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Demanding Culture: A Study of Excessive Competition and Innovation and Managerial Implications for Multinational Enterprises

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Abstract: This research aims at examining what level of business competitiveness and innovation will be best suited for MNEs in the long-run. Author tests the relationship among excessive business competitiveness and innovation and the dysfunction of MNEs, by using multiple regression analysis as the quantitative method. The results show that both excessive business competitiveness and excessive innovation cannot influence the ceasing of business operations. For managerial implications, managers in MNEs should always monitor to what extent it is appropriate for organizational culture to create business competitiveness and innovation. They can add rules in to the internal administration of MNEs, since more rules will block excessive innovation. Regarding the limitations of the research, firstly, the databases did not categorize which enterprises in the USA are truly MNEs or local enterprises. Therefore, the precision of predictive analysis was diminished. Secondly, the data analyzed are not statistically significant, even though a normality test was performed prior to the analysis. Thirdly, since the nature of business competitiveness itself is hard to measure, it is difficult to find a good data representative of overall competitiveness. For future research, the author suggests the future researcher should expend resources identifying statistically valid data for the missing period.

Keywords: multinational enterprise; organizational culture; innovation; business competitiveness; competitive advantage

JEL Classification: F230; L290; M160

1. Learning from the Past

"Now, young adults expect to be comfortable early; a kid's first questions about a job are 'What are the pay, the hours, and the vacations?'" - Jared Diamond in his Collapse: How Societies Choose to Fail or Succeed, page 58, line 33

Human beings are social creatures and need to interact with other people (Hofstede et al., 2002). Economists generally assume that all of us are rational, and we all have reasons for our actions. A book "Collapse: How Societies Choose to Fail or Succeed" by Jared Diamond profiles civilizations that collapsed (mostly) due to human greed resulting from potential competition and, surprisingly, innovation. It is of great interest to researchers to learn the reasons why ancient civilizations at their paragons faced imminent demise and, more importantly, what were the harbingers portending each civilization's impending collapse. Were these civilizations in general overly focused on work and productivity? It is dubious to assume that all humans were born greedy. Or, is there a common factor that plausibly shapes us into the way we are today? Diamond (2005) concentrates much attention on

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collapsed civilizations such as: *Anasazi* (" the ancient ones") in the USA, who landed in a deserted area and faced severe drought finally lead to cannibalism; and Norway's Vikings, who displayed excessive innovation in hunting for new land even though that land was barren. It seems that these catastrophes occurred because of the respective cultures involved. Are some cultures inclined to compel their members to do and to consume too much? These are interesting questions we need to explore.

In fact, the cultures of these fallen civilizations can be considered from a macro-geography perspective since they affected not only one the specific collapsed countries but also neighboring countries. By contrast, an enterprise as a single entity can be considered from a micro-geography perspective since it has to deal only with its internal organizational culture. Diamond (2005) links the extinction of civilizations to environmental problems such as deforestation, excessive hunting for certain species (he points out that some local birds are easy prey because they have never been hunted before and thus have no fear of human beings), and so on. Why do we have to study the past? Diamond mentions that we study the past in order to understand the present and not to repeat the same mistake in the future. We see the mining problem in Australia, Bhopal disaster in India, or even pollution problem in China and realize that greedy leaders in collapsed civilizations were not all that different from modern day American CEOs (Diamond, 2005). Today's CEO may be viewed as being every bit as comfortable as historical cultures prior to their collapse. This poses the question of will civilized American face the same collapse and fate? From this we draw the conclusion that many enterprises, especially multinational enterprises (MNEs), need to address internal organizational cultural issues with determination.

In 1935, a Japanese MNE, Matsushita Electric, established "Keiretsification" - a system in which large Japanese enterprises supported smaller Japanese enterprises by trading with them within a given circle (Shimotani, 1995). This system, led naturally to a reduction in excessive competition since Matsushita was not trading with companies outside of the circle. This may sound unfamiliar to the European or American way of conducting business, but this is an example of the external behavior of Japanese MNEs being influenced by their internal organizational cultures. The collapse or long-term prosperity of this culture cannot be predicted accurately even today. In fact, there are some research efforts (such as Shimotani (1995), Finkelstein (2006), and Lee et al. (2012)) which explore cultural motivations for excessive competition and innovation. This research, as a result, examines what level of business competitiveness and innovation will be best suited for MNEs in the long-run. The author also explores the effects of extreme culture on MNEs using examples of historical civilizations as guidelines for behaviors MNEs should avoid with the objective of mitigating their risks of enterprise extinction. In conclusion, the author organizes this research as follows: the first part is the literature review about organizational culture, excessive business competitiveness, and excessive innovation in MNEs; the second part presents the research methodology, including multiple regression analysis, in which the author uses data from government databases (i.e. the Federal Reserve Bank of St. Louis, U.S. Patent and Trademark Office, and U.S. Census Bureau) to model the correlation between competitiveness, innovation, and long-term MNE success; the third part includes a discussion and conclusions; and the final part includes research limitations and future research.

