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Can Acquirer Creativity Generate Superior M&A Performance? Operationalizing and Measuring Firm Creativity

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강 우 형

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지도교수 박 남 규

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위 원 장 송 재 용 (인)

부위원장 조 승 아 (인)

위 원 박 남 규 (인)

Abstract

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WooHyung Kang
Strategy and International Management
The Graduate School of Business
Seoul National University

This paper investigates the effects of an acquirer's creativity on post-M&A knowledge creation by analyzing the contents of the press releases issued by the acquiring firms. I apply and advance the prior management researches on creativity, integrating fundamental constructs and perspectives of them. The main argument is that creative companies will produce better performance after the M&A than non-creative companies when the industry relatedness between the merging firms is low. My theoretical framework was examined empirically across a sample of 251 M&As for ten years from 2005 to 2014. The results show several notable findings. First, the industry relatedness of acquired firms to their acquirers has no statistically significant influence on

knowledge creation after the M&A. Second, the creativity of the acquiring companies facilitates post-M&A knowledge creation by the targets. Third, the more prominent the differences in the industries of the merging firms, the more noticeable the positive impact of creativity on knowledge creation. These findings indicate that corporate creativity is not only a source of new ideas but also a core resource for dealing with demanding issues such as unrelated mergers and acquisitions.

Keywords: Creativity, Industry Relatedness, Knowledge Creation, Post-M&A Value Creation, M&A Performance, M&A

Student Number: 2018-20817

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Chapter 1. Introduction

What has been missing in previous studies with respect to understanding post-M&A performance? M&A success has long been a key research topic in strategic management (King, Dalton, and Daily, 2004). Many researchers have suggested strategic fit, cultural fit, degree of integration, and the process of acquisitions as major factors influencing the M&A outcomes (Florian and Kurt, 2014). In particular, industry relatedness of acquired firms to their acquirers has been a principal variable among academics and practitioners (Florian and Kurt 2014; Barkema and Schijven, 2008; Birkinshaw, Bresman, and H°akanson, 2000; Larsson and Finkelstein, 1999), while the empirical results on the subject are still inconclusive (Gerbaud and York, 2007).

Some studies have argued that acquirers benefit from pursuing related targets (Uhlenbruck and Castro, 2010; Finkelstein and Haleblian, 2002; Francoeur, 2006; Kayo et al., 2010). Others, however, claim that there exists no significant correlation between acquirers to targets relatedness and post-acquisition performance (Fowler and Schmidt, 1989; Lien and Klein, 2006; Gerbaud and York, 2007) or rather confirm that a negative relationship between them (Andre´ et al., 2004).

One of the reasons for such mixed arguments may result from the fact that prior studies did not contemplate an unexplored variable to discover the hidden dynamics of M&A. Especially, it is important to note that “creativity” has been illustrated as an essential element to innovation and growth of corporates (Shalley and Zhou, 2008; Goncalo and Chatman, 2015). Creativity

refers to generating novel and useful ideas, which in turn can be exploited by a firm to improve its products, processes or context (Woodman, Sawyer and Griffin, 1993; Sarooghi, Libaers, and Burkemper, 2015; Baer, M., 2012; Cirella, Radaelli, and Shani, 2014) Many firms have been striving to capitalize on the creative potential to secure their competitive advantage (Goncalo and Chatman, 2015). McKinsey also highlighted the importance of creativity in business, reporting that highly creative companies showed higher shareholder returns and organic revenue growth (Brodherson, Heller, Perrey, and Remley, 2017).

Despite this attention to creativity, however, traditional M&A literature has not made significant progress in the empirical study regarding the effects of it. Most of the research has been limited to the qualitative methods and thus not provided statistically proven insights into the role of creativity (Kapoor and Lim, 2007). Furthermore, acknowledging that creative outcomes are the result of complex interactions of individuals, teams, and organizational elements, scholars have barely illuminated firm-level creativity by analyzing the components individually.

These theoretical gaps, which were magnified under the increased attention to the creative factors, pose the question of how to quantify corporate creativity. If only micro-level aspects, such as inventors and teams, are considered, it would not be possible to measure the firm-level creativity. Qualitative research for companies such as surveys is also inappropriate because it remains a problem of analyzing past phenomena using the current value of the variable.

This study thus attempted to estimate the company-level creativity, applying the content analysis method. I particularly focused on the function of the corporate press release that has been considered as a crucial mechanism for capturing information related to the firm's competitive resources (Stern and James, 2016; Lassen, 2006). By analyzing the acquirer's press releases before the M&A, I sorted out which of them retained more creativity.

In the empirical setting, I traced M&As that took place from 2005 to 2014. Moreover, focusing on the phenomenon that some of the acquired companies show more active patenting than others after the M&A, I investigated the patent data for four years after the deal to identify post-M&A performance. This approach is a widely accepted way of measuring the corporate performance in previous management literature by which the patenting is regarded as an important tool to protect and create value from their innovations (Ceccagnoli, 2009; Choudhury and Haas, 2018) This method allowed me to operationalize the idea of knowledge creation of the target firms, indicating their post-acquisition performance. I then analyzed the specific manner in which the acquirer's creativity and the target's knowledge creation are intertwined in the context of mergers and acquisitions.

The empirical results from the multi regression model confirm that the importance of creativity accumulated at the acquiring firm. Specifically, the acquirer's creativity positively impacts on their target's knowledge creation after the M&A, while the industry relatedness between the companies participating in the deal has no statistically significant effect on it. Furthermore, in response to the gap in industry relatedness grows, the

companies that owned more creative attributes have derived more knowledge production from the acquired firm. This result means that the positive influence of the acquirer's creativity becomes more prominent as the difficulty of the M&A increases due to the industrial differences. The findings of this paper provide supporting evidence that corporate creativity is not only a source of new ideas but also a core capability for dealing with challenges such as unrelated mergers and acquisitions.

Chapter 2. Theory and Hypothesis

2.1. Industry relatedness and Knowledge creation.

The industry relatedness of acquirers to targets is commonly assumed to have a strong association with post-acquisition performance (King, D. R., Dalton, D. R., 2004), but the empirical literature shows inconsistent results on the subject (Romero Gerbaud, and York, 2007). One of the reasons for such confusion is that prior research has explored dozens of indicators to assess M&A outcomes, e.g., profit, sales, market share, productivity, debt ratios, stock prices, innovation, employee satisfaction, and many other indicators (Das and Kapil, 2012). Zollo and Meier (2008) noted that the stock market and accounting-based measures are the most applied methods in previous literature. However, the details of such measurements are also very different depending on the research questions and the intended answer of the authors (Das and Kapil, 2012). Therefore, before proceeding, I begin by defining which dependent variables are valid in this research.

2.1.1 Knowledge creation There are several papers that consider corporate knowledge creation. According to them, creating knowledge is a process of recombining and converging ideas, and establishing them as intellectual and physical property, such as patents, services, products, or business (Amabile, 1996; Baer, 2012; Nonaka, 1994, Sarooghi, Libaers and Burkemper, 2015). Those intellectual resources, which are hard to duplicate, cultivate a competitive advantage of corporates, and thus strategic management researchers used it as an index to understand the firm performance.

