance at 10% and 5% respectively.

4.2. Robustness checks

The pooled OLS estimates of the specification (9) is subject to a number of concerns. In order to have a consistent estimator of β_1 (elasticity of per capita income with respect to market potential) we have to assume that the many potential unobserved time-constant factors which are difficult to control for in our estimations and which are affecting the level of per capita income across the Ecuadorian provinces are uncorrelated with market potential. However, holding this assumption in the context of the estimation of a relationship between per capita income and market potential is not very reasonable and therefore the pooled OLS method does not solve the omitted variables problem we are mentioning and therefore the estimates are biased and inconsistent. For instance, shocks to $Yrpc_{it}$ as captured by ϵ_{it} are likely to be correlated across regions which in the end raises the issue that ϵ_{it} is also correlated with MP_{it} . Variables like institutional quality, climatic and another amenity of region, historical factors, and geographical features related to regions, etc. can be considered as additional determinants of income levels. In the case of Ecuador, it is well known that these factors vary across the different provinces and to a certain extent they are likely to be correlated across space. For these particular cases in which it is reasonable to assume the existence of unobserved regional heterogeneity in the relationship we want to estimate, having a panel data set is very useful since one of the main reasons of panel data is precisely to allow for the

unobserved effects to be correlated with the explanatory variables (in our case with market potential). So, the next step we are going to take in the analysis is to introduce regional (province) fixed effects into our specification (9) and carry out the estimation of equation (9) by fixed effects (FE) and first differences (FD) to obtain the fixed effect and first-differenced estimator of β_1 .

The equation to be estimated is the following one:

$$\ln Yrpc_{it} = \beta_0 + \beta_1 \ln MP_{it} + a_i + u_{it} \quad (10)$$

Where the variable a_i capture all unobserved time-constant factors that are affecting $Yrpc_{it}$.

The first four columns of Table 6 correspond to the estimations based on a fixed effects transformation of equation (10) which leads to the estimator based on the standard least squares (within estimator or also known as fixed effects estimator). In these set of estimations, we have also controlled for fixed-year effects. The coefficient on market potential shows up as both statistically and economically very significant (columns 1 to 4) with an estimated value of around 0.5 which means that doubling market potential would on average increase real per capita income by 50%. Since market potential is meant to capture market sizes, there is a well-acknowledged endogeneity issue in the Harris' market potential. The market potential variable MP_{it} which in the definitions of columns 1 (2) and 3 (4) use as a proxy for the economic activity GDP_{it} (GVA_{it}) which in turn is increasing in per capita income, as captured by $Yrpc_{it}$, the dependent variable. There are several ways of dealing with this issue. First, in columns 5 and 6 we use values of MP_{it} lagged one period on the grounds that the factors that played a role in the past are uncorrelated to the factors affecting current productivity shocks in the different provinces, thus avoiding problems arising from shocks linked to spatially correlated but intertemporally uncorrelated omitted variables (for instance nationwide strikes). The results of the estimations show that the coefficient estimates are positive and highly economically significant. Doubling market potential would lead to an increase in the average per capita income of around 47%-48%.

Taking longer time lags of the market potential variable helps to reduce the problems from shocks that are correlated across time. Following Boulhol and Serres (2009) we lag market potential three times. It can be seen that the estimated parameter for market potential which is reported in columns 7 and 8 is very significant and the magnitude is pretty much the same as with one period lags in the market potential. However, it is important to bear in mind that there are some factors that are persistent over time which are very difficult to eliminate with this approach such as for instance institutional quality, locational factors, etc.

Table 6: Robustness checks l-distance matrix Kms.- (fixed effects and lagged values)

Dependent variable	Levels							
Log Yrpc								
Regressors	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	2.08 (2.04)	2.44 (1.98)	1.91 (2.72)	2.28 (2.62)	2.18 (2.12)	2.64 (1.26)	2.23 (2.32)	2.67 (2.27)
Log PMYAR	0.49** (0.15)							
Log PMVYAR		0.49** (0.16)						
Log PM3YAR			0.51** (0.21)					
Log PM3VYAR				0.51** (0.21)				
Log PMYAR (t-1)					0.48** (0.16)			
Log PMVYAR (t-1)						0.47** (0.10)		
Log PMYAR (t-3)							0.47** (0.17)	
Log PMVYAR (t-3)								0.46** (0.18)
year dummies	Yes							
Fixed effects			Yes	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes			Yes	Yes	Yes	Yes
Estimation	OLS							
R2	0.31	0.29	0.21	0.20	0.19	0.29	0.27	0.25
Observations (regions/year)	166 (21/8)	166 (21/8)	166 (21/8)	166 (21/8)	147 (21/7)	147 (21/7)	105 (21/5)	105 (21/5)

Note: Table displays coefficients and Huber-White standard errors for OLS. Standard errors for coefficient estimates are in parenthesis. p-values for the statistics are in brackets. For data sources see text and appendix A. * and ** mean statistical significance at 10% and 5% respectively.

Another potential way to control for this endogeneity issue will be presented below with the IV estimations. The panel data set we have built allows us to define a set of instruments for market potential that will be used to obtain an instrumental variable estimator of the impact of economic remoteness on per capita income levels across the Ecuadorian provinces. In the earlier literature on this topic the usual approach was to use the sum of the distances of each region to Luxembourg (Breinlich, 2006) or the sum of the distances to Tokyo, Brussels and New York (Redding and Venables 2004). However, Breinlich, 2006 mentions that one could have objections to this instrument for market potential on the grounds of the fact that Luxembourg is a centroid of regional income's distribution within the EU and distance to it could be capturing other determinants of income levels besides market potential. Similarly, when Redding and Venables 2004 choose the sum of distances of each country to the three centers of global economic activity (Tokyo, Brussels and New York) as an instrument one can argue that in thirty years' time these centers no longer will be the main poles of attraction. Therefore, the choice of these three locations is in itself endogenous. In our case and following (Head and Mayer, 2006) an appealing instrument is to sum the distances of each Ecuadorian province to all the other provinces. In order to take advantage of the panel dimension of the data, we will allow the effect of this time-invariant instrument to vary through time by

interacting the sum of the distances of each Ecuadorian province to all other provinces with time dummies defined for each year included in our period of analysis. The proposed instruments are $Z_{it} = h_t \frac{1}{N} \sum_{j \neq i}^n d_{ij}$ where N is the number of Ecuadorian provinces and h_t are the time dummies. We will measure d_{ij} as the sum of the distances from province “i” to all other provinces using two metrics (kilometres and lorry travel times), so we will have at our disposal two sets of instruments for market potential. Using lorry travel times allow us to control for the quality of the infrastructure.

The results obtained when market potential is treated as an endogenous variable and the time-varying instruments based on the average distances for each province are used are shown in Table 7. The estimates in the first two columns consider the definition of market potential (PMYAR) and the two sets of instruments defined (according to the two metrics of distances) and the estimates in the last two columns correspond the definition of market potential (PMVYAR). It can be seen that the elasticity estimates of per capita income with respect to market potential are in both cases in line with the theoretical predictions of the model and highly economic significant. The Sargan’s test indicates that the instruments are exogenous.

Table 7: GDP per capita and economic geography (IV estimates)

Dependent variable	Log Yrpc (1)	Log Yrpc (2)	Log Yrpc (3)	Log Yrpc (4)
Regressors				
Constant	5.24** (1.50)	5.44** (1.56)	5.42** (0.42)	5.58** (1.50)
Log PMYAR	0.25** (0.11)	0.23** (0.11)		
Log PMVYAR			0.25** (0.11)	0.23* (0.12)
Fixed effects				
Region/year	No/Yes	No/Yes	No/Yes	No/Yes
Estimation	IV	IV	IV	IV
R2 (first stage)	0.38	0.35	0.40	0.37
R2	0.18	0.17	0.17	0.16
^a Sargan’s test (and p-value)	3.35 [0.85]	3.40[0.84]	3.34[0.85]	3.40[0.84]
Observations (regions/year)	166 (21/8)	166 (21/8)	166 (21/8)	166 (21/8)

Note: Table displays coefficients and t-statistics for IV estimation. The dependent variable is the log of per capita income. The independent variable is the log of market potential (PMYAR) columns 1 and 2 and log market potential (PMVYAR) columns 3 and 4. Instruments for PMYAR and PMVYAR in columns 1 (2) and 3 (4) are based on the time dummies interaction with average distance to other provinces in kms (lorry travel times).^a Sargan’s overidentification test of all instruments. * and ** signify statistical significance at the 10% and 5% levels.

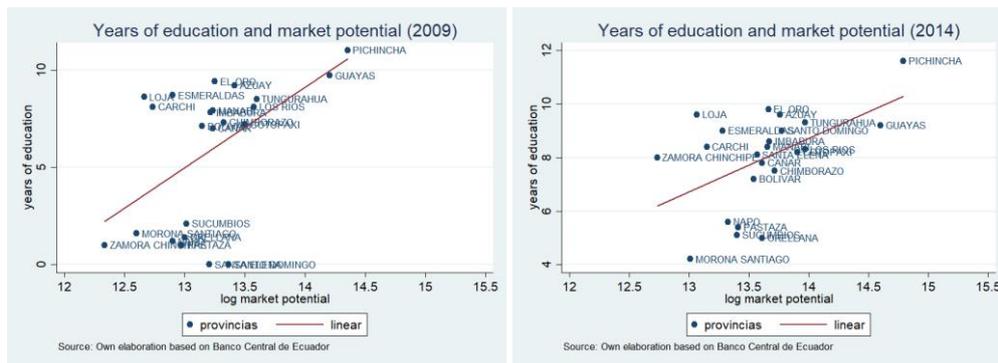
5. Missing Links (Disentangling Channels of Influence): Human capital

The core-periphery geographical economics model sketched in section 3 provides a theoretical framework for the empirical evidence reported in this paper which consisted in finding a positive relationship between the level of income across the Ecuadorian provinces and their relative access to markets measured by market potential. Although we have reported some variability in the estimated elasticity of income with respect to market potential across the different empirical estimates we have carried out, the coefficient of market potential retained both economic and statistical significance. Therefore, the results obtained can be considered a confirmation that the relative access of the Ecuadorian provinces to markets play an important role in shaping the income structure in Ecuador. Despite this important role played by market potential with regard to the income gradient observed in Ecuador it is important to clarify that the estimated baseline model does not account for other potential important determinants of the levels of income across the Ecuadorian provinces. At this point an important driver of income levels which is related and influenced by market potential is worth mentioning: Human capital stocks. With regard to human capital on the one hand it is quite clear that locations with a better endowment of human capital (a large share of skilled workers) are locations characterized by higher income levels than locations with lower endowments of human capital. A wide range of empirical studies for developed and developing countries provide evidence that skilled or educated workers receive higher wages (see for instance Psacharopoulos, 1994).

On the other hand, and from the perspective of the geographical economics literature (Redding and Schott, 2003) have shown that locations with high market potential also provide more long-run incentives for human capital accumulation by increasing the premium for skilled labour. More precisely Redding and Schott (2003) result emerges from an extension of the standard two-sector (agriculture and manufacturing) economic geography model to allow unskilled individuals to endogenously choose whether to invest in education. They argue that if skill-intensive sectors have higher trade costs, more pervasive input–output linkages or stronger increasing returns to scale, they show theoretically that remoteness depresses the skill premium and therefore incentives for human capital accumulation. Therefore, this penalty which accrue to remote locations magnifies the effect that economic geography can have on the cross-province differences in income levels observed in Ecuador. Increasing a province relative trade costs not only reduces contemporaneous factor rewards, but also lowers gross domestic product by suppressing human capital accumulation and decreasing the supply of high-income skilled workers.

Figure 3 shows quite clearly that the stocks of human capital are highly correlated with market potential across the Ecuadorian provinces. The graphs show that the endowment of human capital is on average higher in those locations which feature high values of market potential. A remarkable feature we observe in these graphs is the outlying position of the province of Pichincha where the capital Quito is located.

Figure 3: Market potential and human capital in the Ecuadorian provinces



Source: Banco Central de Ecuador and authors' own calculations

So, assuming that the accumulation of human capital across the Ecuadorian provinces are pretty much influenced by their relative access to markets, a natural way of testing the importance of market potential as a key factor in explaining the spatial distribution of income levels in Ecuador is by incorporating human capital stocks as an additional regressor in the baseline specification estimated earlier.

Table 8 reports the results of the extended regression. In columns 1 and 2 (3 and 4) we regress per capita income against log of PMYAR (log of PMVYAR) and log of average years of education- The coefficient estimates for market potential are in all regressions positive and highly statistically significant and remain economically significant. Instrumenting market potential with the interaction of the time dummies with average distance to other provinces in kms reports higher values for the elasticity estimates of income with respect to market potential than when the instruments for market potential are defined as interaction of the time dummies with average distance to other provinces measured in travel times. The values for the elasticity estimate of income with regard to PMYAR (PMVYAR) compared vis-a-vis are 0.15 vs 0.13. With respect to the coefficients associated with human capital proxy by the average years of education, the signs are in line with the theoretical expectations.

Table 8: GDP per capita and economic geography: Disentangling channels of influence (IV estimates)

Dependent variable	Log Yrpc			
	(1)	(2)	(3)	(4)
Regressors				
Constant	6.33** (1.91)	6.56** (1.97)	6.43** (1.82)	3.13** (1.01)
Log PMYAR	0.15** (0.03)	0.13** (0.03)		
Log PMVYAR			0.15** (0.04)	0.13** (0.04)
Av. years of education	0.02** (0.001)	0.02** (0.001)	0.02** (0.001)	0.02** (0.001)
Fixed effects Region/year	No/Yes	No/Yes	No/Yes	No/Yes
Estimation	IV	IV	IV	IV
R2 first stage	0.69	0.67	0.70	0.67
R2	0.13	0.12	0.12	0.12
^a Sargan's test (and p-value)	0.87 [0.93]	0.82 [0.93]	0.86 [0.93]	0.89 [0.92]
Observations (regions/year)	105 (23/5)	105 (23/5)	105 (23/5)	105 (23/5)

Note: Table displays coefficients and t-statistics for IV estimation. The dependent variable is the log of per capita income. The independent variable is the log of market potential (PMYAR) columns 1, 2 and log market potential (PMVYAR) columns 3 and 4. Instruments for PMYAR and PMVYAR in columns 1 and 3 (2 and 4) are based on the time dummies interaction with average distance to other provinces in kms (lorry travel times).^a Sargan's overidentification test of all instruments. * and ** signify statistical significance at the 10% and 5% levels.

6. Conclusions

In this paper we have analyzed the existence of a spatial structure of provincial per capita income in Ecuador over the period 2007-2014 by testing the so-called *nominal wage equation* of the geographical economics models. The nominal wage equation relates income or wages in a location with a weighted sum of the volume of economic activity in the surrounding locations where the weighted scheme is a function of the inverse of the distance measure either in kilometres or travel times between locations. This weighted sum is usually known as market potential or market access. Therefore, our main goal was to test the role of market potential in shaping the spatial income structure observed in Ecuador. To do so, using our panel data set we have estimated a number of different specifications regressing per capita income on market potential.

Our first approach to the empirical exercise was to carry out a pooled OLS estimation of the impact of market potential on per capita income over the whole sample period (2007-2014) using 12 different market potential metrics. The results of these baseline estimations of the nominal wage equation were in line with the theoretical predictions of the model, i.e, market potential no matter which definition is used in the regressions exerts a positive and economically significant impact in the expected or average income of the Ecuadorian provinces. The estimated slope parameters vary depending on market potential definition

used but they were in the range 0.28-0.44 for distance matrices expressed in Kms. and 0.16-0.44 for distance matrices expressed in lorry travel times.

Our next step in the empirical exercise was to carry out some robustness checks in the baseline estimation. Using the panel data character of our data we introduce regional (province) fixed effects in order to control for many potential unobserved time-constant factors and estimated the baseline specification by fixed effects (FE). The results are again in favour of the hypothesis of the nominal wage equation. The estimated coefficients were in the range 0.46-0.51 for the FE estimations and distance matrix expressed in Kms. Our next concern was about the potential endogeneity of market potential. We have approached to this issue by instrumenting market potential a) with two different sets of instruments which consisted of interacting the sum of the distances of each Ecuadorian province to all other provinces with time dummies defined for each year. The results of the IV estimations delivered slope parameter estimates for market potential which were in the range 0.23-0.25 and b) using lagged values for market potential. In this last case the elasticity estimates of per capital income with respect to market potential is around 0.47.

Finally, another important step we took in the estimation of the baseline nominal wage equation was to disentangle the potential effects of human capital since there are reasons both from a theoretical side as well as from an empirical one that the accumulation of human capital across the Ecuadorian provinces is pretty much influenced by their relative access to markets. The results of the extended baseline estimations controlling for human showed that market potential keeps its importance with elasticity estimates in the range 0.13-0.15.

Acknowledgements

The first author also acknowledges the support received from the Spanish Ministry of Economics and Competitiveness through the project ECO2015-68597-P (MINECO/FEDER).

Literature

1. Bouhol, H., & Serres, A. (2009). Have developed countries escaped the curse of distance?. *Journal of Economic Geography*, 10(1), 113-139.
2. Brakman, S., Garretsen H., & Schramm M. (2004). The spatial distribution of wages and Employment: Estimating the Helpman-Hanson model for Germany. *Journal of Regional Science*, 44, 437-466.
3. Brakman, S., Garretsen, H., & Van Marrewijk, C. (2009). Economic Geography within and between European nations: The role of Market Potential and density across space and time. *Journal of Regional Science*, 49(4), 777-800.
4. Breinlich, H. (2006). The spatial income structure in the European Union: what role for Economic Geography?. *Journal of Economic Geography*, 6(5), 593-617.
5. Bruna, F., Lopez-Rodriguez, J., & Faíña, A. (2015). Market Potential, Spatial Dependences and Spillovers in European Regions. *Regional Studies*, 50(9), 1551-1563.
6. Faíña, A., & López-Rodríguez J. (2005). The economic geography of EU income: evolution since the eighties. In: F. J. Trivez, J. Mur, A. Angulo, M. Ben Kaabia & B. Catalán (eds.), *Contributions in spatial econometrics*. Zaragoza: Copy Center Digital.
7. Fingleton, B. (2006). The new economic geography versus urban economics: an evaluation using local wage rates in Great Britain. *Oxford Economic Papers*, 58(3), 501-530

8. Hanson, G. H. (2005). Market potential, increasing returns and geographic concentration. *Journal of International Economics*, 67(1), 1-24.
9. Harris, C. D. (1954). The Market as a Factor in the Localization of Industry in the United States. *Annals of the Association of American Geographers*, 44(4), 315-348.
10. Head, K., & Mayer, T. (2000). Non-Europe: The Magnitude and Causes of Market Fragmentation in the EU. *Review of World Economics (Weltwirtschaftliches Archiv)*, 136, 284-314.
11. Head, K., & Mayer T. (2006). Regional wage and employment responses to market potential in the EU. *Regional Science and Urban Economics*, 36(5), 573-594.
12. Head, K., & Mayer T. (2011). Gravity, market potential and economic development. *Journal of Economic Geography*, 11(2), 281-294.
13. Krugman, P. (1991). Increasing returns and economic geography. *Journal of Political Economy*, 99(3), 483-499.
14. Krugman, P. (1992). A Dynamic Spatial Model. NBER Working Paper 4219. National Bureau of Economic Research. Available at: <http://ideas.repec.org/p/nbr/nberwo/4219.html>
15. Legarda, V. (2016). El ciclo político y la economía política del gasto social en el Ecuador. *Revista de análisis estadístico*, 12, 111-114.
16. López Rodríguez, J., Márquez, M. A., & Faiña, A. (2011). ¿Hasta qué punto la perifericidad económica es responsable de las diferencias en el pib per capita entre las provincias españolas?. *El Trimestre Económico*, 3, 583-611.
17. López-Rodríguez, J., & Acevedo-Villalobos, M. C. (2013). El acceso a los mercados y la disparidad del ingreso en los departamentos colombianos. *El Trimestre Económico LXXX-4(320)*, 869-901.
18. López-Rodríguez, J., & Faiña, A. (2006). Does distance matter for determining regional income in the European Union? An approach through the market potential concept. *Applied Economics Letters*, 13(6), 385-390.
19. López-Rodríguez, J., Faiña, A., & Cosmin-Gabriel, B. (2011). Economic Remoteness And Wage Disparities In Romania. *Tijdschrift voor economische en sociale geografie*, 102(5), 594-606.
20. López-Rodríguez, J., Faiña, A., & López-Rodríguez, J. (2007). Human capital accumulation and geography: Empirical evidence from the European Union. *Regional Studies*, 41(2), 217-234.
21. Niebuhr, A. (2006). Market access and regional disparities. *The Annals of Regional Science*, 40(2), 313-334.
22. Nitsch, V. (2000). National borders and international trade: evidence from the European Union. *Canadian Journal of Economics*, 22, 1091-1105.
23. Psacharopoulos, G. (1994). Returns to investment in education: a global update. *World Development*, 22(9), 1325-1343
24. Redding, S. J., & Schott, P. K. (2003). Distance, skill deepening and development: will peripheral countries ever get rich?. *Journal of Development Economics*, 72(2), 515-541.
25. Redding, S. J., & Venables, A. (2004). Economic geography and international inequality *Journal of International Economics*, 62(1), 53-82.
26. Stewart, J. Q. (1947). Empirical Mathematical Rules Concerning the Distribution and Equilibrium of Population. *Geographical Review*, 37, 461-485.
27. Stewart, J. Q. (1948). Demographic Gravitation: Evidence and Applications. *Sociometry*, 11, 31-58.
28. Stewart, J. Q. (1952). A Basis for Social Physics. *Impact of Science on Society*, 111, 110-133.

Innovation and Culture as Dynamic Capabilities: The Case of a Vertically Integrated Sawmilling Company

Tshepo Malumane

Department of Business Management

University of Johannesburg

Corner of Kingsway and University Roads, Auckland Park, Johannesburg, South Africa

Suzaan Hughes

Department of Business Management

University of Johannesburg

Corner of Kingsway and University Roads, Auckland Park, Johannesburg, South Africa

E-mail: shughes@uj.ac.za

Abstract

The growing pressure faced by organisations as a result of changes in the business environment and intense global competition has created the need for organisations to adapt and rejuvenate in order to remain competitive and profitable. The strategic use of organisational resources and capabilities has been recognised as central in the pursuit of a sustained competitive advantage in dynamic markets. To this end this study considered how organisational culture and innovation enabling capabilities can act as strategic and dynamic resources which are effective sources of competitive advantage. The research methodology applied to this study was a qualitative case study. Data was gathered in two phases, firstly through a surveying instrument and secondly by means of semi structured interviews. The analysis of the case study revealed a misalignment between the dominant culture at Company X, the dynamic nature of its environment and the need for a competitive advantage. Organisational capabilities with either an enabling or inhibiting impact on innovation were also investigated and informed the outcomes of this study's objectives. The conclusions and implications suggested that Company X reflect on the efficacy of its strategy in driving innovation, and ensure that leadership hones their ability to appropriately leverage off the diverse expertise prevalent in the organisation, doing so in a manner that promotes inclusivity

Keywords

Resource based view, organisational culture, competitive advantage, innovation, distinctive capabilities

1. Introduction

Considering globalisation and international market competition, organisations that wish to remain sustainable should focus on strategies that enable them to shape future competition in their respective markets rather than respond to a future dictated by their competitors. Pursuing competitiveness in dynamic markets will require organisations to construct and reorganise their internal and external resources to adapt to changes in the environment (Gao & Zhu, 2015). The interplay between the external environment and uncertainty makes the business environment dynamic. In order for organisations to thrive in changing and dynamic markets, they need to shift their focus to developing and continually renewing their capabilities, as well as reconfiguring their resources to support the changing environment (Braganza, Brooks, Nepelski, Ali & Moro, 2017).

According to Datta and Banerjee (2012), internalising the forces of a changing environment within an organisation can be difficult to instil without a culture of innovation. To this end, Chien (2013) asserts that culture plays a pivotal role in developing innovation capabilities in an organisation, as it has the ability to stimulate innovative behaviour in employees by providing a context for the emergence and implementation of ideas. In this study, dynamic capabilities (DC), namely innovation capabilities and organisational culture, are used as a framework to investigate how an organisation in the timber industry seeks to attain a sustained competitive advantage.

2. Background and Rationale for the Research

2.1. Company overview

Company X is a leading stakeholder in the South African forestry and lumber processing sector, providing sawmilling, manufacturing and wood processing activities. It is a pioneer of commercially grown saw log rotation and provides high-quality sawn timber to local and international markets. Company X's plantations are located throughout South Africa and such plantations comprise of various wood species, including pine (softwood) and eucalyptus (hardwood), which collectively, extend to almost 11 000 hectares. Company X's line of products includes i) pine products, which are used for industrial and structural applications such as construction, furniture and joinery; ii) eucalyptus products, which are used in applications such as door manufacturing, flooring and joinery, and iii) imported hardwood products, which are sourced internationally and are provided on request to customers.

2.2. Forestry and timber sector profile

The forestry sector is important because it is a key driver for the development of local economies, and the industry size makes it the largest sector in the primary agricultural industry in South Africa (Fibre Processing and Manufacturing Sector and Training Authority, 2014). Not only is the forestry sector one of the top exporting industries in the country, but it is also one of the most employment intensive sectors (Mamba, 2013). It is considered to be worth an estimated R33 billion and equates to a 0.5% contribution to the national gross domestic product (Bosman, 2016).

South Africa is endowed with high-quality indigenous forests, with a lot of forests existing on communal land where several value-added opportunities can be explored by South African timber companies (Deloitte, 2013). Additionally, the South African manufacturing sector is built on the premise of cheap labour (by international standards) and reduced costs. Though South Africa's endowment of resources presents it with a comparative advantage for developing and transforming these resources to a higher value product, which can either be exported or consumed locally, it has failed to make the list of major exporters. The growth of international trade within this sector indicates the potential of a growing demand in South Africa and the need for the sector to connect internationally with global value chains. Herein lies an export focus opportunity for South Africa for whom vast plantations of pine and eucalyptus are already affording geographical advantages. These advantages could position South African wood suppliers as leading players in the market.

3. Problem Statement

The dynamic environment in which organisations operate significantly influences their performance, and highlights the need for organisations to reconfigure and renew existing resources and capabilities in order to remain relevant and competitive. The dynamic capability theory is based on the premise that the ability of resources and capabilities to renew and reconfigure in response to their changing environment is a source of sustained competitive advantage for an organisation. This research focuses on two dynamic capabilities, namely organisational culture and innovative capabilities. This gives rise to the following research question:

What influence does culture and innovation enabling capabilities have on Company X's ability to remain competitive in dynamic markets?

In addressing the research question the authors begin by identifying the current cultural profile of Company X as well as the organisational capabilities that act as enablers and/ or inhibitors to innovation.

4. Literature Review

This article explores the combination of two capabilities which have a strategic impact in the context of a dynamic environment, namely; organisational culture and innovative capabilities. Both are deemed to be critical mechanisms linking organisational resources and capabilities to superior organisational performance in dynamic environments because of their ability to be reconfigured and renewed.

4.1. Dynamic Capabilities (DC)

The dynamic capabilities view recognises the co-evolution of learning mechanisms and the role of environmental dynamism. This view addresses how resources can be created and renewed in changing environments. The DC approach requires organisations to understand environmental requirements and then configure resources and capabilities to handle these requirements (Tondolo & Bitencourt, 2014). According to Hodkinson and Healey (2011),

dynamic capabilities are responsible for the evolutionary and economic fitness of an organisation. Dynamic capabilities ensure organisational fitness by firstly sensing and shaping threats and opportunities through exploring technologies and markets relevant to the organisation, secondly developing opportunities by making quality interdependent investment decisions and lastly reconfiguring organisational structures and assets to maintain competitiveness.

4.2. Innovation

Innovation capability may be defined as an organisation's ability to continuously transform ideas and knowledge into new products, processes and systems for the benefit of the organisation and its stakeholders (Saunila & Ukko, 2013). According to Innes (2009) the embodiment of innovation does not solely lie in the creation of an idea, but its development, dissemination, treatment and implantation as well. It is a combination of processes, teamwork and managerial decisions (Moiseev & Koroleva, 2012). Innovative practices often send out ripple effects to other areas of an organisation, which may need to change its behaviour in light of the innovation, or whose cooperation is needed to fully exploit the innovation (Lambrecht, Kuhne & Gellynck, 2015). In order to align with specific strategies for innovation, organisations need to understand in what knowledge to invest, as well as various ways of generating ideas to be pursued.

4.3. Innovative culture

Culture refers to shared mental models defining how a group perceive the events and assumptions which they possess and share (Alm & Jonsson, 2014). Abdi and Senin (2014) state that organisational culture is a significant factor to effect innovation because the values, norms and assumptions of an organisation have the ability to promote or impede the learning ability of the organisation, and subsequently its ability to innovate. Naranjo-Valencia and Sanz-Valle (2011) support this view by stating that culture plays a key role in innovation in that it can stimulate innovative behaviour among the members of an organisation by leading them to accept innovation as an integral value of the organisation and subsequently foster commitment to it.

Generating creative ideas does very little for an organisation if the means to implement these ideas are lacking. Highly adaptive and involved cultures foster and support creativity in terms of idea generation and implementation (Seen, Singh & Jayasingam, 2012). Though conceptual studies differ greatly with regard to the type of organisational culture which will promote innovation, they do highlight a positive relationship between culture and innovation, noting that organisational culture is an antecedent for innovation (Nahm, Pham & Nguyen, 2014).

4.4. Types of organisational culture

The competing value framework (CVF) is a framework which describes the linkage of an organisation's cultural characteristics with its effectiveness and success. According to the CVF, there are four dominant organisational culture types, namely;

- The hierarchal culture reflects values that are associated with bureaucracy. This form of culture is characterised by a formalised and structured workplace and may result in

worker alienation, purposelessness and a reduced sense of autonomy (Acar & Acar, 2014).

- A market culture is competition-focused. A major focus of the market organisation is to create a competitive advantage through a strong emphasis on external positioning and control. A major concern for organisational members belonging to this culture type is commitment to delivering superior customer value (El Badawy, Trujillo-Reyes & Magdy, 2017).
- Organisations with a clan culture display high affiliation with teamwork and participation. In a clan culture, members of the organisation have a strong sense of identification with the organisation and acknowledge their interdependence with each other. Because the individuals believe the organisation will treat them fairly in terms of recognition, they hold themselves accountable to the organisation (Sun & Xu, 2012).
- In an adhocracy culture, the organisation focuses on external positioning with a high degree of entrepreneurship, creativity and adaptation, as well as a willingness to take risks (Yildiz & Gul, 2016). Leaders in an adhocracy culture are considered risk-takers and subsequently encourage individual initiative, freedom and risk-taking from employees (Rosidah & Gustomo, 2014).

4.5. Developing an innovative culture – The dimensions

According to Aziz and Marcos (2013), developing innovation requires a thorough analysis of the existing culture, a deep understanding of innovative cultural dimensions and lastly, a change in management to bridge the gap between the current and desired culture. Aziz and Marcos (2013) have noted the most pertinent dimensions of innovation culture as;

Strategy

The mission, objectives and strategies of an organisation establish the direction which an organisation will pursue. The vision and mission of an organisation can help establish the implementation of innovative ideas by serving as guidelines which unite organisational employees and their working practices (Gomes, Machado & Alegre, 2015). Wang and Rafiq (2014) assert that diversity of purpose harnessed with a shared vision constitute an 'ambidextrous organisational culture' and that they are integral in reinforcing a culture within an organisation.

Structure

The structure of an organisation has the capacity to either promote or hinder innovation. Aziz and Marcos (2013) further postulate that autonomy and decentralisation have a positive impact on idea generation and innovative practices. They also state that innovation tends to flourish in an organisation which adopts a flat hierarchal structure where each member of the organisation has the power to make decisions and assume responsibility for certain tasks (Aziz & Marcos, 2013).

Management and leadership

Leadership plays an important role in enhancing organisational creativity and innovation because different leadership styles are likely to have different impacts on employee involvement, commitment, and subsequently the climate for innovation (Kesting, Ulhoi, Song & Niu, 2015). A management style which moves away from an autocratic approach to a more

democratic and participatory one reflects a culture that is focused on stimulating innovation (Kesting et al., 2015).

Resources

Harnessing the competence base of an organisation is fundamental to ensuring innovative output. To stimulate innovation, it is essential that organisations combine their resources and knowledge to compete in different markets, and mobilise resources into different channels at various stages of the innovation process (Razavi & Attarnezhad, 2013). Effectively mobilising resources throughout the innovation process requires having the ability to reconfigure and renew them to ensure efficiency in dynamic environment.

Quality development of organisational members

According to Li and Zheng (2014) organisations rely on employees to innovate processes, operations and methods in order to gain a competitive advantage. Levels of employee commitment to an organisation determine their level of engagement with innovative activities. A culture which encourages individualism is able to promote the development of innovation activities within an organisation.

