Country risk, multimarket contacts and MNEs’ competitive action

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Abstract: In light of the lack of empirical evidence on discussing international business issue by integrating MNEs competitive dynamics. This study investigates the moderating role that multimarket contact play in MNEs’ country risk and competitive action. Examining a sample of top 20 container shipping MNEs in terms of collecting 2,117 competitive actions from Shipping Digest, this study finds that when MNEs face higher country risks, they undertake fewer competitive actions. On the other hand, this study also shows that MNEs with higher degrees of multimarket contact between MNEs weaken the negative relationship between country risk and a focal firm’s competitive actions. This study extends mutual forbearance theory to international context by investigating how multimarket contact impacts the relationship between country risk and a focal firm’s competitive actions. The implications of these findings for research and practice are discussed.

Keywords: country risk; competitive action; multimarket contacts; competitive dynamics.


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1 Introduction

As enterprises strive to globalise their operations, they often have to take greater risks than do those enterprises operating only domestically (Ghoshal, 1987). When operating
in a highly competitive international environment, the way manager’s deal with risk is a key part of decision-making, and may even be the factor that determines an organisation’s success or failure. Multinational enterprises (MNEs) are likely to perceive different types and degrees of risk as they enter different countries’ investment environments in the process of internationalisation (Miller, 1992). These different country risks reflect the level of uncertainty associated with the enterprise’s investment (Figueira-de-Lemos et al., 2011), and may not only spur MNEs to design different strategies for different countries, but may also have a significant impact on MNEs’ revenue (Choi et al., 1986).

The issue of risk has been investigated in the literature over last few decades – and for MNEs attempting to compete internationally, risks in various host countries are of paramount importance for managers. However, to our knowledge, no research has ever analysed the relationship between country risk and interfirm rivalry from the competitive dynamics perspective. Competition analysis is a vital element of strategy, and represents a dynamic variable, when it comes to assessing risk in different countries. Nevertheless, most existing research has made use of a static frameworks such as Porter’s industrial structure analysis (i.e., the five-force analysis), strategic group analysis, and the resource-based view (RBV), which focuses on creating competitive advantage by using unique assets or developing new abilities (Wernerfelt, 1984). Such research fails to consider the subtle and dynamic nature of interfirm rivalry.

Based on the dynamic nature of the relationship between one firm’s action and another firm’s response, competitive dynamics research, in contrast to static analysis, attempts to understand how a firm’s actions impact a competitor’s outcomes, including performance and market share, as well as its competitive advantage (Chen and Miller, 2012). Responding to Caves’ (1984) appeal for research focusing on rivalrous moves among incumbent producers’, this paper chiefly investigates competitive interaction between MNEs in different situations of international risk. In addition, this study also integrates theories of international business and competitive dynamics, and extends competitive dynamics research into the international arena. Until now, competitive dynamics research has discussed only domestic interfirm competitive interactions. With the exceptions of Yu and Cannella (2007), Mitsuhashi and Greve (2009), Yu et al. (2009), there have been almost no studies extending competitive dynamics research into the international context while at the same time carrying out an empirical study. Therefore, one of the contributions of this paper is to try to integrate these two streams.

This study collected data during 2007 and 2008, this period is when the most recent financial crisis was sweeping the world, negatively impacting not only many countries, but also most firms. Such impacts included the contraction of people’s purchasing power (PPP), the downfall of many enterprises, and increased unemployment. The USA was one of the most severely affected countries, with its gross domestic product (GDP) contracting 6.3% in the fourth quarter of 2008. More strikingly still, the S&P index, which broadly represents the country’s overall industrial health, declined 45% from 2006 peak to November 2008 (CNNMoney.com). Asia was also hit hard by the financial crisis. The GDP of Japan dropped 12% during the last season in 2008, and the decline was even sharper in Taiwan, Korea and Singapore, with a decline in GDP up to 25% (2009 IMF report). Because the contraction of the world economy led to a reduction in people’s consumption of both automobiles and appliances, these industries also suffered. For this reason, our first research question investigated the effect of risk in host country on MNEs’ competitive actions under tough economic circumstances.
Firms always both initiate actions and undertake responsive actions in the market as they seek competitive advantages. Therefore, examining the actions that occur within interfirm-rivalries is a critical issue in strategic management (Smith et al., 1991; Chen et al., 2010). Furthermore, relative to the homogeneity of a given domestic market, global markets offer their own geographic, cultural, political and legal idiosyncrasies, making MNEs’ operations more complicated and heterogeneous (Gupta and Govindarajan, 1991; Yip, 2003; Duanmu, 2012). During the financial crisis period, MNEs faced, relatively speaking, even more uncertainty and risk in each country in which they operated. To test our hypotheses, I chose to examine the top 20 shipping firms. I did so because these 20 firms typically operate more than 100 overseas offices and ports. These firms are in constant contact with each other in numerous countries; thus, our second research question sought to explore how multimarket contact among these top 20 container shipping firms moderated the relationship between the risk present in a given country and a firm’s actions.

Following its introduction, the paper will review relevant theories and empirical findings to derive its research hypotheses. Next, the paper will move on to describe its sample and methodology. The statistical results of the study, and a discussion of the study’s findings, are presented in the paper’s fourth section. The paper’s final section contains our concluding thoughts, a discussion of the study’s limitations, and suggestions for future research.

2 Literature review and hypotheses development

The competitive dynamics perspective, which focuses on competitive inter-firm interaction, has attracted many scholars of strategic management over the last decade (Smith et al., 2001). The main thrust of the competitive dynamics perspective is to study how a given firm’s actions impact its competitors, and how those competitors in turn react (Chen and Miller, 2012; Nair and Selover, 2012). The unit of analysis of this perspective is the so-called ‘action-response dyad’. Through dyad analysis, competitive dynamics research is able to ascertain the competitive nature of paired competing firms; as such, it is able to compensate for the disadvantages of industrial organisation analysis (Porter, 1980) and strategic group analysis (Cool and Schendel, 1987). It is important to investigate the duality of competitive rivalries, because it is at this analytical level that real competition between firms occurs (Chen et al., 1992), and it is also this level at which the dynamic nature of firms’ strategic and competitive manoeuvres can be explained, and where interdependence between firms can be examined [Porter, (1980), p.17].