Based on the innovation literature, I attempted to understand the relationship between firm creativity and acquisition performance. In particular, I focused on the fact that both creativity and knowledge are underlying resources to corporate innovation. According to Makri and Hitt (2010), innovation can be divided into a two-step process. The first is to generate new ideas. The second is to apply them as tangible and intangible assets. This view suggests that creativity, which indicates producing unique ideas, belongs to the former, while knowledge creation belongs to the latter. As a result, their work proves that innovation outcomes are unlikely to be achieved without the stage of knowledge creation even if a firm has creative resources (Smith, K, Collins, and Clark, 2005; Makri and Hitt, 2010; Arend, Patel, and Park, 2014) Hence, knowledge factors should be considered primarily as a performance indicator associated with firm creativity.

The M&A literature has also often remarked on the importance of knowledge creation (Cefis and Marsili, 2019) as “the strategic use of acquisitions to acquire new knowledge and capabilities has become a well institutionalized corporate phenomenon” (Meyer, Estrin, and Bhaumik, 2009;

Makri, Hitt, and Lane 2010, Prabhu). In the post-M&A integration process, companies are exposed to new knowledge and environments, which serves as an opportunity for achieving valuable expertise and further for organizational learning to recombine and develop their assets (Ghoshal, 1987; Makri, Hitt, and Lane, 2010). The likelihood of accomplishing M&A success thus widely depends on if the firms effectively utilize the synergy chance (Das and Kapil, 2012). Drawing from this standpoint, the post-acquisition knowledge accumulation will be applied as a main dependent variable in this paper to provide a more complete explanation of acquisition performance in interaction with creativity.

2.1.2 Industry relatedness. Previous studies characterized industry relatedness as the similarity in products, processes, market, and technology between the acquirer and the acquired firm (Seth, 1990; Bettinazzi & Zollo, M., 2017). Knowledge creation can be attained in both related and unrelated M&A (Seth, 1990; Cefis Marsili, 2019). According to the literature that argues the positive impacts of the high industry relatedness, acquiring the target with similar industrial backgrounds are expected to generate more value (Harrison et al., 1991). There are two main sources through which the M&A synergies created from industry relatedness: (a) smooth post-M&A integration (b) improved operating efficiency (Harrison et al., 1991).

When the two companies belong to the identical industry, the acquirer will have a familiarity with the market and the customer of the target firm, reducing the commitment for the managers to learn the new business (Hitt, Harrison, and Ireland, 2001). Given that “acquiring a firm exposes a firm to major challenges in managing the purchased business” (Meyer, Estrin, and

Bhaumik, 2009), the similarity with the target's industry can be a driving force of the M&A success (King, Dalton and Daily, 2004). Moreover, Prahalad and Bettis argued that high relatedness of the industry between the merging firms enables the managers of the acquirer to effectively employ their dominant logic in the business (Cefis and Marsili, 2019). Consequently, the industrial similarity can alleviate the burden of the executives in post-M&A integration, which in turn leads to fast and smooth integration and less turnover of key inventors, and therefore more knowledge creation (Prabhu and Chandy, 2005).

Furthermore, improved operating efficiency from horizontal acquisitions, e.g. economies of scale and scope, are also important sources of value creation (Seth, 1990, Harrison et al., 1991). M&A between related companies can create both economies of scale in the advertising, distribution, service networks, and R&D (Seth, 1990, Cassiman et al., 2005), and economies of scope by sharing of know-how or other intangible assets (Seth, 1990). Those enhanced efficiencies are functional to the creation and the commercialization of knowledge (Cefis and Marsili, 2019) because companies with associated technical backgrounds can enjoy the benefit from eliminating duplicated efforts and improving the operation (Makri et al., 2010, Cefis and Marsili, 2019).

Conversely, there are also papers confirming the fact that un-related acquisition can bring more advantages. They provide two theoretical explanations supporting the positive effects of it. Firstly, "Un-relatedness increases the novelty potential of an acquisition" (Cefis and Marsili, 2019) because companies can make path-breaking changes by accessing new

resources, customers, and business environments that they have not experienced. These distant and idiosyncratic resources are the basis for the recombination of the existing assets, and so provide the opportunity to explore new knowledge outside of their established paths (Harrison et al., 1991; Graebner et al., 2010; Cefis and Marsili, 2019). Cefis and Marsili supported this positive influence of dissimilarity, arguing that "acquisitions in unrelated technological domains, by giving rapid access to novel ideas and knowledge, help firms involved in M&A build their own innovative capabilities" (Cefis and Marsili, 2019).

Moreover, integration with the unrelated target opens new chances to acquire complementary assets that boost knowledge creation (Teece, 1986, Cefis and Marsili, 2019). According to Teece (1986), in industries experiencing rapid technological change, it is difficult for a single firm to create knowledge demanded to gain a competitive advantage through efficient and timely innovation. Thus, the acquirers need to select the target with resources that do not overlap with their existing assets to obtain supplements for new intellectual outcomes.

Existing literature has shown that a high level of industry relatedness can inhibit the knowledge synergy due to the lack of the elements to complement each other. Finkelstein and Haleblian (2002) noted that "The more similar the industrial environment of the acquirer and target, the greater the likelihood that situation similarity will be accentuated". Rind (2001) suggested that the industrial relatedness of the firms can result in overlapping and redundant R&D between them. As a result, acquiring a similar target can cause a less productive knowledge production, confining the firms to their current

environment (Prabhu, Chandy, Ellis, 2005). Therefore, knowledge creation is more likely when industry relatedness gap is high.

Taken together, previous studies about the industry relatedness display the mixed results. However, it is generally accepted that the process of creating knowledge requires unique and path-breaking resources that act as a seed for new ideas. The researchers have also acknowledged that relatedness can hamper value creation due to the redundancy of the resources. (Rind Fleisch and Moorman, 2001; Cloodt, Hagedoorn, and Van Kranenburg, 2006). Therefore, I expect that the more unrelated the industries of the acquirer and the target, the more knowledge creation will occur after M&A.

Hypothesis 1*: The industry relatedness gap between the acquirer and the target will have a positive relationship with knowledge creation after M&A*

2.2 Creativity and Knowledge Creation

Creativity indicates generating novel and useful ideas that can be exploited by a firm to improve its products, processes or context to sustain a competitive advantage (Woodman, Sawyer, and Griffin, 1993; Sarooghi, Libaers, and Burkemper, 2015; Baer, M. 2012; Cirella, Radaelli, and Shani, 2014). On the other hand, knowledge creation is the process of the recombination and conversion of the created ideas. By the cyclical process of these two, companies can innovate their old system and thereby gain a foothold for growth. (Sarooghi, Libaers, and Burkemper, 2015; Anderson 2014; Baer, 2012).

2.2.1 Creativity from an Integrated perspective

Existing studies have analyzed the creativity at three levels: individual, team(group), and organization, among which individual-level creativity has been primarily focused (Shalley, Gilson, and Blum 2009; Borghini, 2005). However, I propose that creativity should be demonstrated from a firm-level viewpoint to capture its effects in association with corporate performance.

