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**Cultural Differences across the Countries
in University-Business Cooperation in
Europe**

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Abstract

This research aims at investigating and analysing the association between the actual extent of university-business cooperation and its national cultural characteristics in different European countries. Being forced by the rapid technological change and speed of innovation universities and companies are actively interacting with each other to foster the knowledge transfer and creation of the value for themselves and society at large. In an attempt to understand how these relationships are built and can be strategically facilitated in the future, the role of cultural context affecting the development of favourable environment for university-business cooperation (UBC) will be investigated with a specific focus given to the extent of collaborative activities in Europe and culture as the influencing factor on a country level. In achieving these objectives this paper aims at developing the hypotheses based upon the literature to test the impact of national culture in terms of two cultural dimensions of Hofstede, power distance and individualism, on the extent of different university-business cooperation activities.

Keywords: university-business cooperation, cultural differences, Hofstede, fsQCA

Introduction

Academia and industry increasingly work together and interactions between them are seen as a promising way to foster innovation through the direct exchange of knowledge and technology. While universities exist in the organisational environment unrelated to market considerations and driven by scientific performance focused on knowledge creation and dissemination, companies, in contrast, ultimately aim to profit and to get a financial return, at the same time strictly protecting their proprietary internal information (Hemmert et al., 2014). As a result, differences in organisational culture expressed in diverse behaviour, working style and attitudes towards doing business, have an impact on the collaborative process between private sector and academia (Bruneel et al., 2010; Davey et al., 2015). It is important to consider such institutional cultural divide by building dyadic relationships between universities and industry, since the distinct individual cultures may lead to an incompatibility between both parties.

Whilst there are many justifications for taking the corporate cultural perspective, there are fewer that focus on national cultural context. Given the continuous quest to develop fruitful collaboration, it is also critical for both, companies and higher education institutions, to have an understanding of the national cultural differences across the countries in university-business collaboration (Guimón, 2013).

This research investigates the impact of the national cultural context on the dyadic relationships between higher education institutions and private sector business units in Europe. The role of national cultural context influencing the development of favourable environment for UBC will be investigated with a specific focus given to the extent of different types of UBC in Europe and different cultural dimensions as the influencing factors. In achieving these aims an empirical analysis will be undertaken using dataset that was collected in 2010-2011 by the Science-to-Business Marketing Research Centre (Germany) for the European Commission DG Education and Culture (Davey et al., 2011). On the basis of Hofstede's dimensions (Hofstede, 2001) this paper aims to develop hypotheses, which will be tested in the context of investigation of how cultural dimensions affect the extent of different UBC activities in European countries.

This topic will contribute to the field of UBC by providing an understanding of the impact of national cultural context on the type of collaboration between higher education institutions and industry in Europe from the university perspective. The study will create hypotheses to better explain the important gap in the literature by providing an approach to understand the peculiarities of UBC activities in different cultural settings. This will fill the important gap in the literature by providing an approach to distinguish the cultural differences in UBC across countries and will help practitioners and policy makers to build UBC in the specific cultural context.

Literature Review

UBC

Cooperation between higher education institutions is considered nowadays as a critical element of an efficient national innovation system (Guimón, 2013), since companies have intensified use of external resources and deepened the linkages with other stakeholders not only to capitalise on the existing knowledge, but also to foster their own innovation capabilities (Chesbrough, 2003; Prahalad & Krishan, 2008; Janeiro et al., 2013; Belluci & Pennacchio, 2015). Being forced by the rapid technological change and speed of innovation public and private sector organisations are actively interacting with each other to enhance the knowledge transfer and creation of the value for themselves and for the society at large. Taking into account that the role of universities seems nowadays to be even more important in the changing conditions resulted by globalisation and financial crisis, higher education institutions have to deal with the new challenges and embrace the call for public commitment (Perkmann & Walsh, 2007; Etzkowitz & Zhou, 2008), whilst enterprises try to find new sustainable competitive advantage and engage to survive and to be successful in the modern economic world (Paleari et al., 2015; Berbegal-Mirabent et al., 2015). Academia and business more actively interact with each other, since both higher education institutions and businesses have increased their focus on the need to contribute to the society in a more meaningful way through knowledge and technology exchange and co-creation.