Besides investigating action-level variables, competitive dynamics researchers explore competitive moves from the firm to the macro level, investigating both their meaning as well as their performance implications. Previous studies exploring the roots of competitive action have examined firm-level variables including firm size (Chen and Hambrick, 1995) and top management team characteristics (Hambrick et al., 1996). Notably, both competitive environment and industrial features are thought to impact firms’ awareness, motivation and ability to take action (Smith et al., 1992; Giaglis and Fouskas, 2011). Accordingly, research that studies firms’ actions and responses at the macro-level, examining such factors as resource similarity and market commonality, have also been developed (Chen, 1996).
Although the competitive dynamics perspective has developed gradually, both theoretical and empirical studies have still typically maintained their focus within the context of a single country, where markets are more homogeneous, and common industry standards and rules exist. However, when MNEs are selected as the subject of study, they necessarily have more dissimilar competitors (including both domestic and international competitors), and the environments in which they operate may be characterised by very different risk landscapes. Such heterogeneous features further increase the complexity and difficulty of taking competitive action.

2.1 Awareness, motivation and capability perspective

The hypotheses in this study are derived and developed mainly through the awareness, motivation and capability (AMC) perspective, which is used to predict firms’ actions and responses in competitive dynamic research. This perspective has been used in the literature associated with organisational change, learning, and decision-making (Chen, 1996). However, competitive dynamics researchers have gradually begun to take AMC factors as drivers of interfirm competition (e.g., Yu and Cannella, 2007; Yu et al., 2009), using the AMC framework to predict the probability of competitors taking actions or responses, or to further investigate the antecedents of AMC (Livengood and Reger, 2010).

2.2 Cross-border competition and country risk

MNEs confront different economies, political situations and socio-psychological traits in each national market (Gupta and Govindarajan, 1991; Rizopoulos and Sergakis, 2010) in which they operate, with the result that they face challenges competing both at home and in international markets (Yip, 2003). So far, discussions of MNEs in the global competitive arena have occurred mostly from an industrial or firm-level perspective. To our knowledge, almost no studies have been undertaken based on the competitive dynamic perspective, and which investigate the action/response dyad [notable exceptions are Mitsuhashi and Greve (2009), Yu and Cannella (2007) and Yu et al. (2009)]. Therefore, integrating competitive dynamics research into issues of MNEs’ operation in different national markets is especially important.

When MNEs operate in different countries, they will encounter a wide range of country risks, which might manifest themselves in politics, economics, or legal issues, and which may profoundly affect a firm’s competitive actions. Take the highly globalised auto industry, for example: In 1999, Volkswagen came up with a creative loan plan for its Chinese subsidiary – but the People’s Bank of China (PBC) suddenly decided to prohibit the plan. As a result, Volkswagen was forced to seek assistance from its politically well-connected local partner, First Automobile Works (Yu et al., 2009).

Likewise, Japan’s top three automobile makers – Honda, Nissan and Toyota – have all had their motivation and capability for undertaking action limited by various countries’ legal restrictions. In 1999, responding to European automobile makers’ successful expansion in Asia, Japanese firms were eager to enter the European market. However, because of a 10% tariff on Japanese auto imports, sales of Japanese cars have never taken off (Yu and Cannella, 2007). The president of Toyota’s European operations complained, “Our import strategy has been seriously impacted by this 10% tariff. This is higher than tariffs in other countries, which I believe is very unfair. I also know I cannot
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raise our market share without the danger of a trade war” [Kurylko and Catterall, (2000), p.3]. Above all, in order to investigate how the competitive actions of MNEs are impacted by country risk in a more fine-grained way, this research integrates action-level variables into the context of the national markets in which MNEs operate. In addition, in our multi-dimensional index, country risks are taken as antecedents of MNEs’ competitive actions, and further hypotheses are proposed.

2.3 Hypotheses development

While firms can certainly benefit from engaging in internationalisation, internationalisation is not without its risks. Relative to operating within a given home country market, liabilities associated with operating overseas include different consumer preferences and regulations in host countries, the hostility of local firms, and the presence of international competitors. However, firms often incur great losses because they are ignorant of the above-mentioned factors (Mitchell et al., 1992). Based on the information-processing theory and the AMC perspective, I argue that MNEs may become overloaded with information about the risks they may face in different country markets, which decreases their motivation and capability to take competitive action.

According to organisational information-processing theory, information flow in organisations and around organisations will affect organisational behaviour (Knight and McDaniel, 1979). Competitive dynamics research further uses this theory to predict competitive responses, reasoning that no matter how effective an information system is, the decision maker must know how to use and interpret the information in the system before a response can be undertaken (Smith et al., 1991). Furthermore, according to Lee et al. (2009), a firm’s flexibility would allow them to outperform than competitors in hostile environment. Therefore, I argue that decision makers might commence information-searching activities to decrease or eliminate the uncertainty of a competitor’s action. Applying that perspective in this research, I further predict that in a global context, MNEs will engage in more ‘scanning’ for information, which they will then undertake to interpret, thereby lowering their uncertainty regarding the following actions.

However, when MNEs operate in countries in which high levels of risk are present, it means that they are facing unpredictable governmental policies, legal uncertainties, ineffective and inefficient court systems, defacto expropriation, difficulty enforcing contracts with local partners, violations of intellectual property rights, and so forth (Henisz, 2000; Uhlenbruck et al., 2006).