Teamwork and collaboration

According to Seen et al. (2012), a team-oriented culture emphasises cooperation towards common goals for which all employees feel mutually accountable. Well-established teams promote creativity and innovation by allowing diversity and the individual talents of employees to complement each other. Though an individualistic culture is said to have a positive effect on innovation, it is not contradictory to teamwork. According to Wagner, Humphrey, Meyer and Hollenbeck (2012), tasks which are interdependent can be individualised through mechanical mediators which enable team members to decouple and work as individuals within the context of a team.

Trust and open communication

The creation of open communication among different hierarchical levels suppresses bureaucratic behaviour in organisations and encourages employee creativity (Padilah & Gomes, 2016). Trust and open communication also create an environment where employees feel emotionally safe, which, in turn, has a positive influence on innovative development (Padilha & Gomes, 2016). Because innovation requires individuals to think in new and different ways, it can only exist in an environment which fosters risk-taking. This may require employees to step out of their comfort zone and possibly make mistakes; in many organisations this is considered career limiting.

Behaviours towards innovation

The rewarding of success, as well as the recognition of lessons derived from failures are organisational behaviours that are essential in the development of a culture which promotes creativity and innovation (Padilah & Gomes, 2016). According to Padilah and Gomes (2016), rewarding success and tolerating and even celebrating failures encourages employees to generate new and creative ideas, fostering an innovative atmosphere.

5. Research Methodology

This article followed a qualitative approach and was comprised of a two-phase data collection method, namely:

- Phase 1: biographic questions and the organisational culture assessment instrument (OCAI)
- Phase2: semi-structured interviews

The OCAI survey was e-mailed to participants before the face to face interviews took place. The OCAI provided the authors with feedback of the prevailing perceptions within the organisation regarding organisational culture. The results derived from the survey were not statistically analysed, but rather provided a point of departure for interviews.

In the second phase of the data collection process, personal interviews were utilised to gain insights into Company X's. In-depth responses to questions were transcribed verbatim and provided organisational context, which, according to Alm and Jonsson (2014), are necessary to study the phenomenon of an innovation-enabling culture in a satisfactory manner. Purposive sampling was utilised, thus the researchers selected subjects who had experience or knowledge of the issues being addressed in the research (Oppong, 2013), such as the organisation's financial and operational managers, research and development specialists and customer relations officer. The sample included 12 employees from the organisation who participated in both phases of the research.

The data was analysed using the framework analysis approach which works with structured topic guides to manage and elicit data by investigating and arranging data into clusters by grouping phenomena with similar theories, concepts or empirical areas together (Smith & Firth, 2011). The content analysis used in the framework approach is subsequently deductive. According to Hashemnezhad (2012), a deductive content analysis takes place when the structure of the analysis is operationalised on the basis of previous knowledge.

5.1. Ethical considerations

Ethical guidelines and principles were followed in this study by taking into account the privacy and confidentiality of the participants. Of particular importance to this study is information highlighting Company X's strategic focus. The availability of data relating to such content is quite sensitive and has required the authors to address issues such as confidentiality through the signing of a non-disclosure agreement (NDA), as per Company X's request.

6. Findings

The average years of experience that the participants have within their respective roles are 6 – 10 years, which was also the average number of years that participants spent working at Company X. The majority of the participants were male with the exception of one being female. With the exception of one participant, all were senior and top managers in their respective areas of work. Due to the extensive work role experience, years at the company

and position within the organisation, participants were appropriately experienced to participate in the study.

6.1. Organisational Culture Assessment (OCAI) findings

The OCAI questionnaire consists of six components (OCAI online, 2012), namely:

1. *Dominant Characteristics* – Explains the characteristics of the environment and the atmosphere prevailing in the organisation
2. *Organisational Leadership* – What is leadership understood to be
3. *Management of Employees* – What characterises the management style in the organisation? How are management methods applied?
4. *Organizational Glue* – In what way does the organisation consolidate itself?
5. *Strategic Emphasis* – What is emphasised in the organisation?
6. *Criteria for Success* – How is success defined in the organisation?

Table 1 below presents the dimensions which make up the OCAI. Aligned with each dimension is its specific dominant culture type as indicated by participants from Company X.

Table 1: Dimensions of the OCAI

Dimension	Culture type
Organisation characteristics	Market
Leadership	Clan
Management of employees	Clan
Organisational glue	Clan
Strategic emphasis	Clan
Criteria for success	Market

The OCAI analysis for Company X indicated its organisational culture was perceived to be highly oriented towards a clan culture with seven of the 13 participants sharing this sentiment. An orientation towards a market culture was the second most prevalent culture perception assigned to Company X with three of the 13 participants sharing this sentiment. The perception of Company X having an adhocracy or hierarchal culture received equal weighting among the four remaining participants.

An analysis of the six measured dimensions revealed that the current organisational culture was fairly congruent with four of the six dimensions reflecting as a clan culture, and the remaining two as a market culture. According to Cameron, Quinn, Degraaf and Thako (2014), the OCAI has a unique ability to identify an organisation’s cultural strength, congruence and type. According to Maximini (2015), a clan culture assumes that an environment can best be managed through employee development and teamwork, thinking of customers as partners. A major task of management of a clan culture organisation is the development of a humane working environment which is held together by loyalty and tradition.

The culture type that is best aligned with dynamic markets (in which Company X operates) is the adhocracy culture type, which is one found in turbulent environments, and endeavours to foster flexibility, adaptability and creativity (Maximini, 2015). Maximini (2015) further postulates that effective leadership in adhocracy-dominant environments is visionary,

innovative and risk-oriented. The glue that holds an adhocracy-dominant organisation together is commitment to experimentation and innovation.

The dominant culture at Company X is not ideal for the environment and the market in which Company X operates. If Company X endeavours to pursue competitiveness in the face of a dynamic business landscape, it is imperative that it aligns its culture with the environment in which it operates.

6.2. Interview findings

The dimensions identified by Aziz and Marcos (2013), were instrumental in constructing the semi-structured questionnaire for the interviews. In addition, these dimensions were used as the basis against which the data was analysed and provided *a priori* framework. The responses provided by the participants were transcribed, analysed and presented according to the following framework:

Theme 1: Strategy

Emerging theme from the responses:

Strategic focus is unable to optimally leverage off organisational capabilities.

The majority of the participants shared the sentiment that there definitely was an underlying ethos within the organisation which seeks to synergise behaviour. The synergistic effect of the ethos at Company X did not explicitly nor practically encourage innovation, but rather aimed to maintain successful operations and the legacy of the founder. Furthermore, there was a strong feeling that the synergistic ability of the ethos was dominant only among top management where there was a greater drive and context for it. According to participant 3, *"Firstly, I think the organisation is very strict in terms of reporting lines and dashboards, and sometimes I feel we're too concerned with report writing and often at the expense of the entrepreneurial spirit"*. Participants were also asked which of two feelings (efficiency through adherence to rules, or entrepreneurship and creativity) did they associate with the ethos of the organisation. Six of the 13 participants stated that they associated the ethos of the organisation with both efficiency and entrepreneurship and creativity; four of the 13 participants said that they associated the ethos of the organisation with adherence to rules, while only three participants associated the ethos of Company X with entrepreneurship and creativity.

Theme 2: Structure

Emerging theme from these responses:

Decentralised control and autonomy as constructs of the organisational structure.

The majority of the participants felt that their various work units were fairly autonomous and able to make informed and calculated decisions within organisational budget constraints. Participant 11 noted *"we have a very specific framework and a distinct authority levels and one can work within that framework, there is a certain level of flexibility to make decisions"*. Participant 4 likened Company X's operations and its various departments' ability to operate independently of the wider group to 'ecosystems', and acknowledged the diversity of each ecosystem as well as the need to implement decisions relevant to each. Consistent with a view

of decentralised leadership and its effect on organisational innovation, Participant 2 stated: *“I don’t think you can expect management to make all the decisions, people on the ground as well must have the freedom to express themselves and make decisions. There are parameters and you’ve got to work around those parameters but decisions have to be made across all levels.”* The majority of the participants were of the view that decision-making at Company X is decentralised, as expressed by Participant 2. The autonomous structure of the organisation, as well as the decentralised nature of its operations, renders Company X’s structure an enabler of innovation.

Theme 3: Management and Leadership

Emerging theme from these responses;

The role of leadership on innovation.

Sub-themes;

The positive impact of participatory leadership on innovation.

The detrimental effect of a limited pool of knowledge and expertise on innovation.

The participants collectively characterised the leadership of Company X as participatory and inclusive. This was exemplified by participant 8 who reflected that *“I certainly feel that we are allowed to make decisions; we can voice our opinion to higher management which lends itself to be more open as described in previous question. The openness does promote creative thinking and innovation from employees”*. The leadership creates the platform for Company X to leverage off the diverse opinions and expertise of its members. The second question relating to the management and leadership of the organisation revealed that some participants felt leadership and management were not optimally leveraging off Company X’s work force in order to cement an innovative culture. Participant 12 mentioned *“It’s a two way process, they can drive innovation and everything, but the question is do the people at the bottom relate to this drive for innovation, I’m not sure if that’s the case”*. Company X’s ability to effectively leverage off the diverse expertise of its workforce is a capability which needs to be harnessed, more so if it wishes to edify management’s ability to pursue innovation.

Theme 4: Resources

Emerging theme from these responses:

Practical mobilisation of resources to pursue innovation.

The majority of the participants mentioned a company innovation challenge which seeks to identify and nurture innovations that will contribute to the growth and improvement of the business. The innovation challenge, which is open to every member of the organisation, is representative of practical ways management has sought to incorporate innovation within the organisation. The innovation challenge supplements the organisation’s holistic innovation efforts, which comprise a research and development unit with an explicit innovation mandate. Participant 8 made reference to this and explained that *“we have an innovation competition for people to come up with new ideas, we’re not looking at rocket science innovation ideas, it can be something small which changes things. That is being driven across the organisation which is great and there is obviously incentive for guys to do this.”*

Participants agree that innovation was evidently prioritised at Company X, and that sufficient time, resources and initiatives are devoted to it, and that resources are mobilised into different channels to pursue innovation.

Theme 5: Quality and development of organisational members

Emerging theme from these questions:

Continuous organisational learning as an innovation enabler.

The majority of participants agreed that Company X's commitment to continuous learning is reflected in its efforts to embrace innovative behaviours of employees, as articulated by Participant 10, *"we have culture of offering training to people to empower them to be better off in their roles. They are also given support in whatever form they need. Where lower skilled level employees are concerned, there are regular training update of done by our local training officer which seeks to upskill employees. . . The organisation has quite a few multi skilled teams, and sees to it that people are trained and equipped to work in different divisions."* However, participants also felt that though there were initiatives in the form of on the job training which are meant to broaden employees' knowledge, skillset and self-development, such initiatives were not formalised and this proved to be a deficiency in the development of members. This was cemented in comments by participant 10, *"Training happens ever so often, in my opinion it could probably happen more but time is a problem, this is an area where we could improve"*. Although a few participants thought that Company X's commitment to continuous learning was a weakness in the organisation, the general sentiments were positive and resonated with a clan culture.

Theme 6: Teamwork and Collaboration

Emerging theme from these responses:

Enabling innovation through a culture of teamwork and collaboration.

All of the participants agreed that diversity in terms of opinions and debate was encouraged at Company X, which, in turn encourages collaboration and knowledge sharing. Widespread knowledge sharing throughout Company X fosters effective teamwork and subsequently innovation. The responses mirror the relationship and alignment that teamwork and collaboration shares with innovation. This was exemplified by respondent 10 saying, *"When you talk about knowledge sharing, I think the different disciplines of the units are allowed collaboration and a sharing of ideas through meetings and the fact that we have regular feedback from the mini businesses promotes knowledge sharing. As far as the mills are concerned the engineers collaborate and share a lot as well"*. According to Dettmann, Von Proff and Brenner (2015), spatial proximity promotes knowledge flow. It is also a facilitator for interaction and the learning process, which are key for the development of innovation. However, this is not always the case as is apparent in Company X which has operations and offices in three different cities across South Africa. Teamwork and collaboration are thus important to seamlessly link all parts of the organisations value chain and for the development of innovation. Furthermore, the OCAI revealed that Company X has a dominant clan culture, which assumes that an environment can best be managed through employee development and teamwork. The findings specific to this dimension revealed that there are great inter-team relations and interdependence within the organisation. Team interaction is an innovation enabling capability at Company X.

Theme 7: Trust and open communication

Emerging theme from these questions:

Parameters and protocols concerning trust and communication subduing the organisation's innovation-enabling capability.

The majority of the participants felt that top management was accessible and that there was a fair level of trust within the organisation. The clan culture is rooted in collaboration, and puts great emphasis on values such as teamwork, consensus and communication, the participants associated such values with Company X. However, there was some disconnect between comprehensive application of the values by employees within the organisation, especially where trust and open communication were concerned. Participant 6 alluded to this, "Ok so a strict answer to that is 'yes' they are accessible, but with that being said, there is still the feeling with a lot of guys that they are not accessible, so what I'm saying is that if you were to go up to speak to management they would welcome it but, everyone doesn't feel that you can. So, the message that they are available to speak to is not necessarily all over the place." There was also a feeling that there were parameters regarding the level of trust relinquished from leaders and a protocol inbred in the communication style between employees and leadership that was now an innate part of communication, so much so that it's inhibiting effect on innovation was being overlooked. Feelings of trust significantly impact knowledge-sharing and a lack thereof endangers the flow of information-sharing. The overall findings from the participants indicated that trust and open communication at Company X were fairly innovation-enabling dimensions. However, the parameters and protocols which underpinned these dimensions subdued their efficacy as enablers of innovation.

Theme 8: Behaviours towards innovation

Emerging theme from these questions:

Behavioural framework that supports innovation.

The majority of the participants felt that within reasonable parameters, the organisation is open to exploring new approaches and mechanisms for conducting business. Respondent 7 observed "So I guess you could actually say yes, any innovative ideas would be noted along with your other performance and you going over and above expectations which will positively affect your appraisal". It should be noted that two participants felt that the organisation was risk averse and displayed a reluctance to take any form of risk. One participant attributed the risk aversion to the static nature and history of the forestry industry and the fact that Company X's investments are long-term in nature. Opinions concerning Company X's incentive structure as a determinant of the organisation's behaviour towards innovation were also solicited, and all of the participants agreed that innovation was incentivised adequately. The overall feedback gathered from the participants mirrors the view held by Padilah and Gomes (2016), which explains that the tolerance of faults and the rewarding of success (which are implicit in the responses), encourages employees to generate new and creative ideas, fostering an innovative atmosphere. Behaviours towards innovation at Company X are thus an innovation-enabling capability.

Theme 9: OCAI

In addition to the results derived from OCAI revealing a clan-oriented culture, open-ended interview questions relating to the OCAI resulted in the emergence of two sub-themes;

The need for organisational culture and business landscape alignment.

The need for inclusive leadership and communication as pressing points to facilitate a culture change that tends to adhocracy.

Participants felt that the clan culture was not an ideal culture to foster innovation in the organisation, for example participant 5 states: *"I wouldn't say the clan culture complements innovation because the clan culture isn't the most optimum culture to ensure creativity and innovation, uhm and for me also it's not about being creative and coming up with ideas, it's about translating that into something that unlocks value."*

The last questions concerned the participants' perceptions of the culture that Company X should seek, and their opinions on measures, practices and behaviours which the organisation should pursue in order to attain an entrepreneurial and innovative culture. Inclusive leadership and effective communication from the organisations leadership emerged as aspects that should be addressed by the organisation to attain an adhocracy culture. The overall sentiments from the participants highlight that there is a culture of open communication and transparency at Company X. The decisions implemented by management are communicated openly with the wider organisation. However, the participants were of the opinion that the level of inclusivity was lacking when decisions were made. A predominantly clan culture was found to be misaligned with the dynamic environment in which Company X operated. Leadership and management somewhat inhibited innovation in the organisation, due to a limited ability to adequately leverage off the diversity and expertise from all levels of the organisation and communicate in a way that allows dissent.

7. Conclusion

The vigorous competition faced by organisations as a result of integrated global markets means organisations are constantly under pressure to make cost-efficiency and productivity improvements. Innovation capability has become a key asset in driving organisational development that will anticipate and facilitate changes within a dynamic environment. A synthesis of innovation-enabling capabilities, as well as an organisational culture that inspires dynamism, creativity and proactivity were identified as resources that could be reconfigured to facilitate organisational changes within an organisation in a dynamic market, as well as to contribute to the establishment of innovation and the development thereof.

This study provided insight about the current state of these two dynamic capabilities at Company X. Despite the misalignments between Company X's strategic focus and innovation, the seven remaining organisational dimensions which were observed proved to enhance innovation positively, either directly or indirectly. The remaining dimensions were found to be innovation-enabling in principle even though some needed to be further harnessed to effectively elicit value from them to comprehensively enable innovation. In order for Company X to remain sustainable and competitive in dynamic markets, it is imperative that it conditions its organisational environment to foster the development of innovation capabilities.

8. Managerial Recommendations

Recommendations that address the above noted organisational shortcomings are summarised in the paragraphs below. Organisations which are inwardly focused are susceptible to 'group thinking processes' which emanate from people who are deeply involved in a cohesive group. It is recommended that Company X integrates customer co-creation in its value creation process, which will ensure a wider external focus as well as greater innovation.

There is currently a gap between the innovation-based actions at Company X and the strategic direction of the organisation. It is recommended that Company X establish a strategy that is able to synergise behaviour which will result in optimum outcomes when coupled with an explicit innovation-based focus with adequate resource allocation, founded on the company's mission and goals and aiming for strategy alignment.

The ability of Company X's leadership to optimally leverage off the diverse perspectives and competencies of its employees across the group was found to be an inhibitor of innovation. To remedy this shortcoming, it is recommended that comprehensive collaboration across the group be initiated encouraging different views and perspectives, which, in turn, encourage innovation.

In order to strengthen organisational trust to better encourage innovation, the researcher recommends that leadership refrain from sending conflicting messages to employees. Leadership may say they encourage input and ideas but they actually send undermining signals to the contrary. Mixed messages can impede the desire of staff to bring forth innovative ideas. There should be a credible and consistent message from executive leaders in their commitment to innovation. Furthermore, the innovation strategy should be communicated to the whole organisation. Inclusive leadership and communication will require leaders to play a facilitation role in which they build cohesion, encourage the expression of divergent opinions, as well as fulfil a greater mentor role in which leaders listen to and support their subordinates.

Though the development of organisational members through initiatives that foster employee learning and development is present at Company X, it was found that such initiatives were not formalised. To this end the researcher recommends that Company X adopt a formalised policy for continuous improvement.

9. Limitations of the Study

The study sampled senior, middle and top managers from Company X on the premise that they were best able to contribute towards the aims of the study. This does pose a limitation to the representativeness of the results to the entire organisation. Caution therefore has to be exercised when applying the findings of this study to other product lines managed by Company X and other organisations in the same industry.

The interpretivist paradigm which underpins this study means that the researchers as the instrument of data collection in this study, could introduce their own biases in collecting and

interpreting data. There was, however, an effort to minimise biased results by avoiding asking leading questions.

Literature

1. Abdi, K., & Senin, A. A. (2014). Investigation on the impact of organizational culture on organization innovation. *Journal of Management Policies and Practises*, 2(2), 1-10.
2. Acar, A. Z., & Acar, P. (2014). Organisational culture types and their effects of organisational performance in Turkish hospitals. *Emerging Markets Journal*, 3(3), 18-31.
3. Alm, C. J. J., & Jonsson, E. (2014). *'Innovation in five dimensions: Identifying cultural success factors and barriers for innovation.'* Unpublished dissertation (MSc). Gothenburg: Chalmers University of Technology.
4. Aziz, H. A., & Marcos, S. (2013). *Examining the determinants of innovation culture in Egyptian organisations.* Paper presented at the European conference on innovation and entrepreneurship. Available from: <https://0-search-proquest-com.ujlink.uj.ac.za/docview/1508791703?accountid=13425>
5. Bosman, M. G. (2016). *Forestry and related services: Siccocode 12100.* Who Owns Whom: African Business Information. Available from: <https://www.woweb.co.za/?m=Industries&p=%20reportinfo&id=3256&country=222&Siccid=454&tab=6>
6. Braganza, A., Brooks, L., Nepelski, D., Ali, M., & Moro, M. (2017). Resource management in big data initiatives: Processes and dynamic capabilities. *Journal of Business Research*, 70(1), 328-337
7. Cameron, K. S., Quinn, R. E., Degraaf, J., & Thakor, A. V. (2014). *Competing Values Leadership.* Northampton: Edward Elger Publishing.
8. Chien, S. W. (2013). Innovation strategy as a mediator among social networks, innovative culture, and technological capacity – An empirical study of ICT industry in Taiwan. *African Journal of Business Management*, 7(11), 862-881.
9. Datta, P. R., & Banerjee, P. R. (2012). Innovation and business dynamism: An evolutionary perspective. *The Business Management Review*, 2(1), 245-251.
10. Deloitte (2013). *Enhancing manufacturing competitiveness in South Africa.* Available from: <https://www2.deloitte.com/content/dam/Deloitte/dk/Documents/manufacturing/manufacturing-competitiveness-South-africa.pdf>
11. Dettmann, A., von Proff, S., & Brenner, T. (2015). Co-operation over distance? The spatial dimension of inter-organisational innovation collaboration. *Journal of Evolutionary Economics*, 25(1), 729-753.
12. El Badawy, T. A., Trujillo-Reyes, J. C., & Magdy, M. M. (2014). The demographics' effects on organisational citizenship behaviour and job satisfaction: Evidence from Egypt and Mexico. *Business and Management Research*, 6(1), 28-41.
13. Fibre Processing and Manufacturing Sector Education and Training Authority (2014). *A profile of the forestry and wood products sub-sector.* Available from: www.fpmseta.org.za/downloads/FPM_sub-sector_forestry_wood_final.pdf
14. Gao, Y., & Zhu, T. (2015). Research on dynamic capabilities and innovation performance in the Chinese context: A theory model – knowledge-based view. *Open Journal of Business Management*, 3(1), 364-370.

15. Gomes, G., Machado, D. D. P. N., & Alegre, J. (2015). Determinants of innovation culture: A study of the textile industry in Santa Catarina. *Brazilian Business Review*, 14(4), 99-122.
16. Hashemnezhad, H. (2012). Qualitative content analysis research: A review article. *Journal of ELT and Applied Linguistics*, 3(1), 54-62.
17. Hodkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: Reflexion and reflection in strategic management. *Strategic Management Journal*, 32(13), 1500-1516.
18. Innes, J. L. (2009). The promotion of 'innovation' in forestry: a role for government or others. *Journal of Integrative Environmental Sciences*, 6(3), 201-215.
19. Kesting, P., Ulhoi, J.P., Song, L. J., & Niu, H. (2015). The impact of leadership styles on innovation management – A review and a synthesis. *Journal of Innovation Management*, 3(4), 22-41.
20. Lambrecht, E. Kuhne, B., & Gellynck, X. (2015). 'Success factors of innovation networks: Lessons from agriculture in Flanders.' Unpublished dissertation. Ghent: Ghent University.
21. Li, X., & Zheng, Y. (2014). The influential factors of employees' innovative behaviour and the management advices. *Journal of Service and Management*, 7(1), 446-450.
22. Maximini, D. (2015). *Introducing Agile Methods in Organisations*. Zurich: Springer.
23. Maximini, D. (2015). *The Scrum Culture: Introducing Agile Methods in Organisations*. Zurich: Springer.
24. Moiseev, D., & Koroleva, P. (2012). 'Power of innovative culture within organisations.' Unpublished dissertation. Växjö: Linnaeus University.
25. Naranjo-Valencia, J. C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2011). Innovation or imitation? The role of organizational culture. *Management Decision*, 49(1), 55-72.
26. OCAI Online (2012). *Organisational culture assessment instrument report*. Available from: www.ocai-online.com/userfiles/file/ocai_enterprise_example_report.pdf
27. Oppong, S. H. (2013). The problem of sampling in qualitative research. *Asian Journal of Management Sciences and Education*, 2(2), 202-210.
28. Padilha, C. K., & Gomes, G. (2016). Innovation culture and performance in innovation of products and processes: a study in companies of textile industry. *Innovation and Management Review*, 13(1), 285-294.
29. Razavi, S. H., & Attarnezhad, O. (2013). Management of organizational innovation. *International Journal of Business and Social Science*, 4(1), 229-230.
30. Rosidah, S., & Gustomo, A. (2014). Analysis of organisational culture and leadership style in RST Company. *Journal of Business Management*, 3(8), 913-924.
31. Saunila, M., & Ukko, J. (2013). Facilitating innovation capability through performance measurement: A study of Finnish SME's. *Management Research Review*, 36(10), 991-1010.
32. Seen, N. Y., Sing, S. K. G., & Jayasingam. (2012). Organisational culture and innovation among Malaysian employees. *The Journal of Human Resources and Adult Learning*, 8(2), 147-157.
33. Smith, J., & Firth, J. (2011). Qualitative data analysis: The framework approach. *Nurse Researcher*, 18(2), 52-62.
34. Sun, S., & Xu, Z. (2012). Cultural values and their challenges for enterprises. *International Journal of Business Administration*, 3(2), 68-73.
35. Tondolo, V. A. G., & Bitencourt, C. C. (2014). Understanding Dynamic capabilities from its antecedents, processes and outcome. *Brazilian Business Review*, 11(5), 122-144.

36. Wagner, J. A., Humphrey, S. E., Meyer, C. J., & Hollenbeck, J. R. (2012). Individualism – collectivism and team member performance: Another look. *Journal of Organisational Behaviour*, 33(1), 946-963.
37. Wang, C. L., & Rafiq, M. (2014). Ambidextrous organizational culture, contextual ambidexterity and new product innovation: A comparative study of UK and Chinese high – tech firms. *British Journal of Management*, 25(1), 58-76.
38. Yildiz, S., & Gul, R. (2016). The effect of leadership style on the organisational culture: Evidence from Turkey. *European Journal of Business Management*, 8(9), 51-58.

Evolution of the Challenges of Internationalization of Emerging Market SMEs in a Digitized Global Economy: A Bibliometric Analysis

Bernardo Muñoz Angosto

Faculta de Ciencias Económicas y Empresariales
Universidad Complutense de Madrid
Campus de Somosaguas, 28223, Madrid, Spain
E-mail: bmunoz@embajadaperu.es

Rosario García Cruz

Universidad de Sevilla
1 Ramon y Cajal Avenue, 41008 Sevilla, Spain
E-mail: rosacruz@us.es

Jesús García de Madariaga

Faculta de Ciencias Económicas y Empresariales
Universidad Complutense de Madrid
Campus de Somosaguas, 28223 Madrid, Spain
E-mail: jesusmadariaga@ccee.ucm.es

Abstract

The purpose of this paper is to identify the theoretical bases that sustain the scientific progress on the change experienced, in the challenges of SMEs in emerging markets, in their process of internationalization, in a digitized global economy. Because of this, the scientific production of the object of the study and its keywords have been selected through meta-analysis, between 2009 and 2018. The software tool was SciMat, with 267 papers filtered from Scopus (163) and Web of Science (104). The results have shown that in relation to the “motor theme” the role of institutional voids, technological deficiencies and logistic systems of emerging economies are highlighted; while in the “emergent theme” innovation is the determinant of management and business performance, as well as modes of entry.

Keywords

Challenges, internationalization, digitization, emerging markets, bibliometrics

1. Introduction

The digitization of the economy at a global level (Internet surpasses all borders) has meant that enterprises now have to deal with hitherto unknown business challenges (Zott, Amit & Massa, 2011), giving rise to new business models, management, marketing and / or a new attitude of consumers globally (Chakravorti, 2016). Faced with this situation, not all national economies have the same mechanisms, business ecosystems or infrastructures to turn these challenges into opportunities (Rahman, Uddin & Lodorfos, 2017). Without a doubt, one of the great protagonists of today's international environment, both economic and social, is the digital transformation that has been in place for some years now and that some have defined as the most important revolution in the history of humanity (UNTAD, 2017).

Faced with this new reality, emerging economies are increasing their role and contribution to the Global World Economy (Kazlauskaitė, Autio, Sarapovas, Abramavicius & Gelbuda, 2015; Kumar, & Gray, 2013); however, an analysis of the existing literature on their business ecosystems shows that the parameters that define them do not have the same characteristics as those of developed markets, although they are of a similar nature (Knight & Liesch, 2016; Ooi & Richardson, 2019). In this sense, there is an important void in scientific research that contrasts, corroborates and focuses on these emerging economies and on the different aspects that condition the behavior of their enterprises at an international business level; studies have been found, to a large extent, on developed economies and their performance at a global level or also on very disparate emerging economies and on very general aspects (Aharoni & Brock, 2010; Leonidou, Katsikeas & Coudounaris, 2010).

That is to say that, on the one hand, businesses in emerging economies do not behave exactly like those in developed economies, so business models cannot be applied in the same way without taking into account their own ecosystems (Schimiele, 2009; Kahiya, 2017; Leonidou, Katsikeas, Samiee & Ayrol, 2018). On the other hand, the digital transformation gives these emerging economies the possibility of overcoming a series of obstacles that were previously unthinkable and made it very difficult to take advantage of certain opportunities (Boso, Story & Cadogan, 2013), with the appearance of new ways of doing business more efficiently.

It is within this scope, described above, that this paper is presented. The objective we set focuses on identifying, understanding and explaining the evolution experienced by those factors that represent both a challenge and an opportunity, in the process of internationalization of SMEs, emerging markets, in a world mediatized by the role of new information and communication technologies in business performance and management.

An analysis based on the existing literature on the subject of our research, according to various meta-analyses (Leonidou, Samiee & Ayrol, 2014; Katsikeas, Skarmas & Bello, 2009; Leonidou et al., 2018), shows us that, to date, what we find are studies focusing on barriers, obstacles and challenges to exit to foreign markets by enterprises from developed markets and without much analysis of the new digital reality (Aharoni & Brock, 2010; Rask, 2014; Knight & Liesch 2016). However, we found a significant lack of studies on emerging markets that detect "current" barriers/challenges whose analysis and reflection allows us to identify ways of overcoming them, turning them into real opportunities; in other words, both challenges and opportunities have evolved.

As we have seen, this reality is not sufficiently studied at the academic level, so the specific objective of this work focuses on conducting a bibliometric study (Cobo, López, Herrera & Herrera, 2011; Cobo, López-Herrera, Herrera-Viedma & Herrera, 2012; Murgado-Armenteros, Gutiérrez-Salcedo & Torres-Ruíz, 2015; Castillo-Vergara, Álvarez & Plasencio-Hidalgo, 2018), which allows a first approximation and evaluation to the scientific production carried out to date, whose conclusions shall establish and justify the variables and relationships of a model to face current challenges and opportunities in the performance and positioning of emerging market enterprises in the global economy, with the current parameters that define them (Akbar, Balboni, Bortoluzzi & Tracogna, 2017). Therefore, we address the evolution of the study on the barriers or challenges faced by enterprises in their process of internationalization, specifically focusing on SMEs, as the key element of emerging economies (AIB, 2018; JIMg, 2013) and how they are able to take advantage of opportunities in international markets. This study shall show us where the current business challenges converge in the search for international business opportunities for these emerging economies. We postulate that for these emerging markets, internationalization is an unquestionable reality that becomes an important source of competitive advantage and in order to achieve it, it is necessary to analyze the different challenges and opportunities in the digital economy such as we find ourselves today. This new reality has meant that many of the obstacles that were insurmountable before are now no longer insurmountable, albeit others have appeared that did not exist before.

We specify that the final purpose of our research focuses on identifying what these new business challenges are and how SMEs in emerging markets can develop mechanisms that turn them into opportunities. These mechanisms sometimes require significant involvement at the institutional level and others at the business level, such as infrastructure, training, business networks, contacts, experience, know-how, communications, etc. (Narooz & Child, 2017; Cahen, Lahiri & Mendes, 2016; Rask, 2014; Schwens, 2011). Emerging economies are not following the expected patterns of behavior of the internationalization models known so far. The challenges they face, although similar in nature to developed markets, have responses adapted to the singularities of their own business ecosystems (Knight & Liesch, 2016; Gabrielsson & Gabrielsson, 2013).

