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The Embedded Dynamics of Entrepreneurial Innovation: Inter-Firm Networks and Institutional Moderators

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Abstract:
Entrepreneurs' inter-firm networks play a pivotal role in fostering entrepreneurial activity and driving innovative performance. Collaborative networks are widely recognized as critical to innovation, as they facilitate the generation, exchange, and diffusion of knowledge. Building on the open innovation paradigm, this study investigates how inter-firm networks, embedded within institutional and cultural contexts, influence entrepreneurial innovativeness across countries. Drawing on Global Entrepreneurship Monitor (GEM) data from 68 countries and applying a hierarchical linear modeling approach, we examine how the structure and diversity of inter-firm networks affect innovation, and how institutional factors—such as trust, human development, and intellectual property protections—moderate these relationships. The findings highlight the significance of both network characteristics and institutional environments in shaping entrepreneurial innovation, offering valuable insights for theory development and policy design.

Keywords: Entrepreneurial innovation, inter-firm networks, institutional context, GEM.

Introduction

There has been a growing realization that innovative performance of a firm is intrinsically linked to social networks that exist across organizational boundaries (Smith and Romeo, 2016). Chesbrough (2006), amongst others, have noted that innovation process is no longer considered as a result of combinations of ideas from in-house existing within firm boundaries, yet innovation should happen in an open system in collaboration with sources from internal and external environment to create value. Thus, the era of the 'lonely genius' behind innovation is no longer the norm; most of today's innovation and most effective ones are the result of a collective process in which networks play a central role (Adam and Westlund, 2013; Ozman, 2009). Many researchers have indicated the important role of entrepreneur's inter-firm networks in promoting entrepreneurial activities (e.g. Powell, Koput and smith-Doerr, 1996) and in pursuing innovative performance, because networks and interactions facilitate the generation and exchange of knowledge (Vătămănescu et al., 2020; Lipparini and Sobrero, 1994; Lundvall et al., 1992).

Furthermore, in recent years, most studies have emphasized the role of contextual and institutional factors to explain entrepreneurial action and outcomes (Sendra-Pons et al., 2022; Welter and Smallbone, 2019; Aldrich and Martinez, 2015; Zahra et al., 2014; Autio et al., 2014; Veciana and Urbano, 2008); as noted by Marlow "all social phenomena are undertaken in specific contexts that intersect to generate, enables or constrains particular forms of behaviour" (Zahra et al., 2014: 480). However, several scholars have shown that there have been few attempts to shed light on the relationship between innovation and the embedded context, institutions as well as networks namely inter-firm networks (Pittaway et al., 2004; Zheng et al.,

2010; Autio et al., 2014). Within this paper, we try to fill this gap through addressing the following questions: How does the structure of inter-firm networks influence on entrepreneurs' innovativeness? How do the institutional conditions influence entrepreneurial innovation through their effect on inter-firm networks? Thus, within this research, we make several main contributions. First, we contribute to develop a social network perspective on some of the key question related to the inter-firm network, and to contribute to the growth of studies that consider the inter-firm influence on entrepreneurs' innovative capability. Second, we participate in extending the understanding of entrepreneurial innovation by providing empirical evidence of the link between institutional factors (macro-level) on entrepreneurial innovativeness (micro-level) through firm's networks (meso-level). The remainder of the paper is organized as follows. We first present the literature review on the effect of inter-firm networks on firm performance and innovation. After, we discuss the potential influence of socio-cultural and institutional factors on both inter-firm networks and innovation. In the section 3, we describe our data and methodology. In section 4, we present the empirical results. In the final section, we discuss the main findings and implications.