According to Woodman's study (1993), individual creativity, which indicates how new ideas are generated by a person, is "a function of antecedent conditions (e.g., past reinforcement history, biographical variables), cognitive style and ability (e.g., divergent thinking, ideational fluency), personality factors (e.g., self-esteem, locus of control), relevant knowledge, and motivation". Furthermore, Woodman (1993) and Anderson (2014) highlighted the importance of contextual environments, suggesting that social influences (e.g., social facilitation, social rewards), and contingent factors (e.g., physical environment, task, and time constraints) are also determinants of the individual creativity. This means that even highly creative people may or may not be creative, depending on the circumstances, atmosphere, colleagues, and institutions surrounding them.

Secondly, team-level creativity is a construct indicating how a group brings about creative outcomes. A common misconception about it is that the creative capability of the team just comes forms the simple aggregate of all group members' creativity (Woodman, Sawyer, & Griffin, 1993). However, the team creativity cannot be properly illustrated without the understanding of the complex function of organizational factors such as "group

compositions (e.g., diversity), group characteristics (e.g., cohesiveness, group size), group processes (e.g., problem-solving strategies, social information processes), and contextual influences" (Woodman, Sawyer, & Griffin, 1993).

For example, in group problem-solving systems, new ideas derived from an individual are evaluated by the group's beliefs, norms, and decision-making techniques, determining what the team thinks of the creative solutions (Woodman, Sawyer, & Griffin, 1993). These outcomes are again affected by the attributes of the organization to which the team belongs, e.g., whether the interactions with other groups are vertical or horizontal, how rewards for the solutions are made, and how resources are allocated (Hackman and Morris, 1975). Therefore, team-level creativity is not just the features of the team, but it is a process that individual creative behavior is mediated through the group in interaction with organizational creativity (Woodman, Sawyer, & Griffin, 1993).

Thirdly, regarding the organization-level creativity, management literature has verified various stimulants and obstacles to it (DiLiello, Houghton, and Dawley, 2011). According to DiLiello (2011), "Environmental stimulants to creativity include autonomy, good project management, sufficient resources, mechanisms for considering new ideas, a recognition that failures can provide valuable information, appropriate rewards, constructive feedback, and collaboration". On the other hand, "lack of cooperation, constraint, inappropriate or inequitable evaluation, and feedback systems, insufficient resources, and unhealthy competition that fosters a self-defensive attitude have all been identified as obstacles to creativity" (Amabile, 1988). These analyses show that the components of the organization-level creativity

include an array of individual and group elements such as team cultures and personal cognitions (Weinzimmer, Michel, and Franczak, 2011; Woodman, Sawyer, & Griffin, 1993). Thus, it is confirmed again that creativity is an integrated concept encompassing all factors of the individual, team, and organization (Garfield et al., 2001; Macht and Nembhard, 2015).

In this paper, I operationalize the notion of firm-level creativity to illuminate the role of it from a holistic perspective. Since the construct of "firm" includes culturally accumulated technical and social systems, the collective cognitive systems and, at the same time, particular contexts for the cognition of those who work in it (Weinzimmer, Michel, and Franczak, 2011; Borghini 2005), the "firm-creativity" can be an appropriate term representing the comprehensive features of creativity. Based on this approach, therefore, I attempt to study the statistical effects of corporate creativity that has not been well addressed in prior studies.

2.2.2 The relationship between firm creativity and knowledge creation.

The creative capability of a company is an embedded resource facilitating the production of intellectual assets (Amabile et al., 1996; Baer, 2012; Sarooghi, Libaers, and Burkemper, 2015). The knowledge production, on the other hand, is a process of idea recombination or reconfiguring existing combinations in a creative manner (Radaelli, G and Shani, 2014; Ghoshal, 1987; Hitt et al.,1996). Thus, such mechanism requires creative individuals, creativity-relevant group processes, that values divergent thinking, and an

organizational environment promoting individual- and team- perceptions of support for creativity (Borghini, S. 2005; Von Nordenflycht, 2007; Diliello, Houghton, and Dawley, 2011). Given that the formation of creativity largely depends on whether these prerequisites are met, creative firms are more likely to suit these requirements and so retain more resources for knowledge creation than non-creative firms.

Management studies have pointed out creative individuals are the very first origin of every creative idea (Amabile, 1983; Mannucci and Yong, 2018). In particular, Mannucci (2018) argued that creative employees possess the complexity and flexibility of intellectual schemas, which are cognitive structures that "influence the way events are understood, what is attended to in problem-solving, and how complex situations are processed" (Perry-Smith and Shalley, 2014). Having a complex knowledge structure implies that the individual has access to richer intellectual sources, which are the basis for a wide range of possible recombination to foster new and useful ideas. At the same time, the knowledge flexibility brings about weaker linkages to the existing cognitive paradigms, reinforcing the reorganization of established schemas (Mannucci and Yong, 2018). Non-creative individuals, on the other hand, are highly rigid in their thinking and thus lack the competency to reconstruct new ideas (Mannucci and Yong, 2018; De Dreu, 2008). Hence, firms that are considered creative are likely to have more employees with flexible and intricated knowledge structures (Gallupe, Bastianutti, & Cooper, 1991; Von Nordenflycht, 2007; Shin, Kim, Lee, & Bian, 2012; Harvey, 2014)

Secondly, creative firms will "have diverse social resources based on group composition and interaction" (Harvey, S. 2014). Woodman (1996) outlined

some of the group's characteristics that lead to creative output. In terms of leadership, democratic and cooperative team leaders can embrace diverse opinions and thus encourage members to create ideas that are out of their existing paths. Regarding the decision-making processes, the organic structure that changes malleably to the situation is analyzed enhancing the member's creativity compared to the adamant systems. Woodman (1996) and many other researchers also asserted the importance of diverse team compositions, noting that "team heterogeneity in terms of function, profession, education, tenure, knowledge, skills, or expertise has been shown to be helpful for idea generation because these attributes bring to bear diverse perspectives and knowledge sets and also trigger communication with members outside of the team" (Sarooghi and Libaers, 2015; Perry-Smith, 2006; Perry-Smith and Shalley, 2003). Besides, applying a proper compensation system rewarding productive members can increase the likelihood of creative outputs because it motivates them to advance their careers (Von Nordenflycht, 2007).

Lastly, corporate creativity is closely related to the environmental resources of an organization that support a random variation of ideas and provide critical boundary conditions for the synthesis of unrelated concepts (Harvey, 2014). The organizational environments are the major mechanism that determines whether diverse individuals with diverse ideas coexist or clash with each other. A company where members are equal in power and status promotes their willingness to voice other opinions without fear of being ridiculed or ostracized (Harvey, 2014). Conversely, members in vertical organizations will not deviate from established rules and so only generate a

solution that their managers would like. Previous studies also pointed out that the organization systems that "allow or enable employees to break the rules may be more creative" (Baucus and Norton, 2008; Winslow and Solomon, 1993). For example, a human resource department that introduced a protocol to hire employees who deliberately reject existing norms give a chance the firm to utilize the newly appointed members as the facilitators who "initiate different solutions to problems and raise questions about why the organization operates as it does" (Baucus and Norton, 2008), leading to the increase of creativity.