In order to achieve the objective we have carried out a bibliometric analysis between 2009 and 2018 with a series of keywords (Katsikeas et al, 2009) that are framed in the definitions of the “core” object of research: challenges, internationalization, emerging economies, digitalization, innovation, performance, SMEs, etc; however, we are aware that we are faced with a new paradigm and a new business ecosystem (Gabrielsson & Gabrielsson, 2011) that has forced us to repeat the process several times to identify the “motor theme” and the “emergent theme”. To this end, a systematic search was carried out for the publications, according to bibliometric and impact indicators, which are indexed in the first and second quartiles of Scopus and Web of Science, using SciMat software, which allowed us to identify the conceptual structure of the theme as well as the emerging themes. The resulting findings are of great interest, marking a roadmap to follow to give answers to the original approaches. On the one hand, and as driving themes, the need for studies on emerging economies appear with strength and intensity, linked to the concept of institutional voids (Harms & Schiele, 2012; Akbar et al., 2017; Narooz & Child, 2017) as structural weaknesses for SMEs in international

business operations; at the same time, and related to this concept, there are five categories orbiting all around "international trade" as the most central theme, within which we shall deepen the analysis of results. Additionally, emerging issues or research trends, innovation and entry modes as conditioning factors in the performance of SMEs in their international markets appear.

Below we shall mark the conceptual scheme that we have followed and that shall serve as a basis for future research. The following section describes the methodology followed, to continue with the analysis of the results achieved and ending with the conclusions and implications of the bibliometric analysis.

2. Conceptual Scheme

Businesses are currently entering the fourth industrial revolution that brings with it widespread access to new technologies, without having to assume such high costs (Boso et al., 2013; Cavusgil & Knight, 2015); that is, easy access and affordability for all types of businesses. Maturity in multiple technological skills is leading to solutions that improve efficiency, quality and flexibility, eliminating physical frontiers and opening new paths to international competitiveness (Hess, Matt, Benlian & Wiesbock, 2016; Meyer & Peng, 2016). We are facing a new business reality 4.0 that requires a profound transformation on the part of enterprises in terms of the use of new tools that can lead to the integration of the value chain, from the supplier, through the manufacturers to the final distributor/customer (Kazlauskaitė et al., 2015; Leonidou et al., 2014; Knight & Liesch, 2016). This brings with it the reduction of costs in the process and the increase in added value, which in turn conditions the selection of modes of entry into foreign markets (Morgan, Katsikeas & Vohies, 2012; Katsikeas, Morgan, Leonidou & Huit, 2016) and the internationalization model followed, between gradual or accelerated (Cavusgil & Knight, 2015).

Although we have already been analyzing the internationalization processes for several decades under the focus of different theories (Leonidou et al., 2018): gradual versus accelerated, international entrepreneur, competitive advantages, networks, innovation or the current Born Again Global, we must point out that in recent years there has been a paradigm shift, which implies an approach based on the practical application of the technological advances of the last decade (business intelligence, big data, streaming data, e-commerce, e-business, RRSS, digital marketing, etc.). The new digital economy has generated new ways of relating, doing business and marketing, which have brought with them new tools for communication with the consumer and international positioning, therefore, new challenges and opportunities (UNTAD, 2017; AIB, 2018). The current client is accustomed to the fact that physical distance is not a barrier in any of the activities that make up the purchase process (Consumer Decision Journey). The challenges and barriers faced only a few years ago by SMEs are not the same as today because although their nature is the same, their characteristics have changed. Tools have been detected that allow these barriers to be easily overcome, while others of a different nature have appeared that until recently did not exist.

The identification and analysis of these new challenges faced by SMEs in emerging markets in their processes of internationalization require making it clear that according to the most

contrasted theories (El Makrini, 2015), they are a function of a series of aspects that must be taken into account in this research, such as: phases of the internationalization process (years, experience, commitment, etc.), whether the process has been gradual or accelerated; sector to which the enterprise belongs, depending on whether or not it is affected by accelerated technological development; country of origin; etc., as stated in the studies by El Makrini (2015). As we have already mentioned, it is important to point out that these challenges change their characteristics, although not their nature, when we are dealing with SMEs and not with large corporations; or when these SMEs are located in emerging markets and not in developed markets (Lu et al., 2010; Ooi & Richardson, 2019). Faced with this reality, the capacity to take advantage of global opportunities is conditioned by the capacity to face these challenges, which is partly explained by the theory of the enterprise's resources and capacities (Knight & Liesch, 2016; Cadogan, 2012); this vindicates the need to know them in depth as a preliminary step in order to achieve a successful positioning in international markets. Under this scenario, the theoretical bases are laid for subsequent studies focused on current challenges and opportunities for SMEs in emerging markets (gap in current literature) in the face of the digital transformation.

This panorama is what has led us to consider a thorough examination and first evaluation of the literature produced to date through a bibliometric study that allows us to assess rigorously towards where these challenges or emerging issues evolve.

3. Methodology

In order to achieve the objectives, we have based ourselves on a methodology whose route will determine the type of results we reach; specifically, we have carried out a bibliometric analysis (Murgado-Armenteros et al., 2015), using SciMat software (Cobo et al., 2011). This methodology conditions the way of collecting, ordering and analyzing the data obtained. These data were captured from two prestigious databases such as Scopus and Web of Science, in the period 2009-2018, with the following keywords: international performance, export promotion, international business models, SME entry modes, globalization, SME export, international market entry, international entrepreneurship, business challenges, international barriers, emergent economies, emergent markets, international trends, new business models. In order to identify these keywords, we based ourselves on several meta-analyses by internationally renowned authors in the field (Leonidou et al., 2010; Leonidou et al., 2018; Katsikeas et al., 2016; El Makrini, 2015) as well as on the call for papers of AIB (2018) and on the special issues of JIMg (2013) and JIMk (2017). The result of the search yielded a total of 1,499 papers, which were filtered according to their relevance, bibliometric indices and impact factor in SJR and JCR, from the first or second quartile, leaving finally a sample of 267 papers (163 in Scopus and 104 in WoS).

Although there are other programs for bibliometric analysis, we have chosen SciMat because of its versatility and efficiency in processing textual information from scientific documents (Castillo-Vergara et al., 2018). This tool has been widely used in various studies among which we highlight those that analyze the role of creativity in business or those that focus on the evolution of the use of quantitative methodologies in the area of marketing (Murgado-Armenteros et al., 2015). In our case, in order to study the evolution experienced by the

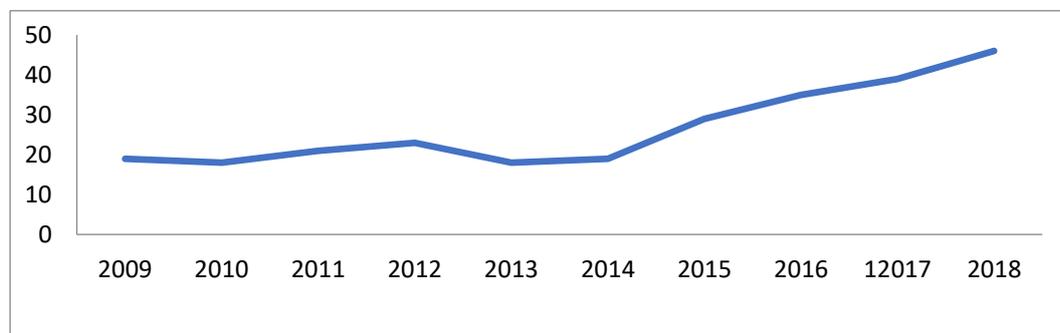
challenges faced by SMEs in emerging markets and their influence on international positioning, the bibliometric analysis included, on the one hand, perform analysis and, on the other, science mapping. Perform analysis seeks to evaluate the impact of citing the scientific production of different authors whilst the scientific map aims to show the conceptual, social or intellectual structure of scientific research (Cobo et al., 2011). For the construction of the scientific map, an analysis of co-word and co-occurrence is carried out, that is, it is parameterized in such a way that the key words that would have been used in at least three documents are included (co-word) and that appear jointly in at least two documents (co-occurrence) (Cobo et al., 2012). This scientific map is represented in a Cartesian axis, where the X axis constitutes the centrality and the Y axis the density of the key words that make up the set of literature analyzed.

Following Cobo et al. (2012) and Castillo-Vergara et al. (2018) this map or quadrant shows the following themes: a) the motor theme (upper right quadrant); b) peripheral themes (upper left quadrant); c) emerging themes (lower left quadrant); and d) basic themes (lower right quadrant). The driving themes have a high centrality and density, which gives them great interest as a field of research. The peripheral themes have high centrality and low density, which configures them as very specific and orbiting around the central ones. Emerging themes have low density and centrality, which require greater analysis and contrast with other types of keywords and require further development. And, finally, the basic topics have high centrality but low density, becoming essential references in those researches that address new concepts.

4. Results

The analysis carried out on the results offered by SciMat shows, as we can see in figure 1, a strong annual growth rate in terms of the number of publications on the subject, especially as from 2014, evidencing a great scientific interest in emerging economies and the challenges they face; in this sense, it would be interesting to see if this academic advance reflects business activity.

Figure 1: Graph showing the number of publications of papers per year 2009-2018



By focusing on the journals that contain these publications, we can identify the ranking of those most committed to research on the keywords used for analysis. As shown in the following figure 2 it can be observed that more than 70% of publications on the subject are

concentrated in 10 journals while the rest correspond to other publications, which in some cases are of a more regional nature (Asia, Latin America, etc.).

Figure 2: Journals by number of publications on the subject matter



The authors with the highest number of publications according to keywords (together in at least 3 of them) are the following: Leonidou, L. (10); Kuivalainen, O. (8); Gabrielsson, M. (8); and, Dimitratos, P. (7). In other words, they are the authors who do the most research on the subject of our research. However, if we analyse the most cited papers, we can see that many of these authors write with others whose country of origin coincides more than once with emerging economies. In this sense, Table 1 shows the 10 papers with the highest number of citations. An analysis of these allows us to draw conclusions about the evolution of scientific production in the field.

Table 1: Ranking of most cited papers

Author	Journal	Title	Quotations
Cavusgil & Knight, 2015	Journal of International Business studies	The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalisation	353
Zott et al., 2011	Journal of Management	The business model: recent development and future research	346
Boso et al., 2013	Journal of Business Venturing	Entrepreneurial orientation, market orientation, network ties and performance: Study of entrepreneurial firms in a developing economy	331
Lu et al., 2010	Journal of Business Studies	Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging economy	304
Morgan et al., 2012	Journal of the Academy of Marketing of Science	Export marketing strategy implementation, export marketing capabilities and export venture performance	259

Meyer & Peng, 2016	Journal of International Business Studies	Theoretical foundations of emergent economy business research	224
Leonidou et al., 2010	Journal of International Management	Five decades of business research exporting: A bibliographic analysis	222
Kuivalainen et al., 2012	International Marketing Review	Internationalisation patterns of small and medium-sized enterprises	127
Gabrielsson et al., 2013	Industrial Marketing Management	A dynamic model of growth phases and survival in international business-to-business new ventures: The moderating effect of decision-making logic	119
Zhou et al., 2012	Journal of International Marketing	The business model: recent development and future research	108

Once the subject matter with which to operate has been identified, SciMat offers us as results (among others) the scientific or strategic map showing the driving, emerging, peripheral and basic themes, according to the level of centrality (strength of the external links of the theme with other themes) and density (degree of internal cohesion of a theme).

Table 2: Centrality & density ranges

Name	Centr	Range	Dens	Range
Global industry	4.28	.4	200	1
Developing world	26.68	.9	44.44	.7
International trade	51.63	1	25.01	.4
Institutional voids	9.21	.6	71.21	.8
Born global	20.22	.7	22.27	.3
SME	25.39	.8	37.83	.6
Innovation	2.44	.2	30	.5
Entry modes	4.04	.3	8.2	.1
International mark	5.4	.5	10.42	.2

Table 2 shows the key issues regarding the challenges faced by SMEs in emerging economies in a globalized and digitized world. It can be seen that the most central theme is “international trade” and the most dense “global industry”: one of the parameters that define the current global economy. It also highlights the role of emerging economies and the importance of SMEs; along with them, the need to deepen in “Institutional voids” as a weakness of these economies appear with a high density. The following figures shows the results of the strategic map.

The results of the driving themes show that international trade, emerging economies, SMEs and institutional voids are important challenges that we have to face, both at the academic and at the business levels. They are surrounded by aspects as important as technological innovation in all its spectrum of action, modes of entry, the born global or problems with

logistic systems with major technological advances in their activity which are major challenges for these SMEs in their activity abroad (Dimitratos et al., 2014; Ismail, 2017; Ismail & Kuivalainen, 2015). The “institutional voids” theme is configured as the structural deficiencies that characterize emerging economies, which make their enterprises, especially SMEs, less competitive (Kahiya, 2017). With regard to emerging issues, innovation plays a strong role insofar as it is considered a strategic factor in the development of sustainable competitive advantages in the current digitalized economy (UNTAD, 2017). Additionally, as far as peripheral and basic issues are concerned, we must emphasize that although these are issues that have already been sufficiently studied (Rahman et al., 2017), nevertheless their contribution and support to emerging and driving forces are essential (Leonidou et al., 2018) as they serve as a basis for progress in the former ones. The results obtained show a great evolution in the challenges, partly explained by technological advances (Hess et al., 2016).

Figure 3: showing the strategic map with driving, emerging, peripheral and basic themes

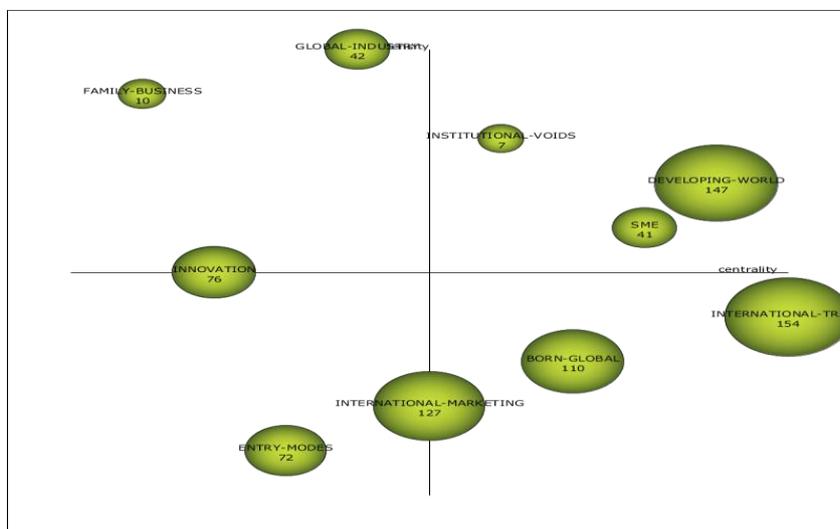
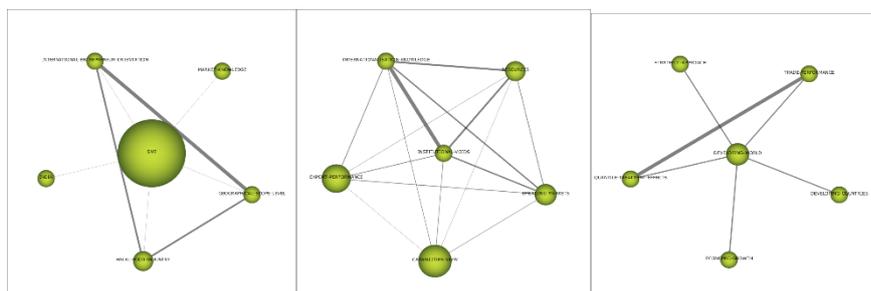


Figure 4: Clusters of driving themes



5. Conclusions and Implications

The most important conclusions after the analysis of the results are two: on the one hand, the strong evolution experienced by the challenges faced by enterprises in their exit to international markets, motivated by the important role that technological advances are playing in business management models, as well as the different mechanisms designed to

overcome obstacles and take advantage of opportunities; on the other hand, highlighting the role of emerging economies in the global economy and the need for studies of all kinds to deepen the knowledge of them. In relation to this, the bibliometric results have shown the impact that institutional voids have on the entire process of internationalization of these emerging economies, as well as of their technological deficiencies or their logistical systems. Around these main topics, other emerging ones have been detected, such as the need to introduce innovation in business management and an adequate selection of the entry mode, as this will condition the enterprise's international performance. Based on these results we can say that we have responded to the main purpose of this research: to analyze the evolution of scientific production on the subject matter of study, which opens the doors to future research to develop the topics exposed.

Literature

1. Academy of International Business – AIB (2018). *Internationalization Challenges of Latin American Firms*. Available at: <https://aib.msu.edu/resources/callforpapers.asp>
2. Aharoni, Y., & Brock, D. (2010). International Business Research: Looking back and looking forward. *Journal of International Management*, 16, 1-15
3. Akbar, Y. H., Balboni, B., Bortoluzzi, G., & Tracogna, A. (2017). SME export performance, capabilities and emerging markets: The impact of institutional voids. *European Journal of International Management*, 1(2), 201-226.
4. Boso, N., Story, V. W., & Cadogan, J. W. (2013). Entrepreneurial orientation, market orientation, network ties and performance: Study of entrepreneurial firms in a developing economy. *Journal of Business Venturing*, 28, 708-727.
5. Cahen, F., Lahiri, S., & Mendes, F. (2016). Managerial perceptions of barriers to internationalization: An examination of Brazil's news technology-based firms. *Journal of Business Research*, 69, 1973-1979.
6. Cadogan, J. (2012). International marketing, strategic orientations and business success: reflections on the path ahead. *International Marketing Review*, 29(4), 340-348.
7. Castillo-Vergara, M., Álvarez, A., & Plasencio-Hidalgo, D. (2018). A bibliometric analysis of creativity in the field of business economics. *Journal of Business Research*, 85, 1-19.
8. Cavusgil, S., & Knight, G. (2015). The BG firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3-16.
9. Chakravorti, B. (2016). Where the digital economy is moving forest. *Harvard Business Review*, 1-20.
10. Cobo, M., López, A., Herrera, E., & Herrera, F. (2011). An approach for detecting, quantifying and visualizing the evolution of a research field. *Journal of Infometrics*, 5, 146-166.
11. Cobo, M., López-Herrera, A., Herrera-Viedma, E., & Herrera, F. (2012). SciMat: A new science mapping analysis software tool. *Journal of the American Society for Information Science and Technology*, 68(8), 1609-1630.
12. Dimitratos, P., Amorós, J., Petrou, A., & Aharoni, Y. (2014). Micro-Multinational International entrepreneurship, networking and learning effects. *Journal of Business Research*, 67(5), 908.

13. El Makrini, H., & Chaibi, A. (2015). On the role of management commitment in export performance: A meta-analysis. *Journal of Applied Business Research*, 31(4), 1205-1222.
14. Gabrielsson, M., & Gabrielsson, P. (2011). Internet-based sales channel strategies of born global firms. *International business review*, 20(1), 88-99.
15. Gabrielsson, P., & Gabrielsson, M. (2013). A dynamic model of growth phases and survival in international business-to-business new ventures: The moderating effect of decision-making logic. *Industrial Marketing Management*, 43, 1357-1373.
16. Harms, R., & Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of International Entrepreneurship*, 10(2), 95-116.
17. Hess, T., Matt, C., Benlian, A., & Wiesbock, F. (2016). Digital transformation is a high-priority management challenge. *MIS Quarterly*, 15(2), 123-132.
18. Ismail, N. (2017). The rolls of international entrepreneur orientation and geographical scope level to determine international performance: A case in the Malaysian Halal food industry. *Journal of International Entrepreneurship*, 21(1), 33-46.
19. Kahiya, E. (2017). Export barriers as liabilities: near perfect substitutes. *European Business Review*, 29(1), 61-102.
20. Katsikeas, C., Skarmas, D., & Bello, D. (2009). Developing successful trust-based international exchange relationship. *Journal of International Business Studies*, 40(1), 132-155.
21. Katsikeas, C., Morgan, N., Leonidou, L., & Huit, G. (2016). Assessing performance outcomes in marketing. *Journal of Marketing*, 80, 1-20.
22. Kazlauskaitė, R., Autio, E., Sarapovas, T., Abramavicius, S., & Gelbuda, M. (2015). The speed and extent of new venture internationalization in emerging economy context. *Entrepreneurial Business and Economics Review*, 3(2), 45-52
23. Knight, G., & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51, 93-102.
24. Kuivalainen, O., Sundqvist, S., Saarenketo, S., & MacNaughton, R. (2012). Internationalization patterns of small and medium-sized enterprises. *International Marketing Review*, 29(5), 448-465.
25. Kumar, V., Mudambi, R., & Gray, S. (2013). Internationalization, innovation and institutions: The three I's underpinning the competitiveness of emerging market firms. *Journal of International Management*, 19(3), 203-206.
26. Leonidou, L., Katsikeas, C., & Coudounaris, D. (2010). Five decades of business research exporting: A bibliographic analysis. *Journal of International Management*, 6(1), 78-91.
27. Leonidou, L., Samiee, S., & Ayrol, B. (2014). Antecedents and outcomes of exporter-importer quality: Synthesis, meta-analysis and directions for research. *Journal of International Marketing*, 22(2), 21-46.
28. Leonidou, L., Katsikeas, C., Samiee, S., & Ayrol, B. (2018). International Marketing Research: A state-of-the-art review and the way forward. *Advances in Global Marketing*.
29. Lu, Y., Zhou, L., Bruton, G., & Li, W. (2010). Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging economy. *Journal of International Business Studies*, 41, 419-436.
30. Meyer, K. E., & Peng, M. W. (2015). Theoretical foundations of emergent economy business research. *Journal of International Business Studies*, 47(1), 17-30.

31. Morgan, N. A., Katsikeas, C., & Vohies, D. (2012). Export marketing strategy implementation, export marketing capabilities and export venture performance. *Journal of the Academy of Marketing of Science*, 40, 271-289.
32. Murgado-Armenteros, E., Gutiérrez-Salcedo, M., Torres-Ruiz, F., & Cobo, M. (2015). Analysing the conceptual evolution of quantitative marketing research through science mapping analysis. *Scientometrics*, 102(19), 519-557.
33. Narooz, R., & Child, J. (2017). Networking responses to different levels of institutional voids: A comparison of internationalizing SMEs in Egypt and UK. *International Business Review*, 26(4), 683-696.
34. Ooi, S. M., & Richardson, C. (2019). The internationalisation of service-sector SMEs in an emerging market: Insight from business training and consultancy firms in Malaysia. *Review of International Business and Strategy*, 29(11), 44-60.
35. Rahman, M., Uddin, M., & Lodorfos, G. (2017). Barriers to enter in foreign markets: Evidence from SMEs in emerging market. *International Marketing Review*, 34(1), 68-86.
36. Rask, M. (2014). Internationalization through business model innovation: In search of relevant design dimension and elements. *Journal of International Entrepreneurship*, 12(2), 146-161.
37. UNTAD (2017). *Information Economy Report. Digitalization, Trade and Development*. Published by UN.
38. Schimiele, A. (2009). *Drivers, for international innovation activities in developed and emerging market. Working Paper 09-064*. Centre for European Economic Research.
39. Schwens, C., Eiche, J., & Kabst, R. (2011). The moderating impact of informal institutional distance and formal institutional risk on SME entry mode choice. *Journal of Management Studies*, 48, 330-351.
40. Zhou, L. Wu, A., & Barnes, B.R. (2012). The effects of early internationalization on performance outcomes in young international ventures: The mediating role of marketing capabilities. *Journal of International Marketing*, 20(4), 25-45.
41. Zott, C., Amit, R., & Massa, L. (2011). The business model: recent development and future research. *Journal of Management*, 1, 1-10.

Mechanisms of Corporate Culture Transformation in Companies and State Corporations in the BRICs Countries

Sergey Myasoedov

The Russian Academy of National Economy and Public Administration
82 Prospect Vernadskogo, Moscow 119571, Russian Federation
E-mail: vicerektor@rane.ru

Emil Martirosyan

The Russian Academy of National Economy and Public Administration
82 Prospect Vernadskogo, Moscow 119571, Russian Federation
E-mail: marem81@mail.ru

Anastasia Sergeeva

The Russian Presidential Academy of National Economy and Public Administration
82 Prospect Vernadskogo, Moscow 119571, Russian Federation
E-mail: nastasia.sergeeva@gmail.com

Yulia Bronnikova

The Russian Presidential Academy of National Economy and Public Administration
82 Prospect Vernadskogo, Moscow 119571, Russian Federation
E-mail: may_flower2004@gmail.com

Abstract

Corporate culture is a mosaic and multi-layered environment of company incorporating both national characteristics, multicultural diversity, and personal aspects of employees. Corporate culture is one of the key tools to adapt company for working in the international market. The development of cross-cultural competence among employees and the management of modern companies and corporations is becoming a primary and important part of corporate culture. Despite the fact that the BRICS countries are placed into one general category corporate culture and its processes are specific to each country. However, business models and practices of companies there have many common features which have become the basis of business cultures of the BRICS countries. Corporate culture is a powerful tool through which collective and individual corporate values and beliefs can be systematically and purposefully transformed into persistent and effective corporate behavior patterns aimed at implementing company strategy and achieving its goals.

Keywords

State corporation, corporate culture, multicultural competence, BRICS countries

Corporate culture is an individual feature of company that, like a human personality, mostly determines the line of conduct, decision-making and, in general, the future. The most important goal of corporation is value creation. Corporate culture, so-called corporate “mentality” is one of the levers to influence value creation, as it is the most important factor to build the main company resource, i.e. human capital. While organization is developing, corporate culture is also transforming.

Corporate culture is one of the key tools to adapt company for working in the international market. Today companies and corporations involved in international interaction with multinational groups are becoming frequent phenomenon. Despite total globalization, differences in business cultures remain significant, as modern internal and external economic relations place higher demands on the observance of generally accepted forms of business communication, etiquette, and ethics.

Business style and corporate patterns in companies and especially in state corporations broadly depends on the national culture, and it affects all areas of business relationships, as well as everyday informal contacts and negotiations, and ways of concluding contracts. The cultural differences are rooted in fundamental differences of value systems.

In the past, such cultural differences were considered as a barrier to communication and cooperation. Today, leaders of successful companies and state corporations accept that cultural differences can be a source of add-on value. It is important to know and consider the national contexts of the internal and external stakeholders for successful and efficient work of companies operating internationally, for implementation of internal corporate processes, and interaction with the external environment. Being aware of opposite traits of cultures improves navigating in cross-cultural communication.

Cultivating cross-cultural competence among employees and management of modern companies and corporations, that implies intercultural differences, makes good command of foreign languages primary and important part of corporate culture.

International and multicultural competence becomes key factor in the development of global leadership paying much attention cross-cultural skills and the development of a global worldview and respect for cultural differences (Rosen, Digh, Singe & Phillips, 2000). Developing multicultural competence in a company as a whole, and introducing it into corporate culture will help creating synergies of cross-cultural experience within corporation, applying best world practices in formulating processes, fruitfully interacting with partners, and building communications with a wide range of stakeholders, not limited to one country.

Since BRICS (Brazil, Russia, India, China and South Africa) represent a young and energetic group of new economic power, the question arises whether they have common features in business and national company management. Despite the fact that the BRICS countries are placed into one general category, the corporate culture and its processes are specific to each country. The management of companies in all BRICS countries is carried out variously.

If we analyze cultural traits of the BRICS countries along G. Hofstede’s five parameters (Hofstede et al., 1990; Hofstede & Minkov, 2010) the data obtained can form the basis to

identify the influence of national cultural traits on building business management models in the country including corporate cultures (Table 1).

Table 1: Cultural dimensions of the BRICS countries according to Hofstede's model

Culture dimension	Index				
	Brazil	Russia	India	China	South African Republic
1. Power distance	69	93	77	80	49
2. Individualism	38	39	48	20	65
3. Masculinity	49	36	56	66	63
4. Uncertainty avoidance	76	95	40	30	49
5. Long-term orientation	65	N/a	61	118	N/a

Data in Table 1 show that the cultural dimensions indices in BRICS countries vary significantly.

The dimension of national culture “Power distance” shows to what extent the degree of inequality in distribution of power and influence in companies and society as a whole is considered natural and acceptable by members of society. Except South Africa, the BRIC countries have a really high degree of power distance that means recognition of social and organizational hierarchy and inequality between members of society. Society accepts that those from the top level in the hierarchy have and should have more social advantages than those from the bottom.

The dimension “Individualism” characterizes the degree of interdependence in society. Self-esteem of members of society is determined by how they identify themselves: as individuals isolated from the rest, or as part of a group. Except South Africa, the BRIC countries have a low value for this indicator that means that they represent collectivist culture. The person is integrated into strong, cohesive social groups in such a society what gives him certain social protection in exchange for his loyalty. It is considered very important to build long-term and reliable relationships with partners in doing business. Prior to concluding contracts parties seek to know each other better.

The “Masculinity” dimension of culture is a basis of human motivation for any action. A high level of masculinity shows the desire to become better, focus on results, while a low level demonstrates desire to obtain satisfaction from the process of any activity itself. A rather high degree of masculinity in society, characteristic of India, China and South Africa shows the great role of competition, achievements, success and winners in society. Low degree of masculinity specific to Brazil and Russia indicates that quality of life is the dominant value in society.

The culture dimension “Uncertainty avoidance” describes attitude of society to the uncertainty and unpredictability of the future. In countries with a high index of uncertainty avoidance, there is a significant public need to establish all sorts of rules and regulations governing life and activity of people to reduce the level of uncertainty. “Long-term orientation” can be interpreted as the orientation of society towards a rational future prospect, instead of short-term achievements.

Despite the difference in degrees of cultural dimensions, business models and practices of organizations in the BRICS countries have many common features (Мясоедов, 2015):

- The business structure. The BRICS countries are characterized by hierarchy in management structures and a large role of personality and personal relationships. The most important decisions in business are made at the top of hierarchy.
- The management style. Mostly the BRICS countries have in common autocracy, directive management style, key role of personal relationships, and paternalism.
- The role of manager. Great importance of official position and status, and manager's experience. Subordinates are given clear and unambiguous instructions.
- The attitude to changes. There is growing willingness to change, as well as lack of willingness to take risks. Failures mean future loss of confidence.
- The attitude to time and priorities. Flexible attitude to time is accepted. There is a focus on relationships, not on tasks.
- The decision-making process. Formalized processes and operations are widespread. Decisions are made by supreme authorities. Duties, range of responsibilities and reporting are clearly defined.
- Teamwork. There is a common for the BRICS countries that personal relationships, clear distribution of responsibilities, hierarchical structure, and top-down decision-making play big role.
- Communication and negotiation style. Personal arrangements, confidential relationships are of high importance. Prior use of oral speech and emotional communications are usual.

Thus, despite of inequalities of cultural dimensions, the BRICS countries demonstrate rather wide range of common features in business models and ways of doing business (Мясоедов, 2003, 2009).

Today, these features are the fundamental as developing, transforming, experiencing the effect of other cultural contexts, and contacting with ultimately different models to result in business cultures of the BRICS countries. Each of these factors can be a lever to transform corporate culture for it is necessary as part of corporate strategy. That is why attention to cross-cultural management and corporate culture management in an international context grows in practice and academic literature (Авдокушин & Жариков, 2013; Ричард, 2003; Градобитова & Пискулова, 2005; Минков, 2010; Льюис Ричард, 2001).

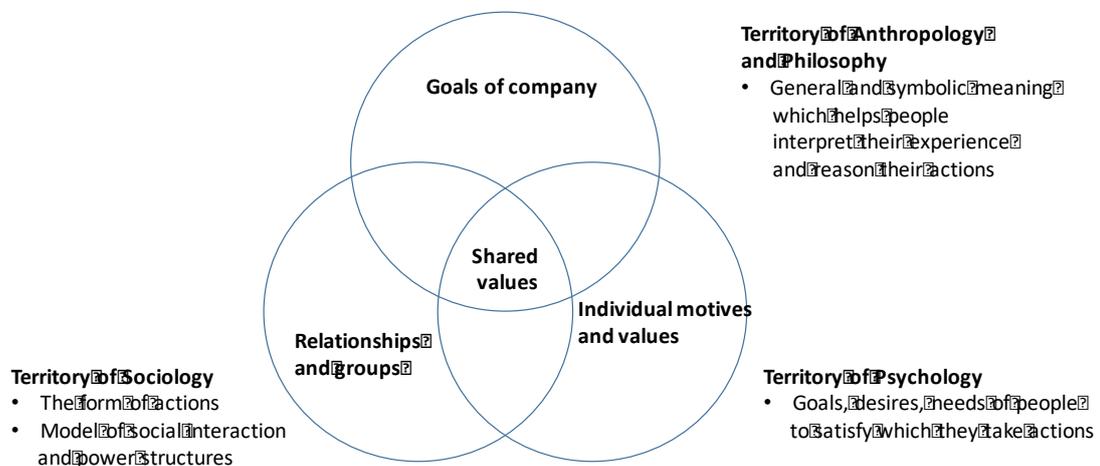
It is important to underline that corporate culture determines staff behavior, especially when independent decision-making is required corresponding to the goals, culture and values of company. Corporate culture management, its transformation, demands an integrated strategic approach. As a rule, companies take actions to transform corporate culture to change staff behavior, so they create teams to increase cooperation, change performance monitoring and bonuses to raise responsibility, introduce formal code of conduct to ensure transparency of business (Hay Group, 2012).