There is a wide range of different ways, in which higher education institutions and business cooperate, but the mostly pursued in practice and discussed in literature are the collaboration in R&D, professional mobility, student mobility of students, commercialisation of joint R&D results, joint curriculum design and delivery, lifelong learning and entrepreneurship (Davey et al., 2011). These types that encapsulate UBC activities include work-related interactive linkages and collaborative efforts to transfer knowledge and technology between academia and industry (Davey et al., 2011). There is a range of different classification options with regards to UBC activities offered by the existing literature, such as for example the typologies according to the duration of relationship (Chen, 1994; Santoro & Gopalakrishnan, 2000), whereas other authors focus on the level of the organizational involvement (Bonarccorsi & Piccaluga, 1994; Ankrah & Al-Tabbaa, 2015). As for this research, the summary of activities represented below (see Table 1: Summary of the UBC activities) is drawn from Davey et al. (2011) and based on the alignment of the UBC forms with three university missions, education, research and valorisation.

Table 1. *Summary of the UBC activities*

	Activity	Definition
Education	Curriculum Design and Delivery	The joint development and supply of a fixed programme of courses, modules majors or minors, planned experiences as well as guest lectures by delegates from external organisations within undergraduate, graduate or PhD programmes
	Lifelong Learning	The provision of adult education, permanent education and/or continuing education involving the acquisition of skills, knowledge, attitudes and behaviours by HEIs to people employed by external organisations
	Student Mobility	The temporary movement of students at all levels from HEIs to business
Research	Professional Mobility	The temporary movement of teaching staff or researchers from HEIs to business; and employees, managers, researchers from business to HEIs
	Joint R&D	Joint R&D activities, contract research, R&D consulting, cooperation in innovation, joint publications with firm, joint supervision of theses and projects in cooperation with business
Valorisation	Commercialisation of R&D	The entry of scientific research and technologies in the market through the trading of intellectual property assets (disclosures of inventions, patenting, licenses or others) or spin-offs
	Entrepreneurship	The creation of an entrepreneurial culture or start-ups/spin-offs by HEI students or academics

Source: Davey et al., 2011

UBC from Cultural Perspective

In recent decades the university business collaboration has become a popular research topic, since it is increasingly perceived as a facilitator for innovation through collaborative activities and knowledge transfer between industry and academia, raising at the same time many questions and opinions encouraging discussions among researchers, practitioners and policy makers. The concept of university-business cooperation has been investigated and understood from various perspectives such as drivers and barriers (Bruneel et al., 2010; Franco & Haase, 2015; Rast et al., 2015), motivations (Dan, 2013; Galib et al., 2015; Franco & Haase, 2015), organisational forms of collaboration between higher education institutions and industry (D'Este & Patel, 2007; Davey et al., 2011; Ankrah & AL-Tabbaa, 2015), and supporting mechanisms, among others. University-business cooperation is understood as any sort of interactions between universities and business for mutual benefit (Davey et al., 2011).

In an attempt to understand how these relationships are developed and can be facilitated in the future many different factors have to be taken into account. Generally, UBC refers to three different types of relationships: the relations

between business and science, the inter-organisational relations between universities and firms, and inter-personal relations between academics and firms' representatives and employees (Croissant & Smith-Doerr, 2008), where the cultural divide is perceived as a significant barrier affecting the development of collaboration between industry and academia (Bruneel et al., 2010; Hemmert et al., 2014).

It is mainly understood that different organisations have different cultures (Reynolds, 1986; Lewis, 2002). While academia works in the environment unrelated to market rules and mainly focuses on scientific performance, business, in contrast, aims to get a profit at the same time highly protecting trade secrets and other not public internal information (Hemmert et al., 2014). From the inter-organisational perspective these dissimilarities in corporate culture obviously have an impact on the collaborative process between business and academia (Bruneel et al., 2010; Davey et al., 2015). The differences in organisational cultures can be explained by the fact that simply none of the both cooperating institutions are properly informed about their working styles. In other words, firms typically have a lack of understanding of how work in academia is allocated or how university budgets are handled, while universities do not comprehend the market rules and business time demands.