Feinberg and Gupta (2009) also mentioned that significant country risk will increase the odds of MNEs’ assets being confiscated, meaning that MNEs may face enormous risks as they seek opportunities. Such risks are often associated with the non-enforcement of contracts, allowing local firms and consumers to prolong payment times. Finally, local governments can restrict MNEs’ abilities to obtain critical assets, thereby creating the risk of rapid depreciation for MNEs.

Situations talked above indeed happen in practice. For example, Click and Weiner (2010) mentioned that the petroleum companies that operate petroleum-exporting countries have been bullied during the past years. Samplings of events are, such as Ecuador uses its army to take over Occidental Petroleum’s holdings in 2006; Russia forced British Petroleum and Shell to renegotiate their contract that these two companies were pressed to transfer their share to local petroleum companies in the end.
Therefore, in order to lessen the uncertainty associated with country risk and decrease the effects of country risk to firm-specific advantages, MNEs must engage in more information-gathering activities and work to lower their information costs. However, March and Simon (1958) stressed that the cost of information gathering is high, so the capabilities and resources of an organisation will impact the speed and exhaustiveness of a decision-maker’s information gathering. Moreover, organisations with slack resources can be spared environmental impacts (Thompson, 1967), and may still therefore be able to undertake the necessary actions. Conversely, firms with tight resources may be incapable of lowering environmental uncertainty, lessening the possibility of undertaking actions.

MNEs’ strategies are affected by many factors, and the fitness of the local environment is one of the most critical such factors (Rugman, 1985). According to information-processing theory, the uncertainty that is triggered by environment or government will affect MNEs’ information-searching costs. This research expects that, relative to MNEs operating in countries where risk levels are low, MNEs operating in countries with higher risks will have to pay more to obtain advantageous information, and that such costs will decrease their motivation (and in turn, their capability) to take the necessary actions. Accordingly, I propose the first hypothesis of this research:

Hypothesis 1 When MNEs face higher country risks, they undertake fewer competitive actions.

2.4 Multimarket contact and competitive action

Multimarket contact can be broadly defined as firms competing with the same competitors simultaneously in many markets. These markets may be product markets (Klemperer, 1992), geographic markets (Heggestad and Rhoades, 1978), or international markets (Waston, 1982). When firms have multimarket contact, they may be hesitant to take action in any one market, because they must consider the risk of being counter-attacked in other markets (Edwards, 1955). Also, the damage incurred by competitors in the multimarket context is potentially much greater than the damage incurred in a single market (Porter, 1984). In addition, competitors are thought to take revenge in markets in which their own potential losses are less than those likely to be incurred by the focal firm, forcing the focal firm to take high-cost defensive actions (Porter, 1984). Karnani and Wernerfelt (1985) provide an early example: “To delay Gillette’s entry into the disposable pen market (Bic’s core market), Bic entered the disposable razor market to counterattack Gillette, then tried to achieve a collusion agreement”.

After multimarket competitors recognise their interdependence, their interactions may decrease in competitiveness, or they may even choose, in some circumstances, to cooperate with one another. By allowing competitors to acquire the advantage in certain markets, they hope that they might be treated similarly in other markets; this is the primary notion behind the concept of mutual forbearance (Edwards, 1955; Simmel, 1950). Such mutual forbearance is more likely to happen within a multimarket context, because there are more opportunities to benefit from not aggressively undertaking actions (Porter, 1980, 1984). In addition, high levels of contact often mean that firms understand
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Each other; thus, such contact can play an important role in the relationship between multimarket competitors (Dimaggio and Powell, 1983; Oliver, 1991).

Although there are many empirical studies of multimarket contact and mutual forbearance (Barlett, 1993; Baum and Korn, 1996), these studies are still limited to the context of a single country; little research has applied this perspective to the context of MNEs (Ma, 1998). However, MNEs will always be affected by situations within a given country – including risk factors. Therefore, this research tries to extend the notion of mutual forbearance into the international context, and to examine how country risk impacts competitive rivalry between MNEs when they contact each other in different international markets.

As mentioned above, little research has extended the notion of multimarket contact into the international context (Ma, 1998). In some recently completed research on the subject, Yu et al. (2009) argued that when MNEs believe that they are susceptible to revenge, their subsidiaries will demonstrate lower competitive aggressiveness. Actually, when MNEs have high degrees of multimarket contact, if a competitor shows competitive aggressiveness in some overlapping markets, a given MNE may be able to seek revenge in more markets (Hamel and Prahalad, 1985). What’s more, a higher degree of multimarket contact will increase the number of spheres in which competitors can undertake retaliatory responses. This means that the benefit a focal firm realises from undertaking action will be less than the loss incurred by a competitor’s taking revenge in another market, thereby lowering the likelihood that a focal firm will take action. McGrath et al. (1998) also propose that if the expected benefit of undertaking aggressive action is lower than the loss likely to be incurred from a competitor’s future revenge, an MNE will be less motivated to undertake aggressive action. After all, multimarket contact between MNEs in international markets will increase the domain in which competitors can potentially take revenge, further decreasing the probability that MNEs’ will undertake action (Yu et al., 2009).

When MNEs have contact with one another in numerous international markets, the spheres in which they may seek revenge on their competitors is increased; that is, if a focal firm undertakes an action in a certain market, its competitor can seek revenge in any international market in which the two firms overlap. This situation will undermine the profitability of a focal firm’s actions, further decreasing its motivation to engage in such actions.

In conclusion, I predict that when MNEs operate in international markets characterised by very different risk levels, firms will pay more attention to changes in local markets, rather than to their competitors; in addition, they will be less motivated to undertake aggressive actions against their competitors. Moreover, given the high cost of seeking high-quality information, the capability to undertake actions is further decreased. Therefore, this study predicts that when MNEs operate in countries characterised by high risk levels, and also have multimarket contact with their competitors, their motivation for undertaking actions against their competitors will be lessened by the threat of revenge in other markets. Therefore:

Hypothesis 2 Higher degrees of multimarket contact between MNEs will strengthen the negative relationship between country risk and a focal firm’s competitive actions.
3 Methodology

Similar to previous study (Miller and Friesen, 1997), I used structured content analysis to collecting data by massively reviewing and gathering public information in terms of time sequence to gain data of sample firm’s competitive interaction (Jauch et al., 1980). Moreover, it uses set structural coding schedule to engage in content analysis. Relative to researches that apply retrospective report of single interviewer (MacMillan et al., 1985), structured content analysis identifies one competitive action through examining public information entirely with objective standard, and records the characteristic of action.