Such selective actions often do not have a long-term effect for they do not affect the deep tunes that determine behavior. To make transformations consistent, it is needed to apply approach affecting motives of behavior, such as common goals and views, beliefs and values of individuals.

These tacit aspects of culture can be both barriers and catalysts for its transformation. They are not on the surface; they are not easy to register, digitize and apply. However, the sustainable and long-term changes are directly dependent on how deeply the transformations can affect behavior. Therefore, the main task is to focus the main efforts on those underlying factors determining behavior.

Hay Group, a consulting company, defines culture as “a balance of organizational incentives and goals, motives and beliefs of individual people, as well as norms and interaction patterns making behavior and activities of leaders and employees reasonable”. Corporate culture can be considered due to three dimensions below (Figure 1): individual - motives and values; social - relationships and groups; organizational - goals and views (Jones, Moore & Snyder, 1988).

Figure 1: Three dimensions of culture.



Source: Hay Group

Personal motives and values comprise desires and needs to satisfy that human behavior is directed to. Psychological approach to culture accentuates the importance of common and deep-rooted skills and mental models relied upon by employees. For example, it is important to consider that in companies where strong motive of achievement predominates, achieving short-term and tangible goals formulate corporate culture and that can damage long-term goals.

Sociological and sociopsychological approaches focus on group norms. Norms are underlying standards and values that can be traced in teams and are reflected in the “rules for the game” often clearly presented in the onboarding processes. In general, culture is a social phenomenon observed in behavioral models manifesting themselves while interactions of people: in language they use, in habits and traditions formed. If we ask different people about their corporate culture the responses may be describing relationships.

Common views are created by group members in the process of interacting with the environment. Every time they make a choice they realize goals, feeling of success and achievement. Goals and views are also formed on the basis of the values and approaches shared by leaders, and based on the rules and policies adopted in company regulating activity. Such meanings are often represented in culture in metaphors and uniting symbols used within the community.

The junction of three cultural dimensions is the area of "shared" values. By focusing on this area, the company gains a powerful lever to balance all aspects affecting people, groups and company as a whole, and as a result to create a highly efficient culture. Employees will be likely to be interested in their work and committed to the company if their individual motives and values, relations between groups in the company and the general business goal will be balanced.

Conversely, if the indicated measurements, then motivation and loyalty will decrease. Collective behavior in groups may be even destructive, and in the long-term may lead to a lower quality of work. One of the examples of the "shared" values can be "corporate legends" that employees retell to each other; so, they imply desired corporate values.

A. G. Lafley, P&G CEO (Lafley & Charan, 2014), created a culture of innovation and cooperation focused on customer, introducing symbolic changes that have real success: instead of isolated executive offices he used training rooms and open spaces, and instead of rectangular tables in the meeting rooms he used round tables softening hierarchy.

Culture transformation is like a regeneration. It's not an event of one moment. Great transformations require time, analysis, and reflection. Moreover, people and companies cannot change if they are not able to learn. So, cultural transformation is a way of continuous learning and analysis, the process of harmonization of the strategy and the three dimensions of corporate culture (Smircich, 1983).

The starting point should be an understanding of corporate strategic requirements: what kind of culture should be to achieve the desired short-term and long-term results? Leaders need to identify behavioral models required for success. Then they should set priorities defining the most effective levers of cultural change and then focus on regular use of these levers (Figure 2). The most effective changes are largely focused on changing symbols and attributes, intangible catalysts of change, and new leadership behavior as a role model in a new culture (Gagliardi, 1990).

One of the most serious problems for most companies is that management behavior, management systems, and organizational symbols send contradictory information to employees. The declared principles of company should be in harmony with existing practices. Employees on individual, group and organizational levels should receive consistent information that helps reinforce the relevant models of behavior. The transformation process should be accompanied by delicate internal communication. Statements contradicting reality immediately undermine trust of employees.

Figure 2: Transformation of culture and balancing its dimensions.



Source: Hay Group

Another fault of many companies is trying to change too much, in a short time and on surface. It is important to highlight successful elements of existing culture to preserve and strengthen in the future. Company is unlikely to need a fundamental transformation of all the attributes of its culture. Thus, the transformation should focus only on the elements need to be changed and balanced.

Leaders are in most cases like guides and creators of corporate culture. When corporate culture requires development or adaptation to environmental conditions smart leaders should be the first to take action and demonstrate new behavior. To transform culture, leaders should be able to learn, take risks, and strengthen positive models of behaviors good for a specific company. It is required the leader's awareness of himself, emotional maturity and the determination to introduce and maintain change processes and through that to help the rest to change beliefs and behavior.

Culture transformation is a complex process but the result of effective system and strategically oriented transformation will be motivated employees, efficient organizational processes, and high performance of company (Kotter, 1995; Schein, 2009).

The principles of cultural transformation are the following:

- Applying methods to affect the fundamentals of culture.
- Defining corporate culture as a key to implement corporate strategy.
- Creating common views for employees, groups and company as a whole.
- Determining the main levers for introducing cultural change;
- Ensuring necessary changes in the culture by their own behavior.

Like many other complex processes corporate culture transformation can be structured, manageable and viable. We could consider an approach to cultural transformation along three questions (Стрельцова, 2014). The first is to determine features of today's culture that

promote strategy and that undermine strategy. We also need to realize what features in the culture are absent in the moment. This process should involve rather big layer of employees. At this stage, companies often involve external advisers since it is almost impossible for the employees to be objective describing the culture of the company where they work.

The second question is what goals company desires to reach. It is important to realize that if there is initiated cultural transformation, it is obvious that the existing culture is different from the target one. So, significant part of employees are bearers of values that will be unwanted in the future culture, and maybe even harmful. The goals company strives to reach, including in terms of culture, are determined by top management. It is practical to take into account members of talent pool (who get to the top of hierarchy in 4-5 years). In some cases it is possible to lean on the values of a particular department being the source of right culture. It would be an error to immediately transform values without relevant analysis of current culture. It is obvious that in this case answering question 3 is impossible (how to get somewhere without knowledge where we are).

The third question is how to get where company is directed to. Clear understanding the target, as well as the strengths and weaknesses of existing culture will help to make cultural transformation consistent at the three levels.

The first level. Change in behavior of top management. Staff changes are the most important and primary task. It is necessary to change the leaders whose behavior contradicts to new values, and hire or appoint leaders to become role models in new culture. Successful workers demonstrating wrong values represent the greatest destructive influence. They could block the changes and make all further actions meaningless until company gets rid of them. There must be started group or individual work with the rest to correct behavior in the format of team sessions, mentoring, and coaching. It is important that changes in behavior of leaders start from CEO and extend to top management and then top-down to the whole company. Many such initiatives died precisely because top managers started to change behavior of employees, instead of starting with themselves.

The second level. Changing business processes. Under the new culture and new values there are specific business processes. Thus, it is necessary to look carefully at these processes and fix them so that they cannot be implemented otherwise but for along with a new culture.

The third level. Transforming HR processes and structures. It is necessary to begin to hire, motivate, train and promote in accordance with new values.

Corporate culture is a mosaic and multi-layered environment of organization incorporating both national characteristics, multicultural diversity, and personal aspects of people working in it. Corporate culture is a powerful tool whereby collective and individual corporate values and beliefs can be transformed into permanent and effective patterns of behavior in companies to implement the strategy (Schwartz & Davis, 1981) of company and achieve its goals.

Literature

1. Gagliardi, P. (1990, ed.). *Symbols and artifacts: Views of the corporate landscape*. Berlin: Walter de Gruyter.
2. Hay Group (2012). Трансформация корпоративной культуры.
3. Hofstede, G. et al. (1990). Measuring Organizational Cultured: A Qualitative and Quantitative Study across Twenty Cases. *Administrative Science Quarterly*, 35.
4. Hofstede, G., & Minkov, M. (2010). *Cultures and organizations. software of the mind. International cooperation and its importance for survival*. New York, NY: McGraw Hill.
5. Jones, M. O., Moore, M. D., & Snyder, R. C. (1988). *Inside organizations: Understanding the human dimension*. Boston, MA: Sage Publications.
6. Kotter, J. P. (1995). Leading change: Why transformation efforts fail. 59-67.
7. Lafley, A. G., & Charan, R. (2014). *P&G's innovation culture*. Strategy+ Business.
8. Minkov, M. (2010). *Cultures and Organizations. Software of the Mind*.
9. Rosen, R., Digh, P., Singe, M., & Phillips, C. (2000). *Global literacies: Lessons on business leadership and national cultures*. New York, NY: Simon & Schuster.
10. Schein, E. H. (2009). *The corporate culture survival guide*. Boston, MA: John Wiley & Sons.
11. Schwartz, H., & Davis, S. M. (1981). Matching corporate culture and business strategy. *Organizational dynamics*, 10(1), 30-48.
12. Smircich, L. (1983). Concepts of culture and organizational analysis. *Administrative science quarterly*, 339-358.
13. Авдокушин, Е. Ф., & Жариков, М. В. (2013). *Страны БРИКС в современной мировой экономике*. М: Магистр издательство.
14. Градобитова, Л. Д., & Пискулова, Н. А. (2005). Деловые культуры в условиях глобализации международных экономических отношений. Часть 1. М.: МГИМО (У) МИД России.
15. Льюис Ричард, Д. (2001). *Деловые культуры в международном бизнесе. От столкновения к взаимопониманию: Пер. с англ.* М.: Дело.
16. Мясоедов, С. П. (2003). *Основы кросс-культурного менеджмента*.
17. Мясоедов, С. П. (2009). *Управление бизнесом в различных деловых культурах*.
18. Мясоедов, С. П., Борисова, Л. (2015). The Impact of National Culture on Business Management Model in BRICS (in Russian).
19. Ричард, Р. (2003). *Гестеланд. Кросс-культурное поведение в бизнесе. Маркетинговые исследования, ведение переговоров, менеджмент в различных культурах*. М: Бизнес- Клуб.
20. Стрельцова, Ю. (2014). Корпоративную культуру можно трансформировать быстро и экономично. *Ведомости*, 23 октября 2014.

Smart Destinations as Method to Rethink Tourism Marketing: A Simplified Method That Any Business or Destination Can Implement It!

Fernando Nahat Jardim

ESPM

Rua Dr. Alvaro Alvim, 123, São Paulo, Brazil

E-mail: fernandonjardim@gmail.com

Cristina Helena Pinto de Mello

ESPM

Rua Dr. Alvaro Alvim, 123, São Paulo, Brazil

E-mail: chmello@espm.br

Abstract

The present academic work seeks to contribute to the existing discussion about tourism marketing in Brazil, relating it to modern tourism development frameworks and understanding key issues of tourism development in the country. Through literature review, surveys and tests a simplified tourism development framework model was developed. Then, in deep interviews with tourism specialists were conducted in order to better understand that industry and to validate the first version of the model. After the interviews, all the data was analyzed, and it was possible to understand the main problems regarding tourism development in Brazil and what should be done in order to put in place a modern and technological tourism development framework. Finally, the prior model was evolved to the final version of the simplified tourism development framework, which now addresses the Brazilian tourism key industry issues, such as the creation of a local governance, continuity of public policies, the non-digitalized trade sector and their old business mindset, and many others. This simplified framework would allow any manager without any previous knowledge in tourism / technology to implement modern, digital and technological methods that are necessary in order to succeed in their tourism strategies.

Keywords

Tourism smart destination, tourism strategy, tourism information system, tourism competitiveness

1. Introduction

From six decades ago until now, tourism has become one of the major world industries as it is one of the fastest growing economic sectors in the world. In this period, the international tourist's departures went from 25 million in 1950 to 1,1 billion in 2015, representing 7% (US\$1,5 trillion) of the world's exports in goods and services. By 2030, there will be 1,8 billion of international tourists visiting other countries (UNWTO, 2016). In 2017, it accounted for 10% of the world's GDP and it was responsible for the generation of 1 of 10 jobs around the globe (WTTC, 2018a).

The tourism industry can positively impact economies. For this reason, developing tourism has been given high priorities in government's agenda (Li, Wu & Cai, 2008) and many countries have emerged as new destinations in addition to the traditional regions such as North America and Europe (UNWTO, 2016).

In 2018, the Travel & Tourism sector has directly contributed to the Brazilian GDP with BRL190.2bn (USD59.6bn). In the same year, its total contribution was BRL 701.7 bn (USD219.8bn), which represents 8.2% of the Global Brazilian GDP. This industry nowadays employs 7 million Brazilians and it was responsible for the creation of 1/5 of all global net jobs in the last decade (WTTC, 2018b), as it impacts 52 sectors in the Brazilian economy (Ministério do turismo, 2015).

Despite being such a big economy, as Brazil is the 11th country with the largest Tourism GDP, the Ministry of Tourism is the second one which receives less investments from the government (R\$ 557.125.760), just in front of the Ministry of Human Rights (R\$ 398.267.203)¹. The country also figures on the 117th position on the ranking of countries with the major travel & tourism's total contribution to GDP last year (WTTC 2018).

One of the reasons for being ranked on the 117th position, is that most of its tourism industry earnings comes from domestic travelers. So, why Brazilian tourism is underperforming? According to Speaker 1², some of the main problems in Brazil are:

- *In other countries, even if they are really far away from main senders, their touristic offer is really clear and they use storytelling to fascinate and delight people about their destinations. In Brazil it does not happen. Tourists with high purchasing power do not perceive the country as touristic destination, mainly because of its poor infrastructure and the high complexity to book something, such as a touristic activity or an airport transfer.*
- *American tourists, which usually are the world's benchmark for tourism, mainly because they send a lot of tourists with high purchasing power overseas and they have an accurate sense of tourism infrastructure as their own country is really developed in this area, prefer to travel to places such as Thailand which has a clear touristic offer in English, better infrastructure and logistics than Brazil.*
- *So, without a clear touristic offer and poor infrastructure the tourists cannot plan a travel to Brazil by themselves (online shopping) so they need to go to specialized*

¹ Orçamento 2019 (Ministério do planejamento, 2019)

² In interview over the phone, on the 31st of March, 2017. The speaker is a relevant tourism specialist who was working at the "Destinos Turísticos Inteligentes" project.

agencies to do that. In Brazil it is not easy to book a transfer, no one speaks English, most of the business websites are in Portuguese and there is no segmentation on the touristic offer (as an example what is low budget? or luxury travel?).

- *There are no unified policies and laws to promote tourism for foreigners. There are too many regions with too many distinct policies and the cities / governmental agencies do not speak to each other to create integrated strategies, so there is no effectiveness, no unified projects and investments.*
- *Those issues were caused mainly because Brazil never had an integrated plan to develop tourism, retaining travelers for more time in some touristic destinations, offering more activities do be done. As an example, EMBRATUR promotes isolated destinations and it should be promoting the Country as an integrated experience.*

To contribute with Speaker 1, according to the Embratur's Former President Vinicius Lummertz, one of the main reasons that makes Brazil to receive such small inbound tourism is the lack in communication and marketing investment. As an example, in 2017 Argentina has invested around US\$ 80 million in tourism promotion, Colombia US\$ 100 million and Peru US\$ 95 million. Embratur which is the entity in charge of promoting the Brazilian tourism overseas, has invested only US\$ 20 million in international campaigns such as media, fairs, press trip and others in the same year (EMBRATUR, 2018).

To accomplish all the objectives of this study, this research will be developed in distinct phases, using quantitative, qualitative, exploratory and descriptive approaches. This phase aimed to test customers responses when impacted by a destination storytelling in which they could book their travel at the end of that story. In order to do that, a quantitative survey was developed to better understand local customers profiles and their knowledge regarding the tourism offer in the State of São Paulo (chosen by convenience, as the author lives there), then two articles on a major travel blog would be posted with a Call to Action to book that activity, as better detailed bellow.

The quantitative approach was chosen as, according to Richardson, Peres and De (1999), this method is categorized for the measurement of something using structured processes to collect the data and to analyze it using statistical models. A descriptive approach was adopted as Gil (2008) described that it as a manner to identify factors that contribute, may lead or are determinant to a phenomenon to happen.

On the following phase, two locations were chosen: a known and an unknown destination, based on the previews results. Then an article about each location was written, describing those destinations main activities and posted at the authors' travel startup "Trip". At the end of each article, there was a call to action to compare prices among 100 agencies to find the cheapest price, including transportation to all activities.

To build traffic, a shorter version of each article was posted on the blog "Catraca Livre" (CL)³ and shared on the "Catraca Livre Viagem" Facebook page⁴. CL is a well-known Brazilian blog. According to its own website, Catraca Livre has 12 Mi of Unique Visitors, +50 Mi page views and its general Facebook page has monthly engagement of 67 MI of people. The "Catraca Livre

³ www.catractalivre.com.br

⁴ <https://www.facebook.com/CatracaLivreViagem/>

Viagem”, which is the Facebook page in which the posts were shared, has more than 1.500.000 fans. Similarweb, which is a popular tool to measure traffic and SEO, also ranks Catraca Livre as the 227th website with the most traffic in Brazil.⁵

Both articles that were posted on Catraca Livre described the locations⁶ and their available activities. To check people response to each article, at the end each text that were published, a call to action (CTO) was placed with the following copy: “O Tripr monitora mais de 100 agências de ecoturismo. Caso tenha interesse em viajar para este destino, cadastre-se nesta página e você será avisado das viagens mais baratas para este destino!” (The Tripr Platform monitors more than 100 ecotourism agencies. If you are interested in traveling to this destination, register yourself on this page and you will be notified about the cheapest travels available for this destination).

People who would click on CTA would be redirected to the Tripr’s website with the full article for that location, and on the end of the page, they could fill a form to receive those offers notifications. The results were measured based on how many people were interested on that travel and left their email addresses, and this validated that customers would response to known and unknown destination storytelling and they would book their travel if it was possible, as it will be shown on the following chapters.

2. Qualitative Exploratory Research

Then, a qualitative exploratory method was chosen in order to validate the model. This method was chosen as exploratory researches are the base to formulate problems and hypotheses (Gil, 2008) and there were many key points that the researcher needed to deeper understand in order to develop the final framework.

In order to proper understand the key subjects that arose from the first method, a pre-test followed by 9 individual in-depth interviews were conducted. This method is supported by many scholars such as Seidman (2006) and Godoi and Mattos (2006), as it is one of the only methods in which is possible to deep explore complex subjects that could not be explored by any other method. This kind of research also do not require to use a structured collection of data or any statistical model to analyze the results (Richardson, Peres & De 1999). A non-aleatory sample was defined based on the respondent’s expertise in the tourism industry, taking in consideration what positions they already held on the tourism chain, to guarantee a complete overview of the whole sector (Creswell, 2010).

The in deep interviews were based on a flexible script as this method allows flexibility to organize and formulate questions along the in deep interviews to assure that all the topics would be covered (Godoi & Mattos, 2006; Prentice, 2006). This was the right choice, once chosen participants have different experiences and points of views regarding the tourism industry. The script was built based on the results from the pre-exploratory research and the literature review.

⁵ <https://www.similarweb.com/website/catracalivre.com.br> , checked on 26/12/2018

⁶ Both articles were copied and are available on the Attachments section of this dissertation

A pre-test interview was conducted with a tourism specialist (over than 10 years working at the city council's tourism company) in order to test and adapt the script. Then, 9 well known tourism specialists were chosen to be interviewed, according to the sector that they work at. To be able to acquire all the necessary information it was necessary to keep participant's names and occupations in secret. We will refer to each participant according to table 1.

Table 1: Speaker by Sector

Identity	Sector
Speaker 1	A Government Agency to Develop Businesses
Speaker 2	OTA (Tours)
Speaker 3	Operators
Speaker 4	Travel Agencies
Speaker 5	Search Engine
Speaker 6	Travel Meta-Search Engine
Speaker 7	A Government Agency to Develop Businesses
Speaker 8	A Government Representant of Tourism
Speaker 9	Trade Association
Speaker 10	Tourism Company Specialized in Government Affairs

Source: Created by the author

The interviews were recorded with the speaker's permission and they were conducted either in person or via video call / phone, according to the respondent availability. At the very end of the interview, when there was no additional information given by the respondents, the proposed model developed by the author was explained and submitted to their appreciation (Strauss & Corbin, 1998) to collect their feedbacks about the proposed model and to add / ask anything else they would like to.

3. Data Analysis

The content analysis is a technique used to analyze all communication that was generated through the interview process to create knowledge and comprehension regarding the subject which is being studied from the original data (Ruiz Olabuénaga & Ispizua, 1989). Following Bardin (2011) content analysis principles, this study has adopted the following steps in order to analyze content data: Prior Analysis; Content Exploration; and Content treatment, Interpretation and Inference. At the prior analysis, it was organized a system to standardize data collection, so it would be possible to measure and understand determined phenomenon to proper formulate suitable guidelines.

Then, the system was applied to the collected content creating more structured data. Finally, all this data was treated and interpreted to achieve the final outcomes of this study. The final model and its guidelines were evolved based on the in deep interviews key findings. A survey was developed using google docs with convenience sampling and distributed on Facebook to check customer's knowledge about the tourism offers in the State of São Paulo. To incentive people to answer, a day trip was drawn (cost of R\$ 100,00). 561 people have answered the

questionnaire⁷, but only 353 replies were considered as valid answers, once respondents must live in São Paulo and a few people tried to fake the answers in order to win the prize.⁸

Most of the participants were workers from 24 to 29 years old that live in the South Region of the São Paulo City. Charts number 15, 16 and 17 shows respondent's demography. On the chart 12, there was an "others" field and many people answered "gym" / "sports" as an activity. Another interesting fact is that 30 people considered themselves with 100% of their time free, which is almost 10% of the sampling.

When asked if they were familiar with "day trips concept"⁹ more than 30% of them answered "no" and after that the definition was given, 20% of them said that they would expend more than R\$ 200 in an activity and 23% said that they travel on a monthly basis.

There was also one question to verify tourist's knowledge about the activities that are up to 2 or 3 hours driving from São Paulo and another one to check travelers willing to do them. So, on the first question the respondents were asked to mark the activities that they were familiar with around São Paulo. On the next question, the same activities were presented, and they have to choose between "muito interessado" (Very Interested), "Interessado" (Interested), "Neutro" (Indifferent), "Pouco Interessado" (not really interested) and "Desinteressado" (not interested at all).

The top 5 most known activities up to 3 hours from São Paulo were: "Trilhas e Cidades do Interior" (Hikes and Countryside tourism), "Kart e Corrida no Autódromo" (Kart and Racetrack), "Tour por SP" (Tour around SP), "Praia e Mergulho" (Beach and Diving) and "Cachoeira / Rafting" (Waterfall and Rafting) and the top 5 activities that tourists were willing the most to do are: "Praia e Mergulho" (Beach and Diving), and "Cachoeira / Rafting" (Waterfall and Rafting), "Trilhas e Cidades do Interior" (Hikes and Countryside tourism), "Rota do Vinho" (the wine route) and "Cavernas" (Caves).

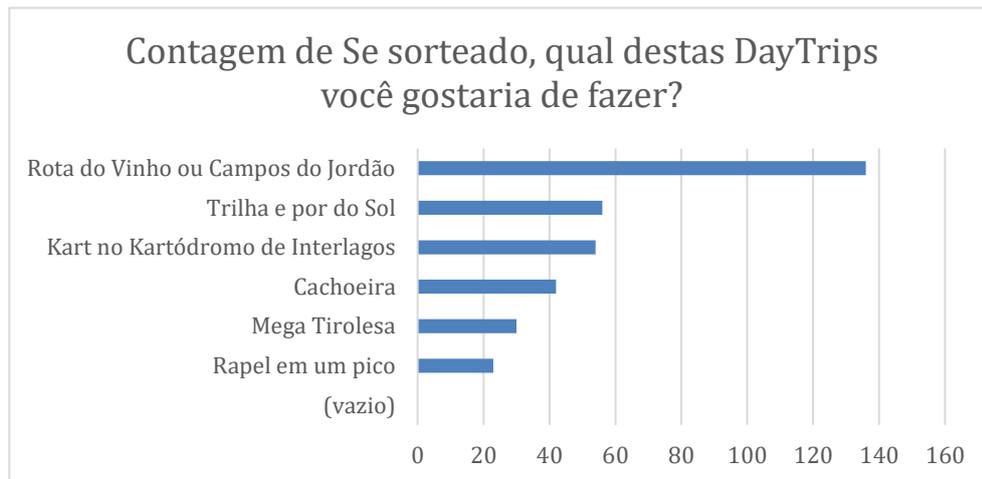
On the final block, participants were asked to suggest new activities or travels they would like to do it, and on the following question, to choose one of the destinations that they would like to go, if they win the drawn. Chart 34 shows participants preferred choices for the prize and below all the travel suggestions that were giving by respondents.

⁷ Form on the Attachments section of this dissertation

⁸ All the answers can be consulted on this link: <http://bit.ly/2ld4aoU>

⁹ One-day return trip to any destination. Guest do not stay overnight at the destination.

Chart 1: Respondents choice for the prize



This preview survey suggested that it is likely to have a big unexplored touristic potential in the State of São Paulo, (which it would be checked on the following section) once a lot of unusual destinations were suggested on the final block, in which participants were asked to suggest new activities or travels they would like to do it.

Additionally, some high potential touristic activities still unknown by respondents, this was suggested when participants marked which activities they known and on the following question they replied the ones that they would like to do. “Rota do Vinho” (the wine route) and “Cavernas” (Caves) were chosen by respondents as activities that they were willing to do but they have not ranked well on the question to check which activities were known by participants.

4. Storytelling Test

To double check if the key findings from the preview survey were trustable, a test was conducted to check consumer responses to determined travel offer, once exposed to a destination storytelling.

In order to develop this test, two destinations were chosen: Ubatuba and São Roque. The first destination was chosen because Beach / Diving was ranked as the first activity that tourists would like to do in the previews survey as well as it appeared twice when respondents were asked to provide destination suggestions, so it was considered a known destination. São Roque was chosen because the wine route figured on the top 5 unknown activities (so it was considered as unknown destination) as well as it was on the top 5 activities that tourists were willing to do the most and it was also the preferred destination for the prize drawn.

The first post¹⁰ was entitled “Ubatuba, uma das regiões mais bonitas do litoral de São Paulo” (Ubatuba, one of the most beautiful places on the São Paulo’s Coast) and it was posted with the following text post: “Ubatuba conta com 75 praias de tirar o fôlego e diversas ilhas, como a ilha das couves! Também é conhecida como o paraíso do ecoturismo!” (With 75 breath-

¹⁰ <https://www.facebook.com/CatracalivreViagem/posts/1503153423055359>

taking beaches and lots of islands, such as the Ilha das Couves, Ubatuba is also well-known as the Ecotourism Paradise). This post was shared 111 times, commented by 332 people and has more than 1.500 reactions as shown by Figures 18 and 19¹¹.

Chart 2: Post on Facebook: Ubatuba



Source: Catraca Livre Viagem Facebook's Profile

This post was the 5th most popular post on that week on "Catraca Livre Viagem" Facebook's page and 178 people have subscribed¹² to receive travel deals to this destination which would include accommodation, transport and some tours at the location. A Table with all the Facebook posts on that week can be found on the attachments.

São Roque

The second post¹³ was entitled "São Roque, o paraíso das degustações gratuitas de vinho e queijo!" (São Roque, the free wine and cheese tasting paradise!) and it was posted with the following text post: "Pertinho de SP, a cidade é ideal para um bate-volta" (Very close to SP, this destination is ideal for a day-trip). This post was shared 303 times, commented by more than 1,200 people and has more than 3.500 reactions as shown by figure 20 and 21¹⁴.

¹¹ Visited on 22/11/2017. The complete list with all the comments can be found on the Attachments section of this dissertation.

¹² Used Mailchimp Subscribed report

¹³ <https://www.facebook.com/CatracaLivreViagem/posts/1510145525689482>

¹⁴ Visited on 28/11/2017 - The complete list with all the comments can be found on the Attachments section of this dissertation.

Figure 1: Post on Facebook: São Roque



Source: Catraca Livre Viagem Facebook’s Profile

Chart 3: Facebook’s comments (São Roque)



Source: Catraca Livre Viagem Facebook’s Profile

This post was the most popular post on that week on “Catraca Livre Viagem” Facebook’s page and 222 people have subscribed¹⁵ to receive travel deals to this destination, even if it was highlighted that tourists could go there by their own, once the wine and cheese tasting were for free and this destination was very close to SP (the offered deal at the end of the post costs R\$ 50,00). A Table with all the Facebook posts on that week can be found on Section 5.4 (attachment).

¹⁵ Used Mailchimp Subscribed report

Both tests suggested that relevant content with storytelling and activities information together with an offer/call to action, can have significant relevance on the Facebook (1st and 5th positions on the weekly posts) and would bring qualified leads to a destination (222 and 178 people have subscribed, despite the ones that went by themselves to the destination and could not be measured).

5. Exploratory Qualitative Research

As mentioned on the methodology section, 9 interviews were conducted. Those interviews were recorded, and they have generated 12 hours and 15 minutes of audio and 64 pages of transcript content. All this content was analyzed and the subjects that appeared on the interviews more than once were grouped, as demonstrated on table 2.

Table 2: Subjects by speakers

Subject	Speaker 2	Speaker 3	Speaker 4	Speaker 5	Speaker 6	Speaker 7	Speaker 8	Speaker 9	Speaker 10	SCORE
New Business Models	x	x	x	x	x	x	x	x	x	9
Storytelling	x		x	x	x	x	x	x	x	8
Mindset and Training		x	x	x	x	x	x	x	x	8
Lack of Public and Stable Policies		x	x	x	x	x	x	x	x	8
Flight Costs and Deals	x	x	x	x	x		x	x		7
Different Traveller Profiles	x	x	x	x		x		x	x	7
Destination Curatorship	x	x		x	x		x	x	x	7
Branding	x			x	x	x	x	x	x	7
Social Network & Human Language	x	x		x		x	x		x	6
Bookable	x			x	x	x	x		x	6
Trade Relationship	x	x			x	x	x		x	6
Reviews and Post Feedback	x	x				x	x	x		5
How to Turn SMB Online?	x				x	x	x		x	5
Access + Installments + Travel Necessity		x		x	x		x	x		5
Hardness to Put Policies in Place		x					x	x	x	5
Lack of Flight Network				x		x	x	x		4
Content Quality	x	x			x		x			4
Cheap x Value for the Money	x	x	x	x						4
Productivity		x	x				x	x		4
Easiness in Comparing Offers	x				x				x	3
Safeness				x		x		x		3
From Contemplative to Experiences	x	x							x	3
Future of Packages and Deals		x		x				x		3
Tourism Functionalization & Disintermediation		x	x	x						3
Tourists and their Purchases		x	x				x			3
Non-Comission Based Business		x					x	x		3
Lack of Tourism Priorization		x						x	x	3
Access to Loans, Credit and Investments						x	x	x		3
Lack of the "Tourism Economy"						x	x	x		3
Importance of Taking Pictures on the Place	x							x		2
Lack of Tourist Assistance		x		x						2
Visa Costs			x				x			2
Total	17	22	11	16	14	17	23	21	16	151

Source: Author's creation

From that grouping it was possible to understand how each of those subjects can impact each actor distinctively, according to their position on the tourism chain and how they have different perspectives of the same industry.

6. Results and Contribution

This study has contributed to the field with the creation of a simplified model to develop tourism in which any destination can implement it, even if their managers do not understand that much of tourism or technology, so now they can develop their own tourism sector using modern, digital and technological methods, increasing their chance to succeed.

This model addresses the key issues regarding tourism development in Brazil, such as the creation of the local tourism governance, the continuity of public policies, the non-digitalized trade sector which implies in not being findable, bookable and sharable by tourists, the old business mindset, the functionalization of the tourism brands, the creation of new tourism products to address the shift between cultural x creative tourism, the non-unified investments, the personalized tourism offer according to each traveler profile and the use of data in order to take decisions.

It also has contributed with the Brazilian literature as this subject is pretty recent in the country, once it was started to be developed in 2017, and according to speaker 7, the first projects are being implement only now, at the end of 2018, beginning of 2019.

7. Limitations and Future Studies

As a matter of time, this model was not implemented, as the cooperation agreement between ESPM and the City of Santos took too long to be signed. So, despite interviewing well known tourism specialist and having their feedbacks regarding the first version of the model, the final simplified model was not applied yet, so this becomes a limitation of this study.

Applying to purposed model to develop a destination then becomes necessary to adjust the model and make it better, so this becomes a recommendation of future studies. Following 5 suggestions for further studies:

- How to create a simplified measuring system that destinations can use big data in order to allow them to adjust their local experiences and adapt the stakeholders chain?
- What are the most effective ways to engage the local trade in order to implement regional tourism strategies?
- How destinations can work with influencers / creators in order to achieve better conversion results?
- What are the impacts of tourism brands being functionalized and how they can improve their service in order to help tourists along their whole travel journey?
- How to create effective guidelines in order to scale destination and business managers training in order to get them updated regarding the new business models?