Literature Review

In recent years, an interest in networks has permeated entrepreneurship research. Recent works on entrepreneurial innovativeness are increasingly emphasizing the importance of networking (Parida et al., 2017; Pittaway et al., 2004; Zheng et al., 2010; Smith and Romeo, 2016). Granovetter's (1985) essay on embeddedness has given rise to networks approach, which start from the premise that economic actions are embedded within social networks and relationships. Networks, which are often associated with valuable resources and other supports, play a crucial role in firms' innovation performance (Parida et al., 2017; Pittaway et al., 2004; Obstfeld, 2005). Given greater complexity and specialization, entrepreneurs may need to interact with other and external helps to implement and market their new idea (Perry-Smith and Mannucci, 2015). Current knowledge production depends increasingly on teamwork and extended networks, for today innovation is more than "to do something new" (Schumpeter, 1931); but according to Debra Amidon (1997), who coined the phrase "knowledge innovation," it is rather "the creation, evolution, exchange and application of new ideas into marketable goods and services." As such, it would be a gross exaggeration to say that entrepreneur can innovate 'lonely' without any collaboration with different actors. Networks are thus seen as a stimulus for innovation actions (Uzzi and Spiro, 2005; Pittaway et al, 2004; Powell et al., 1996). Through inter-firm networks, a firm's innovative output can be affected positively (Gulati, 2007; Huggins, 2010) by providing three substantive benefits: knowledge sharing, risk reduction and speed of development (Pittaway et al., 2004; Litter et al., 1995).

Scholars have termed inter-firm networks differently. Uzzi (1996, 1997) has used the term of 'inter-firm network' and 'organization network', while others have called this form of networks 'inter-organizational collaboration' (Powell et al., 1996), 'network governance' (Jones et al., 1997), 'strategic network' (Stuart and Sorenson, 2007) and other names. Despite this variation of terms used, most of these studies have comprehended a meaning close to the definition proposed by Uzzi (1996) who has considered it as "a set of firms that maintain ongoing and exclusive relationships with one another"; he further argued that the inter-firm network operates on a logic of exchange. When firms or entrepreneurs engage in inter-firm relationship, they create an opportunity to exchange goods, services and information (Argyres et al., 2020; Lefaix-Durand et al., 2005; Uzzi, 1996; Shan et al., 1994). Firms might also resort to exchange process when problems arise or opportunities crop up (Johannisson, 1988). Thus, according to several

auteurs embedded exchange engenders economic efficiency; the main argument put forward is that networking behaviour contribute to reduce transaction costs, uncertainty and to produce performance (Veciana and Urbano, 2008; Uzzi, 1997; Larson, 1991); it also influences creativity and innovativeness (Uzzi, 2005). Coleman (1988) has argued that dense networks occur performance, because strong relationships between parties facilitate the transfer of resources, information and knowledge. Larson (1991) has found that entrepreneurial firms attempt to be embedded in a dense inter-firm network to address their lack of internal resources and vulnerability. Although literature claims that weak ties provide access to non-redundant information which comes from distinct knowledge source, strong ties allow the transfer of complex and proprietary information (Perry-Smith, and Mannucci, 2015). From an embeddedness perspective, the density of the relationships between firms will regenerate the ability of innovation and this capability will be stronger when inter-firm networks become denser and more diverse. Therefore, we postulate:

H1a. Strong inter-firm networks effect positively entrepreneurs' innovativeness.
H1b. The positive effect of inter-firm networks on entrepreneurs' innovativeness will increase with the diversity of ongoing networks.

Entrepreneurial firms are characterized by a smaller size. Although small firms are often considered to be more reliant on social networks such as connections with friends and family (Aldrich and Zimmer 1986; Uzzi 1997), Shaw (2006) has noticed that they may shift toward inter-firm networks to increase their opportunity to acquire information relevant to improving their performance and competitiveness. Moreover, Almeida and Kogut (1997) have found that small size firms explore new technology fields by engaging in firm's networking. These differences in views on this question merit further consideration, as such, we consider this issue in the following hypothesis:

H2. The higher the size of inter-firm networks, the higher the innovativeness of small size firms.
As argued above, entrepreneurial innovativeness is influenced by the networking of the firm. Coinciding with this reality, the idea of the lone innovator or the lone entrepreneur is no longer the norm. The entrepreneurial literature has contended that entrepreneurial process is influenced by both the individual and the context (Aldrich, H.E. and Martinez, M.A., 2015. Cooper and Dunkelberg, 1981; Aldrich, 1979; Gartner, 1985; Anderson, 2000; March and Olsen, 2006; Aldrich and Martinez, 2015; Hundt and Sternberg, 2016). Jack and Anderson (2002) have argued that context shapes and forms entrepreneurial outcomes. Baumol (1990) has found that entrepreneurial behaviour depends on the institutional context. In context where institutions are functioning effectively, entrepreneurial risks pertain to the nature of the ventures themselves (Schumpeter, 1934; Kirzner 1973); however, weaker institutions context may increase net returns to non-productive activity. Empirical results of Ferriera et al. (2012) have corroborated the above-mentioned fact that innovation is strongly related to contextual factors; in the sense that contextual environment is crucial for societies to be innovative. Shane (1992) claims that in context where social values as trust pervades the culture entrepreneurs tend to communicate more, and their intensity of communication will forward their creativity and innovation. For instance, societies that are characterized by a high level of interpersonal and societal trust facilitate knowledge sharing. Ivančič et al. (2012) have found that the low level of trust in people and institutions represents an important barrier to co-operation in networks. The results of this research are in line with several authors' views who argued that trust plays a major role in making resource exchanges possible and efficient (Lechner, 2016; Smangs, 2006; Zaheer,