3.1 Data and sample

Top 20 container shipping corporations are chosen as subjects in this research, the reasons they are applied are as following, first of all, container shipping industry belongs to high concentrated oligopoly industry, top 20 container shipping corporations have occupied 70% of world total TEU (20-foot equivalent unit), and information of each liner is apparently opened. Therefore, firms will pay more attention on competitive actions between each other, and response to these actions at once. Secondly, container shipping industry is a high internationalised industry, and the ports each shipping company passed are highly overlapped, so each action will impact other firms, causing intense competition. Above all, container shipping industry is appropriate sample to the topic of this research. The information of liner’s ranking is reached from Alphaliner, and liners are ranked according to each liner’s TEU in last month of the former year. For example, ranking in 2008 is reached from data in December, 2007.

Due to sufficient news of action – 2,117 news in two years – I used season as unit of time frame, therefore, the top 20 container shipping corporations has constructed 160 sample numbers in eight seasons within two years. However, because of different degrees of disclosing information for each firm, it causes problems in data collecting, for example, data of the third container shipping company Mediterranean Shipping Corporation (MSC) is unavailable, so it is inevitable to delete all of MSC’s data in eight seasons.

On the other hand, Wan Hai shipping company is not included in top 20 container Shipping Corporation in third and fourth season in 2008, it makes limitation of data collection, therefore, samples of this company are eliminated. Similarly, Compania de Sud Americana de Vapors (CSAV) has no related news in first, third and fourth season of 2007, also in first season of 2008, also, Pacific International Lines (PIL) has also no relevant news report in third season of 2008. It might be resulted from insufficient breadth of this period, but not be resulted from absent actions taken by these two companies. Therefore, in order to lower biases of news report, these five samples are deleted in this research. Finally, for ensuring accuracy of our research sample, 145 left samples are used in this research after deleting those incomplete seasonal samples.

The database is constructed with two-year periods (i.e., eight seasons) from January, 2007 to December, 2008, all news of competitive actions are used to build database of actions. The electronic version of world shipping news in Shipping Digest is taken as source of data. This magazine of shipping industry is the main publication of container shipping industry of Taiwan which is highly recognised by academics and practices. In order to make sure the reliability of this publication, researchers draw 20 news randomly, and triangulated the news with other publications such as news of China Daily News.
Shipping and Containerisation International. Among these news, 17 news are almost the same in these publications, accuracy reaches 85%, and it reflects the high reliability of news in Shipping Digest.

### 3.2 The process of database construction

The process of building this database can be separated into four stages. In the first step, researchers collect all relevant news about top 20 corporations of shipping industry in Shipping Digest from year 2007 to 2008, all news searched are listed according to time sequence after carefully examination. In second stage, researchers try to find out all news that are related to competitive action among news searched in first stage, and sort competitive actions in shipping industry according to definition of competitive action (Smith et al., 1991; Miller et al., 2010; Chen and Miller, 2012).

In third, similar to Chen and Hambrick’s (1995) study, I discriminate type of competitive action into consideration, separating all competitive action into 21 types according to characteristics of container shipping industry. These 21 action styles are as following, lowering price, raising price, service improvement, providing new service, rearrangement of ship route, route recovering, entering new route, quitting routes, joining alliance of fee, quitting alliance of fee, joining strategic alliance, quitting strategic alliance, cooperation between different industry, cooperation between shipping firms, acquisition, capability enlargement, leasing ships, selling ships, construction of ports and developing techniques of building ships. Furthermore, these 21 types of actions are finally confirmed by professional persons of container shipping industry.

In the last stage, all of news related to container shipping industry is coded according to codebook, and then the action news database of container shipping industry is constructed. In addition, in order to confirm the correctness of database, four well-trained researchers practice four stages above-mentioned back and forth. They further discuss the dissimilar part, including selection of competitive news and identification of action type. The database is finally revised based on opinion of professional person of shipping industry, and researchers also discuss the problematic news with professional person.

Except for the stages of construction action database, three researchers further compare whether all news in Shipping Digest includes news is relevant to top 20 firms in container shipping industry. In order to complete this, A researcher picks up 450 relevant news, B researcher picks 439 news, and C researcher picks 435 related news separately in total 1,445 news. Among news separately picked by three researchers, the overlapped number is 434, therefore, the commonality of news picked by three researcher reaches 98.35%. The reason causes dissimilar result of news judgment might be irrelevancy of firm’s action in the news although it includes key words of top 20 container shipping corporations.

After content of news is all confirmed, three researchers also distribute news averagely for discriminating type of action, and further cross identification will be implemented after this step is completed. More specifically, because that total number of actions is 2,117, at the end of classification of 700 actions by A researcher, this researcher will read classification of another 700 actions completed by B researcher, also, after B researcher completes classification of his part, he will check 711 actions classified by C researcher, finally, C researcher will examine A’s classification. The dissimilar number of actions sorted by A and B researcher is 15, between B and C is 12, and 19 between C and A, the average commonality among research team is 97.83%. About
dissimilar items, three researchers keep discussing with the other researcher in the next step till they achieve consensus.

3.3 Measurements

3.3.1 Number of competitive action (NCA)

The number of competitive action is measured by actions that undertaken by focal firms in one season. I take natural log to prevent the confusing result, since taking natural log can make the coefficient close to normal distribution (Miller and Chen, 1996).