Literature

1. Creswell, J. W. (2010). Projeto de pesquisa métodos qualitativo, quantitativo e misto. In: *Projeto de pesquisa métodos qualitativo, quantitativo e misto*.
2. Ek, R. et al. (2008). A Dynamic Framework of Tourist Experiences: Space-Time and Performances in the Experience Economy. *Scandinavian Journal of Hospitality and Tourism*, 8(2), 122-140.
3. EMBRATUR (2018). *Luz amarela acesa na Embratur*. Available at: http://www.embratur.gov.br/piembratur-new/opencms/salalmprensa/noticias/arquivos/Luz_amarela_acesa_na_Embratur.html
4. Gil, A. C. (2008). *Métodos e técnicas de pesquisa social*. 6th ed. Editora Atlas SA.
5. Godoi, C. K., & Mattos, P. (2006). Entrevista qualitativa: instrumento de pesquisa e evento dialógico. *Pesquisa qualitativa em estudos organizacionais: paradigmas, estratégias e métodos*, 301-323.
6. Li, M., Wu, B., & Cai, L. (2008). Tourism development of world heritage sites in China: A geographic perspective. *Tourism Management*, 29, 308-319.
7. Ministério do planejamento (2019). *Orçamentos Da União - Exercício Financeiro 2019*. Brasília. Available at: <http://www.planejamento.gov.br/assuntos/orcamento-1/orcamentos-anuais/2019/orcamento-anual-de-2019>
8. Ministério do turismo (2019). *Artigo: Turismo como vetor do desenvolvimento*. Available at: <http://www.turismo.gov.br/últimas-notícias/5661-artigo-turismo-como-vetor-do-desenvolvimento.html>
9. Prentice, R. (2006). Evocation and experiential seduction: Updating choice-sets modelling. *Tourism Management*, 27(6), 1153-1170.
10. Richardson, R. J., Peres, J. A., & De, S. (1999). *Pesquisa social : métodos e técnicas*. Atlas.
11. Ruiz Olabuénaga, J. I., & Ispizua, M. A. (1989). *La descodificación de la vida cotidiana métodos de investigación cualitativa*. Universidad de Deusto.
12. Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers college press.
13. UNWTO (2016). *Tourism Highlights - 2016 Edition*.
14. WTTC (2018a). *Travel & Tourism Economic Impact 2018 World*. Available at: <https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2018/world2018.pdf>
15. WTTC (2018b). *Travel & Tourism Economic Impact 2018 Brazil*. Available at: <https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/brazil2018.pdf>

Determinants of Dynamic Banking Efficiency in Central and Eastern Europe Countries

Iveta Palečková

School of Business Administration in Karviná

Silesian University in Opava

Univerzitní náměstí 1934/3, 733 40 Karviná, Czech Republic

E-mail: paleckova@opf.slu.cz

Abstract

The aim of the paper is to estimate the determinants of dynamic efficiency in banking sectors in Central and Eastern Europe countries. The analysis covered the commercial banks operating in ten Central and Eastern Europe (CEE) countries within the period 2005-2015. In this paper we used two-stage Data Envelopment Analysis (DEA). In the first stage we estimated efficiency of commercial banks using the Dynamic Data Envelopment Analysis method. Most of efficiency studies used the traditional models of Data Envelopment Analysis. We used the extended approach, where we can better measure the banking efficiency during whole time period. Moreover, we can consider carry-over variable that linked the individual years. In the second stage we added the environmental factors into analysis of banking efficiency. In the empirical literature there are several approaches for estimation of efficiency determinants in the second stage of DEA. Most authors used ordinary least square or Tobit regression in the second stage for estimation efficiency determinants. However, there are several problems of using ordinary least square or Tobit regression. Therefore, we adopted double-bootstrap truncated regression to add the bank-specific and macroeconomic factors into DEA analysis. We chose several banks-specific and macroeconomic factors that influenced efficiency of commercial banks. Moreover, we examined the influence of the bank's affiliation with the financial conglomerate on efficiency. The results show that larger, better capitalized, lower efficient banks in the financial conglomerate were more efficient than other banks in the CEE countries.

Keywords

Dynamic Data Envelopment Analysis (DEA), double bootstrap truncated regression, banking sectors, Central and Eastern Europe (CEE), efficiency

Selected Approaches to Sustainable Development of Corporate Reputation – The Reputation of Family Owned Businesses in the Face of Turbulent Environment

František Pollák

Faculty of Management
University of Prešov in Prešov
Konštantínova 16, 080 01 Prešov, Slovakia
E-mail: frank.pollak@acuityeng.com

Nella Svetozarovová

Faculty of Management
University of Prešov in Prešov
Konštantínova 16, 080 01 Prešov, Slovakia
E-mail: nella.svetozarovova@unipo.sk

Jozef Simko

Innovation Partner Center
Hlavná 139, 080 01 Prešov, Slovakia
E-mail: info@ipcpo.sk

Abstract

The paper discusses the issue of sustainable development of corporate reputation, more specifically discusses the issue of traditional and innovative approaches of reputation management of selected entities- the World's Top 10 family owned businesses, operating on the turbulent environment of international market in the time of hyper-competition.

The main aim of paper itself is to present the available ways and methods of measuring the marketing phenomenon of reputation, especially online reputation, as the modern challenge for responsible and sustainable development of perceived image of subjects, as their very fragile intangible assets.

A thorough standardized multifactor analysis of reputation in the virtual world of the Internet was conducted on a specific sample of entities - the World's Top 10 family owned businesses selected by the Family Capital; the online publishing company dedicated to the global family enterprise sector. Taking into account all the relevant factors, all online ratings are normalized and then compared against the offline rating provided by Family Capital. Relationships between factors are then examined in order to identify and describe basic facts affecting online reputation of family owned businesses in the hyper-competitive market environment of the Internet.

The results of analysis are thus providing a comprehensive view on the issue of the sustainable development of corporate reputation. Despite the fact that literature offers a wide range of

approaches to measure reputation, the presented methodology offers a relatively simple and fairly accurate form for active reputation management, thus providing an effective tool for increasing the competitiveness for wide range of subjects trying to seek strategic alliances and maximize their market advantages against their competitors.

Keywords

Business succession, family business, reputation, brand management, competitiveness

1. Introduction

The rapid onset of mass-media communication in the second half of the 20th century has fundamentally changed the established principles of corporate practice in many areas. Prior to the advent of the "media era", the reputation of business entities, or even individuals, was hard to build, but also well-guarded. Procedures on how to build a good reputation have been honed for hundreds of years. Years of proven and effective reputation building tools have almost seamlessly managed to offer solutions in difficult situations. However, times have changed, and the flow of information has accelerated. The nature of information has been adapted to fit the times. What was once private is now public. The availability of information in combination with the interactivity of the environment offers innumerable possibilities for influencing the reputation; of course, it is not just about influencing it in a positive sense. It may seem that the way to achieve a positive result is the effort to maximize transparency, maximum correctness and a positive approach to entrepreneurship (Williams, Schanke & Fredenberger, 2005). If we lived in an ideal and rational world, it would surely be a guaranteed step towards the desired goal. Businesses as well as individuals would be able to plan a sequence of steps to build the dreamed-of target. However, we live in a real world full of real people. Warren Buffett would certainly be able to talk about that. Mr. Buffett came face-to-face with the limits of the real world in 1987, when his company Berkshire Hathaway made its biggest acquisition until that time, buying Solomon Inc. for 9 billion dollars.

Despite the famous Oracle of Omaha building up an excellent reputation over dozens of years, it was soon necessary to tangle with an existential threat in the form of negative publicity associated with the activities of Solomon. Mr. Buffett had it easier in the period before the onset of the Internet. The audiences that he and his team had to manage in the process of fixing their reputation were largely clearly defined. With the advent of the Internet, the flow of information has accelerated tremendously, one could say that a few mouse clicks are enough to destroy a good reputation today. There are many entities who are deliberately attempting to destroy corporate reputation, whether they are fierce competitors or dissatisfied employees or clients. It is enough to mention the name of Jeff Jarvis and his blog Dell Hell from the year 2005. The Internet gives users the ability to permanently interfere with the online reputation of a business in real-time. Google has become the ideal tool to build or destroy a reputation. The unregulated nature of the site provided a platform for the unregulated dissemination of information. The positive side is, of course, the access to up-to-date and uncensored information, while the downside is a severe lack of authenticity and false or modified information.

In our paper, we bring the overview of what happens if we must suddenly face the problem of building and maintaining a good reputation in both, traditional and the virtual world. Sustainable development of corporate reputation has never been that complex. From the point of view of our prime motivation for assembling this study, we would like to state, that we have been studying reputation issues for more than half a decade. The area of family owned business has a number of specifics, among other things the high sensitivity of customer perception. Therefore, the selected field is more than adequate for a thorough examination. Highly turbulent and competitive market, on which it was possible to test all significant entities from the whole set, specifically the sample of World's Top 10 family owned businesses, selected on the basis of their y. 2017 revenues (Bain, 2019), subsequently identifying

significant findings and connections valid also for other entities operating on a selected market.

2. Research Problem

2.1. The basic definition of reputation

In terms of reputation, the literature offers a wide range of views, from interpretational formalized views to views of an almost informal nature. In general, all of these views agree that reputation as a business asset is an extremely fragile element. At the same time, we are confronted with the claim that reputation is an element that every organization has to offer without distinction (Marsden, 2013). Unlike trust, often described as an oriented state, reputation is a more complex term, but we also encounter the claim (in our opinion not quite accurate) that it can be seen as a synonym for trust and reputation. Let's look at how reputation is defined within the scope of the available literature. Reputation is perceived as the overall quality, the optics, how the organization is perceived or judged by individuals (Griffin, 2008).

The definition is a fairly simple interpretation; on the other hand, the purely formal encyclopaedic definition (Brittanica, 2017) deals with reputation, again as a general quality, this time however it extends this quality to the very nature of the organization, which is clear and known to the target audience, with emphasis being placed on how these audiences perceive the attitudes, actions and opinions of the organization. From the point of view of corporate management, it can be argued that, in the past, reputation was the domain of marketing, while currently it is integrated into the company strategy itself (Cooper et al., 2012). An interesting management view of the issue of reputation is the claim (Benedigová, 2003) that reputation can also affect activities directly unrelated to the fulfilment of corporate goals. It may be informal expressions of personnel, insufficient or unsatisfactory responses to customer complaints, or ill-considered statements of representatives of organizations for the media.

From the point of view of history (Burke, Graeme & Cooper, 2012), it is possible to believe that reputation or reputation management evolved from public relations. As mentioned above, reputation is considered by many authors to be an asset of an organization. We also encounter the claim that it is the most comprehensive business asset (Helm et al., 2011). Despite the challenge in the form of organized corporate reputation management and the use of comprehensive measurement approaches, reputation is still a relatively unexplored area.

2.2. Online reputation management

The increasing number of Internet users and the related increase in users of social networks, blogs and websites where the content is generated by the users themselves now justifies the growing importance of Internet monitoring. For this purpose, entities can use a variety of tools that continuously index new pages on the Internet and compare them with the monitored phrases such as product name, company, competitors, or any other keyword. Domestic literature discusses the issue only marginally, but from the point of view of corporate practice, we encounter a relevant and highly current level of development as such. Practitioners (Saruc,

Dorčák & Pollák, 2013; Sasko, 2015) define the term "online reputation management" simply as "ORM" as a process of managing user perception on the Internet, or as a systematic monitoring of corporate reputation in as wide a range of online media as possible, and potentially influencing this reputation in the positive direction (Laurenčík, 2015). The goal of ORM is therefore to actively prevent damage to the image of an enterprise in the Internet environment. In the literature, one can also meet the term "Reputation Management in the Search Engine Environment," which includes active Internet monitoring through dominant search engines such as Google, communication with target audiences, evaluation and interpretation of monitoring results, crisis management, reputation management and crisis communication. Many enterprises still do not know how to effectively build their online reputation.

Online reputation management offers an effective tool to deal with a number of business-related activities in a turbulent, often unclear, social networking environment, portals, search engines, and opinion-forming media. The ever-increasing number of Internet users is logically reflected in the continuous year-on-year growth of social network users, discussion forums, website and portal visitors, blog readers, bloggers themselves, and audio-visual content contributors. With the growth of these user groups, the need, importance and justification of monitoring this virtual mass media are growing. Internet monitoring does not necessarily mean hours spent in front of the monitor, there is a wide variety of automated tools to index sites, their comparison with monitored phrases in the form of product names, companies, or any relevant context in the form of keywords (Sasko, 2015).

3. Materials and Methods

The primary aim of our research is to point out to available possibilities of quantification and subsequent measurement of reputation, but especially reputation in online environment. The issue of managing online reputation as a new phenomenon in the form of fragile intangible assets is gradually gaining on importance and it is becoming one of the essential prerequisites for responsible and sustainable reputation management. Selected methods of quantification and subsequent measurement of reputation were presented, for the purposes of this study, we approach to the presentation of the issue using advanced multifactor analysis of online reputation of the World's Top 10 family owned businesses.

The turbulent environment of international market creates ideal conditions for presenting selected methodology. Considering competitive character created by the market itself, all selected subjects approach actively to the management of its reputation in a mortar as well as virtual world. Describing key connections and determinants influencing the reputation of these subjects will certainly help better understanding this, from our point of view, extremely important issue. Describing the current state of knowledge, and last but not least, our long-standing research effort, has accumulate the knowledge necessary for the actual implementation of the empirical research in question. Using the multifactor analysis of the reputation in the online Internet environment, we tested specific subjects, namely the World's Top 10 family owned businesses (Bain, 2019).

Within the testing, we considered the entire spectrum of perceiving their reputation since we compared the whole spectre of relevant virtual factors and connections measured by us against significant and relevant ranking of the mortar world provided by Family Capital; the online publishing company dedicated to the global family enterprise sector, based on y. 2017 revenues in USD. From the point of view of the subjects, these subjects as a lighthouse of perceived quality guarantee the relevance for identified connections, and findings and recommendations drawn from them directed to the other players operating in the analyzed market. Within our research, we used the methodology of multi-factor analysis of online reputation, namely its modified version TOR (Pollak, 2015), which we would like to present as a priority possibility to measure the entire power of online reputation of a subject in the Internet environment. The TOR methodology presented by us is n-factor which only increases its versatility and usability.

The measurement itself takes place in three steps, in first step, it is necessary to analyze the sentiment of the first ten keyword search results, namely own or established name of the particular subject through Google search. To increase the validity of retrieved data, the sentiment of the first ten search results of own name of specific subject is parallelly tested by its own name in Google tab "News". The number of parameters is not limited; however, analysis normally does not work with more than three parameters. Partial scores are subsequently calculated, the sum of points is the starting point for subsequent quantification. For one parameter, the subject can get a maximum of 155 points, one such point is then 0.645% in percentage terms. With two parameters, a maximum score of 310 points can be obtained, giving one point a value of 0.322%.

In the second step, we identify the determinants of online reputation, for the purposes of our study, we will call them reputators. As a reputator, we can identify any determinant which has the ability to influence the perceived online reputation of a subject, at the same time, it can be quantified, and it is possible to express its value in percentages. Typically, this can be important web pages of a catalogue type providing different ratings, subjects' profiles on social nets or portals that can significantly influence the perception of the reputation of a selected subject. Given the various business fields entities operate in, reputation determinants cannot be clearly defined in advance. In terms of advantage quantification, it is possible to approach individual reputation determinants by calculation of reputators' competitive score – the amount of users (fans/customers/followers) the particular entity has relative to the sum of all tested subjects. The result serves as a basis for calculating the percentage of the reputators' competitive score (CS) of the particular entity. In other words, reputator competitive strength of the particular subject can be calculated as the size ratio of its own tribe (Socialbakers, 2019) indicated as the total number of subject followers/fans/subscribers/to the total amount of tribes of all tested subjects.

In the third step, we can proceed to the actual calculation of the overall power of online reputation of a specific TOR subject which then serves as a starting point for complex comparison of overall power of reputation across all analyzed subjects. The standard equation for TOR calculation, presented in our previous studies (Pollák et al., 2016; Dorčák, Markovič & Pollák, 2017; Pollák et al., 2017), predicts the occurrence of the factor and its weight, the primary reputator is here the overall score of the analysis of sentiment (step one), for the purposes of interpretation marked as ASA, the equation then allows the possibility to take into

account n of additional reputators. But for the subsequent calculation, it is necessary to determine the weight for each factor and the weight is determined by the subject and the market it operates in. If the weight of individual reputation determinants is not known in advance, the simplified formula for calculating the overall online reputation is as follows (1):

$$TOR = \frac{R_{ASA} + \sum_{i=1}^n R_i}{n + 1} \quad (1)$$

Where:

TOR- Total online reputation v %

R_i- Reputation determinant (% score according to the particular i- reputation determinant)

R_{ASA}- ASA reputation determinant (%score according to the advanced sentiment analysis)

n- Number of determinants

In this case, the value of the overall online reputation is an arithmetic average of individual indicators (partial score according to individual determinants).

Relationships between factors were examined in order to identify and describe facts affecting online reputation of those entities in the hyper competitive market environment of the Internet.

4. Results and Discussion

All examined subjects are actively involved in their reputation management both in traditional and virtual environments. For the purposes of our study, we will predominantly refer to the virtual Internet environment.

4.1. Overview table of partial score

Using the advanced sentiment analysis, we calculated partial score presenting the power of online reputation of entities based on the nature of the first 10 Google search results. Google and its search results are, however, only one of many ways in which potential customers can access relevant information. Considering the previous research in the field, we identified the following other determinants of online reputation (reputators), in particular:

- Facebook (total number of followers of the official and verified global profile);
- Twitter (total number of followers of the official and verified global profile);
- YouTube (total number of subscribers of the official global profile);
- LinkedIn (total number of followers of the official global profile).

Each of these reputators has its own system which determines the overall score. But basically, all of them operate with a certain tribe of the customers (followers, fans, subscribers). For the purposes of further analysis scores of partial reputators were unified to the parameter which we named competitive strength, hereafter referred to as CS and converted into a percentage. Before we present our own interpretations, we consider necessary to present partial evaluations of the subjects as well as all relevant indicators in one summary table. Table 1 presents both individual ranking of the mortar world and a partial score obtained by quantification of individual reputators and last but not least it shows the overall level of online reputation represented by the TOR indicator:

Tablet 1: Overall (Total) online reputation

Subject/ Result	ASA score (%)	Facebook CS (%)	Twitter CS (%)	YouTube CS (%)	Linked in CS (%)	Number of pages indexed by Google	TOR score (%)	Revenues (in B USD)
Walmart Inc.	42.50	31.94	27.23	14.66	24.53	282 M	28.17	495.012
Volkswagen AG	68.91	33.01	3.36	1.42	7.95	64.8 M	22.93	276.995
Berkshire Hathaway Inc.	20.61	0.00	0.00	0.00	0.88	41.9 M	4.30	239.289
Exor NV	22.86	0.00	0.00	0.01	0.07	258 000	4.59	171.175
Ford Motor Company	76.96	15.28	32.93	74.68	26.92	700 M	45.35	156.776
Schwarz Gruppe	88.55	0,00	0.00	0.00	0.00	82.7 M	17.71	127.616
BMW AG	57.32	19,47	16.31	1.48	15.16	89.9 M	21.95	118.489
Cargill, Incorporated	28.66	0,10	1,40	0.15	13.21	2.36 M	8.70	109.699
Tata Sons Ltd	19.00	0,16	17.99	7.44	10.11	15.2 M	10.94	100.000
Koch Industries, Inc.	61.82	0,06	0.78	0.16	1.16	11.3 M	12.80	95.155

Source: authors' processing

Firstly, we focused on analyzing the virtual reputation of the subjects using an Advanced Sentiment Analysis ASA. With regard to each subject, we analyzed the first 10 results of the Google search. Searching by specifying the first parameter, the subject's own name, we recorded the subjects' own sites predominantly at the first positions in searching. This came out as not a surprising fact since the situation is almost the same for all sectors of business. It was expected that the following nine search results will be of a neutral character, however, this was not confirmed in any cases. Neutral search results are mostly various subpages of the homepage or various formal references found on pages related to the subject. Although they do not damage the reputation of the subject, they definitely do not add to its value with respect to the virtual "attractiveness".

Positive search results related to the searched subject are from the point of view of Internet users more interesting, especially if the users have no direct experience with any of those. The perception of the subject is thus established on very subjective – virtual experience. In this case, the positive sentiment regarding the studied subject was generally associated with the presence of the subject on Wikipedia, encyclopaedic dictionary or subject's presence on social media. Then we repeated the measurements using only one parameter, the full name of the subject. This time, we focused on the results found in the tab "News". Based on the results, we can state that our tested subjects can be divided into two groups, those who already mastered they mass media communication, and those who for some reason leave this area outside the mainstream of their activities. From the first group we would like to highlight the Ford Motor Company and Schwarz Gruppe, which in the view of the media presentation leaves nothing to chance, since they recorded (as only two subjects from sample) positive sentiment in all positions in google tab News.

In the second step, we analyzed reputation of the analyzed subjects calculating their competitive strength across all relevant social medias. In this step we have found an interesting finding, namely that three out of ten entities do not have an authorized official

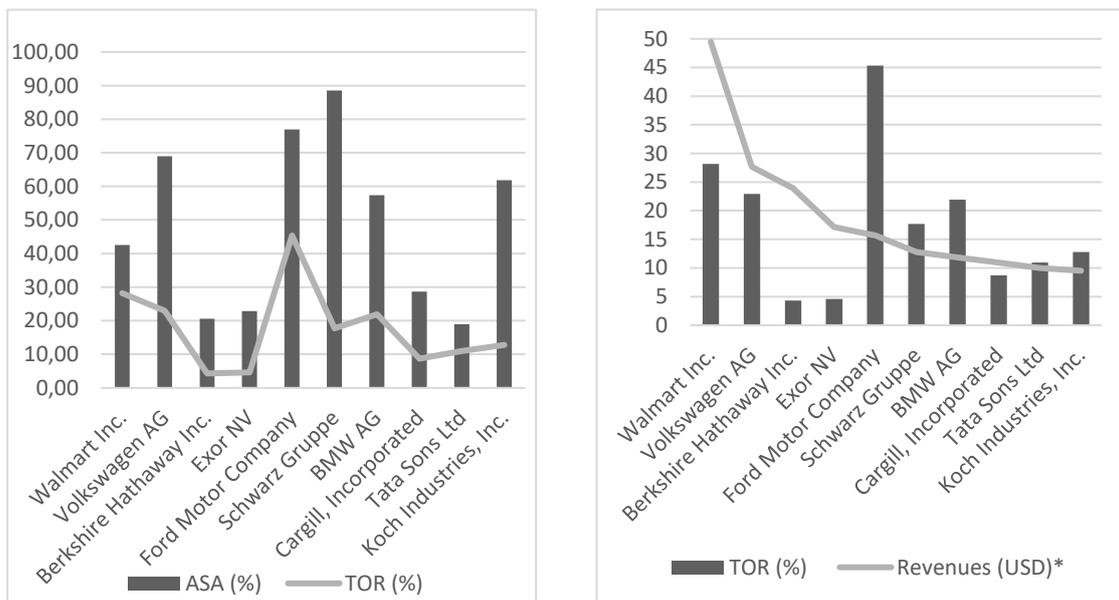
profile on any of the dominant social networks (with the exception of LinkedIn), one of them, Schwarz Gruppe does not even have such a profile on any virtual mainstream social network. The absence of such profiles of Schwarz Gruppe is well supported by the well-managed online marketing communications of companies in its portfolio, but anyway, such conduct is rather exceptional today. It is a compulsory ride of any company operating in a turbulent market to create and maintain channels of communication at all levels of its business. The opposite action may give the impression of a negative nature associated with inadequacy, lack of transparency and mystery, all these sentiments are unacceptable to the modern company in 21st century.

In the third step of the analysis, we calculated the overall reputation. The clear winner in virtual world is the Ford Motor Company, the rating of which exceeded 45% of the total value of positive online reputation. The winner from brick world, Walmart Inc. was followed Ford by more than 28% of the total value of positive online reputation. Interestingly enough, that being in competition fight with the best, providing great work is not enough, you need to be just perfect.

4.2. Interesting outcomes of the analysis

The following figures point out some interesting outcomes of the analysis.

Chart 1: (a) Partial vs. Total Online Reputation; (b) Online vs. Offline world



Source: our own processing

* in tens of billions; in our visualization is 1% of TOR equal roughly to 10 Billion of USD

Among the interesting findings we could summarize the relatively independent nature of the sentiment analysis results with respect to the overall strength of the online reputation of the subjects as we can see in Chart 1, part (a). In our benchmark comparison, there has been an interesting paradox in a number of cases, namely that the masterpiece of virtual presentation in search results has been dampened by a decision to omit virtual social media from the parent company's communications portfolio. In terms of revenue compared to the overall level of

online reputation Chart 1, part (b), Ford Motor Company is once and again the clear winner, with a revenue of around \$ 150 billion, Ford reaching a 50% level of overall online reputation (with respect to the variables defined by us). With a large amount of abstraction, we can say that on our sample, one percent of the total possible online reputation is approximately \$ 10 billion in revenue. In this case, we can see that, in terms of the overall online reputation level, four entities exceed their financial indicators, five entities are below the "expected" level and one, Tata Sons Ltd is almost exactly at our indicated level. For a deeper analysis, we did not have a sufficient amount of allocated resources or empirical material. However, the trend indicated by the abstraction seems to be extremely interesting for further research.

5. Conclusion

Based on the findings, we can conclude that sustainable development of reputation management combines offline and online techniques, as the both worlds are connected. Even though different environments require specific approaches, recorded different dynamics, and required specific tools. It is almost impossible to be a star only in one world. However, by its nature, online reputation is more fragile. Eliminating negative publicity while maximizing positive media outputs in opinion-forming Internet media, and the displacement of neutral or negative search results to irrelevant positions presented by the second to nth side of Google search results is the key approach to online reputation management.

Responsible and sustainable is the multiplatform approach to the reputation management. Since Google is not the only platform that needs to be considered, integration of the main platforms presented by virtual social networks and media will ensure active C2B feedback, as well as active B2C content control. This largely eliminates the possibility of spreading half-truths and incomplete or untrue information. Involving virtual social networks into communication portfolio of companies can significantly contribute to the increase of interactivity and authenticity within communication provider – consumer. Not speaking about invaluable source of relevant data in the form of feedback in the real time. Especially in crisis marketing communication, the integration of modern communication channels is seen as key to master the so called first wave. Finally, it is important to pay attention to the construction of consumer tribes, without any developed and motivated user base, it is not possible to predict any significant results for any of the activities described.

Even when the company operates as a headquarters for subsidiaries that fully approach the established trends in online marketing, we believe that transparent, clear and direct online communication is essential. It is a compulsory ride of any company operating in a turbulent market to create and maintain channels of communication at all levels of its business. The opposite action may give the impression of a negative nature associated with inadequacy, lack of transparency and mystery, all these sentiments are unacceptable for the modern company in 21st century.

Acknowledgement

This contribution is prepared within the project CE1158 ENTER-transfer.



ENTER-transfer

This work was supported by the Slovak Research and Development Agency under the contract No. APVV-15-0511.

Literature

1. Bain, D. (2019). *The World's Top 750 Family Businesses Ranking*. Available online: <https://www.famcap.com/the-worlds-750-biggest-family-businesses/>
2. Benedigová, M. (2003). *Reputáciu firmy nemožno ponechať len na PR manažéra*. Available online: <http://www.etrend.sk/podnikanie/reputaciu-firmy-nemozno-ponechat-len-na-pr-manazera.html>
3. Britannica (2017). *Encyclopedic Dictionary*. Available online: <https://www.britannica.com>
4. Burke, J. R., Graeme M., & Cooper, L. C. (2012). *Corporate Reputation: Managing Opportunities and Threats*. London: Gower Publishing.
5. Cooper, C., et al. (2012). *Corporate Reputation: Managing Opportunities and Threats*. London: Gower Publishing.
6. Dorčák, P., Markovič, P., & Pollák, F. (2017). Multifactor analysis of online reputation of selected car brands. *Procedia engineering*, 192, 719-724.
7. Griffin, A. (2008). *New Strategies for Reputation Management: Gaining Control of Issues, rises & Corporate Social Responsibility*. Kogan Page Publishers: London.
8. Helm, S., et al. (2011). *Reputation Management*. Berlin: Springer-Verlag.
9. Laurenčík, J. (2010). *Online reputačný manažment vo veľkom*. Available online: <http://blog.pizzaseo.com/sk/online-reputacny-manazment-vo-velkom/>
10. Marsden, H. (2013). *Guard Your Reputation On-line*. Birmingham: Smartebookshop.
11. Pollák, F. (2015). *On-line reputačný manažment v podmienkach stredoeurópskeho virtuálneho trhu*. Prešov: Bookman.
12. Pollák, F., et al. (2016). *Sustainable E-marketing of Selected Tourism Subjects from the Mediterranean Through Active Online Reputation Management*. In Volume 166 of the series Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Toronto: Springer.
13. Pollak, F., et al. (2017). *Online reputation of selected car brands*. IDIMT-2017. Digitalization in management, society and economy: 25th interdisciplinary information management talks.
14. Saruc, N. T., Dorčák, P., & Pollák, F. (2013). E-business and its Application in Conditions of Central European Market. *QIP Journal*, 17(1), 9-15.
15. Sasko, J. (2015). *Dbáte na hodnotu svojej značky?* Available online: <http://www.podnikaite.sk/manazmentmarketing/c/1392/category/marketing/article/online-reputacny-manazment.xhtml>
16. Socialbakers (2019). *2019 Social Media Marketing Statistics*. Available online: <http://socialbakers.com>
17. Williams, R. J., Schanke, M. E., & Fredenberger, W. (2005). The Impact of Corporate Strategy on a Firm's Reputation. *Corporate Reputation Review*, 8(3), 187-197.

The Influence of Online Marketing Communication Tools to Consumers' Perception and Purchase Decision via Online Stores

Santidhorn Pooripakdee

Faculty of Management Sciences

Silpakorn University

Thailand

E-mail: santidhorn@gmail.com

Abstract

The purposes of this research were to study 1) the marketing mix factors affecting the consumers' perception to make a purchase decision via online stores 2) the online marketing communication tools affecting the consumers' perception to make a purchase decision via online stores, and 3) the consumers' perception factors affecting a purchase decision via online stores.

The sample group in this research included 400 consumers who decided to purchase products via online stores and the general internet users who purchased/ever purchased products via online stores. The instrument used in this research was a questionnaire. The data were analyzed by using Frequency, Percentage, Standard Deviation, factors analysis, and Multiple Linear Regression.

The research result revealed that most of the participants were male, whose age was between 21-30 years old, the educational background was bachelor's degree, the career was private sector employees, the monthly income was between 15,001-25,000 baht. The participants preferred using smart phones to purchase the products via online stores, and via E-market place channel such as Lazada, Shopee, normally bought products once a month, the price of products each time of the purchase was between 501-1,000 baht.

The analysis of marketing mix factors and online marketing communication tools could extract the new factors as 8 groups. Each factor affected the consumers' perception factor as follows: 1) all eight marketing mix factors and online marketing communication tools factor affected the consumers' perception in terms of technology acceptance about the perception of use benefits, 2) all four online marketing communication tools factor in terms of search engine marketing and marketing mix factors affected the consumers' perception in terms of technology acceptance about the perception of easy use, 3) online marketing communication tools factor in terms of content marketing and sales promotion via online marketing communication tools affected the consumers' perception in terms of risk perception, 4) marketing mix factors in terms of products quality appropriate to the price and reliability, variety of products and prices, service and delivery. The online marketing communication tools factor in terms of search engine marketing and social media marketing affected the consumers' perception in term of trustworthiness, and 5) consumers' perception factor in

term of technology acceptance about the perception of easiness and use benefits, risk and trustworthiness perception affected the purchase decision via online stores.

Keywords

Marketing mix, online marketing communication tool, consumers' perception, purchase decision

Introduction

For several years now, it can be seen that the E-commerce has been popular and interested by various business sectors, which might probably become the mainstream of the future businesses. The small and big entrepreneurs both has adjusted and turned to invest in the E-commerce increasingly. The Electronic Transactions Development Agency expected the growth rate of the E-commerce value in 2017 comparing with 2016 which was found that the E-Commerce value in Thailand tended to grow continuously. The total value was around 2,812,592.03 million baht in 2017, which grew up 9.86%.