In sum, prior management literature has proposed dozens of factors that can be found in the creative companies (DiLiello, Houghton, and Dawley, 2011; He and Wong, 2004; Amabile, Conti, and Coon, 1996). I posit based on the literature so far that creative corporates have more resources to facilitate knowledge creation than non-creative companies.

2.2.3 The role of Acquirer's creativity.

There are several challenges suggested by the management scholars regarding value creation in post-acquisition integration (Haspeslagh and Jemison 1991). Hambrick (2006) particularly specified two significant hurdles that occur in M&A: social and task environmental disruption. The former is caused by the target's feelings of relative deprivation, inferiority, and loss due to the implicit or explicit hierarchy between the acquirer and the acquired firm. The latter is caused by incompatible corporate culture, different information processing structure, differences in human resources

policies, and national culture (Paruchuri, Nerkar, and Hambrick 2006). Since these disruptions can adversely affect value creation after M&A, how the acquiring firm handles the problems will determine the success of the deal.

Especially, it should be noted that the acquirer's characteristics act as the dominant criterion that affects the form of the combined organization after the integration because the target company is required to adapt to the procedures, routines, and cultures of it (Jemison and Sitkin 1986; Paruchuri, Nerkar, and Hambrick 2006; Haspeslagh and Jemison 1991). Prior studies have proposed numerous aspects that characterize the acquiring firm such as M&A experience, knowledgebase (patents), relative size (financially, organizationally), decision-making structure, nationality, and CEO (Larsson, & Finkelstein 1999; Jemison and Sitkin 1986), yet the creativity related features have been poorly reviewed in M&A research.

According to innovation literature, technical personnel, who is a pivot of knowledge production, are the group that highly relies on an intricate organizational and social context for executing their routines. Considering that corporate creativity represents a collection of firm environments (Paruchuri, Nerkar, and Hambrick 2006), the creativity-related characteristics can have a great influence on inventors and developers.

In particular, "the inventors who experience disproportionate disruption including those who had the highest social standing and centrality, those whose expertise is peripheral to the acquirer, and those who were most socially connected in collaborative relationships in their pre-acquisition companies" are more at risk of disruption because the acquirer seeks to eliminate redundant resources (Hambrick 2006). However, those inventors

are the crucial members with in-depth knowledge about the target firm, abundant external networks, and peripheral knowledge that produce novel ideas. Thus, if the acquirer lacks the foundations to embrace those members who are vulnerable to the changes in social and work environments, knowledge creation becomes even more complicated.

Consequently, the acquirer's creativity is a primary determinant that significantly impacts on the position of the knowledge workers. If the inventors leave or their activities are negatively affected by the poor creative environment of the acquirer in the integration, knowledge synergy between the target and the buyer is unlikely. Even if the inventors remain, knowledge creation is also less likely to occur if the acquirer does not have practices that respect their path-breaking attempts and divergent thinking. Thus, I expect that the more creative the acquirer is, the more knowledge creation will occur after M&A. The second hypothesis is

Hypothesis 2*: The creativity of an acquirer will have a positive relationship with knowledge creation after M&A*

2.3 The moderating role of Creativity

Creativity has been mainly described in terms of idea production, but one of its main functions, which often overlooked in previous studies, is to enhance problem-solving skills (Catmull, 2008; Quinn, 2005). According to Catmull (2008), "creativity involves a large number of people from different disciplines working effectively together to solve a great many problems."

Perry-Smith (2014) also noted that creativity maximizes the benefits of contradictory environments while minimizing the cost of workplace conflict (Perry-Smith and Shalley, 2014). These facts suggest that the creative ability of the acquiring company positively influences the performance of the demanding M&A.

The post-M&A integration process involves "potential problems originate from differences between the cultures, attitudes, and knowledge bases of the acquirer's and target's workforce" (Bettinazzi and Zollo, 2017). Such challenges can be exacerbated if the industries of the merging companies are different because the low level of industry relatedness does not simply mean producing different products or services, but rather indicates the differences in developed routines, dominant logic, business tools, orientations, and characteristics of employees (Short and Ketchen, 2007; Bettinazzi and Zollo, 2017).

Some studies, meanwhile, have proposed that industrial dissimilarity of acquired firms to their acquirers can be a source of novelty and variation, even though it causes several challenges to the integration (Cefis and Marsili, 2019; Graebner and Eisenhardt, 2010). They argue that mergers and acquisitions promote the transformation of existing organizations into a new form by rearranging individuals and teams with the target firm (Kauppila, Bizzi, and Obstfeld, 2018). This process can generate new synergy among unconnected entities, promoting the possibility of knowledge creation. Therefore, the capability for dealing with the problems arising from the post-acquisition integration can be a decisive factor for M&A success (Bauer and Matzler, 2014; Birkinshaw and Bresman, 2000).

Creativity-driven companies strive to keep their workers constantly exposed to complex and different challenges and further to come up with new ways that deviate from their traditional paths (Perry-Smith and Shalley, 2014; Harvey, S. 2014; López and Meroño, 2011). This experience reinforces the capacity of devising solutions, mitigating the confusion resulting from an abrupt change (Amabile et al., 1996). Furthermore, the environment that respects diverse ideas yields a mutually respectful relationship between the unconnected members of merging companies (Kauppila, Bizzi, and Obstfeld, 2018; Perry-Smith, 2006). This positive attitude towards the recombination with unknown people contributes to mutual understanding by enabling "the ongoing sharing and extension of complex, tacit, and confidential knowledge over time" (Kauppila, Bizzi, and Obstfeld, 2018).

Taken together, the creativity of the acquirer can ease the adverse conditions of the low industry relatedness in the integration process. Moreover, as noted earlier, creativity promotes the creation of knowledge by target companies. Thus, I hypothesize the positive relationship between industry relatedness gaps and knowledge creation is further strengthened by the acquirers' creativity.

Hypothesis 3*: The positive relationship between the industry relatedness gap and knowledge creation will be positively moderated by the creativity of an acquirer.*

Chapter 3. Method

3.1 Sample

I used the SDC platinum database for data collection and identified 965 M&A deals between 2005 and 2014 made by the top 150 companies on the "2014 Forbes 2000" list. "These M&A events refer to the merging of two more or less equal companies, as well as to acquisitions where one company obtains majority ownership over another company" (Cloodt, Hagedoorn, and Van Kranenburg, 2006). The period (2005 to 20014) was set to collect as much data as possible while tracking four years of patent activity by the target firms before and after the deals. Also, I only included companies with records of owning or filing at least one patent in the four years to identify the impact of the knowledge base of the merging firms. This approach is a well-applied method in existing innovation research (Ahuja and Katila, 2001, Cloodt, Hagedoorn, and Van Kranenburg, 2006). The final cross-sectional data size for the regression analysis is 251.