Whilst there are some justifications for taking the inter-organisational and inter-personal cultural perspectives, there are fewer that focus on national cultural context. For instance, there is evidence that national context has an impact on the extent of academic entrepreneurship (Davey et al., 2015), reflecting differences across the countries. Also it was found cultural differences to affect the national rates of innovation significantly in several countries (Shane, 1992, 1993; Rinne, 2012; Kumar, 2014), which also might help to understand which cultural dimensions promote the innovation on the country level. Therefore, it is important to examine the university-business collaboration by considering national culture as a possible influencing factor, besides other situational factors directly or indirectly affecting the way the relationships work, because it is critical for both, companies and higher education institutions, to have an understanding of the role of culture from the academic perspective in fostering university-business collaboration activities. (Owen-Smith et al., 2002; Nyerere & Friso, 2012).

Hofstede's Dimensions of Culture

Hofstede (2001, p. 11) defined culture as “the collective programming of the mind that distinguishes the members of one group from another”. The key of the cultural mechanism according to Hofstede (2001, p. 3) is “a system of societal norms consisting of the value systems (or the mental software) shared by major groups in the population”. Using systematically collected data from the study on IBM employees in 40 countries during 1960s and 1970s, Hofstede (1991) sought to develop empirically based terminologies to describe different national cultures. He identified four cultural dimensions: (1) power distance, (2) individualism versus collectivism, (3) uncertainty avoidance, and (4) masculinity versus femininity. In 1991 a fifth dimension was added – (5) long-

term orientation versus short-term orientation (Hofstede, 2001). Most recently, Hofstede's cultural study was complemented by a sixth dimension – (6) indulgence versus restraint (Hofstede et al., 2010). The following provides a brief overview of the six cultural dimensions (Hofstede, 1980, 2001; Hofstede et al., 1991, 2010):

- (1) Power distance – degree to which certain society accepts and expects that power is distributed unequally;
- (2) Individualism versus collectivism – extent to which individuals are supposed to remain integrated to the society or a preference for a loosely-knit social framework in which individuals in contrast are supposed to take care of themselves;
- (3) Uncertainty avoidance – degree to which individuals feel uncomfortable with uncertainty and ambiguity;
- (4) Masculinity versus femininity – value placed on “tough” male values mainly associated with achievement, heroism, assertiveness and material rewards for success; or on “tender” feminine values such as a preference for cooperation, modesty, caring for weak and quality of life;
- (5) Long-term orientation versus short-term orientation – degree to which members of a society have a great respect for the traditions and focus on achieving quick results (short-term), or in contrast, characterized by the ability to adapt to changed conditions and to take more pragmatic future-oriented approach;
- (6) Indulgence versus restraint – degree to which certain society allows relatively gratification of basic and natural human motivations towards enjoying life and having fun.

Research Hypotheses

The increasing importance of knowledge in modern national innovation systems signifies a larger role of knowledge generating and distributing institutions, like higher education institutions, for industrial innovation (Bellucci & Pennacchio, 2015). In the process of generating high quality innovations and technologies companies are today not the only players in the national innovation system. Changing business environment urges businesses to acquire knowledge from external sources to maintain competitive advantage in the modern globalised and rapidly developing world (Santoro & Chakrabarti, 2002; Perkmann & West, 2014). The increasing cooperation between enterprises and universities is considered in this context as one possible way to oppose the challenges, the institutions extensively face today.

There is evidence in the literature for existing connections between Hofstede's cultural dimensions and national level of innovation. For instance, Shane (1992) found several correlations between individualism and power distance as influencing factors and the number of patents issued in the country. There is an empirical justification of the significant relationships, when the data on innovation

was adjusted for wealth. Later Shane (1993) justified the similar influence of the same cultural dimensions on the number of trademarks as another proxy for national level of innovation, by utilising also uncertainty avoidance as independent variable negatively correlated with innovation. Through utilising the institutional theory as a framework for explanation of the existing impact of the cultural dimensions on the rates of innovation, Shane (1993) provided an understanding of the societal values to directly affect the organisational behaviours in generating and promoting innovation.