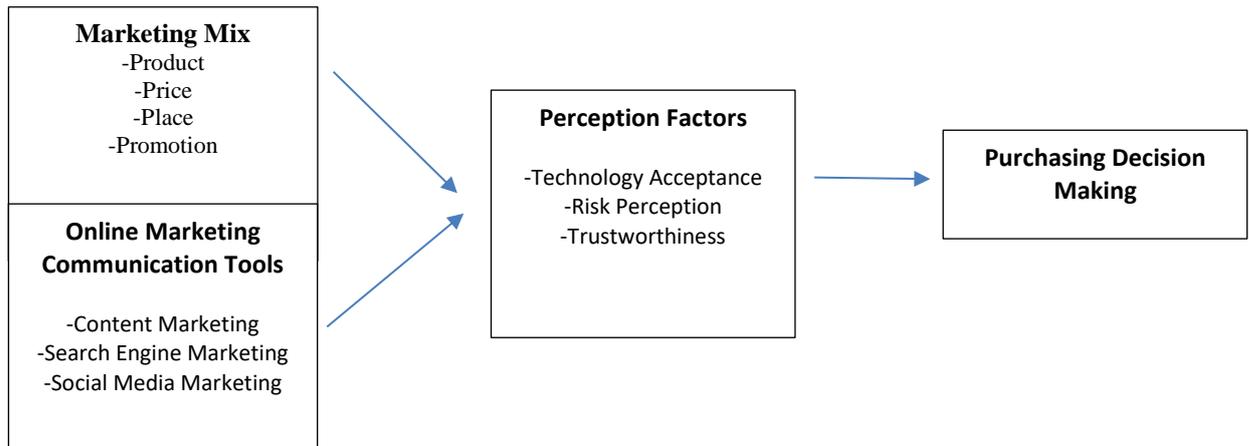
Internet begins to influence the behaviors of consumers through searching information or even making decision to buy a thing. This becomes easy and convenient. The roles and duties of previously marketing communication instruments have been reduced and replaced by the arrival of various applications occurring on internet, which replace the same styles of marketing communication instruments. Therefore, it is necessary for marketers to adjust their strategies to be in accordance with the changing behaviors of the consumers. Eventually, the instruments used to communicate with the consumers have been changing to different platforms or types while the methods are still the same. Consequently, accessing the consumers becomes easier but more complex. Then, which types of the marketing instruments that will be effectively accessible in this period which consumers have immense information and varied alternatives in their hands, including their needs and interests which are increasingly different.

For this reason, the researcher is interested to study the influence of marketing mix factors and online marketing communication tools affecting the consumers' perception through their purchase decision making via online stores to realize the marketing mix factors and online marketing communication tools used currently how they are influencing the perceptions of purchase decision making via online stores. Furthermore, the study result revealed from this research will be able to be applied as a guidance of strategic plan and marketing promotion plan, in order to respond the consumers' satisfaction further.

Research Objectives

1. To study the marketing mix factors affecting the consumers' perception to make a purchase decision via online stores;
2. To study the online marketing communication tools affecting the consumers' perception to make a purchase decision via online stores;
3. To study the consumers' perception affecting a purchase decision via online stores.

Research Framework



Research Hypothesis

H1: Marketing mix factors affect the consumers' perception for making decision to buy products via online stores;

H2: Online marketing communication tools affect the consumers' perception for making decision to buy products via online stores;

H3: The consumers' perception affects the consumers' decision making to buy the products via online stores.

Research Scope

1. Population: the consumers who made a decision to purchase the products via online stores, and who were general internet users purchasing the products via online stores;

2. Variable: it was divided into 2 parts:

2.1. Independent variable; 1) marketing mix factors, which comprised product, price, place, and promotion, 2) online marketing communication tools, which comprised content marketing, search engine marketing, and social media marketing

2.2. Dependent variable; 1) Perception factors, which comprised technology acceptance, risk perception, and trustworthiness, and 2) purchase decision making;

3. Content: the researcher emphasizes the study of the influences of marketing mix factors and online marketing communication tools which affect the consumers' perception through the purchase decision making via online stores. The literature reviews relevant to marketing mix theories are also studied, including perception and decision making theories, as well as relevant research.

4. Space and Time: the researcher created a questionnaire through Google Form and posted its link on social media, web board, websites and groups related to the products selling and buying, and the niche market group. The time period used for this data collection was between April 2018 and June 2018.

Research Methodology

This research was carried out by using the quantitative research method. The research methodology was conducted as follows:

Population and Sample

The population in this research is the group who ever bought and ordered the products via online stores, without limiting the scope of population group through areas.

Regarding the sample group in this research, from the report of survey result on Thailand internet users' behaviors in 2017 (Electronic Transactions Development Agency, 2017), it identified that a number of internet users in 2016 were 29,835,410 persons, and there were the internet users who ever visited websites/applications selling online products/service for 82.3% from all internet users, a total of 24,554,542 persons. The researcher used the formula of Taro Yamane to find out the sample size, by determining the reliability of 95%, the error was not over than 5%, which got the sample size equal to 400 persons. The data collection was done by using the simple random sampling technique through purposive sampling type, and got the samples who ever bought the products via online stores from April 2018 to May 2018.

Research Instrument

The instrument used in this research was a questionnaire. The researcher developed this questionnaire from the research of Sanchai Upadia (2011) and Pattanant Rungcharearn (2012), the consumers' behaviors theory, marketing mix, perception, and purchase decision making theories, including the relevant research to be the basic development. The questionnaire was divided into 6 parts as follows:

Part 1: General information about the internet use behaviors of the participants, which comprised gender, age, education, career, monthly average income, electronic equipment regularly used for buying products through online stores, products purchase channels, frequency of products purchase, and average price of purchased products each time via online stores. The question characteristic was a check list type which had only one choice, from 9 question items;

Part 2: Marketing mix factors affecting the consumers' perception to make a decision of purchasing products via online stores, which comprised Product, Price, Place, and Promotion.

The questions characteristic was in a type of Likert Scale, which its scores were divided into 5 intervals starting from the least important (1) to the most important (5), a total of 20 items;

Part 3: Online marketing communication tools affecting the consumers' perception to make a decision for purchasing products, which comprised Content Marketing, Search Engine Marketing, and Social Media Marketing. The questions characteristic was in a type of Likert Scale. The scores were divided into 5 intervals starting from the least important (1) to the most important (5), a total of 12 question items;

Part 4: the consumers' perception to make a decision to purchase the products via online stores, which comprised the acceptance of technology about the perceived use benefits, acceptance of technology about perceived use easiness, risk, and trustworthiness. The questions characteristic was in a type of Likert Scale. The scores were divided into 5 intervals starting from the least important (1) to the most important (5), a total of 12 items;

Part 5: Decision making of purchasing products via online stores of the consumers. The questions characteristic was in a type of Likert Scale. The scores were divided into 5 intervals starting from the least important (1) to the most important (5), a total of 6 items;

Part 6: Recommendation, the question characteristic was Opened Form.

For investigating the research instrument, the researcher brought the drafted questionnaire to propose 3 experts to consider its validity and investigate reliability. 30 samples were tested to check how much each question item could convey the meaning clearly, or whether such each question item was vague. Then, the questionnaire was analyzed for its value using the Cronbach's Alpha Coefficient method. The result revealed the value was 0.943, therefore, it identified that this questionnaire had high validity.

Data Analysis

The researcher analyzed the data by using the Statistical Packages for Social Science (SPSS); then brought the collected data got from the questionnaire which had been given out and investigated its validity to analyze the Descriptive Statistics and analyze the inferential statistics as follows:

1. Descriptive Statistics; the statistics comprise frequency, percentage, mean, and standard deviation. These are used for describing general information and purchase behaviors via online stores of the participants;
2. Factor Analysis; the analysis is used to study the marketing mix factors and online marketing communication tools, including applied to solve the problems of relating independent variables (Multicollinearity) in order to analyze the Multiple Regression Analysis further;
3. Multiple Regression Analysis; this analysis is to study the influence of marketing mix factors and online marketing communication tools affecting the consumers' perception for purchase making decision via online stores.

Research Conclusion

Concerning the data collection of 400 questionnaires, the researcher had examined and analyzed the data, and the result revealed as follows: From the analysis result of general information and information about the behaviors of internet use for purchasing the products via online stores of the participants, it indicated that most of the participants were male (63.3%), age was between 21-30 years old (54.5%), the educational level was bachelor's degree (62.3%), the career was private sector employees (31.3%), the monthly income was between 15,001-25,000 baht (43.8%), the smart phone was used for purchasing products via online stores (53.8%) through the E-Marketplace channel (E-market place) such as Lazada, Shopee (47%), the purchase was done once a month averagely (48.3%), the product prices purchased each time were between 501-1,000 baht (47.3%) of the participants.

Analysis of factors affecting the consumers' perception for purchase decision making via online stores

From the factor analysis: A total of 32 independent variable got by factors extraction in a type of Principal Component Analysis (PCA), using the Varimax rotation, the researcher used the KMO (Kaiser-Meyer-Olkin) method to test the variables whether they were related to each other. The suitable KMO which can be applied must not less than 0.5. The significance level was determined at 0.05.

It was found that the KMO value is equal to 0.799. The test result of Bartlett's Test of Sphericity revealed that the Chi-Square is equal to 5180.813 and the sig. was equal to 0.000, which is less than the statistical significance at 0.05. It indicates that the independent variables relate to each other and could be analyzed the factors further.

From the factor analysis, it was found that all of the eight factors could be newly set. All factors could describe the variance of the previous variables at 66.5% as follows:

1. Factor of products quality appropriate to the price and reliability, which comprised the products quality, products reliability, prices are appropriate with the quality, and products are insured and could be changed/returned in case they had some problems;
2. Factor of service and delivery, which comprised the convenience/easy to use, various payment channels, several ways of delivery service such as ordinary delivery, EMS delivery, and service of information to the customers via E-mail, Social Media, etc.;
3. Factor of marketing promotion; which comprised special discount during the festivals or special occasions such as New Year's Day, Songkran Festival, etc., or point collection for redeem offer, and award presenting in crucial occasions of the stores
4. Factor of variety of products and prices, which comprised the products are various, there are various prices for select and purchase, and the prices are cheaper than other stores;
5. Factor of content marketing, which comprised seeing advertising from content/video published on the blog or website, getting publicized news from the content/video published on the blog or website, and getting information from/video publicized on the blog or website;
6. Factor of search engine marketing, which comprised of seeing the advertising from searching through search engine such as Google, getting publicized news from searching

through search engine such as Google, and getting information from the searching through search engine such as Google;

7. Factor of social media marketing, which comprised the seeing the advertising from social media use, getting publicized news from social media use, and getting information from social media use;
8. Factors of sales promotion via online marketing communication tools, which comprised the participating in sales promotion activities from getting contents/videos publicized on the blog or website, participating in the sales promotion activities from searching through search engines such as Google, and participating in the sales promotion activities from social media use

The researcher would analyze all of the eight factors for finding the Multiple Regression Analysis to study the influences of the marketing mix factors and online marketing communication tools affecting the consumers' perception for purchase decision making via online stores, and factors of consumers' perception affecting the purchase decision making via online stores in further parts.

Hypothesis Test

Test 1: Analysis of Multiple Linear Regression of the factors affecting the consumers' perception in terms of technology acceptance about the perception of use benefits. When considering the Sig. value, it can be concluded that the factors affecting the consumers' perception in terms of technology acceptance about the perception of use benefits by statistical significance at 0.05 level can be explained that the factor of search engine marketing affected the consumers' perception in terms of technology acceptance about the perception of use benefits the most, secondly was the factor of content marketing, and followed by the factor of social media marketing, the variety of products and prices, the sales promotion via online marketing communication tools, the products quality was appropriate to the price and reliability affected the consumers' perception in terms of technology acceptance about the perception of use benefits, respectively. These results can be explained the dependent variables at 30.8%.

Test 2: Analysis of Multiple Linear Regression of the factors affecting the consumers' perception in terms of technology acceptance about the perception of easy use. When considering from the Sig. value, it can be concluded that the factors affecting the factors affecting the consumers' perception in terms of technology acceptance about the perception of easy use by statistical significance at 0.05 level. It can be explained that the factor of search engine marketing affected the consumers' perception in terms of technology acceptance about the perception of easy use the most whereas the secondly was the factor of products quality appropriate to the price and reliability, and followed by the factor of service and delivery, the factor of sales promotion, the factor of variety of products and prices affected the consumers' perception in terms of technology acceptance about the perception of easy use, respectively. This can be described the dependent variables for 11.6%.

Test 3: Analysis of Multiple Linear Regression of the factors affecting the consumers' perception in terms of risk perception. When considering the Sig. value, it can be concluded

that the factors affecting the consumers' perception in terms of risk perception by statistical significance at 0.05 can be explained that the factor of content marketing affected the consumers' perception in terms of risk perception the most while the factor of sales promotion through online marketing communication tools affected the consumers' perception in terms of risk perception the least. This can be described the dependent variables for 5.6%.

Test 4: Analysis of Multiple Linear Regression of the factors affecting the consumers' perception in terms of trustworthiness. When considering the Sig. value, it can be concluded that the factors affecting the consumers' perception in terms of trustworthiness by statistical significance at 0.05 can be explained that the factor of products quality appropriate to the price and reliability affected the consumers' perception in terms of trustworthiness the most, secondly was the factor of variety of products and prices, while the factors of service and delivery, social media marketing, and search engine marketing affected the consumers' perception in terms of trustworthiness the least, respectively. These can be described the dependent variables for 12.8%.

Test 5: Analysis of Multiple Linear Regression of the factors of consumers' perception affecting the purchase decision making via online stores. When considering the Sig. value, it can be concluded that the factor affecting the purchase decision making via online stores by statistical significance at 0.05 can be explained that the factor of technology acceptance about the perception of use benefits affected the purchase decision making via online store the most, secondly was the factor of trustworthiness, while the factor of technology acceptance about the perception of easy use and the factor of risk perception affected the purchase decision making via online stores the least, respectively. These can be described the dependent variables for 31.4%.

Research Discussion

The behaviors of internet use for buying products via online stores of the participants were mostly from buying products by using the smart phone through E-Marketplace channel (E-market place) such as Lazada or Shopee. The purchase was done once a month averagely, the purchase price was between 501-1,000 baht. This is in accordance with the research of Sunisa Trongjit (2016) which was found that the sample group used the smart phone for accessing the internet to buy the online products via application channel of Lazada, the E-Marketplace (E-market place) the most, by buying mostly less than one time a month, with the price between 501-1,000 baht.

Marketing mix factors; the result revealed that all four factors, which included, the factor of products quality appropriate to the price and reliability, the service and delivery, the sales promotion, and the variety of products and prices, affected the consumers' perception of purchase decision making, especially in terms of technology acceptance about the perception of use benefits which is in accordance with the research of Pirinda Lhuangtep (2013) which indicated that the marketing mix factors in terms of product, price, and marketing promotion affected the purchase decision making and services through E-Commerce business system, also the research of Sunisa Trongjit (2016) which was found that the factor of variety of

products and prices affected the purchase decision making through the E-Marketplace channel.

Regarding the online marketing communication tools, it indicated that all four factors, which included, the factor of content marketing, search engine marketing, social media marketing, and sales promotion through online marketing communication tools affected the consumers' perception of purchase decision making. This is in accordance with Sila Noramat (2015) who found that the marketing promotion via the sales promotion promoted by the sales representatives and publication affected the recognition process of the consumers in Mueang District area, Ubon Ratchathani province. Furthermore, Jidapa Tadhom (2015) who studied the marketing factors via social media found that the marketing factor via social media affected the purchase decision making through Facebook Live channel of the consumers in Bangkok. The recognition channel of the consumers through internet enhances the purchase decision via online stores.

The factors of consumers' perception for all four aspects, which included, the technology acceptance about the perception of use benefits, the technology acceptance about the perception of easy use, the risk perception, and the trustworthiness, affected the purchase decision making via online stores. This is in accordance with the research of Sunchai Upadia (2011) which revealed that the factor of perception on E-Commerce system in terms of technology acceptance about the perception of use benefits, the factor of perception of easy use, the risk perception, and trustworthiness, affected the decision making to use the payment service through the E-Commerce system of people in Bangkok areas.

Research Recommendation

The purchase behavior via online stores was mostly done through the smart phone as a major tool. Therefore, the entrepreneurs or business owners should consider the website usage via mobile phones which facilitate the consumers, as well as the channels of products purchase through E-market place which is being more famous currently. The entrepreneurs should contact or create a channel to place their own products through the websites of E-market place such as Lazada or Shopee to create an opportunity to sell more products.

Marketing mix factor; this was found that the products quality and reasonable prices are still the main factors realized by the consumers before they decide to buy the products. Hence, the entrepreneurs should select the products with their quality is reasonable with the prices. In addition, it should have various kinds of products and prices to make various choices for the consumers. Furthermore, the products insurance, various payment channels, products categorization, and delivery service, are still considered as main factors by the consumers for making their decision to purchase products via online stores;

Online marketing communication tools; the research result revealed that the content marketing, the search engine marketing, and the social media marketing, all of the three tools really influence the creation of consumers' perception for the purchase decision making through online stores such as advertising via blogs, websites, social media like Facebook, LINE , even advertising through search engine websites such as Google, which are regarded as the

effective factors which will almost totally affect the consumers to decide to buy the products. Particularly, the advertisement through the search engine of Google, numerous consumers today prefer using it to search for and compare their information before making a decision to purchase products via online stores. Moreover, social media is concerned as very influencing media toward the consumers' perception which will lead to the purchase decision making through online stores.

Consumers' perception; according to the research, the technology acceptance about the perception of easiness and use benefits, the risk perception, and trustworthiness influence the purchase decision making via online stores. The entrepreneurs or business owners can create the consumers' perception through the online channels by using the varied electronic equipment such as smart phone, tablet, computer, etc. Particularly, smart phones are used by most of the consumers at present in order to purchase products via online stores. Also, most of the consumers can use those instruments or equipment easily without additional learning. Moreover, they can solve their own problems when any errors occur or when they encounter the problems during the time of buying products via online stores, including the reliability of the stores, reservation of customers' private information, and good images toward the stores or products page, which are considered as the key indicators which enhance the consumers to decide whether they will buy such products. Thus, creating reliability to the consumers is regarded as a necessary factor for the business of selling and buying products through E-Commerce business.

Further Research Recommendation

It should be studied about the marketing mix factors more apart from the 4P's such as the marketing mix of 7P's which will be able to cover the consumers' behaviors better. Furthermore, other variables should be considered such as online marketing communication tools used today should be more various and technical more in order to access the target group.

The research should be done by qualitative research method such as interview, observation, or focus group in order to bring the opinions information from both sides of consumers and entrepreneurs to take a consideration for enhancing the research result to reach more perfectness.

Literature

1. Amonkaew, S. (2012). *Risks Perception Factors Affecting to Purchasing Behaviors of Food Products at the Market among Consumers in Bangkok*. Bangkok: Srinakharinwirot University.
2. Buasalee, R. (2010). *Factors Affecting the E-payment Acceptance of the Internet Service Users*. Bangkok: Sripatum University.
3. Chaffey (2009). *Online marketing communication*.
4. Demandmetric (2015). *Digital Marketing for 2015: Targeting Audiences & Adopting New Strategies*.

5. Electronic Transactions Development Agency (2017). *ETDA Revealed the Survey Result of Internet Use Behavior and E-Commerce Value Showing the Readiness Thailand is Stepping Up to Asian E-Commerce Champion*. Retrieved from: <https://www.eta.or.th/content/thailand-internet-user-profile-2017-and-value-of-e-commerce-survey-in-thailand-2017l-press-conference.html>
6. Hyken, S. (2016). The New Moment of Truth in Business. Retrieved from: <https://www.forbes.com/sites/shephyken/2016/04/09/new-moment-of-truth-in-business/#62e4192038d9>
7. Kotler, P. (2003). *Principles of marketing*. Boston, MA: Pearson.
8. Lhuangtep, P. (2013). *Factors Affecting Goods and Services Purchasing Decision Through E-Commerce of Silapakorn University Petchaburi IT Campus Students*. Bangkok: Silapakorn University.
9. Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
10. Noramat, S. (2015). *Seasoning Sauce Product's Marketing Promotion Influencing Consumer's Perception Process in Mueang district, Ubon Ratchathani province*. Chang Wat Ubon Ratchathani: Ubon Ratchathani University.
11. Pura, K. (2013). Effectiveness of online marketing tools.
12. Rogers, E., & Shoemaker, E. (1971). Diffusion of Innovations. In: S. Taylor & P. A. Todd (Eds.), *Assessing IT usage: The role of prior experience*. New York, NY: Pearson.
13. Rungcharoan, P. (2012). *Marketing Factors that Affect the Customer's Decision to Buy Cosmetics at Sawasdee Directsales Nakhonpathom Province*. Bangkok: Silapakorn University,
14. Thadhom, J. (2012). *Social Media Marketing, Trust and Information System Quality Affecting Products' Purchase Decision through Facebook Live of Online Customers in Bangkok*. Bangkok: Krung Thep University,
15. Throngjit, S. (2016). *Factors Affecting Decision on the Online Purchasing through E-Market Place*. Krung Thep Maha Nakhon: Thammasart University.
16. Upadia, S. (2011). *Perception Factor of E-Commerce System Affecting the Decision Making of Payment Service Through E-Commerce System of People in Bangkok Areas*. Bangkok: Krung Thep University.

Evaluation of Expense Ratio of Selected Insurance Companies Operating on the Czech Insurance Market in 2004-2017

Lenka Přečková

School of Business Administration in Karviná

Silesian University in Opava

Univerzitní nám. 1934/3, 733 40 Karviná, Czech Republic

E-mail: preckova@opf.slu.cz

Abstract

This paper shall compare insurance portfolios in selected insurance companies operating in the Czech Republic based on the expense ratio. The expense ratio is a proportion of operating costs and premiums written. Expense ratio shall be calculated for life and non-life insurance. The data necessary for calculation are accessed in CAP's statistics (Czech Insurance Association). The following insurance companies shall be compared: ČSOB pojišťovna, Komerční pojišťovna and UNIQA pojišťovna. The insurance companies are subsidiaries of commercial banks and belong to prominent financial groups (KBC Verzekeringer, Société Générale and UNIQA Insurance Group). The insurance companies offer their products through the distribution channel of bancassurance. They cooperate exclusively with a commercial bank belonging to the same financial group. Previous research proved that insurance companies with a developed bancassurance model which operate within a financial group under the same ownership reach lower levels of expense ratio. The aim of this paper is to determine whether or not the selected insurance companies achieve lower expense ratio of the insurance portfolio than what is the average value of expense ratio of insurance portfolios on the Czech insurance market. The paper shall compare the expense ratio of selected commercial insurance companies with the average value of expense ratio on the Czech insurance market over the period 2004-2017.

Keywords

Bancassurance, insurance market, expense ratio, non-life and life insurance

Usefulness of Comprehensive Income Reporting in Selected Polish Companies

Artur Sajnog

Faculty of Economics and Sociology

University of Łódź

P.O.W. no. 3/5, 90-255 Łódź, Poland

E-mail: artur.sajnog@uni.lodz.pl

Abstract

This study examines the usefulness of comprehensive income as the predictive power for the future firm performance in the Polish industrial companies listed on the Warsaw Stock Exchange (the period from 2009 to 2017). The discussed research problem was conducted in two parts. The first part depicts mainly theoretical reflections of both the concept of comprehensive income and its predictive strengths and weaknesses. The second part presents the results of the empirical research on the predictive power of other comprehensive income for subsequent periods of firm performances which include the net income, comprehensive income, operating cash flow and market value. The results of four regression models estimations show a positive and statistically significant impact of the net income on the future net income, comprehensive income and market value. The relationship between the net income and future operating cash flows was also statistically significant, but negative. On the other hand, one can observe a negative and statistically significant influence of other comprehensive income on future earnings (net and comprehensive income), but the relationship with the future cash flow was definitely positive. Thus, one cannot observe a certain advantage of the comprehensive income over the net profit, which can inhibit the high relevance of comprehensive income for analysts as a very important category for earnings prediction. Nevertheless, the comprehensive income can be used as a more important indicator of financial statements to assist its users in predicting the entity's future cash flows and, in particular, their timing and certainty.

Keywords

Comprehensive income, other comprehensive income, net income, predictability, Polish companies

1. Introduction

In the theory and practice of the company's strategic financial management, which is oriented to increase the shareholder value, the essential attention is concentrated on determinants of changes in the value and structure of equity. In this context the future firm performances play an important role, which are related to the financial earnings presented in the financial statements. Paying attention to the company's profits and considering them as the key determinants of changes in the value and structure of equity for the growth of the shareholder value arises not only from its leading position in the financial reporting, but also from their advantages reflecting the predictive power of future performances.

Bearing in mind the two concepts of profit, which are mentioned in literature, firstly the concept of operating profit or net profit, which is connected with a measure of the efficiency of the company and its management, secondly the concept of the comprehensive income as a measure of the growth in wealth of the owners (Newberry, 2003; Delaney, 2002), the question of which profit has a better predictive power for future firm performances arises. It is worth emphasizing that the comprehensive income, presented in the statement of comprehensive income, has a much wider capacity than net profit and contains many important elements which affect the companies' future profitability and are omitted in the traditional income statement (Kanagaretman et al., 2009). According to the results of research, comprehensive income is incrementally useful in predicting subsequent period changes in net income (Choi & Zang, 2006), additionally it can predict subsequent period net income, over and above current period income. On the other hand, net income is a more significant item in financial reporting (Goncharov & Hodgson, 2011), as well as the amount of net profit is a better reflection of the company's final performance (Liu & Thomas, 2000). In this case net income predicts future incomes and operating cash flows better than comprehensive income (Dhaliwal et al., 1999), which confirms the stronger predictive power of net income over comprehensive income (Wang, 2006).

The comprehensive income reporting, together with the presentation of its two important components (net income and other comprehensive income), is due to the necessity of full presenting, proper reflecting and understanding of the implemented various strategies of equity management, to increase the predictive power of the firm performance and therefore future benefits for shareholders. Although the information contained in the comprehensive income statement is undoubtedly essential for the assessment of shareholders' future capital benefits, they cannot be seen as a substitute for the cash and accrual data, which have been dominant in the financial statements so far.

In order to accomplish that fact, a general research hypothesis was formulated, which assumes that other comprehensive income has a stronger positive influence on future performances than net income, especially on cash flows which are connected with the market value of firms and show the stakeholders' perspective. The scope of the comprehensive income, presented in the proper statement, not only has a broader problem area in comparison to net profit, but it also contains a number of significant effects of the value creation process and factors that drive the firm's future performance. The outcome calculated on the basis of the comprehensive income concept includes the value of all changes in the prices of assets over the period which are ignored in the traditional income statement.

Therefore, it can be emphasized that its range, accuracy and information capacity create the satisfying conditions of high information competences for stakeholders.

In order to verify the above hypothesis a specific research goal is set, which is concentrated on three main directions of the theoretical and empirical analysis. Firstly, this research is focused on the theoretical presentation of the comprehensive income concept. Secondly, it concerns the advantages and shortcomings of comprehensive income and traditional earnings in predicting the firm's future performances. Thirdly, it refers to the empirical research, which is oriented to the influence of net income and other comprehensive income of future firm performances, namely: net income, comprehensive income, operating cash flow and market value. The empirical studies were carried out on the group of companies listed on the Warsaw Stock Exchange (WSE) from the industry sector¹ (4XX in the sectoral classification of WSE) which presents their financial statements in accordance with IFRS (for November 10th, 2018). The study period is from 2009 to 2017, because since 2009 Polish public companies have been required to present a statement of comprehensive income. Thorough analysis covered annual financial statements of companies.

The direct premise of the study is the lack of research in literature, not on the motives of implementation of comprehensive income to the Polish company's financial reporting system, but rather on the predictive power of this category in comparison to traditional net earnings. Although in Polish literature one can find papers dealing with the topic of comprehensive income, these studies mainly concern issues from the field of accounting, especially the form and structure of the comprehensive income statement (Marcinkowska, 2003; Szychta, 2010; Walińska & Jurewicz, 2011; Gierusz, 2013; Gad, 2017).

2. Essence of Comprehensive Income

The earnings can be seen as a measure of the efficiency of the company or a measure of wealth of its owners. The presented approach correlates with the two concepts of profit which are mentioned in literature, namely:

- a) the concept of profit as a measure of the efficiency of the company and its management (the concept of operating profit or net profit)
- b) the concept of profit as the growth in wealth of the owners (the concept of comprehensive income) (Newberry, 2003; Delaney, 2002).

In the first approach, board decisions aimed at maximizing the operating profit in the certain period should be the starting point in defining and measuring financial performance (Szychta, 2010). In this case profit that is calculated on the basis of current traditional net earnings is treated as a measure of management efficiency of the primary business activity and is generally characterized by continuity and repeatability. What is more, the traditional income statement shows only the effects of transactions that are directly related to the earnings. Other changes in the value of assets or liabilities are transferred to the statement of changes in equity, or directly to the balance sheet. Such actions are called dirty surplus accounting and are often difficult to identify for users of financial statements (Ohlson, 1995).

¹ Industrial companies are the most represented ones on the WSE. What is more, this type of limitation enables us to avoid the issue of sample heterogeneity when assessing the relation between executive compensation and firm profitability.

Within the second concept, where profit is understood as a gain in wealth of the owners, the profit rises when the value of net assets (equity) at the end of the accounting period is higher than their value at the beginning of the period (Szychta, 2012). It can, therefore, be concluded that comprehensive income represents a total increase (or decrease) in wealth of the owners, expressing the value which was gained or lost by the company in the period (Marcinkowska, 2003). The scope of comprehensive income is much wider than net earnings, because it takes into account the results of all transactions and events resulting in changes of equity, which meets the requirements of the so-called clean surplus (O'Hanlon & Pope, 1999). According to this approach, all changes in equity, excluding transactions with the firm's owners, should be taken into account in the company's income statement for the accounting period.

It is worth emphasizing that the presentation of comprehensive income in the financial reporting is related to the use of the valuation model, in which "clean surplus accounting" is applied. According to the concept of comprehensive income, this profit is understood as a gain in wealth of the owners. The profit rises when the value of net assets (equity) at the end of the accounting period is higher than their value at the beginning of the period.

The comprehensive income (all-inclusive income) is interpreted as a change in the company's equity in a given reporting period that results from economic transactions and other occurrences taking place in relationship with firms and individuals other than owners (Epstein et al., 2010).

Comprehensive income is a relatively new, little recognized and researched in literature economic category, which is the consequence of the implementation of International Accounting Standards (IAS), which came into force on January 1st, 2009. According to these regulations, stock companies are required to present the comprehensive income statement together with its components. Generally, comprehensive income is comprised of net profit and other comprehensive income (OCI) (see Table 1).

Table 1: Overview of OCI items under IFRS

Position	Standard
Foreign currency translation adjustments	IAS 21.39(c)
Unrealized gains (losses) on re-measuring available-for-sale financial assets	IAS 39.55(b)
Effective portion of gains and losses on hedging instruments in a cash flow hedge	IAS 39.95(a)
Effective portion of gains or losses on hedging instruments of a net investment in a foreign operation	IAS 39.102
Revaluation of property, plant and equipment	IAS 16.39
Revaluation of intangible assets	IAS 38.85
Actuarial gains (losses) on defined benefit plans	IAS 19.93A

Source: (IFRS, 2011)

Prior to the adoption of IFRS (IFRS, 2011), listed companies were required to present some components of comprehensive income in a statement of changes in equity, but the new statement of comprehensive income, which concluded these categories, is more useful for users of financial statements, especially for analysts. This group have special abilities to assess

the firm performance using comprehensive income in the presence of earnings management, especially subsequent repurchase of assets for sales securities. For example, "buy-side analysts" are able to detect earnings management and incorporate this knowledge into their stock price judgments only when comprehensive income components are presented in a statement of comprehensive income (Hirst & Hopkins, 1998). Maines and McDaniel (2000) showed that particularly non-professional investors are able to incorporate these categories when they are reported in a performance statement beginning with net income and ending with comprehensive income. It may definitely mean that investors are able to correctly assess firm performances only when comprehensive income components are presented directly in the comprehensive income statement and not in the statement of changes in equity.

3. Predictive Strengths and Weaknesses of Comprehensive Income

The aim of financial reporting is to communicate to capital market participants all the information, including internal, which can be useful in predicting the future financial performance, particularly in estimating the company's value. Such intent has guided the implementation of the comprehensive income category to the companies' financial reporting system. It forces the need to analyze the company's gains and losses, which are the result of all of its action, regardless of where in the financial reporting they are positioned. Moreover, you can specify that making the size of comprehensive income and its components publicly available becomes necessary for users of financial statements, so they can more accurately assess the current business activity of the enterprise and they are able to predict future financial effects more precisely. The information about the firm's comprehensive income should therefore help managers, investors, creditors and others in the evaluation of the company's actions as well as recognize the time and value of its future cash flows.