3.2 Measurement and Data Sources

3.2.1 Independent Variable

The creativity of an acquirer. I employed the content analysis method to estimate the creativity of an acquiring firm, which is the main independent variable and the moderator of this study. "Content analysis is a research technique for making replicable and valid inferences from texts to the contexts of their use" (Krippendorff, 2004). The underlying principles of it

are that “a text can be classified into many fewer content categories, where each category consists of one or many similar words, and the occurrence of a word can be counted and the counts compared analytically” (Kothari and Short, 2009).

The media materials have been widely used as a data for content research in the field of information and communication science, whose use is expanding as a means to understand the phenomena of politics, economy, and management (Krippendorff, K. 2013, White and Marsh, 2006). According to White (2006), appropriate data for it must meet the following two requirements. Firstly, the contents should provide useful information for answering research questions and testing hypotheses, and secondly, the text must be written for communication purposes. Press releases are the materials that satisfy these criteria (Krippendorff, K. 2013; Riff, Lacy, and Fico 2005), involving the active delivery of messages from a sender to a receiver.

Press releases are short pieces of writing issued by companies or institutions “to communicate newsworthy information to the journalist community on the one hand, and to the general public (indirectly through newspaper reporting, or, increasingly, directly by making press releases available on corporate websites) on the other” (Catenaccio, 2008). Genre analysts demonstrated that they display the features of hybrid genres that contain a typical mix of informative and promotional purposes (Lassen 2006, Catenaccio 2008). In other words, a firm’s press release consists of fact-based information and the promotional statement that reflects the intent of the corporate. Catenaccio's study (2008) also explained that “while ostensibly informative, press releases also carry an implicitly self-promotional purpose, in so far as the information

they contain comes from a source internal to the organization which is the object of the release itself."

Furthermore, press release, which is a pre-formulating device for news, is a text with fewer modifications than any other media materials (Lassen, 2006). Newspapers or newsmagazines inevitably include additional editing to the initial contents by reporters and press. This process produces information that is different from facts and so hinders the analysis. Accordingly, I utilize press releases as the main data source of this study.

I collected data on creativity from the Nexis Uni database that provides articles and press releases of the world-leading newspapers, magazines, and media. Firstly, I counted all press releases where the name of the firm appeared in the title or the content two years preceding to the M&A. By narrowing the scope of the search to business news, I excluded data irrelevant to corporate management. The number of articles of the press releases and newspapers mentioned the exact names of the 251 acquiring firms were 3,129,052 and 3,638,766, respectively. Of those, only the articles containing the words "creativity" and "creative" at the same time were considered to represent the acquirer's creativity. Since a creativity dictionary for content analysis has a strong tendency to overlap with an innovation-relevant one, I coded only these two words as the indicator of creativity to reduces the unnecessary effects. For the robustness check, the word "novel" is used in the extra test because it is one of the most mentioned words in the dictionary on creativity and innovation.

This descriptive content analysis is the simplest way of content research

analyzing "the attribution of the incidence of an event as indicated by the mention of the event" (Abbott and Monsen, 1979). Each article is assigned a score of zero or one depending on whether it has the words or not, "indicating the absence or presence of the attribute under analysis" (Abbott and Monsen, 1979). The drawback of this approach is a high possibility of omitting complex contextual meanings, hampering the understanding of whether the words were used negatively or positively (Riff 2006: 189). Thus, this measurement can only be justified when the frequency or existence of the words can be related to what a body of text means in the chosen context (Riff 2006: 171).

Press releases are the material that has a strong promotional purpose. Therefore, they generally convey positive arguments regarding the variables, which enables abductive inference of the context from the mention of the word. The data shows that the companies which are considered very creative in the literature, such as Apple, Microsoft, IBM, and Walt Disney, have a high frequency of the mention of the word "creativity" and "creative" in their press releases. It means that the reasoning from the descriptive content analysis provides legitimate grounds for measuring the features of the firms. The empirical results also support the validity of this estimation, showing the consistency regardless of the media types or the applied words. Hence, I conducted statistical procedures based on the counting-based content analysis and further attempted to find the implications of the creativity of the firms.

Industry Relatedness Gap. The M&A literature commonly employs either the SIC system or the FTC's merger classification to estimate the industry relatedness between companies (Valentini, G. 2012; Cefis, Marsili, and

Rigamonti, 2015). Following its method, I measured the level of industry relatedness by calculating the number of the exact matching between the four-digit SIC codes of the acquirer and the target.

Specifically, if the two firms share the same primary four-digit SIC codes, a value of 4 is assigned; if they share the same primary 3-digit codes, a value of 3 is assigned; and if they share the same primary two-digit codes, a value of 2 was assigned, if they only share the first digit, a value of 1 was assigned. Lastly, if they are different from each other, a value of 0 was assigned.

To reduce confusion in understanding the moderator effects of creativity caused by mixed directions of coefficients, I use the term "industry relatedness gap" as an independent variable rather than industry relatedness. Accordingly, the calculated relatedness numbers were changed to negative indicating "the relatedness gap". The coefficients and the P-value of the results of the two ways are the same, and only the signs of the coefficients are different from each other.

3.2.2 Dependent variable.

Knowledge Creation I investigated the post-acquisition patents issued by the target companies to measure knowledge creation, which is the dependent variable of this research. Only "granted patents" owned or submitted by the acquired firm for four years following the M&A were regarded as post-acquisition knowledge creation (Kapoor and Lim, 2007). The time horizon was set to track long-term performance after the announcement. I used the LENS ORG database that provides patent information not only registered in

the USPTO (The united states patent and trademark office), but also in the WIPO (World intellectual property organization) and the EPO (Europe patent office). Considering that there are considerable overlaps among those organizations, only the data from the USPTO was utilized. Duplicates were removed from the list by the database's own functionality ensuring that a patent appears only once.

3.3.3 Control

I controlled for several factors that could affect the results. **(1)** First, in previous M&A researches, cultural distance has been described as a negative factor in post-M&A value creation (Cloodt, Hagedoorn, and Van 2006). Thus, I used the modified Hofstede index suggested by Kogut and Singh to control for the effects of the cultural distance between the acquirer and the target.

(2) Furthermore, because the amount of media attention can have a correlation with the frequency of the creativity-related words, I included the total number of press releases and newspapers of each acquirer. **(3)** I also controlled for the value of the acquired firms by estimating the deal price of them, which implies their level of technology, sales, and assets. (4) The number of bidders can influence the acquisition process, so I included it using the SDC platinum database (Paruchuri, Nerkar, and Hambrick, 2006) (5) M&A Attitude is a factor that could be expected to adversely impact on the post-acquisition integration. Thus, I introduced dummies for friendly, neutral, and hostile to control for the attitude factor.

Regarding the features of the firms participating in the M&A, (6) I collected the number of patents owned or filed by them for four years before the deal

to measure the amount of knowledge base. Since patenting experience can have a positive effect on knowledge creation after the M&A, I included it to the control variable. (7) Also, given that the patent activity may vary depending on the industry, the industry of the firms is also controlled based on the SIC code.