and Harris, 2005; Uzzi, 1996, 1997; Larson, 1991; Granovetter, 1985; Coleman, 1988). Hauser et al. (2007) have provided empirical evidence that in a context where exchanges process is enhanced through a high level of trust in people, and institutions should contribute to foster innovation. Thus, the higher level of trust in society will result an increased information and resources sharing and therefore, more innovation. We consider this issue in the following hypothesis:

H3. The positive effect of inter-firm networks on the entrepreneurs' innovativeness will increase with the high level of trust.

Literature has identified that innovation benefits of networking when property rights are safeguarded (Squicciarini, 2016; Pittway et al., 2004; Hayton et al., 2002). Harper (2003) argues that private property enhances the feeling of "… internal control and personal agency, and thereby promotes entrepreneurial alertness." Hence, society where private and intellectual property is highly protected enables entrepreneurs to co-operate with other firms, and innovate. Thus, the macro-level context in which firms are created can promote entrepreneur innovativeness. Therefore, we postulate:

H4. The positive effect of inter-firm network on entrepreneurs' innovativeness will increase with stronger intellectual property rights institutions.

Method

Entrepreneur's inter-firm networks and innovation in the context of society can be investigated with two-level data on entrepreneurs nested in societies. Individual-level data have been collected in the Global Entrepreneurship Monitor (GEM) by annual surveys in participating countries. In order to provide for reliable comparisons across countries, GEM data is obtained using a research design that is harmonized over all participating countries (Harrington et al., 2010). In each country, a fairly randomly sample of adults, aged 18–64 years old, has been interviewed in the GEM population survey. Entrepreneurs were identified as those who own and manage a starting or operating enterprise. GEM individual level survey provides data on entrepreneurs' inter-firm networks and innovation. In 68 countries, a sample of 18,850 entrepreneurs reported on their innovation and inter-firm networking. The countries comprising Algeria, Angola, Argentina, Austria, Barbados, Belgium, Bosnia and Herzegovina, Botswana, Brazil, Chile, China, Colombia, Costa Rica, Croatia, Denmark, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Germany, Ghana, Greece, Hungary, India, Iran, Ireland, Israel, Italy, Jamaica, Japan, Korea, Latvia, Lithuania, Macedonia, Malawi, Malaysia, Mexico, Namibia, Netherlands, Nigeria, Norway, Pakistan, Palestine, Panama, Peru, Poland, Portugal, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, United Kingdom, Uruguay and Zambia.

Dependent Variable: Innovation

GEM determines innovation by measuring the novelty of product-market-combination (Amorós and Bosma, 2014). Accordingly, the survey asks the entrepreneurs:

"Have the technologies or procedures required for this product or service been available for less than a year, or between one to five years, or longer than five years?"

"Do all, some, or none of your potential customers consider this product or service new and unfamiliar?"

"Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?"

The response to each question is given on a three-point scale, from low through medium up to high innovation, coded 1, 2 and 3.

Independent variables:
GEM data also provide a number of explanatory variables that relate to the theoretical considerations of this study. For each individual, GEM contains basic socio-economic information, including country of residence, age, gender and educational attainment.
In addition, the data contain variables that relate to the network around a firm. Each entrepreneur was asked whether or not co-operates with other entrepreneurs and the intensity of this co-operation in seven activities: production, supplies, marketing, creation of new products for the current market, search for new markets for current products, development of new products for new markets, and improving the effectiveness of the business. These inter-firm relationships were measured by asking:

Is your business working together with other enterprises or organizations to produce goods or services?
Is your business working together with other enterprises or organizations to procure supplies?
Is your business working together with others to sell your products or services to your current customers?
Is your business working together with others to sell your products or services to new customers?
Is your business working together with others to create new products or services to your current customers?
Is your business working together with others to create new products or services to new customers?
Is your business working together with others about how to make your business more effective?
When response of each question reports that the relationship exists, a follow-up question asks whether the collaboration is intense or not so intense.