Table 2: Previous studies on the predictive power of comprehensive income and its individual components (in comparison to net income)

Authors	The conclusions from empirical research
Dhaliwal, Subramanyam & Trezevant (1999)	Comprehensive income is more consistent with the theory of valuation.
Biddle & Choi (2006)	Unlike net earnings, comprehensive income is more associated with the return on shares.
Hirst & Hopkins (1998)	Reporting of other comprehensive income in a separate statement helps analysts to detect the earnings management practice.
Chambers, Linsmeier, Shakespeare & Sougiannis (2007)	Comprehensive income is characterized by higher resistance (in comparison to net earnings) to managers' manipulation.
Feltham & Ohlson (1995)	Comprehensive income compared to the net profit is more in line with the concept of clean surplus.
Choi & Zang (2006)	Comprehensive income has more power in prediction of future net earnings than the current operating profit (EBIT). Comprehensive income can predict subsequent period net income, over and above current period income.

According to many researchers, effects resulting from extraordinary events or changes in the macroeconomic environment that affect the market value of assets and liabilities on which

managers have no or very limited influence should be eliminated from the income statement and disclosed in other parts of financial statements, e.g. in the statement of changes in equity or directly in the balance sheet. For this reason, managers are the biggest supporters of the operating profit concept instead of the comprehensive income idea (Biddle & Choi, 2006). The insightful characterization of all OCI components allows stating that they are all characterized by the lack of durability over time, and almost all are beyond the control of managers, which hinders active earnings management (Rees & Shane, 2012).

In foreign literature one can find a number of arguments to justify the greater predictive power of comprehensive income in comparison to net income (see Table 2).

Table 3: Previous studies on the predictive power of net income in comparison to comprehensive income

Authors	The conclusions from empirical research
Chamberts, Linsmeier, Shakespeare & Sougiannis (2007)	Presentation of other comprehensive income will not generate any additional information.
Goncharov & Hodgson (2011)	Elements of comprehensive income are temporary and changeable, and introduce confusion and uncertainty of their realization. Investors are still using net earnings for information, valuation and prediction purposes.
O'Hanlon & Pope (1999)	Comprehensive income includes external and blurred components that reduce the ability of long-term results prediction.
Rees & Shane (2012)	Comprehensive income includes temporary components, introduces confusion and uncertainty and inhibits decision making.
Louis (2003)	Components of other comprehensive income have different usefulness for creating enterprise value.
Liu & Thomas (2000)	The amount of net profit is a better reflection of the company's final performance.
Dhaliwal, Subramanyam & Trezevant (1999); Barton, Hansen & Pownall (2010)	Net profit is a better reflection of the final performance of the company. Net profit predicts the future cash flows and revenues better.
Kanagaretnam, Mathieu & Shehata (2009)	Net profit is a better promise of the future than the comprehensive income.
Biddle & Choi (2006)	Net profit is a more important measure in terms of management contracts than comprehensive income.

However, these empirical findings should not be regarded as undisputed testimony of the superiority of comprehensive income over traditional net earnings. The results of the studies of many other researchers, sometimes even supporters of the implementation of the comprehensive income category to the financial reporting, do not give a definite answer regarding this. Moreover, their further findings demonstrate the advantages of net earnings in relation to the weaknesses of the prediction made on the basis of comprehensive income (see Table 3).

In the light of preliminary own research on practices of implementation of comprehensive income to the financial statements of companies listed on the Polish capital market one can spot some important findings and draw conclusions relating to the desirability of conducting more extensive comparative research on the predictive power of comprehensive income. One can observe a positive influence of comprehensive income on the future return on total assets

in Polish banks listed on WSE (Sajnóg, 2017). On the other hand, the other comprehensive income can, to a certain extent, inhibit the effects of managers' intentional influence on the value of the reported earnings (Sajnóg & Sosnowski, 2018).

4. Research Methodology

The presented empirical research concerns the Polish industrial companies listed on the Warsaw Stock Exchange (as of March 31st, 2019). In order to realize the aim of the study, a 9-year research period was adopted i.e. years between 2009-2017 in the aftermath of the need to prepare statements of comprehensive income by Polish listed companies from January 1st, 2009. A thorough analysis covered annual financial statements of companies. Empirical data was taken from the Thomson Reuters database and from the websites of the companies.

The research problem is realized on the basis of the key firm performances by using both accounting and market measures. A leading dimension of the predictive power of comprehensive income was oriented at using four single equation models (see table 4) which show the implications of net income (NI) and other comprehensive income for the prediction of the future net income, comprehensive income, operating cash flows (OCF) and market value, i.e. with a book to market ratio (BTM)². It is assumed that another comprehensive income has a superior predictive power for these future performances than net income, especially with regard to operating cash flows.

Table 4: Analytical forms of the applied single equation models

Model version	Analytical form
M1	$NI_{t+1} = \alpha_0 + \alpha_1 NI_t + \alpha_2 OCI_t + \alpha_3 SIZE_t + \alpha_4 D/E_t + \alpha_5 BTM_t + \alpha_6 DIV_t + \mu_t$
M2	$CI_{t+1} = \alpha_0 + \alpha_1 NI_t + \alpha_2 OCI_t + \alpha_3 SIZE_t + \alpha_4 D/E_t + \alpha_5 BTM_t + \alpha_6 DIV_t + \mu_t$
M3	$OCF_{t+1} = \alpha_0 + \alpha_1 NI_t + \alpha_2 OCI_t + \alpha_3 SIZE_t + \alpha_4 D/E_t + \alpha_5 BTM_t + \alpha_6 DIV_t + \mu_t$
M4	$BTM_{t+1} = \alpha_0 + \alpha_1 NI_t + \alpha_2 OCI_t + \alpha_3 SIZE_t + \alpha_4 D/E_t + \alpha_5 BTM_t + \alpha_6 DIV_t + \mu_t$

Marks:

- NI* – net income (standardized by total capital),
- OCI* – other comprehensive income (standardized by total capital),
- OCF* – operating cash flow (standardized by total capital),
- BTM* – book to market ratio,
- SIZE* – firm size (natural logarithm of total assets),
- D/E* – debt to equity ratio,
- DIV* – dividend yield (dividend compared to share price).

In addition to the assumed validity of net income and other comprehensive income, other factors might also influence the dependent variables as defined in operational definition of four models. For this reason, moderating variables are considered. The moderating variables, which were used in the implication for the firm performances in *t+1* period, comprise: firm

² To investigate these effects in industrial WSE-listed companies, it was employed a panel least square (unbalanced) model using year fixed-effects.

size (SIZE), which was expressed in total assets, debt to equity ratio (D/E), dividend yield (DIV) and book to market ratio (BTM) in t period. In line with the suggestions of the prior research (Zhou, 2000), firm size as a key factor of the influence on future performances was also controlled. Specifically, the natural logarithm of total assets as a proxy of firm size (SIZE) was used. Debt to equity ratio (D/E) was used to control the financial leverage of the companies, which may affect future firm performance through the level of the cost of capital, investment restrictions caused by covenants, etc. (Dhaliwal et al., 1999). Dividend ratio (DIV) was also included as a control variable due to the prior empirical research in order to show that dividends contain information about expected firm performances or earnings (Miller & Modigliani, 1961). In these models a book to market ratio to control for any variation in the expected performances missed by the dividend was also used (Fama & French, 2000).

5. Results

The results of four regression models were preceded by the analysis of key descriptive statistics of variables and the results of correlations between these categories. Table 5 presents the descriptive statistics of the main and control variables. Although the amount of CI ranges from -7.66 to 0.46, in comparison to net income which fluctuates between -5.19 and 0.46, it does not mean that this category has a significantly higher volatility during the analyzed period. It results from the fact that the standard deviation of OCI is only 0,15. The relation of operating cash flows to total capital is even less volatile, with the median and mean of 0.

Table 5: Descriptive statistics

Statistics	<i>NI</i>	<i>CI</i>	<i>OCI</i>	<i>OCF</i>	<i>SIZE</i>	<i>BTM</i>	<i>D/E</i>	<i>DIV</i>
Mean	0.000	0.000	0.000	0.040	1.315	12.301	0.469	2.452
Median	0.035	0.036	0.000	0.039	1.010	12.272	0.404	0.050
Maximum	0.464	0.464	2.421	0.459	14.286	15.530	5.615	115.900
Minimum	-5.187	-7.656	-2.652	-0.484	0.063	7.459	0.005	0.000
Std. Dev.	0.335	0.371	0.153	0.097	1.177	1.080	0.412	5.839
Observations	602	602	602	602	602	602	602	602

Regarding control variables, on average, the SIZE ratio of the analyzed companies is 1.32, with a minimum value of 0.06 and maximum value of 14.29. The average book to market ratio is about 12.30, and it varies from 7.46 to 15.53. All companies use debt in each and every year. The average of debt to equity ratio is 0.40, while the median is slightly higher. The vast majority of firms pay a dividend, but one can definitely observe a very diversified dividend payment policy. The average (median) DIV is 2.45 (0.05), with standard deviation of 5.84, minimum value of 0 and maximum value of 115.9.

The conducted empirical research shows that the analyzed companies are characterized by a diversity of correlation among the key firm performances (see table 6). Nevertheless, it must be stressed that the calculated correlation coefficients confirm a positive character of dependence between the traditional accounting measures (NI, CI, OCI, OCF, SIZE) and dividend policy (DIV). On the other hand, in most cases, one can observe a negative correlation

between these ratios and debt to equity ratio (D/E) or book to market ratio (BTM). What deserves special attention is the very high, positive and statistically significant value of Pearson’s correlation coefficient, which suggests a high dependence between comprehensive income and net income (NI is, after all, included in CI).

Table 6: Correlation matrix

Variables	NI	CI	OCI	OCF	BTM	SIZE	D/E	DIV
NI	1.000							
CI	0.911***	1.000						
OCI	0.021	0.430***	1.000					
OCF	0.248***	0.272***	0.118***	1.000				
BTM	-0.254***	-0.222***	0.018	-0.099**	1.000			
SIZE	0.227***	0.234***	0.070*	0.075*	-0.086**	1.000		
D/E	-0.199***	-0.185***	-0.013	-0.072*	-0.002	0.261***	1.000	
DIV	0.059	0.054	0.003	0.055	-0.070*	0.050	0.022	1.000

*, ** and *** represent statistical significance at the 0.1, 0.05, and 0.01 levels.

However, the relation between OCI and CI is also positive and admittedly statistically significant, but moderate. Moreover, what must be indicated is the weak strength of the positive correlation between earnings and operating cash flows or size of firm, which is proved by the calculated values of correlation coefficients below 0.3. The negative dependencies between CI or NI and D/E or BTM are statistically significant, but their strength is relatively weak.

Table 7: Results of Panel Least Squares regression

Specification	Coefficient	t-Statistic	Prob. (t-Statistic)	Adjusted R-squared	F-Statistic	Prob. (F-Statistic)
M1 – dependent variable NI_{t+1}						
Intercept	-0.102	-0.530	0.596	0.351	51.675	0.000
NI	0.578**	10.263	0.000			
OCI	-0.700**	-7.093	0.000			
SIZE	0.015	0.891	0.374			
D/E	0.017	0.182	0.856			
BTM	-0.087**	-6.550	0.000			
DIV	0.000	0.152	0.879			
M2 – dependent variable CI_{t+1}						
Intercept	-0.054	-0.270	0.787	0.380	58.323	0.000
NI	0.642**	11.009	0.000			
OCI	-0.859**	-8.399	0.000			
SIZE	0.010	0.606	0.545			
D/E	0.038	0.398	0.691			
BTM	-0.089**	-6.455	0.000			
DIV	0.000	0.105	0.917			

M3 – dependent variable OCF_{t+1}						
Intercept	0.047	0.951	0.342	0.047	5.662	0.000
<i>NI</i>	-0.044**	-3.021	0.003			
<i>OCI</i>	0.087**	3.394	0.001			
<i>SIZE</i>	0.001	0.273	0.785			
<i>D/E</i>	-0.032	-1.331	0.184			
<i>BTM</i>	-0.010**	-3.014	0.003			
<i>DIV</i>	0.002*	2.546	0.011			
M4 – dependent variable BTM_{t+1}						
Intercept	0.502	1.003	0.316	0.404	63.502	0.000
<i>NI</i>	0.821*	2.501	0.013			
<i>OCI</i>	0.366	0.406	0.685			
<i>SIZE</i>	0.006	0.144	0.885			
<i>D/E</i>	-0.155	-0.632	0.527			
<i>BTM</i>	0.692**	18.177	0.000			
<i>DIV</i>	-0.014*	-2.034	0.042			

* and ** represent statistical significance at the 5% and 1% levels.

The assessment of four regression models is presented in table 7. On the basis of these results one can notice that especially six facts deserve attention:

- 1) a positive and statistically significant impact of net income on the future net income, comprehensive income and market value (BTM),
- 2) a negative and also statistically significant relationship between net income and future operating cash flows (OCF),
- 3) a negative and statistically significant influence of other comprehensive income on future earnings (net and comprehensive income),
- 4) a positive and statistically significant relationship between other comprehensive income and future cash flows,
- 5) a negative and statistically significant influence of book to market ratio on both future earnings (NI or CI) and operating cash flows (in case of this category one can only observe a positive relation with future BTM),
- 6) a varied but rather statistically unimportant character of dependence between dividends and the analyzed variables.

6. Conclusions

The conducted empirical research on the basis of the industrial Polish stock companies allows stating that one cannot observe a certain advantage of comprehensive income over net profit, which can inhibit the high relevance of comprehensive income for analysts as a very important category for earnings prediction. The analyzed relations between net income or other comprehensive income and future firm performances were of a various character. Nevertheless, the comprehensive income can be used as a more important indicator of financial statements to assist their users in predicting the entity's future earnings, cash flows or market ratios and, in particular, their timing and certainty.

Quite apart from these empirical results, which are based on only one sector of the Polish economy, the presentation of the weaknesses and strengths of the predictive power of comprehensive income in stock companies on the Polish capital markets can provide owners and managers with some arguments and counterarguments for the creation and implementation of specific equity management strategies. In the future, the thorough analysis of the predictive value of comprehensive income while forecasting the future benefits for shareholders of all Polish stock companies from all sectors may have an important meaning

for specific strategies of finance management. These managers' decisions will not only change the capital structure (debt ratio), but they can also affect the amount of projected earnings or cash flows. Earnings shaping policy, in the long run, can be read as a weighty signal about the company's financial situation, which is connected with the future preference of investors to choose between capital gains and retained earnings. It should be emphasized that in the longer perspective it can influence the company's development and increase its competitiveness.

Literature

1. Barton, J., Hansen, T. B., & Pownall, G. (2010). Which performance measures do investors around the world value the most – and why. *Accounting Review*, 85(3), 753-789.
2. Biddle, G., & Choi, J. H. (2006). Is comprehensive income useful? *Journal of Contemporary Accounting & Economics*, 2(1), 1-32.
3. Chambers, D., Linsmeier, T., Shakespeare, C., & Sougiannis, T. (2007). An evaluation of SFAS No. 130 comprehensive income disclosure. *Review of Accounting Studies*, 12(4), 557-593.
4. Choi, J. H., & Zang, Y. (2006). Implications of comprehensive income disclosure for future earning and analysts. *Seoul Journal of Business*, 12(2), 77-109.
5. Delaney, P. R., Epstein, B. J., Nach, R., & Weis, S. (2002). *GAAP 2003 Interpretation and application of generally accepted accounting principles*. Hoboken, NJ: Wiley.
6. Dhaliwal, D., Subramanyam, K. R., & Trezevant, R. (1999). Is comprehensive income superior to net income as a measure of firm performance. *Journal of Accounting and Economics*, 26(1/3), 43-67.
7. Epstein B., Nach R., Bragg S. (2010), GAAP 2010. *Interpretation and application of generally accepted accounting principles*. Hoboken, NJ: Wiley.
8. Fama, E. F., & French, K. R. (2000). Forecasting profitability and earnings. *Journal of Business*, 73(2), 161-175.
9. Feltham, J., & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11(2), 689-731.
10. Gad, J. (2017). Forma sprawozdania z wyniku całościowego – perspektywa polskiego i niemieckiego rynku kapitałowego. *Przegląd Organizacji*, 5, 44-52.
11. Gierusz, J. (2013). Postulowana forma ujawnień w sprawozdaniu z całkowitych dochodów. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 314, 31-44.
12. Goncharov, I., & Hodgson, A. (2011). Measuring and reporting income in Europe. *Journal of International Accounting Research*, 10(1), 27-59.
13. Hirst, D. E., & Hopkins, P. E. (1998). Comprehensive income disclosure and analysts' valuation judgements. *Journal of Accounting Research*, 36(3), 47-75.
14. IFRS – International Financial Reporting Standards (2011). IFRS Foundation.
15. Kanagaretman, K., Mathieu, R., & Shehata, M. (2009). Usefulness of comprehensive income reporting in Canada. *Journal of Accounting and Public Policy*, 28(4), 349-365.
16. Liu, J., & Thomas, J. (2000). Stock returns and accounting earnings. *Journal of Accounting Research*, 38(1), 71-101.
17. Louis, H. (2003). The value relevance of the foreign translation adjustment. *Accounting Review*, 78(4), 1027-1047.

18. Maines, L., & McDaniel, L. (2000). Effects of comprehensive-income characteristics on nonprofessional investors' judgments: the role of financial-statement presentation format. *The Accounting Review*, 75, 179-207.
19. Marcinkowska, M. (2003). Istota wyniku całościowego i jego ujmowanie w sprawozdawczości finansowej. *Zeszyty Teoretyczne Rachunkowości*, 17(33), 89-109.
20. Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(2), 411-433.
21. Newberry, S. (2003). Reporting performance: comprehensive income and its components. *ABACUS*, 39(3), 325-339.
22. O'Hanlon, J. F., & Pope, P. F. (1999). The value relevance of U.K. dirty surplus accounting flows. *British Accounting Review*, 31(4), 459-482.
23. Ohlson, J. A. (1995). Earnings, book values, and dividends in security valuation. *Contemporary Accounting Research*, 11(2), 661-687.
24. Rees, L. L., & Shane, P. B. (2012). Academic research and standard-setting: The case of other comprehensive income. *Accounting Horizons*, 26(4), 789-816.
25. Sajnog, A. (2017). The role of comprehensive income in predicting banks' future earnings based on the practice of banks listed on the Warsaw Stock Exchange, Equilibrium. *Quarterly Journal of Economics and Economic Policy*, 12(3), 485-500.
26. Sajnog, A., & Sosnowski, T. (2018). *The effect of other comprehensive income reporting on accruals-based earnings management activities*. *Annales Universitatis Mariae Curie-Skłodowska, sectio H*, LII(3), 127-135.
27. Szychta, A. (2010). Measurement and presentation of comprehensive income in financial statements of companies. *Theoretical Journal of Accounting*, 55(115), 117-141.
28. Walińska, E., & Jurewicz, A. (2011). Ewolucja sprawozdania finansowego w wymiarze międzynarodowym. In: E. Walińska (Ed.), *Sprawozdanie finansowe według MSSF. Zasady prezentacji i ujawniania informacji*. Warszawa: Oficyna a Wolters Kluwer business.
29. Wang, Y. (2006). *Essays on the relevance and use of dirty surplus accounting flows in Europe*. Tilburg: Tilburg University.
30. Zhou, X. (2000). CEO pay, firm size, and corporate performance: evidence from Canada. *Canadian Journal of Economics*, 33(1), 213-251.

Navigating Institutional Voids: A Managerial Perspective on the Competitiveness of Selected African Countries

Frances Scholtz

Department of Business Management
University of Johannesburg
Corner of Kingsway and University Roads, Auckland Park, Johannesburg, South Africa
E-mail: fran.gilmore@gmail.com

Suzaan Hughes

Department of Business Management
University of Johannesburg
Corner of Kingsway and University Roads, Auckland Park, Johannesburg, South Africa
E-mail: shughes@uj.ac.za

Abstract

Africa represents tremendous potential constrained by complex challenges. A qualitative approach was used to do a thematic macro analysis of the competitiveness of Egypt, Nigeria and South Africa using the management research category, navigating institutional voids, identified by George et al. (2016) and incorporating data from the World Economic Forum's Global Competitiveness Report (GCR). This study provides a framework for comparative analysis to inform business practitioners of issues, challenges and opportunities and propose a research agenda for management scholars. In several of the factors, South Africa had the highest ranking. However, the most interesting findings emerge when analyzing the measures on which all three African countries had equally poor ranks, namely; the quality of the education system and of math and science education. Additionally, information relating to some sub-themes was lacking which could be the result of two factors. Firstly, certain sub-themes are difficult to quantify which makes it challenging to measure by way of a scale or rank. Secondly, there may be some information on certain sub-themes but the conditions or policies that give rise to the information are highly contextual and cannot be compared between countries in a meaningful way. Regardless of the constraints, the existing sub-themes are widely accepted to have a bearing on competitiveness.

Keywords

Institutional voids, management in Africa, resource constraints, institutional infrastructure, competitiveness

1. Introduction

Emerging countries in Africa are characterized by rapid industrialization, economic liberalization and greater integration in the global economy (Marquis & Raynard, 2015). Amidst declining poverty and improving growth rates the global economic crisis, which started in 2008, came at a particularly unfavorable time for Africa. Growth in Africa has decreased by 60% as a result of the crisis (Fosu, 2013). Economic growth is not an end in itself, in order for African countries to achieve the Millennium Development Goals agreed to by the United Nations member states, which aim to reduce extreme poverty and improve living standards, a 7% year on year average growth rate is required (Akinboada & Kinack, 2015).

To spur economic growth certain driving factors such as an attractive investment ratio, human capital, research and development, and trade openness are needed (Akinboada & Kinack, 2015). A challenging economic climate demands an understanding of the growth factors listed and additional drivers of competitiveness in a range of synergistically connected areas, ranging from government policy to infrastructure and even the work ethic of citizens in the countries concerned. Developing and emerging countries in Africa are faced with a myriad of complex socio-economic challenges and knowing which competitive drivers to prioritize is in and of itself a significant challenge. It can be argued that countries with managers that deeply understand and address the relevant areas, through research and policy interventions will have a significant competitive advantage. The article 'Bringing Africa in: promising directions for management research' featured in the Academy of Management journal makes a compelling case for more management research to be conducted in the emerging and developing markets represented by the African continent (George, Corbishley, Khayesi, Haas & Tihanyi, 2016).

In a review of the management articles about Africa conducted on publications from 1950 to date, Zoogah and Nkoma (2013) found 216 published articles. Between 1990-2015 only 552 peer-reviewed articles were published containing the words 'Africa' and 'emerging economies' in the business and economics field of journals listed in the Social Sciences Citation Index (George et al., 2016). Zoogah and Nkoma (2013) noted that the first decade of the new century was the most productive, commensurate with a growing interest in Africa.

Interest in Africa is increasing but a clear and compelling research agenda is yet to emerge. The first category identified by George et al. (2016), which delimits the challenges created by a lack of robust institutions, represents the category with the most prolific information available - an indication that academic researchers are fairly au fait with describing the business management challenges in Africa. It is tragically descriptive of the challenges faced in Africa that the third category, "enabling opportunities of scale and scope" is the least well developed and discussed in terms of supporting information - an indication that researchers and practitioners are still grappling with potential solutions. It is instructive to consider the three largest economies on the continent by gross domestic product, Egypt, Nigeria and South Africa, as a sample of the broader concerns faced by the continent.

Africa represents tremendous potential constrained by complex challenges. While it would be an oversimplification to say that the root of all solutions lies in economic growth, it is not inaccurate to emphasise the many social and developmental advantages that will inevitably

flow from economic growth. In order to establish the conditions necessary for economic growth, it is crucial to understand the drivers of competitiveness, the holy grail of the economic growth imperative. As a result, this article seeks to explore the following research question;

What are the challenges and opportunities faced by managers in the three largest economies in Africa as they navigate institutional voids?

This article will seek to address the research question by addressing the following primary and secondary objectives.

1.1. Primary objective

Qualitatively contrast the three largest economies in Africa by identifying and exploring the sub-themes that describe the management imperatives related to navigating institutional voids.

1.2. Secondary objectives

- Identify measures and sources of data that descriptively illustrate the sub-themes describing 'navigating institutional voids.'
- Qualitatively contrast the three largest economies in Africa from a management perspective according to the available data.

2. Literature Review

The literature review will provide an overview of Management research in Africa followed by definitions of institutional voids and an overview of opportunities and challenges faced in the African context.

2.1. The importance of management in Africa

In their book chapter on 'Management Research in Africa', Zoogah and Nkoma (2013) analyzed the Management publications related to Africa and found the following trends in articles;

- Criticism of the dominance of western epistemology in the creation of management knowledge.
- The assumptions and limitations of theories don't translate well into the African context and are often the focus of articles that encourage a post-colonial lens.
- Attempts to address the gaps in management research by conducting studies to adapt or develop 'Africa-centered' frameworks.

Their research culminates in a call for the development of an African management philosophy that responds to the social and economic realities of the region. The call for management systems that are established and institutionalized in Africa is supported by Edoho (2001) which elucidates that these endogenous systems should take cognizance of the cultural realities,

societal value systems and aim to improve the standard of living of the citizens in these countries.

The management challenge in Africa is amplified because it emanates not only from a lack of productivity and efficiency but also from the shortcomings of technical training and management development programs (Edoho, 2001). In the face of a critical shortage of trained and efficient managers, it may seem ungrateful to criticize the attempts that have been made to remedy the status quo. However Edoho (2001), as well as Zoogah and Nkoma (2013), posit that a substantial part of the challenge remains in the disconnect between the management epistemology, theory and philosophies that are conveyed (as they are accepted in other parts of the world) and the prevailing practices that face African managers in reality.

In order to develop an African management identity Zoogah and Nkoma (2013) explain that existing research falls into one of the following categories;

1. Symbolic: doesn't contribute to a unique African or global identity
2. Sentimental: contributes to defining a foreign rather than African identity
3. Territorial: contributes to defining a unique African identity
4. Instrumental: contributes to defining both an African and global management identity

In order to develop an African management philosophy more research with a territorial or instrumental focus is needed. African countries are also often characterized by a large public sector, making the government a key economic actor (Acquaah et al., 2013). Edoho (2001) articulates that effective management of human resources, industrial infrastructure, socio-political processes and economic institutions can bring about the structural transformation that is critically important for national development and economic growth, an imperative African nations can agree on.

2.2. Navigating institutional voids in Africa

This article will focus on the first category identified by George et al. (2016), navigating institutional voids for two reasons; firstly, after a thorough review and analysis of available data points the category relating to institutional voids represents the best developed and most robust research stream of the three categories identified in the article. Secondly, the pervasive nature of institutions, including social, political and physical considerations often make them the perceived lynchpin of success and failure for entrepreneurs and large organizations. In fact, Acemoglu et al. (2014) argue that differences in institutional quality explain as much as 75% of the disparity in global income levels.

Institutions have been credited with having multifaceted influences on organizations and competition (Williamson, 2000). Institutions can be defined as constraints that are devised and created by people that provide the structure and context for political, economic and social interactions (North, 1991). Scott (2014) adds that institutions also include the norms, regulations and conforming beliefs about cultural identities that in conjunction with activities and resources provide stability and meaning to social life. This is especially important in Africa as the society and economy are evolving simultaneously and in an interdependent manner, such that organizations are not just expected to promote economic development but also play a role in social development (Mair et al., 2012). Additionally, there are a diversity of African

management thought systems that influence the interconnected formal and informal economies throughout the continent (Zoogah et al., 2015).

2.3. The African context: opportunities and challenges

The African continent represents tremendous diversity across the various cultures and countries that call the continent home. Countries in Africa are diverse on many measures including political, legal, sociocultural, technological and economic, but one common factor is the strong influence of governments and the predominance of state-owned enterprises (Musacchio & Lazzarini, 2014). Unfortunately, poverty together with slow growth, unequal income and wealth distribution are the norm and not the exception in Africa (Asongu, 2013). Another commonality is that these countries and their markets are characterized by a lack of formality and less developed regulatory infrastructure which translates into market regulations, corporate governance, and requisite transparency, accounting standards and the protection of intellectual property not being as dependable and advanced as would be expected from developed economies (Marquis, Zhang & Zhou, 2011). These countries share certain similarities such as a young population and increasing workforce along with rapid urbanization (Marquis & Raynard, 2015). Additionally Africa battles with endemic and systemic corruption which increases income inequality and impedes economic development, factors which negatively affect economic growth (Asongu, 2013). Additionally, corruption affects the productivity of resources by reducing their quality.

There are distinct differences in Africa by region and country on a variety of measures, nevertheless, it is possible to identify the key factors that contribute to competitive success (Rogerson, 2001). This is especially important because eight of the worlds' 20 fastest growing economies in the next few years are in Africa (Global Macro Monitor, 2017). In order to contribute to the discussion of the reality inferred to by the 'navigating institutional voids' research category, only the three largest economies in Africa will be evaluated. The three largest economies by gross domestic product in Africa are **Egypt, Nigeria** and **South Africa**.

The Arab spring that swept through the Middle East did not leave Egypt untouched, unseating Hosni Mubarak in 2011 after almost 30 years at the helm (Henderson, 2013). Unfortunately, the anticipated freedom and reform that this regime change was supposed to bring to bear have yet to materialize, instead resulting in political unrest, declining tourism and fuel and currency reserve shortages (Euronews, 2016; Samir, 2018). However, economic progress is being made with Egypt pushing through a raft of reforms in order to gain US\$ 12 billion from the International Monetary Fund (IMF) first promised in 2016 (IMF, 2016). Thus far Egypt has floated the Egyptian pound (the resulting devaluation of assets was significant), introduced a value added tax law, reduced their energy subsidies and raised interest rates to manage inflation (Samir, 2018). Initial results are promising with increasing growth rates touted for 2018-2019.

Nigeria has been plagued by religious and ethnic turmoil, with the first elections since the end of the military rule only being held in 2003 (BBC, 2017a). Nigeria is the biggest oil exporter on the continent while also boasting the largest gas reserves (The World Bank, 2017). The wealth of oil discovered in Nigeria can be regarded as both a blessing and curse, it has led to great wealth but also violence and corruption. The uprising by Boko Haram militants and the

challenges subsequent Nigerian presidents have faced in managing and even acknowledging the magnitude of the problem reveals the extent of the political and religious challenges faced by the country (BBC, 2017a). The current administration, led by Muhammadu Buhari ushered in the first peaceful transition of power between two political parties in 2015. The administration is also implementing an Economic Recovery and Growth plan 2017-2020 that is starting to bear fruit. The main objectives are to diversify the economy (where growth has been led by cyclical oil prices), promote growth in the private sector and drive job growth to address inequality, address insufficient infrastructure and build effective institutions addressing governance issues (The World Bank, 2017).

South Africa has represented a tale of transformation since the dawn of democracy in 1994 (South African History Online, 2017). Economic growth and sound policies did start to transform the economy and improve living conditions. Unfortunately, the recession combined with declining commodity prices has meant that economic growth cannot keep pace with the demands of a growing population. In order for the economy to be reinvigorated the following is necessary; ease market entry for new firms, remove hurdles to increase job creation, address policy uncertainty which negatively affects consumer confidence, and address perceptions of weakening governance (IMF, 2016). Unfortunately, political turmoil in the ruling African National Congress has only increased along with the exposure of extensive corruption claims (BBC, 2017b). While private institutions have tried to deal with allegations of corruption levelled against them, there has been a lack of political will to date for public institutions to do the same, even in the face of numerous commissions of inquiry. Against the backdrop of a credit rating downgrade and with the threat of more downgrades looming the stakes are high for the newly elected president of South Africa to get it right (McKenzie, 2019).

While each of these countries is contextually unique they also collectively represent challenges and opportunities synonymous with the rest of the African continent. Demands for reforms that address inequality and corruption are widespread. Demographics skewed to the youth who are seeking access to the labor market and have aspirations for a better future are another shared characteristic (Ighobor, 2013). These similarities mean that despite religious and political idiosyncrasies these three economies represent the broad themes that the African continent is grappling with.

3. Research Methodology

A qualitative approach was used to address the research question in this exploratory study that provides rich descriptions of the phenomena (country performance) in question. In structuring the findings, a thematic content analysis was conducted. Firstly, the authors identified themes that explained the phenomena represented by the research category 'navigating institutional voids'. The second step was to systematically analyze the three largest economies in Africa according to the phenomena and themes, using a process of theoretical sampling (Willig, 2009). To this end, data was collected and analyzed in a process that was directed by the parameters of the established category, which assisted in the theoretical development of the themes that were analyzed. The data which informed this process was collected from the World Economic Forums Global Competitiveness Report for 2015-2016 and 2017-2018. The GCR's validity and reliability are well established and accepted in literature,

both influencing policy makers and academic literature (Høyland et al., 2009; Xia et al., 2012). As the themes and data collected refer to country level analysis this study constitutes a macro perspective of the phenomenon in question. For the purposes of this particular study, the secondary data available in the GCR are appropriate and adequate to draw the necessary conclusions. The report analyses 140 countries in 2015-2016 and 137 countries in 2017-2018 resulting in 114 indicators which are grouped into 12 pillars (Schwab et al., 2015; Schwab et al., 2017). The variance in countries ranked in each subsequent report depends on the relevant information being available when sought. Although the country rankings changed in some cases between 2015-2016 and 2017-2018, the score achieved by the country remained unchanged. The authors mitigated this limitation by taking both the score and ranking of countries into consideration.