3.3.2 Country risk (CR)

The variable of country risk used in this study is taken from OECD (data source from http://www.oecd.org/). This report classifies risk of each country based on two main elements with every season:

1. the country risk assessment model (CRAM) that estimates country risk in quantification method with index of economic situation, financial situation and debt record

2. other elements such as politic situation that are not included in CRAM will be estimated after discussion of export credit agencies who understand country risk very well.

According to the weighted index of quantified and qualified methods, the report ranks risk of each country in eight levels by giving 0 to 7 points. This research estimates the coefficient of each firm by searching all countries where they set up office, and collecting country risk coefficients of these countries, finally average the coefficients as measurement of this variable. For example, the countries YangMing operates in are totally 35 countries, which include Singapore, Malaysia and Japan, etc., therefore, country risk YangMing faces in first quarter in 2007 are the aggregation of 35 country’s risk coefficient (2.3429) listed of OECD in first quarter in 2007.

3.3.3 Multimarket contact (MMC)

The measurement of multimarket contact has been developed in previous literatures (e.g., Baum and Korn, 1996; Evans and Kessides, 1994), similar to Gimeno and Woo’s (1996) study, which judges whether focal firm ‘i’ competes with one of its competitors ‘j’ in market ‘m’, and sums up all markets they contact. Accordingly, this research measures multimarket contact as all ports where top 20 container shipping companies contact. Specifically, if route of firm i stops at port m, while firm j also chooses port m as one of stop point, and the same situation happens at port n, I count 1, and finally sum up all of ports overlapped between firm i and j. Above all, the formula is as following:

\[ MMC_{ij,m,t} = \sum_{n \neq m} MMC_{ij,mn,t} \]

Among this formula, \( MMC_{ij,m,t} \) means that all ports firm i and j contact in season t. The degree of MMC arranged by this research is presented in Table 1.
Table 1  The overlapping degree of ports of top 20 container shipping corporations

<table>
<thead>
<tr>
<th>Firm name</th>
<th>Overlapping degree of ports with other 18 firms</th>
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<tbody>
<tr>
<td>Maersk</td>
<td>0.35</td>
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<tr>
<td>GMG GMA</td>
<td>0.28</td>
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<tr>
<td>Evergreen</td>
<td>0.36</td>
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<tr>
<td>Hapag-Lloyd</td>
<td>0.45</td>
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<tr>
<td>China Shipping</td>
<td>0.53</td>
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<tr>
<td>COSCO</td>
<td>0.44</td>
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<tr>
<td>APL</td>
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<td>NYK</td>
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<td>OOCL</td>
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<tr>
<td>MOL</td>
<td>0.49</td>
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<tr>
<td>Han-Jin</td>
<td>0.34</td>
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<tr>
<td>K-line</td>
<td>0.50</td>
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<tr>
<td>ZIM</td>
<td>0.33</td>
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<tr>
<td>Hamburg South America Line</td>
<td>0.46</td>
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<tr>
<td>YangMing</td>
<td>0.48</td>
</tr>
<tr>
<td>CSAV</td>
<td>0.41</td>
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<tr>
<td>Hyundai</td>
<td>0.43</td>
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<tr>
<td>PIL</td>
<td>0.35</td>
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<tr>
<td>WanHai</td>
<td>0.52</td>
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Note: Because of limited data, MSC is not included in the form.

3.3.4 Control variables

In order to disturb the relationship between country risk and competitive action, some variables of this study have been controlled. They are firm’s performance in previous season \( \log P_{t-1} \) measured as firm’s TEU, firms age \( \log Age \), firm’s relative market share \( RMS \) measured as its rank, firm’s relative internationalisation \( RInt'l \) measured as \( RInt'l \) between firms by dividing the number of country where a firm set up subsidiaries from the entered country number to mostly internationalised firm, market demand \( MD \) measured as world economy growth ratio (data source from global insight), and the number of firm’s undertakes actions \( NFUA \) measured as counting average number of firms that also undertake action when focal firm undertakes an action.

4 Results

Table 2 presents the descriptive statistics of all variable and Pearson correlation coefficient. The highest variance inflation factor only equals 2.775 so I can further assume variables have no problem of multicollinearity.
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<tbody>
<tr>
<td>1</td>
<td>NCA</td>
<td>14.0275</td>
<td>9.9275</td>
<td>47.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
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<tr>
<td>2</td>
<td>RMS</td>
<td>0.5183</td>
<td>0.2755</td>
<td>1.000</td>
<td>0.200</td>
<td>0.160*</td>
<td>1.000</td>
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<tr>
<td>3</td>
<td>RInt'</td>
<td>22.8408</td>
<td>9.9736</td>
<td>42.287</td>
<td>9.484</td>
<td>-0.147*</td>
<td>0.619**</td>
<td>1.000</td>
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<tr>
<td>4</td>
<td>log P_{x1}</td>
<td>11.9769</td>
<td>0.1173</td>
<td>12.598</td>
<td>11.679</td>
<td>-0.033</td>
<td>0.261**</td>
<td>0.279**</td>
<td>1.000</td>
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</tr>
<tr>
<td>5</td>
<td>MD</td>
<td>3.2048</td>
<td>0.7024</td>
<td>3.900</td>
<td>2.500</td>
<td>-0.054</td>
<td>-0.024</td>
<td>-0.030</td>
<td>-0.037</td>
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</tr>
<tr>
<td>6</td>
<td>NFUA</td>
<td>6.3562</td>
<td>2.7341</td>
<td>15.000</td>
<td>1.500</td>
<td>-0.243**</td>
<td>-0.126</td>
<td>-0.007</td>
<td>-0.161*</td>
<td>0.070</td>
</tr>
<tr>
<td>7</td>
<td>log Age</td>
<td>4.0731</td>
<td>0.7385</td>
<td>5.081</td>
<td>2.303</td>
<td>0.066</td>
<td>0.034</td>
<td>0.143</td>
<td>0.070</td>
<td>-0.041</td>
</tr>
<tr>
<td>8</td>
<td>CR</td>
<td>2.7594</td>
<td>0.5193</td>
<td>3.796</td>
<td>1.917</td>
<td>-0.191*</td>
<td>-0.342**</td>
<td>0.535**</td>
<td>0.198**</td>
<td>0.073</td>
</tr>
<tr>
<td>9</td>
<td>MMC</td>
<td>55.3901</td>
<td>11.9915</td>
<td>72.260</td>
<td>27.470</td>
<td>-0.137*</td>
<td>0.544**</td>
<td>0.433**</td>
<td>0.258**</td>
<td>-0.130</td>
</tr>
<tr>
<td>10</td>
<td>CR * MMC</td>
<td>0.4909</td>
<td>1.2045</td>
<td>3.78</td>
<td>-1.97</td>
<td>0.147</td>
<td>0.455**</td>
<td>0.328**</td>
<td>0.012</td>
<td>-0.099</td>
</tr>
</tbody>
</table>