(8) Cloodt (2006) noted that the number of patents could increase in accordance with the firm size. Sarooghi (2015) also mentioned that “large firms typically have the resources to effectively perform activities related to idea generation and idea implementation”. Thus, to control for these additional influences, I collected the number of acquirer’s employees to measure their size. (Paruchuri, Nerkar, and Hambrick 2006). (9) The age of the acquiring firms is also included because it can represent the level of the company's management know-how and business capabilities.

Chapter 4. Results

Table 1 presents descriptive statistics and correlations among variables (without the factor variables). Table 2 displays the results of the multivariate regression analysis in which the first three models are the main research models of this study.

Model 1 contains only control variables, with several findings. The knowledge base of the target had a positive and statistically significant influence on knowledge creation after the acquisition, but the acquirer's knowledge base did not show a significant effect. The industries of the acquirer and the target also did not have a meaningful relationship with the dependent variable.

Model 2 adds the main independent variables: industry relatedness gap and creativity inferred from press releases. Contrary to prediction in Hypothesis 1, Industry relatedness gap had no significant effect on knowledge creation. On the other hand, the acquirer's creativity was positively related to the likelihood of the target's knowledge creation after the M&A, which supports Hypothesis 2.

Model 3 is the full model reporting the effect of the interaction terms. Industry relatedness gap still did not show statistical significance. In contrast, both the coefficients (0.71) and p-value (<0.001) of the creativity variables notably increased, yielding stronger support for hypothesis 2 than model 2. The moderating effect of the acquirer's creativity was significantly positive (coefficients 0.19, p-value 0.001), which means creative firms generated better post-acquisition knowledge creation than non-creative firms in the context of the unrelated M&A (supporting Hypothesis 3).

Table 1. Correlation

Variable	Obs	Mean	Std. Dev.	Knowledge Creation	Industry Relatedness Gap	Acquirer Creativity	Total Press Release	Total Newspaper	Target Knowledge Base	Acquirer Knowledge Base	Acquirer Size	Acquirer Age	Cultural Distance	Deal Value
Knowledge Creation	251	38.9761	116.4416	1.0000										
Industry Relatedness Gap	251	-1.828685	1.665693	0.0145	1.0000									
Acquirer Creativity	251	39.90837	71.79585	0.1528*	0.0915	1.0000								
Total Press Release	251	18230.21	17973.53	0.0701	0.0846	0.8348*	1.0000							
Total Newspaper	251	18933.76	27257.24	0.1095	0.0751	0.8354*	0.8269*	1.0000						
Target Knowledge Base	251	2.411365	1.673407	0.6398*	0.0865	0.1003	0.0326	0.0652	1.0000					
Acquirer Knowledge Base	251	6.138004	2.558855	0.1682*	0.1279*	0.2889*	0.3869*	0.2730*	0.2801*	1.0000				
Acquirer Size	251	143395	113642.5	0.0264	0.2946*	0.0163	0.1336*	0.0622	0.1152	0.1238	1.0000			
Acquirer Age	251	68.26693	52.44018	0.0439	0.1031	-0.1033	-0.0828	-0.0506	0.0535 -	0.1367*	0.3353*	1.0000		
Cultural Distance	251	.3644701	.8781444	-0.0898	-0.1122	-0.0057	-0.0315	-0.0207	-0.1502*	-0.1511*	-0.0485	-0.0155	1.0000	
Deal Value	251	4683.329	12753.62	0.2445*	-0.0597	-0.0259	-0.0472	0.0135	0.3353*	-0.0562	-0.0376	-0.0000	-0.0874	1.0000

* $p<0.05$

Table 2. Multivariate Analysis of Post-M&A Knowledge Creation of Acquired Firm

Model	(1)	(2)	Main (3)	(4)	(5)	(6)
	Control	Independent Variables	Interaction Creativity Press Release	Interaction Creativity Newspaper	Interaction Novel Press Release	Interaction Novel Newspaper
Industry Relatedness Gap		0.618	-7.444	-9.720+	-3.548	-8.951
		(4.973)	(5.435)	(5.380)	(5.389)	(5.669)
Creativity Press Release		0.383*	0.716***			
		(0.190)	(0.211)			
Interaction Creativity_P X Unrelatedness			0.190**			
			(0.0574)			
Creativity Newspapers				0.579***		
				(0.161)		
Interaction Creativity_N X Unrelatedness				0.201***		
				(0.0511)		
Creativity Using Word Novel in Press Release					0.00494	
					(0.0246)	
Interaction Novel P X Unrelatedness					0.0164*	
					(0.00820)	
Creativity Using Word Novel in Newspaper						-0.0121
						(0.0280)
Interaction Novel_N X Unrelatedness						0.0697***
						(0.0173)
Cultural Distance	-0.469	-1.317	-3.383	-4.232	-1.757	-2.920
	(7.272)	(7.310)	(7.173)	(7.083)	(7.283)	(7.152)
Total Press Release	0.000440	0.000333	0.000627	0.00158*	0.000854	0.000631
	(0.000777)	(0.000865)	(0.000894)	(0.000786)	(0.000783)	(0.000810)
Total Newspaper	-0.0000263	-0.000475	-0.00108*	-0.00189*	-0.000176	0.000963
	(0.000430)	(0.000480)	(0.000504)	(0.000749)	(0.000432)	(0.000696)
Deal Value	0.0000153	0.0000537	0.0000732	0.000110	0.0000827	0.000274
	(0.000552)	(0.000551)	(0.000539)	(0.000531)	(0.000550)	(0.000541)
Number of Bidders: 1	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)
Number of Bidders: 2	7.866	9.784	0.0554	-0.456	16.26	0.867
	(37.50)	(37.48)	(36.76)	(36.26)	(37.34)	(36.62)
Attitude Friendly	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)
Attitude	-13.80	-15.33	-16.37	-15.61	-9.915	-11.36