Rinne et al. (2012) following the same logic tested the correlations between power distance, individualism and uncertainty avoidance with Global Innovation Index and found out that there is a negative relationship between power distance and Global Innovation scores and positive – between individualism and Global innovation scores, while uncertainty avoidance has no influence at all. This study extends the relationship between Hofstede’s dimensions with the Global Innovation Index as a more comprehensive measure of the national innovation rate. Kumar (2014) provides another generalisation supporting above mentioned justifications for the influence of national culture on innovation, suggesting that power distance has a negative effect on the adoption of/propensity to adopt new products, while individualism has a negative relationship with this ability.

In the same manner the hypotheses related to the potentially existing relationships between Hofstede’s individualism and the long-run growth of nations have been developed by Gorodnichenko and Roland (2010, 2011). The authors proposed both theoretical model and empirical evidence again admitting that countries with a more individualistic culture are more innovative and productive, and therefore have higher long-run growth than more collectivistic countries. One possible direction for the future research, they emphasised (Gorodnichenko & Roland, 2011), was that the individualism-collectivism cleavage might also have the same effect on other economic and institutional variables such as for example specialization in trade and public good provision.

Based upon the literature review shown above, two hypotheses have been developed to test the impact of national culture in terms of two cultural dimensions of Hofstede on the extent of university-business cooperation:

Hypothesis 1: *Countries with a low power distance tend to have a higher level of UBC development.*

Hypothesis 2: *Countries with a high individualism tend to have a higher level of UBC development.*

Methodology

The main aim of this research will be to test the aforementioned hypotheses and explore whether national culture operationalised as two cultural dimension indexes in this study have a significant effect on the extent of different types of university-business cooperation activities in Europe. The study relies on two datasets. One set of research variables will be taken from Hofstede et al. (2010)

work on cultural values – power distance and individualism. Hofstede’s measures of time orientation, masculinity, indulgence and uncertainty avoidance will not be used in this research, as they either have not been previously linked to innovation and wealth, or showed no significance of these relationships. In the statistical analysis, the Hofstede’s power distance and individualism-collectivism index scores will be used. They were mainly generated through his IBM survey, which has been later complemented by the estimation for countries previously not included into IBM research project (Hofstede, 2001).

The other set of research variables will be taken from the dataset, which was collected in the framework of the European Study “The State of European University-Business Cooperation” in 2010-2011 by the Science-to-Business Marketing Research Centre (Germany) for the European Commission DG Education and Culture (Davey et al., 2011). The survey translated into 22 languages was distributed via e-mail to university managers and academics officially registered in 33 countries members of the European Economic Area (EEA). In this study, only the data collected from higher education institution managers (technology transfer office, innovation office, incubator directors) regarding UBC activities will be used. After data cleaning, 2157 completed interviews of university managers were achieved (Davey et al., 2011).

There are seven sets of data groups representing different UBC activities: collaboration in R&D, professional mobility, student mobility of students, commercialisation of joint R&D results, joint curriculum design and delivery, lifelong learning and entrepreneurship. The question was: “Please indicate to what extent your university cooperates with business in respect to...” seven above mentioned UBC activities. The two independent variables representing cultural dimensions are power distance index and individualism-collectivism index. Each index represents a cluster of related cultural values, and each country receives a single numeric score for each of two indexes.

The data analysis will be carried out using the statistical software for fuzzy set/qualitative comparative analysis (fsQCA). The fsQCA is a technique for investigating the set relationships and enables to provide in this study the holistic comparisons of countries as configurations of different cultural attributes to reveal patterns of similarities and differences among them with regards to the extent of UBC activities. This method is considered as a practical analysis tool in the presence of potential causal complexity, which furthermore extends on “the concept of property space to bridge quantitative and qualitative approaches to measurement”. (Ragin, 2008, p. 82).

Conclusion and Pathways to Future Research

This paper presents the hypotheses to better explain the important gap in the literature by providing an approach to understand the peculiarities of UBC activities in different cultural settings on a country level. The hypotheses, developed based upon the literature review, will be tested to investigate the impact of national culture in terms of two cultural dimensions of Hofstede, power distance and individualism, on the extent of university-business cooperation activities.