Controles variables
Entrepreneurs were asked on characteristics of themselves and their firms. These will serve as control variables in the analysis:

- Gender: Dichotomy, we coded 1 for females, 0 for males.
- Age of entrepreneurs: it was measured by asking participants to provide information about their age in years; we calculated the logarithm of the number of members to avoid skewness.
- Education of entrepreneurs: It was measured through nominal scales by asking the participants: what is their highest level of education, choices were grouped into seven categories, which are later used as numerical scale with 0 – pre-primary education, and 6 – second stage of tertiary education.
- Firm size: it was measured by asking participants to provide information about the number of people including the owner of the business.

Context characteristics
We utilize country-level measures of institutional environment, and national characteristics (PRI, HDI, trust) combined with individual-level variables.

- Property Rights Index (PRI): it was measured through three core components of property rights systems, legal and political environment, physical property rights, and intellectual

property rights. The overall grading scale ranges from 0 to 10, where 10 is the highest value for a property rights system and 0 is the lowest value for a property rights system within a country.

- Human Development Index (HDI): A Human development index is a composite index measuring average achievement in three basic dimensions of human development: a long and healthy life, knowledge and a decent standard of living. The overall grading scale range from 0 to 10, where 10 is the highest value for a HDI and 0 is the lowest value for a HDI within a country.
- Trust: It is derived from the World Values Survey. We use the available measures of trust index for all 68 countries of our simple that are listed in the world map of interpersonal trust. The world values survey has chosen to build the trust index for each country from their most-recent survey. Indexes over 100 correspond to countries where a majority of people trust others, while an index under 100 correspond to countries where a majority of people think one can never be too careful when dealing with others (World map of interpersonal trust)
- To examine the effects of both individual characteristics (networking and control variables) and context characteristics (PRI, HDI, Trust) we use a hierarchical mixed linear model (HLM). This model is considered as the ideally suited model for the analysis of nested data, or data with group structure (Wong and Mason, 1985; Woltman et al., 2012). It has the ability to identify the relationship between predictor and outcome variables, by taking into account both level-1 (entrepreneurs) and level-2 (countries) in regression relationships (Woltman et al., 2012).

Results

The results of the study provide a detailed insight into the impact of inter-firm networks and contextual factors on entrepreneurial innovation. The analysis confirms that the size and diversity of inter-firm networks significantly enhance innovation by fostering access to a broader range of resources, knowledge, and ideas. Entrepreneurs who engage in larger and more diverse networks are better positioned to leverage external inputs, leading to innovative outcomes. This finding aligns with established literature emphasizing the role of networks in facilitating knowledge sharing and collaborative problem-solving (Powell et al., 1996; Uzzi, 1997). It reinforces the argument that innovation is rarely an isolated process but one deeply embedded in systems of interconnected actors.

Interestingly, the type of collaboration within these networks emerges as a critical determinant of their effectiveness in driving innovation. Collaborations focused on technological development, such as producing goods and services or creating new products, exhibit the strongest positive impact on entrepreneurial innovation. These collaborations likely succeed because they allow entrepreneurs to access specialized expertise and technical knowledge essential for creating novel solutions. Conversely, collaborations centered on marketing or procurement show little to no significant impact on innovation, suggesting that while these activities are vital for business operations, they do not directly contribute to the generation of new ideas or products. This nuanced understanding challenges generalized assumptions about the benefits of networking, offering a more detailed view of how different forms of collaboration influence innovation.

The study also highlights the moderating effects of contextual factors such as trust, human development, and intellectual property rights on the relationship between networks and

innovation. High levels of trust within a society enhance the efficiency and productivity of inter-firm networks by facilitating open communication and resource sharing. This finding supports the view that trust acts as a falicitator for cooperative interactions, enabling entrepreneurs to overcome uncertainties and build effective partnerships. Similarly, the presence of strong intellectual property protections provides a secure environment for collaboration. These contextual elements, while not directly driving innovation on their own, create an environment that amplifies the positive effects of inter-firm networks on entrepreneurial outcomes.