Neutral	(39.38)	(39.19)	(38.31)	(37.80)	(39.08)	(38.23)
Attitude Hostile	-14.43	-9.209	-9.158	-13.62	-8.808	-12.54
	(74.01)	(73.74)	(72.08)	(71.09)	(73.29)	(71.93)
< Target Firm >						
Target Knowledge Base	42.75***	41.00***	40.09***	39.77***	42.85***	42.29***
	(4.422)	(4.486)	(4.394)	(4.327)	(4.386)	(4.346)
Industry	0	0	0	0	0	0
1. Agriculture, Forestry, And Fishing	(.)	(.)	(.)	(.)	(.)	(.)
2. Mining and Construction	-68.16	-68.49	-82.78	-88.94+	-36.98	-63.95
	(51.48)	(52.43)	(51.44)	(50.81)	(52.97)	(51.28)
3. Manufacturing	-44.11	-38.75	-42.76	-42.42	-40.05	-45.88
	(53.43)	(53.25)	(52.07)	(51.36)	(54.03)	(51.90)
4. Transportation, Communications, Electric, Gas, And Sanitary Services	-57.96	-49.92	-44.21	-40.10	-52.94	-48.77
	(62.49)	(62.43)	(61.05)	(60.24)	(62.37)	(61.32)
5. Wholesale and Retail Trade	-66.37	-64.52	-62.08	-52.97	-56.28	-64.38
	(66.83)	(66.65)	(65.16)	(64.39)	(67.23)	(65.11)
6. Finance, Insurance, And Real Estate	-48.42	-43.71	-64.73	-76.50	-43.08	-66.95
	(61.05)	(61.66)	(60.60)	(59.90)	(62.23)	(60.96)
7. Hotels and Business Services	-89.91	-93.47+	-100.6+	-96.71+	-83.64	-79.85
	(54.59)	(54.46)	(53.28)	(52.55)	(55.45)	(53.21)
8. Medical Services	-96.92	-93.52	-85.12	-84.03	-90.02	-89.00
	(62.08)	(61.98)	(60.64)	(59.81)	(63.19)	(60.50)
< Acquirer >						
Acquirer Knowledge Base	2.800	3.397	5.459	6.713	2.403	3.550
	(4.302)	(4.302)	(4.251)	(4.235)	(4.275)	(4.233)
Acquirer Size	-0.0000365	-0.0000179	-0.0000112	-0.00000272	-0.0000350	-0.0000641
	(0.0000689)	(0.0000692)	(0.0000676)	(0.0000675)	(0.0000682)	(0.0000686)
Acquirer Age	0.0902	0.0776	0.0876	0.0856	0.0212	0.0872
	(0.133)	(0.132)	(0.129)	(0.128)	(0.134)	(0.130)
Industry	0	0	0	0	0	0
1. Agriculture, Forestry, And Fishing	(.)	(.)	(.)	(.)	(.)	(.)
2. Mining and Construction	49.62	50.98	60.78	63.91	51.97	53.38
	(58.02)	(58.37)	(57.13)	(56.41)	(58.01)	(56.99)
3. Manufacturing	30.43	29.53	26.93	23.68	24.72	34.73
	(63.11)	(63.05)	(61.64)	(60.81)	(64.51)	(61.53)
4. Transportation, Communications, Electric, Gas, And Sanitary Services	43.76	34.16	30.20	29.03	33.60	41.87
	(69.49)	(69.46)	(67.91)	(66.94)	(69.48)	(68.49)
5. Wholesale and Retail Trade	102.6	91.72	116.4	122.9	93.32	122.8
	(85.88)	(86.57)	(84.95)	(83.70)	(87.74)	(84.67)

6. Finance, Insurance, And Real Estate	48.88	50.09	76.42	88.05	42.48	64.59
	(68.31)	(69.23)	(68.14)	(67.37)	(69.70)	(68.48)
7. Hotels and Business Services	61.52	59.36	67.47	63.26	52.76	93.13
	(65.30)	(65.31)	(63.89)	(63.26)	(66.80)	(64.47)
_cons	-67.75	-61.10	-92.81+	-103.2*	-68.65	-94.05+
	(47.25)	(49.26)	(49.09)	(48.32)	(49.09)	(49.02)
N	251	251	251	251	251	251
r2	0.463	0.473	0.499	0.512	0.482	0.501
F	6.718	6.426	6.884	7.291	6.406	6.943
ll	-1471.8	-1469.4	-1463.1	-1459.7	-1467.2	-1462.6

Standard errors in parentheses + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Figure 1 Predicted Line without Interaction Effects

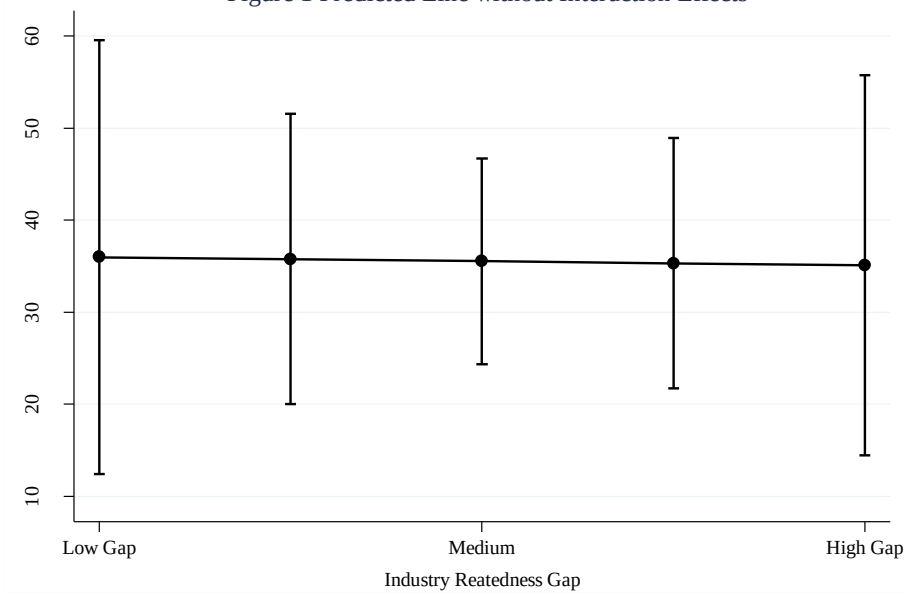
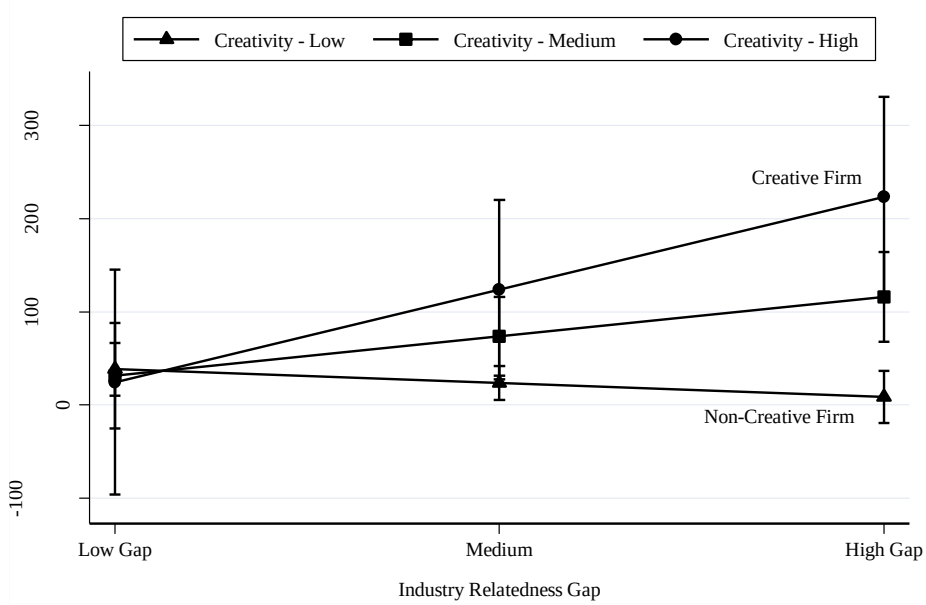


Figure 2 Interaction Effects of Creativity



Figures 1 and 2 show the different predicted lines of knowledge creation with and without the interaction term, respectively. It is clearly confirmed again in figure 1 that the effect of industry relatedness gap without interaction effects is not statistically important. The horizontal line of figure 1 is drawn near 38, which means the average number of the patents made by the targets

after the M&A is 38 regardless of the level of the acquirer's creativity. The second graph with interaction effects, on the other hand, illustrates the varied aspects of knowledge creation. The creativity effect was not statistically meaningful when the gap of industry relatedness is low, but creative firms produce more and more knowledge when the industry relatedness gap becomes high.