This research aims at contributing to the field of university-business cooperation by focusing on the national cultural aspects, as possible influencing factors affecting the development of the certain UBC activities on a country level. This will fill the important gap in the literature by providing an approach to distinguish the cultural differences in UBC across the countries and will help practitioners and policy makers to build UBC in a specific cultural context. For the first time, Hofstede's cultural dimensions will be matched with UBC by utilising the findings from the study on "The State of the European University-Business Cooperation", biggest European study conducted in this field. The data analysis will be carried out using the fuzzy set/qualitative comparative analysis (fsQCA), a technique for investigating the set relationships, which will provide the holistic comparisons of the countries as configurations of different cultural attributes to reveal patterns of similarities and differences among them with regards to the extent of UBC activities.

However, one of the problems associated with the country comparisons with regards to the national culture is that although Hofstede's cultural dimension framework including the country level index scores have been widely used, cited and tested in the literature, it has some limitations. First, the cultural country index scores to be utilised in this research are outdated due to the fact the study was conducted mainly round 1968 and 1972 (Hofstede, 2001). Recent studies on culture found that significant changes are taking place with regards to the cultural index scores, as culture is not static phenomenon and changes over time (Abdullah et al., 2008). Second, aside from Hofstede's six cultural dimensions, there are other factors on which culture can be analysed. There is sampling inconsistency that disqualifies the study from being authoritative on societies and nations as the survey participants involved sales and engineering IBM personnel with few women and social minorities participating (Moussetes, 2007).

Given the limitations mentioned above, the following research direction is suggested. Since the early 80s various culture studies have been conducted. The most cited and applied ones besides Hofstede are Trompenaars (Smith et al., 1996, Trompenaars et al., 2001), Schwartz and the GLOBE Study (see Table 2: Overview of Cultural Studies).

For further research UBC should be connected to the Schwartz and the GLOBE Study. Referring to the character and scope of dimensions and the rare application it could be most interesting to combine the UBC data with GLOBE. A principal outcome of the GLOBE research effort was the development of six universally shared conceptions of leadership, known most often as "culturally endorsed leadership theory dimensions," also known as "global leadership dimensions". Much of the analysis is focused on explaining how the nine cultural dimensions (e.g., "performance orientation," "assertiveness," and the others) as independent variables relate to the six culturally endorsed leadership theory dimensions (e.g., "charismatic/value-based," "team-oriented," and four others) as dependent variables across the 10 societal clusters (Tung & Verbeke, 2010). Thus next research should elaborate on UBC explanation by using the GLOBE results and dimensions.

Table 2. Overview of Cultural Studies

	Hofstede	Trompenaars	Schwartz	GLOBE Study*
Published	1980, 1991, 2010	1993	1994	2004
No of countries	53	55	67	59
Field work	1966-1973, 1991, 2010	1983-1992	1988-1992, 1992-2000	1994-1997
No of dimensions	6	7	3	9
Methodology	Grounded theory, correlation and factor analysis	Conception of categories created from literature, empirical validation	Conception of categories created from literature, empirical validation	Conception of categories created from literature, pilot studies, empirical validation
Questionnaire	60 questions	57 questions	Classification of 56 values	292 questions
Dimensions	<ul style="list-style-type: none"> - Collectivism vs. Individualism - Power Distance - Time Orientation - Uncertainty Avoidance - Masculinity vs. Femininity - Indulgence vs. Restraint 	<ul style="list-style-type: none"> - Collectivism vs. Individualism - Achievement vs. Ascription - Equability vs. Hierarchy - Internal vs. External Orientation - Universalism vs. Particularism - Neutral vs. Affective - Sequential vs. Synchrony 	<ul style="list-style-type: none"> - Embeddedness vs. Autonomy - Egalitarianism vs. Hierarchy - Harmony vs. Mastery 	<ul style="list-style-type: none"> - In-Group Collectivism - Power Distance - Future Orientation - Uncertainty Avoidance - Gender Egalitarianism - Assertiveness - Performance Orientation - Human Orientation
Application in the other studies**	Very often	Often	Sometimes	Rarely

* GLOBE is the acronym for “Global Leadership and Organizational Behavior Effectiveness” More detailed information is available on GLOBE’s public website at www.thunderbird.edu/wwwfiles/ms/globe/ (see also House et al., 2004; Javidan et al., 2006).