4. Findings

The research question in this paper delineated the focus on the category; 'Navigating institutional voids', the researchers deduced themes that explain this category, namely:

- Influence of institutional infrastructure on success and failure of firms.
- Resource constraints.
- Fair market access for inclusive growth.

Next, the researchers analyzed each theme to identify the relevant components using sub-themes. Following these secondary data sources were analyzed in order to ascertain potentially relevant data from the World Economic Forum's Global Competitiveness Report (GCR) that accurately describe the competitiveness of a country in relation to the pre-identified sub-themes. Table 1 presents a summary of the secondary data items that were identified.

In order to determine whether a data item was relevant to a sub-theme, the researchers meticulously used the descriptions of each data item to gain an accurate understanding of what the secondary data point describes. The findings report on the specific score that the country received, which was based on a Likert scale out of seven, as well as the country's ranking out of all the countries assessed-which provides perspective on relative global competitiveness. Part of the contribution of this study relates to identifying the shortage of easily accessible and reliable data for certain items. Five sub-themes could not accurately be described by the comparative secondary data sources that were available.

4.1. Influence of institutional infrastructure on success and failure of firms

The influence of institutional infrastructure on the success and failure of firms (see Table 2) describes a country's context relating to the structures and facilities that impact the potential effectiveness of an organization operating within the specific country. The sub-themes relating to this include (1) Market liberalization, (2) Corruption and (3) Ethnic and linguistic diversity. Market liberalization refers to creating more competitive markets by removing government-imposed barriers to economic behavior (Simmons *et al.*, 2006) evidenced in the increasing value and intensity of value chain activities. Overall South Africa reflects the most competitive environment in relation to Market liberalization. South Africa has the highest

value and ranking for value chain breath (46/137), local supplier quality (42/137) and quantity (46/137) and intensity of local competition (43/137). Between 2015-2016 and 2017-2018 Egypt showed the greatest improvement in value chain breadth, followed by South Africa, unfortunately Nigeria showed a decrease in this item. The greatest variance between the countries is local supplier quality with South Africa listed as number 42, Egypt at 95 and Nigeria at 110 of the 137 countries listed in 2017-2018. The intensity of local competition in Egypt seems to be particularly low with a score of 4.8/7 and a ranking of 88/137 when compared to Nigeria (70/137) and South Africa (44/137). In spite of this, it must, however, be noted that Egypt also showed the greatest improvement between 2015-2016 and 2017-2018 with their ranking improving from 128/40 to 88/137.

Table 1: Summary of descriptive components identified in phase three

	Navigating institutional voids	Secondary data items from GCR
Theme 1	Influence of institutional infrastructure on success and failure of firms	
1.1	Market liberalisation	<ul style="list-style-type: none"> · Value chain breath · Local supplier quantity and quality · Intensity of local competition
1.2	Corruption	<ul style="list-style-type: none"> · Diversion of public funds · Public trust in politicians · Irregular payments and bribes · Favouritism in decisions of government officials
1.3	Ethnic and linguistic diversity	None applicable
Theme 2	Resource constraints	
2.1	Lack of human capital	<ul style="list-style-type: none"> · Capacity to retain and attract talent · Secondary education · Tertiary education enrolment · Quality of education
2.2	Lack of financial capital	<ul style="list-style-type: none"> · Financing through local equity markets · Ease of access to loans · Venture capital availability · Availability of financial services · Affordability of financial services
2.3	Technology	<ul style="list-style-type: none"> · Technology readiness
2.4	Managerial capabilities	<ul style="list-style-type: none"> · Reliance on professional management
2.5	Local knowledge	None applicable
2.6	Traditional technologies	None applicable
2.7	Networks of trust	<ul style="list-style-type: none"> · Willingness to delegate authority
Theme 3	Fair market access for inclusive growth	
3.1	Enabling services and conditions	<ul style="list-style-type: none"> · Burden of government regulation · Overall infrastructure · Quality of electricity supply · Mobile and fixed telephones · Soundness of banks
3.2	Access to financial services (hurdles, gender discrimination and lack of enforcement of property rights)	<ul style="list-style-type: none"> · Women in labour force <p>No additional applicable information</p>
3.3	Policy initiative (i.e. Female inclusion, BEE)	None applicable

Corruption can have a negative effect on the prosperity of a country. Although corruption appears to be a challenge for all three of the chosen countries, Egypt is dealing with corruption better, relative to Nigeria and South Africa. Egypt has the best ranking for the diversion of public funds (52/137), public trust in politicians (67/137), irregular payments and bribes (57/137) and favoritism in decisions of government officials (48/137). Egypt also showed noteworthy gains in the rankings for the first three measures between 2015-2016 and 2017-2018, with the only dramatic decrease in the same period being for the favoritism in decisions

of government officials. South Africa had the most dramatic decrease in ranking, reflecting the ongoing governance crises arising from the now frequent allegations of corruption. 'Irregular payments and bribes' reflect the average score of five components concerning the commonality of firms making undocumented payments or bribes connected to (a) imports and exports; (b) public utilities; (c) annual tax payments; (d) awarding of public contracts and licenses; and (e) obtaining favorable judicial decisions (Schwab et al., 2015). The scores on the ranking for these measures are reverse coded with 1 indicating that the practice is very common and 7 indicating that the practice never occurs (Schwab et al., 2016). From an ethical managerial perspective, attempts to diminish the influence of corruption on business dealings and economic growth, should be the focus for policies and reform initiatives.

Ethnic and linguistic diversity is an undoubted reality, perhaps more so in multicultural Nigeria and South Africa than in Egypt. Whilst there are individual sources that identify and attempt to explain the ethnic diversity of these three countries there is not a central source of data comparing the complexity of conducting business in these countries as a result of ethnic and linguistic diversity.

Table 2: Influence of institutional infrastructure on success and failure of firms

Influence of institutional infrastructure on success and failure of firms	Egypt		Egypt		Nigeria		Nigeria		South Africa		South Africa	
	2015-2016		2017-2018		2015-2016		2017-2018		2015-2016		2017-2018	
	Value	Rank /140	Value	Rank /137	Value	Rank /140	Value	Rank /137	Value	Rank /140	Value	Rank /137
<i>Value chain breath</i>	3.7	73	3.9	56	3.5	99	3.3	107	3.9	56	4.2	46
<i>Local supplier quantity</i>	4.5	68	4.3	85	4.7	44	4.6	64	4.6	51	4.7	46
<i>Local supplier quality</i>	3.8	109	4	95	3.8	102	3.7	110	4.8	38	4.7	42
<i>Intensity of local competition</i>	4.2	128	4.8	88	5.2	60	5.1	70	5.4	43	5.4	44
Corruption (including firms attempts to mitigate corruption by i.e. CSR)												
<i>Diversion of public funds</i>	3.5	61	4	52	2.1	132	2.1	132	2.9	94	2.6	109
<i>Public trust in politicians</i>	2.8	83	3	67	1.7	132	1.6	130	2.4	98	2	114
<i>Irregular payments and bribes</i>	4.1	60	4.2	57	2.6	132	2.8	124	4.3	50	3.4	91
<i>Favouritism in decisions of government officials</i>	4.1	25	3.5	48	2.1	132	2.1	125	2.6	105	2	127
Ethnic and linguistic diversity	n/a	n/a	n/a	n/a								
<i>n/a-none applicable</i>												

4.2. Resource constraints

Available resources are the foundation of economic growth and where there is a lack of infrastructure it impedes company access to transport, human capital, finance flows and requisite technology. The sub-themes that describe this are categorized according to formal resources which include (1) lack of human capital, (2) lack of financial capital, (3) technology, and (4) managerial capabilities; and informal resources which include (5) local knowledge, (6) traditional technologies, and (7) networks of trust (refer to Table 3).

Management of human capital leads to national development and economic growth (Edoho, 2001). The lack of human capital is, therefore, an important consideration as a country cannot move from a factor based to a knowledge-based economy without an educated labor force

with the necessary skills, becoming a knowledge-based economy is a measure of competitiveness. The secondary data that describes this subtheme offers a mix of results. Between 2015-2016 and 2017-2018 South Africa's advantages in terms of country capacity to retain talent (61/140 to 78/137), country capacity to attract talent (46/140 to 66/137), and secondary education enrolment, (12/140 to 54/137) were seriously dented with Nigeria taking over in terms of capacity to retain talent (70/137) and attract talent (52/137). South Africa's excellent enrolment in secondary education dropped considerably by 2017-2018 (54/137) reflecting the struggle to translate enrollment to higher education, Egypt boasts the 'highest' ranking (76/137). Unfortunately, both the quality of the education systems and of math and science education in all three countries is very weak, reflected by unfavorably high rankings. However, progress must be acknowledged as all three countries improved their rankings over the period under investigation. The 'highest' ranking is South Africa's for the quality of their education system (114/137). South Africa is also no longer stone last (140/140) for the quality of math and science education revealing a somewhat improved ranking (128/137). The ability to retain talent from an educational system that fares so poorly points to the systematic and structural weaknesses that have to be dealt with in these economies.

The lack of financial capital (both credit and private equity) has the potential to be a critical hurdle for competitiveness, as entrepreneurs and businesses cannot trade without access to financial capital. The secondary data shows that South Africa displays the best performance of the countries in question despite a substantial decrease in rankings for the period under investigation. In 2015-16 South Africa was ranked first in the world in financing through local equity markets (1/140) and highly ranked for the availability and affordability of financial services (6/140 and 21/140). By 2017-2018 South Africa's ranking for financing through local equity markets (25/137), and the availability and affordability of financial services (32/137 and 48/137) was reflecting the challenging operating environment for business. The challenging financial landscape that businesses in Egypt and Nigeria dealt with in 2015-2016, is noticeable with low competitive rankings for availability of financial services (129/140 and 86/140 respectively), affordability of financial services (126/140 and 122/140 respectively), ease of access to loans (128/140 and 135/140 respectively) and venture capital availability (91/140 and 128/140 respectively). Nigeria experienced a small decrease in ranking for all the above elements except ease of access to loans (130/137). The most astounding improvement came from Egypt, with leaps in the rankings for the availability of financial services (from 129/140 to 73/137), affordability of financial services (126/140 to 85/137), ease of access to loans (128/140 to 66/137) and venture capital availability (91/140 to 74/137). The financial inflows and improvements in these rankings can be attributed to the reforms that are underway as well as the inflow of capital from the IMF into the Egyptian economy (IMF, 2017).

Technology is acknowledged for its enabling role in country competitiveness (Dosi et al., 2015). South-Africa scores very competitively in internet bandwidth (19/140 and 11/137), firm-level technology absorption (28/140 and 38/137) and availability of the latest technologies (41/140 and 45/137). All three countries show similar levels of individuals using the internet when calculated as a percentage of the population with only Nigeria showing quite a decline in rankings for the years under investigation (84/140 to 105/137). Egypt showed a notable increase in the availability of the latest technology (120/140 to 91/137). Nigeria shows the weakest performance in mobile-broadband subscriptions (117/137), internet bandwidth (109/137) and fixed broadband internet subscriptions (133/137).

Upon reviewing the advantages that should be conferred by informal resources, it is the absence of comparative information that is glaring. The lack of information could be ascribed to the fact that local knowledge and traditional technologies are contextual elements and by their nature that makes it difficult to identify what information needs to be collected in different countries and what should and can be compared.

Table 3: Resource constraints

Resource constraints		Egypt		Egypt		Nigeria		Nigeria		South Africa		South Africa		
		2015-2016		2017-2018		2015-2016		2017-2018		2015-2016		2017-2018		
		Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	
		/140	/140	/137	/137	/140	/140	/137	/137	/140	/140	/137	/137	
Formal resources	Lack of human capital (educated workforce)													
	<i>Country capacity to retain talent</i>	2.9	101	2.9	103	3.2	90	3.4	70	3.6	61	3.3	78	
	<i>Country capacity to attract talent</i>	2.7	108	2.4	116	3.7	50	3.6	52	3.8	46	3.3	66	
	<i>Secondary education enrolment, gross %</i>	86.3	80	86.1	84	43.8	125	55.7	112	110.8	12	98.8	54	
	<i>Tertiary education enrolment, gross %</i>	30.1	77	36.2	76	10.4	113	10.1	113	19.7	93	19.4	99	
	<i>Quality of education system</i>	2.1	139	2.5	130	2.7	125	2.8	117	2.2	138	2.8	114	
	<i>Quality of math and science education</i>	2.6	131	2.8	122	2.6	132	2.9	118	2	140	2.8	128	
	Lack of financial capital (credit and private equity, from microbusinesses)													
	<i>Availability of financial services</i>	3.4	129	4.2	73	4.1	86	3.7	102	6.1	6	5	32	
	<i>Affordability of financial services</i>	3.3	126	3.6	85	3.5	122	2.6	129	5.3	21	4.1	48	
	<i>Financing through local equity markets</i>	3.8	55	4.3	41	4	43	4	48	5.6	1	4.6	25	
	<i>Ease of access to loans</i>	1.9	128	3.9	66	1.6	135	2.6	130	3.5	32	3.9	62	
	<i>Venture capital availability</i>	2.5	91	2.8	74	2	128	1.8	131	3	47	2.9	66	
	Technology													
	<i>Availability of latest technologies</i>	3.9	120	4.3	91	4.2	99	4.3	98	5.3	41	5.2	45	
	<i>Firm-level technology absorption</i>	3.8	126	4.1	100	4.3	91	4.3	80	5.4	28	5	38	
	<i>FDI and technology transfer</i>	4.4	75	4.3	75	4.4	71	4.2	82	4.5	64	4.5	60	
	<i>Individuals using internet %</i>	31.7	95	39.2	93	42.7	84	25.7	105	49	71	54	76	
	<i>Fixed-broadband Internet subscriptions</i>	3.7	91	5.2	88	0	137	0	133	3.2	93	2.8	98	
	<i>Internet bandwidth</i>	9.3	101	17.2	100	3.1	126	11.3	109	149.5	19	263	11	
<i>Mobile-broadband subscriptions</i>	43.5	68	52.6	77	11.7	110	21.8	117	46.7	63	58.6	71		
Managerial capabilities	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Informal resources	Local knowledge	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Traditional technologies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Networks of trust													
	<i>Willingness to delegate authority</i>	4.2	34	3.7	118	3.6	89	4.6	41	4.5	26	5	24	

n/a-none applicable

4.3. Fair market access for inclusive growth

The opportunity to contribute meaningfully to the economy of a country and thus aid economic development and growth is a measure of how equal the society is (Samans et al., 2015). Table 4 presents the sub-themes that describe this theme being 'Enabling services and conditions' as a sub-theme describes the business environment that is needed for countries to become competitive. Egypt appears to be relinquishing an important advantage in that the burden of its government regulation increased (60/140 to 87/137). South Africa seems to have made some improvement with regards to decreasing the burden of its government regulation (117/140 to 89/137). An important advantage that South Africa appears to be relinquishing is the soundness of its banks (8/140 to 37/137), the same measure where Egypt has shown marked improvement (70/140 to 49/137). Egypt has also shown great improvement in the quality of its electricity supply (101/140 to 63/137) and the quality of its overall infrastructure (114/140 to 73/137). Nigeria currently presents the worst business environment considering

the quality of their electricity supply (136/137), fixed telephone line/100 population (134/137) and the quality of overall infrastructure (131/137).

Table 4: Fair market access for inclusive growth

Fair market access for inclusive growth (bridging inequalities of market access)	Egypt		Egypt		Nigeria		Nigeria		South Africa		South Africa	
	2015-2016		2017-2018		2015-2016		2017-2018		2015-2016		2017-2018	
	Value	Rank /140	Value	Rank /137	Value	Rank /140	Value	Rank /137	Value	Rank /140	Value	Rank /137
Enabling services and conditions												
<i>Burden of government regulation</i>	3.5	60	3.2	87	3	109	2.8	114	2.9	117	3.2	89
<i>Quality of overall infrastructure</i>	3.1	114	4	73	2.4	133	2.3	131	4.3	59	4.1	72
<i>Quality of electricity supply</i>	3.5	101	5	63	1.4	139	1.4	136	2.9	116	3.9	97
<i>Mobile telephone subscriptions/100 pop</i>	114.3	69	114	77	77.8	117	81.8	117	150	22	142.4	27
<i>Fixed telephones lines/100 pop</i>	7.6	97	7.1	90	0.1	139	0.1	134	8.1	90	6.6	93
<i>Soundness of banks</i>	4.8	70	5.4	49	4.7	77	4.3	99	6.4	8	5.5	37
Access to financial services (hurdles, gender discrimination and lack of enforcement of property rights)												
<i>Women in labour force</i>	0.33	135	0.31	131	0.76	87	0.76	83	0.77	86	0.8	72
Policy initiative (ie. Female inclusion, BEE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

n/a-none applicable

The sub-theme, access to financial services describes the ease with which financial services can be accessed regardless of gender and the opportunity for access to legal recourse to exercise property rights. South Africa and Nigeria show slight increases in their ranking position for women in the labor force (83/137 and 72/137 respectively), while Egypt (131/137) can contribute their low ranking to religious observance. Unfortunately, there is not comparative data to more comprehensively describe all the elements of this sub-theme. Additionally, the sub-theme 'policy initiative' also has no comparative information available. The lack of comparative evidence can be attributed to the contextual nature of policies in different countries, broad based black economic empowerment, for example, is a South African policy which will not be found in other African countries.

5. Conclusion

This article presents an analysis of the management research category; navigating institutional voids identified by George et al. (2016). The themes that were identified in this article are the (1) influence of institutional infrastructure on success and failure of firms, (2) resource constraints, and (3) fair market access for inclusive growth. Subsequently, sub-themes were identified and data points that were descriptive of each sub-theme were elicited. The authors propose the use of the identified themes and sub-themes as an approach for evaluating and comparing African economies. This can be useful for practitioners and researchers to gain a deeper understanding and fresh perspective in order to identify the hurdles to greater economic growth.

Over the period under investigation Egypt displayed the biggest improvement in rankings and South Africa the biggest slide. Egypt's improvement can be broadly attributed to the reforms and policy initiatives that are being implemented by the current government in order to comply with requirements for an IMF injection of capital (IMF, 2017). The slide in South Africa's rankings can be attributed to the spate of corruption allegations that have increasingly

plagued both the public and private sector. What is most telling are the measures on which all three African countries had equally poor ranks, namely; the quality of the education system and of math and science education, and to an extent the quality of the electricity supply and overall quality of infrastructure.

6. Implications of the Research

Unfortunately, lamenting unequal access to opportunities may prove cathartic but offers no solutions when the human capital and physical infrastructure are not being built to succeed in the world of tomorrow. Interestingly, Nigeria and South Africa had much poorer scores and ranking than Egypt for almost every category connected to corruption. The mere fact that the rents of business accrue to third parties and gate keepers is largely explanatory of the missed opportunities and prosperity that has yet to be achieved on the continent.

A limitation faced by the authors was that comparative data points could not be sourced in all instances, this points to factors and issues that are highly contextual and likely to differ between African countries. This alludes to the fact that exploiting opportunities in Africa is contextually unique, under explored and under reported in the African context. Thus, the gap in information indicates where management researchers could focus their attention and where managers as practitioners need to develop innovative approaches to address the prevailing challenges.

The number of studies conducted in an African context are increasing, but it is not just the volume of studies that is important. The research areas that studies address as well as the impact and validity of these studies is of great importance. This article links the theoretical challenges that mark institutional voids with the practical reality in the three largest economies in Africa. The gaps and challenges identified provide an agenda for researchers and practitioners, outlining challenges that require high impact research and dedicated interventions to be addressed.

7. Recommendations

Future studies would benefit from a broader perspective, providing insight into the remaining categories; developing capabilities, embedding values and enabling opportunities of scale and scope (George et al., 2016). Additionally, other economies in Africa could be included in the analysis to propose a research agenda for the emerging and developing economies present on the African continent.

Literature

1. Acemoglu, D., Gallego, F. A., & Robinson, J. A. (2014). *Institutions, Human Capital, and Development*, Unpublished paper. Available at: <http://hdl.handle.net/1721.1/95986>

2. Acquah, M., Zoogah, D. B., & Kwesiga, E. N. (2013). Advancing Africa through management knowledge and practice: the way forward. *African Journal of Economic and Management Studies*, 4(2), 164-176.
3. Akinboada, O. A., & Kinfack, E. C. (2015). Financial development, economic growth and millennium development goals in South Africa Is there a link? *International Journal of Social Economics*, 42(5), 459-479.
4. Asongu, S. A. (2013). Fighting corruption when existing corruption control levels count: What do wealth-effects tell us in Africa? *Institutions and Economies*, 5(3), 53-74.
5. BBC (2017a). *Nigeria profile – Timeline*. Available at: <http://www.bbc.com/news/world-africa-13951696>
6. BBC (2017b). *South Africa's President Jacob Zuma - a profile*. Available at: <http://www.bbc.com/news/world-africa-17450447>
7. Dosi, G., Grazzi, M., & Moschella, D. (2015). Technology and costs in international competitiveness: from countries and sectors to firms. *Research Policy*, 44(10), 1795-1814.
8. Edoho, F. M. (2001). *Management challenges for Africa in the Twenty-First century: Theoretical and applied perspectives*. FM Edoho (Ed.), Management challenges for Africa in the twenty-first century. Westport, CT: Greenwood Publishing Group.
9. Euronews (2016). *Egypt: 5 years on from revolution - how much has changed?* Available at: <http://www.euronews.com/2016/01/25/egypt-5-years-on-from-revolution-how-much-has-changed>
10. Fosu, A. K. (2013). Impact of the Global Financial and Economic Crisis on Development: Whither Africa? *Journal of International Development*, 25(8), 1085-1104.
11. George, G., Corbishley, C., Khayesi, J. N. O., Haas, M. R., & Tihanyi, L. (2016). Bringing Africa in: Promising directions for management research. *Academy of Management Journal*, 59(2), 377-393.
12. Global Macro Monitor (2017). *2017 Fastest growing economies*. Retrieved from: <https://macromon.wordpress.com/2017/01/02/2017-fastest-growing-economies/>
13. Henderson, B. (2013). *Egypt timeline: from revolution to the current crisis*. Available at: <http://www.telegraph.co.uk/news/worldnews/africaandindianocean/egypt/10156802/Egypt-timeline-from-revolution-to-the-current-crisis.html>
14. Høyland, B., Moene, K., & Willumsen, F. (2012). The tyranny of international index rankings. *Journal of Development economics*, 97(1), 1-14.
15. Ighobor, K. (2013). *Africa's youth: a "ticking time bomb" or an opportunity?*. Available at: <http://www.un.org/africarenewal/magazine/may-2013/africa%E2%80%99s-youth-%E2%80%9Cticking-time-bomb%E2%80%9D-or-opportunity>
16. IMF (2016). *South Africa: Concluding Statement of an IMF Staff Visit*. Available at: <https://www.imf.org/en/News/Articles/2016/12/13/MS121316-South-Africa-Concluding-Statement-of-an-IMF-Staff-Visit>
17. IMF (2017). *Arab republic of Egypt, IMF Country report no. 17/17*. Available at: <https://www.imf.org/en/Publications/CR/Issues/2017/01/18/Arab-Republic-of-Egypt-Request-for-Extended-Arrangement-Under-the-Extended-Fund-Facility-44534>
18. Mair, J., Martí, I., & Ventresca, M.J. (2012). Building inclusive markets in rural Bangladesh: How intermediaries work institutional voids. *Academy of Management Journal*, 55(4), 819-850.
19. Marquis, C., & Raynard, M. (2015). Institutional Strategies in Emerging Markets. *The Academy of Management Annals*, 9(1), 291-335.

20. Marquis, C., Zhang, J., & Zhou, Y. (2011). Regulatory uncertainty and corporate responses to environmental protection in China. *California Management Review*, 54(1), 39-63.
21. McKenzie, C. (2019). *South Africa election: Ramaphosa holds power as memory of Mandela fades*. Available at: <https://edition.cnn.com/2019/05/11/africa/south-africa-election-analysis-intl/index.html>
22. Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond*. Cambridge, MA: Harvard University Press.
23. North, D. C. (1991). Institutions. *Journal of Economic Perspectives*, 5(1), 97-112.
24. Rogerson, C. (2001). In search of the African miracle: debates on successful small enterprise development in Africa. *Habitat International*, 25(1), 115-142.
25. Samans, R., Blanke, J., Corrigan, G., & Drzeniek, M. (2015). September, *The inclusive growth and development report 2015*, In Geneva: World Economic Forum. Available at: http://www3.weforum.org/docs/WEF_Inclusive_Growth_Development2014.pdf
26. Samir, M. (2018). *Economic experts view Egypt's economy in 2018 with cautious optimism*. Available at: <https://dailynewsegyp.com/2018/01/20/economic-experts-view-egypts-economy-2018-cautious-optimism/>
27. Scott, W. R. (2014). *Institutions and organizations* (4th ed.). Thousand Oaks, CA: Sage Publications.
28. Simmons, B. A., Dobbin, F., & Garrett, G. (2006). Introduction: The international diffusion of liberalism. *International Organization*, 60(4), 781-810.
29. South African History Online. (2017). *Timeline 20 years of Democracy 1994 to 2014*. Available at: <http://www.sahistory.org.za/article/timeline-20-years-democracy-1994-2014>
30. Williamson, O. E. (2000). The New institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, 38(3), 595-613.
31. Willig, C. (2009). *Introducing qualitative research in Psychology* (2nd ed.). Berkshire: McGrawHill.
32. Xia, R., Liang, T., Zhang, Y., & Wu, S. (2012). Is global competitive index a good standard to measure economic growth? A suggestion for improvement. *International Journal of Services and Standards*, 8(1), 45-57.
33. Zoogah, D. B., & Nkoma, S. (2013). Management in Africa. In: T. Lituchy, B. J. Punnett & B. B. Pupilampu (Eds.), *Management in Africa: Macro and Micro Perspectives*. New York, NY: Routledge.
34. Zoogah, D. B., Peng, M. W., & Woldu, H. (2015). Effectiveness in Africa. *Academy of Management Perspectives*, 29(1), 7-31.

The Use of Controlling for Corporate Management in Western Austrian Companies: An Empirical Analysis

Mario Situm

University of Applied Sciences Kufstein
Andreas Hofer-Straße 7, 6330 Kufstein, Austria
E-mail: mario.situm@fh-kufstein.ac.at

Stefan Märk

University of Applied Sciences Salzburg
Urstein Süd 1, 5412 Puch/Salzburg, Austria
E-mail: stefan.maerk@fh-salzburg.ac.at

Abstract

The importance of controlling for corporate management is undisputed on the basis of various empirical findings and practical observations. Nevertheless, there are still many companies that do not use controlling and there are no empirical studies for western Austria. From a scientific point of view, the resource-based view is a good explanatory approach to explaining the use of controlling in companies, which was used in this study. Based on this theory, data on selected variables was collected in a questionnaire from West Austrian companies. In total, around 480 companies took part in this survey and, based on the available data, several research hypotheses were tested using logistic regression. It can be seen from the data that there is still a need for controlling especially for micro and small enterprises. As the size of the company increases, the use of controlling is significantly increased. The essential and significant variable that can explain the use of controlling in companies is the size of the company. The age and the industry of the company showed no significance. Even the federal state, in which a company has its seat, showed no relevance with regard to the use of controlling. Variables that describe the status of family businesses (for example, family-owned businesses, generation) and selected interaction variables also show no significant correlation to the use of controlling in companies. The resource-based view therefore provides a good theoretical basis for explaining the use of controlling in companies in West Austria. Nevertheless, the relevance of many theoretical explanatory variables could not be confirmed in this study.

Keywords

Controlling, family firms, resource-based-view

Leadership as a Core Competence to Productive Service Delivery in a South African Municipality

Kariena Strydom

Faculty of Business Sciences
Walter Sisulu University
South Africa
E-mail: kstrydom@wsu.ac.za

Zimkhitha Katywa

Faculty of Business and Economic Sciences
Nelson Mandela University
South Africa
E-mail: zikhitha.katywa@gmail.com

Abstract

The stability of any organization is largely dependent upon the leadership prevailing at the time. Different styles of leadership have displayed both advantages and disadvantages in organizations, but no study has adequately answered the question of what the suitable leadership style is for productive service delivery in a South African municipality. Furthermore, several studies have been conducted to establish the causes of poor service delivery, but no consensus has yet been reached. Although it has been more than twenty years since the adoption of the Constitution of South Africa (1996), some citizens still find themselves without basic services. Consequently, service delivery protests increase in number and in intensity across the provinces of South Africa. The study was conducted to determine leadership competency and its impact on service delivery in the Buffalo City Metropolitan Municipality (BCMM). Primarily, the study examined the existence of transformational leadership and secondarily, how each sub-dimension (idealized influence, inspirational motivation, intellectual stimulation and individual consideration) influence service delivery in the BCMM. A quantitative approach was followed to collect data from BCMM employees with a task grade level above nine. Descriptive statistical analysis was performed and inferential statistics was used to enable the researcher to draw conclusions about the study based on the sample. Multiple regression analysis, analysis of variance, Pearson's Bivariate Correlation coefficient and one-way ANOVA test were conducted. Empirical results indicated that only three of the sub-dimensions, that is, inspirational motivation, intellectual stimulation and individual consideration had a positive impact on productive service delivery at BCMM. This suggests that leaders do not necessarily have to influence followers through creating an idealized perception of themselves but need to focus on the other three elements of transformational leadership to enhance productive service delivery.

Keywords

Leadership, service delivery, transformational leadership, municipalities

Common Challenges Faced by SMEs Within a South African District

Louis Jacobus Van Staden

North-West University

Potchefstroom Campus, Private Bag X6001, Potchefstroom, 2531, South Africa

E-mail: Louis.VanStaden@nwu.ac.za

Jan J. H. Myburgh

North-West University

Potchefstroom Campus, Private Bag X6001, Potchefstroom, 2531, South Africa

E-mail: jjhmyburgh@mweb.co.za

Abstract

SMEs play an important role in developing countries, as they contribute significantly to higher production rates that lead to greater export capabilities; they continually drive innovation and economic diversification. The sustainability of South African SMEs is continuously challenged, as many SMEs are closing their doors within the first three years of establishment; the causes hereof are mostly ascribed to general (business- and management-related), personal (owner-related), and demographic (district-related) challenges.

The primary objective of this research was to investigate the common challenges faced by SMEs within a specific South African district and the effect thereof on the success of the business. The research followed a quantitative descriptive research design, implementing non-probability convenience sampling. The scales measuring the key constructs were found to be valid and reliable.

From the results, as measured on a seven-point Likert scale, general challenges were indicated to have the strongest influence on SME success ($\bar{x} = 4.75$), followed by personal challenges ($\bar{x} = 3.86$), and lastly a negative view on the effect of demographic challenges ($\bar{x} = 2.08$). The results also showed that the source of start-up funding had an effect on their perceptions of the different constructs.

It can therefore be concluded that SME owners agreed that general challenges had an effect on the success of the business, while they were neutral that the personal challenge influenced their success, and they felt strongly that the demographic challenges influenced negatively on the success of their business. The source of start-up funding also had several views on the influence on the different challenges they faced.

Keywords

Business sustainability, challenges, entrepreneurship, management, small and medium enterprises

Operational Risk Disclosure and Ownership Structure: A Study on Banking Industries

Surya Widyaningsih

Faculty of Economics

Universitas Sebelas Maret

Surakarta, Indonesia

E-mail: widyaningsih.surya@student.uns.ac.id

Doddy Setiawan

Faculty of Economics

Universitas Sebelas Maret

Surakarta, Indonesia

E-mail: doddy.setiawan@staff.uns.ac.id

Abstract

This study has the purpose of analyzing empirical evidence about the effect of ownership structure and operational risk disclosure on banking industries from 2014 to 2016. There are of 330 firm-year observations that met the sample selection criteria. The failure of credit policy in the case of Subprime Mortgage who has bad loan records in the United States caused international financial crisis. The incident illustrates the existence of a large risk so that the Government and related parties tighten the information that must be reported by each bank. Risk taking must be fulfilled in accordance with the rules and requests of shareholders. Information, especially operational risk disclosure, helps shareholders in making decisions and avoids conflicts in banking. The findings present empirical evidence that controlling ownership, foreign ownership and family ownership positively influences operational risk disclosure. The government ownership negatively influences operational risk disclosure. Family and foreign ownership have management that requires disclosure with additional standards in accordance with the needs of shareholders so that the quality of disclosure is better than government ownership. The higher the percentage of ownership, the higher the disclosure made.

Keywords

Operational risk disclosure, controlling ownership, foreign ownership, family ownership, government ownership



www.innovation-institute.eu

www.gbcsummer.com

www.gbcwinter.com

ISSN 1848-2252