Notes: N = 145; *p < 0.1, **p < 0.05, ***p < 0.01.
Table 3 presents the result of hierarchical regression, model 1 contains control variables ($F = 5.424$, $P < 0.01$). From the result of model 1, firm’s relative market share ($RMS$) has a significantly positive effect on competitive action number ($\beta = 0.385$, $p < 0.01$), which means leading firms undertake more actions than other firms; also, firms relative internationalisation ($RInt’l$) has a significantly negative effect on competitive action ($\beta = -0.390$, $p < 0.01$), therefore, when firms are more internationalised, they will take fewer competitive action. Market demand ($MD$) has no significant on firm’s competitive action, however, firm age (log $Age$) has a significantly positive effect on competitive action ($\beta = 0.156$, $p < 0.05$), which means that with increasing firm age, firms will take more competitive actions. Moreover, number of firms undertaking action ($NFUA$) has a significantly negative effect on competitive action ($\beta = -0.235$, $p < 0.01$), the result presents that the more firms undertakes certain action together, the more the competitive actions will be. Finally, performance of firms in previous season (log $P_{t-1}$) has no significant effect on competitive action.

Table 3  
Hierarchical regression result of competitive action

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$t$</td>
</tr>
<tr>
<td>$RMS$</td>
<td>0.385</td>
<td>3.877***</td>
<td>0.386</td>
<td>3.944***</td>
<td>0.134</td>
<td>1.100</td>
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<tr>
<td></td>
<td>(1.680)</td>
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<td>(1.681)</td>
<td></td>
<td>(2.775)</td>
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<tr>
<td>$RInt’l$</td>
<td>-0.390</td>
<td>-3.890***</td>
<td>-0.286</td>
<td>-2.619***</td>
<td>-0.278</td>
<td>-2.603***</td>
</tr>
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<td></td>
<td>(1.712)</td>
<td></td>
<td>(2.088)</td>
<td></td>
<td>(2.136)</td>
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</tr>
<tr>
<td>$log P_{t-1}$</td>
<td>-0.750</td>
<td>-0.922</td>
<td>-0.068</td>
<td>-0.845</td>
<td>-0.106</td>
<td>-1.349</td>
</tr>
<tr>
<td></td>
<td>(1.130)</td>
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<td>(1.132)</td>
<td></td>
<td>(1.158)</td>
<td></td>
</tr>
<tr>
<td>$MD$</td>
<td>-0.370</td>
<td>-0.479</td>
<td>-0.016</td>
<td>-0.212</td>
<td>-0.009</td>
<td>-0.116</td>
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<tr>
<td></td>
<td>(1.009)</td>
<td></td>
<td>(1.023)</td>
<td></td>
<td>(1.025)</td>
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</tr>
<tr>
<td>$NFUA$</td>
<td>-0.235</td>
<td>-2.941***</td>
<td>-0.255</td>
<td>-3.207***</td>
<td>-0.307</td>
<td>-3.894***</td>
</tr>
<tr>
<td></td>
<td>(1.093)</td>
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<td>(1.106)</td>
<td></td>
<td>(1.168)</td>
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</tr>
<tr>
<td>$log Age$</td>
<td>0.156</td>
<td>1.975**</td>
<td>0.180</td>
<td>2.288</td>
<td>0.095</td>
<td>1.184</td>
</tr>
<tr>
<td></td>
<td>(1.068)</td>
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<td>(1.088)</td>
<td></td>
<td>(1.210)</td>
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</tr>
<tr>
<td>$CR$</td>
<td>-0.205</td>
<td>-2.248***</td>
<td>-0.299</td>
<td>-3.140***</td>
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<tr>
<td></td>
<td>(1.459)</td>
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<td>$MMC$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.371</td>
<td>3.293***</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>(2.383)</td>
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<tr>
<td>$CR * MMC$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.184</td>
<td>2.022**</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.554)</td>
<td></td>
</tr>
</tbody>
</table>

F-value   5.424***  5.073***  5.852** *
Adj. $R^2$ 0.156 0.180 0.233
$\Delta Adj. R^2$ 0.024** 0.053***

Notes: $N = 145$, numbers in parentheses are VIF coefficient,
*p < 0.1; **p < 0.05; ***p < 0.01.
Models 2 and 3 examine hypothesis 1 and 2 separately, both of two models reach significant level (Model 2, $F = 5.507, p < 0.01$; Model 3, $F = 5.852, p < 0.01$, separately). I add the variable used to test main effect, country risk (CR) in model 2, the statistic result shows that country risk has a significantly negative effect on competitive action ($t = 3.138, P < 0.01$), which means that when MNEs operate in host country with higher country risk, they will undertake fewer actions. Therefore, hypothesis 1 is statistically supported.