2. Literature Review

2.1. Culture through the Enterprise Lens

Culture, in all of its forms, plays a major role in human history (Finkelstein, 2006). Culture can be seen as national, business-oriented, or organizational in nature. For example, Icelanders prefer to be individualistic and pride themselves on their ability to survive without foreign influence (Eyjolfsdottir & Smith, 1997). In any enterprise, organizational culture evolves cyclically, showing the enterprise's norms and the values created by the enterprise's stakeholders (Cîmpeanu & Pîrju, 2010). Hence, MNEs, given their nature as global enterprises, face many challenges and obstacles stemming from encountering a variety of cultures based on employee demographics. It is incumbent upon managers to inspire employees as the future of such enterprises by using organizational culture as a tool (Cîmpeanu & Pîrju, 2010). However, if the organizational culture in the MNE is mistaken and promoting the wrong values, what will be the consequences? For example, in Snow Brand (Japan's dairy MNE), its culture is so demanding so that it is unacceptable to make a mistake in the enterprise (Finkelstein, 2006). Therefore, when something wrong happens (which the author will discuss later), employees simply sweep it under the rug.

2.2. Excessive Competition in the Enterprise

Enterprises are concerned mainly with establishing and maintaining competitive advantages (Porter, 1985). Competitive advantage and business competitiveness shape the economic system and drive the growth of businesses globally (Zariṇa et al., 2012). To avoid extinction, MNEs in dynamic industries such as software need to be allied with competitors since the competition in this industry is extreme (Cloodt et al., 2010). In contrast, Snow Brand was overwhelmed with intensive competition from retailers and finally faced extinction due to mislabeling and knowingly selling contaminated products (Finkelstein, 2006). In addition, Japanese MNEs, since 1930, created the culture of Keiretsu to eliminate foreign MNEs from their business circles due to potential competition from these foreign countries (Shimotani, 1995). At first glance, this competitive strategy would seem to foster the long-term prosperity of Japanese MNEs, however the lagging behind of today's Japanese MNEs (when compared to ex-underdog South Korean MNEs) offers proof that there must be something wrong with this business culture of Keiretsification. Lee et al. (2012) also supports the notion that competition can bring catastrophe to enterprises. Therefore, we assume that:

Hypothesis 1: The excessive competition in MNEs (shaped by a demanding culture) leads to the extinction of MNEs.

2.3. Excessive Innovation in the Enterprise

Innovation, as mentioned by John E. Elliot in reference to Schumpeter's work, is an industrialized or business application of a modern product, production method, process, market penetration strategy, or even enterprise (Schumpeter, 2008). Porter et al. (2004) report that advancements in state-of-the art technology emerge because of innovation. They stress that followers, in order to be innovative as well, will imitate the products and services of the market leader. Therefore, the result of excessive innovation may be MNEs who are frightened of the competition's tendency to copy their products and services. As a result, MNEs will try too quickly and too aggressively to enter too many markets

(Hutzschenreuter & Voll, 2008). In Japan, there are plenty of innovative products available, but these products are suitable for domestic customers only (Makino & Roehl, 2010). That is, these products are almost useless and overly complicated to use in foreign countries. Unsurprisingly, a work of Cîmpeanu & Pîrju (2010) asserts that innovative technology divides the people, and this is the reason why Japanese consumer behavior is different from that of other consumers in other parts of the world. As a result, these activities are exhausting and will not benefit MNEs in the long-run. Therefore, we assume that:

Hypothesis 2: The excessive innovation in MNEs (shaped by a demanding culture) leads to the extinction of MNEs.

3. Research Methodology and Results

The data were taken from three databases: the Federal Reserve Bank of St. Louis, the U.S. Patent and Trademark Office, and the U.S. Census Bureau. The Federal Reserve Bank of St. Louis provided data on total production of American industry for the years 1955-2014. The author used this data to represent the competitiveness of MNEs since Porter et al. (2004) used the production process sophistication of a company's operations and strategy as a key indicator to explain the business competitiveness. The data were analyzed by summing all production figures from each 12 month period and deriving a monthly average. The U.S. Census Bureau provided statistics for patents statistics issued in the USA during the period 1992-2014. The author used this data (the number of patents issued to American MNEs) to represent the innovation level of the American MNEs. The reason to for using this data is that patents motivate innovation by inspiring enterprises and employees to provide and invest resources for innovation through a dedication to research and development (European Commission, 2015). Figure 1 shows the number of patents issued in USA from 2004-2013 from U.S. Patent and Trademark Office (USPTO). The x-axis represents year issued and the y-axis represents the number of patents. The U.S. Patent and Trademark Office provided data on American firm characteristics during the years 1977-2012. The author used this data (firm age) to represent the extinction of MNEs since the data provides the number of enterprises ceasing operation during that period. The period used in analysis is 1992-2012 due to the plausible overlapped timeline of these three datasets. Multiple regression analysis was used to predict the extinction of MNEs based on excessive business competitiveness and innovation.