The role of human development in shaping innovation also emerges as significant, though complex. Higher levels of human development, indicated by factors such as education, health, and overall societal well-being, equip entrepreneurs with the skills and infrastructure necessary to engage effectively in innovative activities. However, the findings suggest that the interaction between human development and network dynamics requires further exploration to fully understand its mechanisms.

Contrary to expectations, some factors, such as gender, do not exhibit a significant influence on innovation, while firm size plays only a modest role. These results suggest that the benefits of inter-firm networks and the influence of contextual factors are relatively consistent across different demographic and organizational characteristics. These finding challenges traditional assumptions about the role of individual and firm-level characteristics in shaping innovation, shifting the focus toward the broader structural and contextual variables at play.
Overall, the study emphasizes that entrepreneurial innovation is a collective process shaped by the interplay between network structures and the broader institutional and social environments. The findings contribute to a more nuanced understanding of how networks function as vehicles for innovation, not in isolation but within a complex matrix of relationships and contextual influences. By situating the results within this broader framework, the research provides valuable insights for both academic and practical applications, highlighting the need for targeted strategies to enhance the innovative potential of entrepreneurs through effective networking and supportive institutional environments.

Value/ Implications

This study enhances our understanding of the dynamics of entrepreneurial innovation by affirming that innovation is neither an isolated nor exclusively in-house process but rather one that emerges within systems of interconnected actors embedded in a broader social context. The relational capabilities of entrepreneurs can serve as a critical pathway to achieving sustainable competitive advantage.

The findings of this study offer important implications for policymakers. First, fostering innovation requires strengthening institutional contexts by improving national systems of education, enhancing human development, and building societal trust. Second, innovation can be further enhanced by promoting networking, particularly cooperative technology networks, through targeted investments in network-building initiatives. Policies aimed at advancing inter-firm networks should, in principle, also focus on enhancing institutional frameworks and improving the quality of relationships among actors. By addressing these dimensions, policymakers can create environments that support both the collaborative and innovative potential of entrepreneurs.

Conclusion

This study provides valuable insights into the intricate dynamics between inter-firm networks, institutional contexts, and entrepreneurial innovation. The findings underscore the significant role of network size and collaboration types in driving innovation, particularly those focused on technological advancements and improving business effectiveness. These results highlight that while broad and diverse networks are essential for fostering innovation, the nature and purpose of collaborations within these networks are equally critical.

The study also reveals the nuanced influence of contextual factors such as trust, intellectual property rights, and the Human Development Index (HDI). While these variables do not demonstrate significant direct effects on innovation, their interaction with inter-firm networks proves essential in shaping innovative outcomes. For instance, trust and robust intellectual property frameworks amplify the positive effects of technology-focused networks, while higher levels of HDI create an enabling environment that enhances the overall effectiveness of entrepreneurial collaborations.

Importantly, this research emphasizes the embeddedness of entrepreneurial innovation within social and institutional environments. It moves beyond the simplistic view of networks as isolated mechanisms and instead situates them within broader contexts that either enable or constrain their potential. Entrepreneurs operating in high-trust, high-HDI environments with strong intellectual property protections are better positioned to maximize the innovative benefits of their networks, reaffirming the interplay between micro-level network structures and macro-level contextual factors.

These findings contribute to the growing literature on the interrelationship between networks, institutions, and innovation by providing empirical evidence of their interconnected effects. They also have practical implications for both entrepreneurs and policymakers. Entrepreneurs are encouraged to strategically build and leverage networks that focus on technological and operational collaborations, while policymakers are advised to foster institutional environments that support trust, safeguard intellectual property, and promote human development.

Ultimately, this study demonstrates that entrepreneurial innovation is a collective process influenced by the structural and contextual dimensions of inter-firm networks. By integrating insights from social networks and institutional theory, it provides a more holistic understanding of how entrepreneurs can navigate and utilize their networks to drive innovation effectively. Future research could further explore these relationships, particularly the mechanisms through which contextual factors interact with specific types of inter-firm collaborations, to uncover additional pathways for fostering innovation.