For examining hypothesis 2, multimarket contact (MMC) is added in model 3, also its interaction with country risk is added at the same time. The interaction coefficient is involved from multiplication of standardised country risk and multimarket contact, this method is believed to decrease multicolinearity (Jaccard et al., 1990). Hypothesis 2 predicts that multimarket contact will strengthen the negative impact of country risk to competitive action, which means that when MNEs operate in host country with high country risk, while massively contact with competitors in many markets, MNEs will undertake much fewer competitive actions. As result showed in model 3, the coefficient of interaction between country risk and multimarket contact is positively significant ($t = 2.022, P < 0.05$), therefore, hypothesis 2 is not supported.

In order to present the interaction effect in analysis above-mentioned, I divide the multimarket contact into two groups, high and low multimarket contact based on mean of this variable, and further draw Figure 1 to explain the effect of interaction more clearly. In the figure, country risk coefficient is on X axis, while number of competitive action is on axis Y, I can see that the regression line’s slope of low multimarket contact is higher than higher one, this phenomenon explicates that the mutual forbearance is not existed in this research.

Figure 1 Interaction diagram between country risk and international multimarket contact (see online version for colours)

5 Theoretical discussion

Building on competitive dynamic research, this research investigates how country risk impacts MNEs’ competitive actions, and the moderating effect that multimarket contact have on the relationship between country risk and competitive action. So far, there has
been no research studying the relationship between MNEs’ interfirm rivalries and country risk. By applying the competitive dynamic perspective, this research explains how environmental complexity affects rivalry between MNEs. Moreover, only a few studies have discussed firms’ competitive actions from the perspective of MNEs; instead, they have tended to investigate competitive action by examining variables such as characteristics of action or the TMT of a single country. This research focuses on the dynamic and interactive nature of global markets, and investigates the effects of country risk on competitive action. Therefore, this research makes up for a deficiency in competitive dynamics research, which has so far only examined industries within a single country. In addition, while the mutual forbearance hypothesis has been confirmed in many domestic contexts, little research has examined its veracity in the context of MNEs. Thus, the empirical results of this research will also make contributions to the literature on mutual forbearance.

In accordance with information-processing theory, this study argues that there is a negative relationship between country risk and the number of competitive actions undertaken by a firm.

Our empirical results show that country risk has an inverse relationship to the number of competitive actions undertaken by a firm which supports our hypothesis. More specifically, when country risk is great as the result of an unpredictable legal system or unstable economy, MNEs are forced to spend more resources seeking information, weakening their motivation and capability to undertake action against their competitors. Feinberg and Gupta (2009) proposed a similar perspective, postulating that when firms face institutional risk, they will transfer their resources from economic activities to political activities. Therefore, one of the theoretical contributions of this study comes from our proposition that many opportunities are controlled by non-market powers; thus, future researchers might integrate non-market motivations into their investigation of MNEs’ competitive actions. Previous studies have proposed effective non-market strategies including persuasion, which means providing financial incentives to decision makers or parties, or to other related people who can impact decision makers (Boddewyn, 1988; Bonardi et al., 2005; Hillman and Hitt, 1999; Hillman and Keim, 1995; Ring et al., 1990).

In addition, this research also investigates the moderating effects of multimarket contact on the relationship between country risk and competitive action. Based on mutual forbearance theory, this research assumes that multimarket contact will strengthen the negative relationship between country risk and a focal firm’s competitive action. However, our empirical results in this regard were not significant, and even showed reverse significance. I theorise that these results may be related to the financial crisis that occurred during the period of our research, and may also have affected our sample industry, which is highly susceptible to economic fluctuations. I further explain the empirical results of this study from the perspective of mutual forbearance, internal coordination within an MNE [Jayachandran et al., (1999), p.58], and prospect theory.

MNEs can only undertake action when subsidiaries operate their strategy in host countries. That is, subsidiaries are like pawns on a chessboard, which can be directed to carry out MNEs’ designs for retaliation in different international markets. However, MNEs do not always find themselves in total control over the actions taken in international markets, because subsidiaries may feel local responsibilities in a host country, rendering them incapable of following exactly the global strategy of their headquarters (Prahalad and Doz, 1987). Indeed, there is little research investigating the
internal processes and systems within an MNE which subsidiaries meet one another in the multimarket context; mutual forbearance theory assumes that subsidiary managers of products or geographic departments are able to regularly associate with their headquarters (Golden and Ma, 2003). When this concept is extended into the international context, it means that headquarters can effectively control and coordinate subsidiaries’ competitive actions in diversified international markets (Yu et al., 2009).

In contrast to contract risk, which is associated with a dedicated specific asset, and can be alleviated by internalisation or an intermediate market, the uncertainty and risk caused by complicated environments is generally out of firms’ control (Root, 1968). For example, the Taiwanese jewellery seller Lucoral & Lupearl, which is known for its pearl products, (and recently made famous by First Lady Michelle Obama), had a pearl farm in Hainan confiscated by the Chinese Government before its 20-year contract was up. Lucoral & Lupearl makes a rainbow pearl which has long been famous around the world. The president of Lucoral & Lupearl commented, “The Chinese government seized our farm saying they needed it for construction and other civic purposes – but I think they’ll probably reconstruct it as a military harbor or fishing port”.

Therefore, the degree of global integration is usually lower within host countries that have complex environments (Bartlett and Ghoshal, 1989). As mentioned above, I conducted our research for this study during a time of major financial crisis; during this period, each country enacted different policies to try to save its contracting economy and reduce its high unemployment rate. For example, the USA applied an expansionary monetary policy, letting the US dollar depreciate and continuously lowering interest rates. Some European countries, as well as the USA, encouraged their citizens to buy more domestic products, but this project was stopped after other countries objected. To decrease their high unemployment rates, countries like Taiwan and the USA relaxed their standards for unemployment payment, as well as their limitations on corporations’ minimum wage. Above all, abrupt changes to laws or the economy will increase the environmental uncertainty in which MNEs operate. Therefore, this research predicts that, in situations of environmental variation, subsidiaries of MNEs will focus on the changing policies and economy of the host country and their motivation to follow the mutual forbearance strategy laid out by their headquarters will be decreased, with the result that subsidiaries will undertake aggressive action in response to environmental changes.