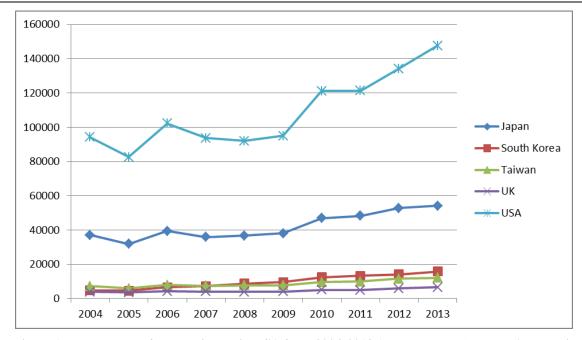


Figure 1. The number of patents issued in USA from 2004-2013 (www.uspto.gov); author's analysis

Later on, the author tests the relationship between excessive business competitiveness and innovation and the dysfunction of MNEs (Hypotheses 1 and 2), by using multiple regression analysis as the quantitative method (see Table 1). Consequently, the multiple regression model with adjusted $R^2 = 25.1\%$ shows that excessive competition and innovation do not influence the ceasing of business operations by MNEs since they are not statistically significant (both p-values of the excessive competition and the excessive innovation are more than 0.05). Nonetheless, with TOL = 0.359 (more than 0.100) and VIF = 2.785 (less than 10.000), the multiple regression model does not exhibit the intercorrelation problem. In conclusion, the aforementioned results show that excessive competition (shaped by a demanding culture) does not influence the ceasing of business operations by MNEs (accept Hypothesis 1) and excessive innovation (shaped by a demanding culture) also does not influence the ceasing of business operations by MNEs (accept Hypothesis 2).

Predictors	В	SE	t	Sig.	Intercorrelation
					TOL VIF
Excessive Competition	2022.591	1344.944	1.504	0.150	0.359 2.785
Excessive Innovation	0.256	0.810	0.316	0.756	

4. Research Discussion and Conclusion

Being proactive and able to adapt to both internal and external environments are the main characteristics of competition (Zariņa et al., 2012). In the past, Easter Islanders in Chile faced excessive competition among its leaders in building gigantic Moai and as a result spent and spoiled too many resources on developing the island (workers had to consume a lot of food to sustain enough energy for building such Moai). Once the island was totally deforested, the lack of sufficient natural

resources led to cannibalism and the extinction of most Easter Islanders (Diamond, 2005). We can see that even the positive attitudes, when they are too much, can generate the negative outcomes. Even though the author concludes that the results are not significant and both excessive business competitiveness and excessive innovation cannot influence the ceasing of business operations, there are still lessons to be learned and guidelines and solutions available. For instance, managers and CEOs in MNEs should always monitor to what extent it is appropriate for organizational culture to create business competitiveness and innovation. They can add rules in to the internal administration of MNEs, since more rules will block excessive innovation (Eyjolfsdottir & Smith, 1997). Lee et al. (2012) also support the belief that when the excessive business competitiveness is restricted, society benefits as a result.

5. Research Limitations and Future Research

Regarding the limitations of the research, firstly, the databases did not categorize which enterprises in the USA are truly MNEs or local enterprises. Therefore, the precision of predictive analysis was diminished (this, perhaps, is the reason why adjusted R² is only 0.251). Secondly, the data analyzed are not statistically significant, even though a normality test (Kolmogorov-Smirnov Test) was performed prior to the analysis. This may be due to the timeline of data is not being long enough (year 1992-2012). Nevertheless, it is problematic for the author to find more official information due to the limited public release of government data. Thirdly, since the nature of business competitiveness itself is hard to measure (Zariṇa et al., 2012), it is difficult to find a good data representative of overall competitiveness. For future research, the author suggests the future researcher should expend resources identifying statistically valid data for the missing period. The author also recommends that the future researcher to conduct quantitative analysis on a larger volume of data to provide more precise insights on how organizational culture affects the innovation and business competitiveness of MNEs.

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