The results of the regression diagnostics for Model 3 are as follows. Except for the factor variables that cause the inaccuracy of the Variance Inflation Factor (VIF) test, the mean VIF index was about 2.49 and the index of each variable was less than 10, indicating no multicollinearity issue (The VIF values of the continuous variables, including the factor variables, are also less than 10). Also, according to the Dublin Watson test for diagnosing autocorrelation, the number of Model 3 was 1.89, indicating no autocorrelation problem.

Model 4 tests creativity inferred from the newspapers. This analysis was conducted to confirm whether the consistency of the results is maintained even when the variable is inferred from other media sources. According to the table, Model 4 shows consistent outcomes with the main model, supporting hypotheses 2 and 3.

Models 5 and 6 use the word "novel" instead of "creativity" and "creative" to infer the creativity. The novel is a frequently mentioned word in the existing literature to explain the definition of creativity. In both models, the effects of the acquirer's creativity were not statistically significant; only the interaction effect was positively associated with the post-M&A patent activity. The coefficients of the interaction term in both models are considerably lower than

the model 3 and 4, indicating that the impacts of creativity measured by the word “novel” are relatively weak.

Chapter 5. Discussion and Conclusions

The empirical results generally support the main arguments proposed based on the resource-based view of creativity across all research models, revealing several notable findings. First, concerning the post-M&A innovation performance, this paper shows that the industries of the merging firms are not a determinant factor. Innovation, which is a primary indicator of M&A success, has been generally measured by the number of newly created patents and the number of citations or applications of them (Das and Kapil 2012). By estimating the dependent variable of this study from the quantity-based patent analysis, I throw a question at some of the previous studies claiming that industrial differences are the driving force behind innovation achievement.

Furthermore, in a business environment where the strategic use of M&As to acquire new knowledge increases, it is confirmed that the industrial elements of the firms no longer guarantee whether new knowledge is generated or not. Thus, the relatedness of the industry itself cannot be a sufficient explanatory variable when interpreting complex modern business phenomena and thus the effects must be illustrated in the interaction with other management elements.

Second, this paper shows the possible way of measuring firm-level creativity. Prior research has emphasized the understanding of creativity in an integrated view, but the empirical evidence on it has been limited due to methodological

obstacles. This study, therefore, attempted to utilize the content analysis by focusing on the fact that issuing press releases reflects the firms' intention to promote their internal information and resources. This approach contributes to extend the scope of the methodology of creativity literature that extensively relied on a qualitative way.

Also, depending on which words were applied in the measurement, my statistical results regarding the impact of the buyer's creativity show different outcomes. In Models 3 and 4 using the words directly related to creativity (creative and creativity), the influence of it on knowledge creation is significantly positive. When using the indirect word (novel), on the other hand, the statistical significance of the effect is not confirmed. Given that "novel" is the common word that explains other terms such as innovation, exploration, and product development, the results of Models 3 and 4 are expected to be more reliable. Therefore, I posit that when analyzing content about creativity, it is necessary to code the words that do not indicate other notions into the operationalized terms to exclude texts irrelevant to the variable.

Third, this research complements the prior creativity studies by providing statistical evidence of two primary roles of creativity in M&A. Facilitating idea implementation and problem-solving processes are the benefits attained from creative resources (Catmull, 2008; Quinn, 2005; Perry-Smith and Shalley, 2014). Previous literature has attempted to find those effects with the basic elements such as individuals, teams, and organizations, yet the results are mostly restricted to the survey-based analysis and small sample size. To my knowledge, this is the first empirical attempt to consider how the acquirer's creativity affects the knowledge creation of the target firm in the

context of mergers and acquisitions.

The significant association between creativity and knowledge creation identified in this paper supports the positive impacts of firm creativity on idea implementation. By tracing four years of patenting activity of the acquired companies, I illuminated the occurrence of a conversion process from the creative resources to appropriate intellectual properties. Furthermore, Figure 2, which graphically depicts the interaction effects, shows that the more prominent the dissimilarity in industries, the more noticeable the positive impact of creativity on knowledge creation. This result suggests that creative companies are better at dealing with demanding situations like the integration between the different businesses.

Lastly, this study provides practical implications for target choices in M&A. The hidden dynamics found in the interaction model reveal that creative acquirers enjoy more opportunities for knowledge creation when they select targets that belong to different industries. Interestingly, the predicted line of interaction effects shown in Figure 2 indicates that the level of creativity did not have a notable influence in the case of low industry relatedness. However, the effects on knowledge creation become greater in response to the gap of industries between the companies increases. These outcomes demonstrate that creative acquirers who possess more problem-solving resources can take full advantage of the novelty arising from non-overlapping business environments and high complexity. Therefore, in the process of the M&A target choice, acquiring managers should first evaluate the creative resources of their company and estimate the amount of possible post-M&A value creation with a target.

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국문초록

인수기업의 창의성은 더 나은 M&A 성과를 창출하는가? 기업수준 창의성의 측정과 조작화

강 우 형

경영학과 전략 및 국제경영전공

서울대학교 대학원

본 연구는 인수합병의 성패에 영향을 미치는 핵심 요인을 분석하기 위해, 인수기업의 창의성이 피인수기업의 지식창출에 미치는 영향을 분석한다. 특히 질적연구에 의존하던 창의성에 관한 기존연구에서 더 나아가, 2005년부터 10년간 발생했던 251건의 M&A 표본을 기초로 기업의 창의성 수준을 내용분석법(content analysis)을 통해 추론하고 회귀분석 하였다. 구체적으로, 피인수기업의 지식창출을 종속변수로 하여, M&A에 참여하는 기업들 간 산업 연관성과 인수기업의 창의성이 가지는 설명력을 확인한다. 본 연구의 결과는 다음과 같다. 첫째, 인수기업과 피인수기업의 산업연관성(industry relatedness)은 M&A 이후 피인수기업의 지식창출(knowledge creation)과

통계적으로 유의미한 관계를 가지지 않는다. 둘째, 인수기업의 창의성은 피인수기업의 지식창출을 촉진한다. 셋째, 유사한 산업에 속한 기업들이 M&A 하는 경우 창의성은 중요한 변수가 아니었으나, 서로 상이한 산업에 속한 기업들이 M&A 할 경우 인수기업이 창의적일수록 지식창출은 더욱 촉진되었다. 이러한 연구결과는 기업의 창의적 역량이 새로운 아이디어를 창출하는 원천일 뿐만 아니라 연관성이 낮은 M&A(unrelated M&A)와 같은 난제를 해결하는 핵심 자원이라는 사실을 입증한다.

주요어: 창의성, 산업 연관성, 지식창출, M&A, 인수합병, M&A 성과

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