Prospect theory provides another perspective: under conditions of loss, firms’ tendencies to take risks and engage in unusual activities will increase (Tversky and Kahneman, 1973). Organisational scholars also point out that most companies will abandon their traditional decision repertoire when faced with certain pressures. Container shipping companies Evergreen, YangMing and WanHai, for example, had earnings per share (EPS) in 2007 of 3.53, 2.60 and 3.05 respectively. During the financial crisis, however, their EPS dropped precipitously to 0.21, 0.27 and 0.

When firms’ earnings decrease dramatically in a short time, firms will aggressively seek significant changes, whether inside or outside their organisation. Some scholars argue that when the market contracts, it provides a major incentive for managers to change. Threats of market contraction and financial challenges have a major impact on performance, forcing managers to adjust the way they compete in order to maintain the existence of the company (Rogers, 1992). Judging from the changes in EPS demonstrated by these three companies, this research presumes that the financial crisis likely put the three companies under tremendous pressure, and that this pressure surpassed the
motivation for holding to the mutual forbearance strategy. This situation corresponds to prospect theory, which holds that, in situations of great loss or strain, a firm will tend to take greater risks than usual, and to undertake unconventional tactics (Tversky and Kahneman, 1973). Therefore, like the three container shipping firms mentioned above, the subjects of this research are selected from the shipping industry, which is closely connected to the global economy. Thus, they may well undertake a greater proportion of unorthodox actions because of the losses resulting from the financial crisis.

6 Managerial implications

In addition to the aforementioned theoretical contributions, I also propose some managerial implications. First of all, slack resources can increase the adaptability of an organisation (Cyert and March, 1963). Similarly, strategic choice will be limited when a firm has insufficient resources (Chakravarthy, 1982). Empirically speaking, this means that entering a country characterised by high country risk will raise the cost of seeking information. To shelter themselves from this cost, and because they may ultimately find themselves incapable of undertaking action in a host country, MNEs should carefully consider both the resources and the risks present in a country before they choose to pursue entry.

In addition, changes to the legal and economic situation brought about by the financial crisis will make it difficult for MNEs to execute internal coordination, and will also make it difficult for headquarters to force subsidiaries to follow their mutual forbearance strategy, resulting in an increase in competitive actions on the part of the subsidiaries. In order to increase the likelihood that subsidiaries will follow headquarters’ strategy, this research proposes some methods that can raise internal coordination inside firms for MNE managers. First, managers can gain greater control over their subsidiaries by taking ownership of them. Furthermore, organisations that apply formal structures can facilitate knowledge sharing within those structures. Elements of such formal structures include integration committees, information systems, and matrix structures, and each different element can increase the breadth, efficiency and quality of information sharing between organisations (Daft and Lengel, 1984; Hahn et al., 2009).

Therefore, managers can achieve integration between headquarters and subsidiaries by applying formal structures to increase information sharing between them. In addition, the effect of a rewards system on organisational behaviour has been confirmed in past studies (Osterloh and Frey, 2000). Hence, in order to facilitate subsidiaries have the consensus with a headquarters, managers of MNEs can consider creating integrated rewards linking the benefits of a subsidiary’s manager to the benefits of the whole corporation (Hauser et al., 1994).

7 Research limitations

This study has some limitations, as well as some implications for future work, which should be mentioned here. First, I selected the top 20 container shipping corporations, and collected our sample data between 2007 to 2008, so the results of this research may not be generalised to other industries and times. In addition, the fact that the financial crisis occurred while I was conducting our research may have critical implications worthy
of further exploration. I suggest that in the future, researchers increase the time during which data is collected so that some of this uncertainty may be alleviated.

Secondly, the competitive action data for the top 20 container shipping corporations was collected from *Shipping Digest*. Although this publication makes every effort to gather comprehensive information on the container shipping industry, and is highly regarded by both academics and practitioners, there may still be some defects in their data collection methods. Therefore, future research might include data from a global shipping industry database such as *Containerisation International* for gathering data and news of competitive action, and to provide a complementary data source.

Thirdly, I only used a country risk coefficient for OECD organisations when estimating country risk, when in fact there are still many different country risk coefficients reported by other organisations such as Coface and Euler. Researchers may investigate the differences between them, and develop more complete measurements of country risk in the future. Moreover, utilising qualitative methods such as interviewing executive managers straightaway will allow researchers to better understand the relationship between country risk and MNEs’ interfirm rivalries. Fourthly, based on previous studies, this study applies a complete measurement of multimarket contact (Gimeno and Woo, 1996; Chen and Miller, 2012). However, this measurement has not taken into account the fact that different national markets might differ in importance. When global competitors are aware of certain markets as being of central importance, they will focus on one another’s position in that marketplace, and will also rapidly become aware of competitive actions undertaken in such important markets (Yu et al., 2009).

This may affect the way MNEs undertake actions in different national markets. In the future, other methods of measuring multimarket contact that consider market importance might be used to examine its effects on research result.

Finally, this research investigates the effect of country risk on MNE interfirm rivalry, and proposes that multimarket contact has a moderating effect on this relationship. In fact, some firm-level variables might have an effect on the decisions MNE managers make when they are facing country risk. Such variables might include the heterogeneity of the top management team (Hambrick et al., 1996; Chen and Miller, 2012) and information-processing abilities (Smith et al., 1991). Future research might wish to integrate these variables to study their impacts.

In conclusion, I propose the perspective of multipoint competition to investigate the interaction between national level factors and MNEs’ competitive actions. Our research findings illustrate the contingency of the mutual forbearance hypothesis, and also contribute to the field of international business by including the perspective of competitive dynamics.

References