** (Buck et al., 2008; Tung & Verbeke, 2010)

Source: own table

References

- Abdullah, A. B., Ling, K. S., & Samad, Z. (2008). The relationship between national culture and e-adoption: a case study of Iran. *American Journal of Applied Sciences*, 5 (4), 369–377.
- Ankrah, S., & AL-Tabbaa, O. (2015). Universities-industry collaboration: A systematic review. *Scandinavian Journal of Management*, 31(3), 387–408.
- Bellucci, A., & Pennacchio, L. (2015) University knowledge and firm innovation: evidence from European countries. *Journal of Technology Transfer*, online 2015.
- Berbegal-Mirabent, J., Luís Sánchez García, J., & Ribeiro-Soriano, D. E. (2015) University–industry partnerships for the provision of R&D services. *Journal of Business Research*, 68(7), 1407–1413.
- Bonaccorsi, A., & Piccaluga, A. (1994). A theoretical framework for the evaluation of university—industry relationships. *R&D Management*, 24, 229—247.
- Bruneel, J., D’Este, & P., Salter, A. (2010). Investigating the factors that diminish the barriers to university-industry collaboration. *Research Policy* 39(7), 858-859.
- Croissant, J.L., & Smith-Doerr, L. (2008). Organizational Contexts of Science: Boundaries and Relationships between University and Industry. In E. J. Hackett, O. Amsterdamska, M. Lynch, & J. Wajcman (eds.) *The Handbook of Science and Technology Studies*, 3rd edition. Cambridge: The MIT Press, 691-718.
- Davey, T., Baaken, T., Meerman, A., & Galàn Muros, V. (2011). *The State of UBC in Europe: Study on the cooperation between Higher Education Institutions and Public and Private Organisations in Europe*. European Commission, DG Education and Culture, Brussels.
- Davey, T. A., Rossano, S., & van der Sijde, P., (2015). Does context matter in academic entrepreneurship? The role of barriers and drivers in the regional and national context. *The Journal of Technology Transfer*, October 2015, 1-26.
- D’Este, P., & Patel, P. (2007). University-industry linkages in the UK: What are the factors underlying the variety of interactions with industry? *Research Policy*, 36, 1295-1313.
- Gorodnichenko, Y., & Roland, G. (2010). Culture, institutions and the wealth of nations. *CEPR Discussion Paper No 8013* (Center for Economic Policy Research, London).
- Gorodnichenko, Y., & Roland, G. (2011). Individualism, innovation, and long-run growth. *Proceedings of the National Academy of Sciences*, 108 (Supplement 4), 21316-21319.
- Guimón, J. (2013). Promoting University-Industry Collaboration in Developing Countries. *Policy Brief. The Innovation Policy Platform*, 1(3), 1-12.
- Hemmert, M., Bstieler, L., Okamuro, H. (2014). Bridging the cultural divide: Trust formation in university–industry research collaborations in the US, Japan, and South Korea. *Technovation*, 34(10), 605-616.
- Hofstede, G. (1980). *Culture’s consequences: International differences in work related values*. Beverly Hills, CA: SAGE.
- Hofstede, G., Hofstede, G. J., Minkov, M. (1991). *Cultures and organizations: Software of the mind (Vol. 2)*. London: McGraw-Hill.
- Hofstede, G. (2001). *Culture’s consequences: comparing values, behaviors, institutions and organizations across nations*. 2nd ed. Thousand Oaks, CA: SAGE Publications.
- Hofstede, G., Hofstede, G.J., & Minkov, M. (2010). *Cultures and organizations: software of the mind*. 3rd ed. New York: McGraw-Hill.

- 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*. Sage publications.
- Franco, M., & Haase, H. (2015). University–industry cooperation: Researchers’ motivations and interaction channels. *Journal of Engineering and Technology Management*, 36, 41-51.
- Janeiro, P., Proenca, I., & Goncalves, V. da C. (2013). Open innovation: factors explaining universities as service firm innovation sources. *Journal of Business Research*, 66, 2017-2023.
- Javidan, M., Dorfman, P. W., Sully de Luque, M. & House, R. J. (2006). In the eye of the beholder: Cross cultural lessons in leadership from Project GLOBE. *Academy of Management Perspective*, 20(1), 67-91.
- Javidan, M., & Dastmalchian, A. (2009). Managerial implications of the GLOBE project: A study of 62 societies. *Asia Pacific Journal of Human Resources*, 47(1), 41-58.
- Kumar, V. (2014). Understanding cultural differences in innovation: a conceptual framework and future research directions. *Journal of International Marketing*, 22(3), 1-29.
- Moussetes, A. (2007). The absence of women’s voices in Hofstede’s Cultural Consequences: A postcolonial reading. *Women in Management Review*, 22, 443-445.
- Nyerere, J., & Friso, V. (2013). Forums for dialogue between university and industry. A case of Kenyatta University, Kenya and University of Padua, Italy. *European Journal of Training and Development*, 37(7), 662-677.
- Owen-Smith, J., Riccaboni, M., Pammolli, F., & Powell, W. W. (2002). A comparison of U.S. and European University-Industry Relations in the Life Sciences. *Management Science*, 48(1), 24-43.
- Paleari, S., Donina, D., & Meoli, M. (2015). The role of the university in twenty-first century European society. *Journal of Technology Transfer*, 40(3), 369-379.
- Perkmann, M., & Walsh, K. (2007). University industry relationships and open innovation: towards a research agenda. *International journal of Management reviews*, 9(4), 259-280.
- Perkmann, M., & West, J. (2014). Open Science and Open Innovation: Sourcing Knowledge from Universities. In A. N. Link, D. S. Siegel, & M. Wright (eds.) *The Chicago Handbook of University Technology Transfer and Academic Entrepreneurship*. Chicago: University of Chicago Press, 41-74.
- Prahalad, C. K., & Krishnan, M. S. (2008). *The new age of innovation: Driving co-created value through global networks*. New York: McGraw-Hill.
- Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.
- Rast, S., Tourani, A., & Aslan, A. S. (2015). Effect of Organizational Factors on University-Industry Collaboration: A Conceptual Model. *International Journal of Business and Management*, 10(6), 188-198.
- Rinne, T., Steel, G. D., & Fairweather, J. (2012). Hofstede and Shane revisited the role of power distance and individualism in national-level innovation success. *Cross-cultural research*, 46(2), 91-108.
- Santoro, M. D., & Gopalakrishnan, S. (2000). The institutionalization of knowledge transfer activities within industry—university collaborative ventures. *Journal of Engineering and Technology Management*, 17, 299-319.
- Santoro, M., & Chakrabarti, A. K. (2002). Firm size and technology centrality in industry–university interactions. *Research Policy* 31, 1163-1180.

- Schwartz, S. H. (1992). Cultural dimensions of values - Towards an understanding of national differences. *International Journal of Psychology*, 27(3-4), 540-540.
- Schwartz, S. H. (1994). *Beyond individualism/collectivism: New cultural dimensions of values*. Sage Publications, Inc.
- Shane, S. (1992). Why do some societies invest more than others? *Journal of Business Venturing*, 7(1), 29-46.
- Shane, S. (1993). Cultural differences on national rates of innovation. *Journal of Business Venturing*, 8(1), 59-73.
- Smith, P. B., Dugan, S., & Trompenaars, F. (1996). National culture and the values of organizational employees a dimensional analysis across 43 nations. *Journal of cross-cultural psychology*, 27(2), 231-264.
- Trompenaars, F., & Hampden-Turner, C. (2011). *Riding the waves of culture: Understanding diversity in global business*. Nicholas Brealey Publishing.
- Tung, R. L., & Verbeke, A. (2010). Beyond Hofstede and GLOBE: Improving the quality of cross-cultural research. *Journal of International Business Studies*, 41(8), 1259-1274.