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Annexes

Table 1: Entrepreneurs' innovation affected by inter-firm network and contextual factors

Parameter	Estimate	Sig.
Intercept	1.849758	.000
Gender(M = 0, F=1)	.000506	.961
Age	**-.044271**	**.007**
Size of Firm	.012073	.012073
Collaboration to produce goods or services	-.004208	.762
Collaboration to procure supplies	-.002973	.820
Collaboration to sell your products or services to your current customers	-.005138	.759
Collaboration to sell your products or services to new customers	**.051281**	**.004**
Collaboration to create new products or services to your current customers	.001497	.943
Collaboration to create new products or services to new customers?	**.105019**	**.000**
Collaboration to make your business more effective	**.026936**	**.058**
PRI	.002008	.097
TRUST	.000274	.684
HDI	**-.569306**	**.010**
a. Dependent Variable: INNO.		

Table 2: Entrepreneurs' innovation affected by the intensity of inter-firm network

Parameter	Estimate	Sig.
Intercept	1.849758	.000
Gender(M = 0, F=1)	-.043576	.463
Age	-.098782	.269
Size of Firm	.023189	.463
Collaboration to produce goods or services	.023189	.463
Collaboration to procure supplies	-.071738	.402
Intensive collaboration to sell your products or services to your current customers	-.045761	.614

Intensive collaboration to sell your products or services to new customers	-.081118	.398
intensive collaboration to create new products or services to your current customers	-.056575	.593
Intensive collaboration to create new products or services to new customers?	.079694	.570
Intensive collaboration to make your business more effective	.088356	.473
a. Dependent Variable: INNO.		

Table 3: Entrepreneurs' innovation affected by the size of inter-firm network

Parameter	Estimate	Sig.
Intercept	1.849758	.000
Gender(M = 0, F=1)	.018208	.001
Age	-.095559	.000
Size of inter-firm networks	**.014387**	**.000**
PRI	.001713	.122
TRUST	.000385	.562
HDI	-.670125	.001
a. Dependent Variable: INNO.		

Table 4: Entrepreneurs' innovation affected by the size of inter-firm network

Parameter	Estimate	Sig.
Intercept	1.771002	.000
Gender(M = 0, F=1)	.018208	.001
Age	-.095559	.000
Size of inter-firm networks	.014387	.000
PRI	.001713	.122
TRUST	.000385	.562
HDI	-.670125	.001
Size of inter-firm networks*PRI	**.000159**	**.053**
Size of inter-firm networks*TRUST	-1.850774E-05	.672

Size of inter-firm networks*HDI	**-.047578**	**.001**
a. Dependent Variable: INNO.		

Table 5: Entrepreneurs' innovation affected by the size of inter-firm network moderation contextual factors

Parameter	**Estimate**	**Sig.**
Intercept	1.522733	.000
Gender(M = 0, F=1)	.004481	.640
Age	-.041153	.007
Size of Firm	.010178	.169
Collaboration to produce goods or services	.046412	.204
Collaboration to procure supplies	.009581	.779
Collaboration to sell your products or services to your current customers	-.007747	.855
Collaboration to sell your products or services to new customers	.124754	.006
Collaboration to create new products or services to your current customers	-.055244	.279
Collaboration to create new products or services to new customers?	.054478	.292
Collaboration to make your business more effective	.005711	.875
PRI	.000243	.774
PRI*Collaboration to produce goods or services	-.000800	.182
PRI*Collaboration to procure supplies	-.000371	.513
PRI*Collaboration to sell your products or services to your current customers	-8.293640E-05	.907
PRI*Collaboration to sell your products or services to new customers	-.001244	.100
PRI* Collaboration to create new products or services to your current customers	.001088	.192
PRI* Collaboration to create new products or services to new customers?	.000754	.378
PRI*Collaboration to make your business more effective	.000260	.669
a. Dependent Variable: INNO.		

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Table 6: Entrepreneurs' innovation affected by the inter-firm network moderation HDI

Parameter	Estimate	Sig.
Intercept	1.669954	.000
Gender(M = 0, F=1)	.004749	.620
Age	-.043334	.004
Size of Firm	.010549	.155
Collaboration to produce goods or services	.083850	.263
Collaboration to procure supplies	.178868	.009
Collaboration to sell your products or services to your current customers	-.133052	.093
Collaboration to sell your products or services to new customers	.200414	.014
Collaboration to create new products or services to your current customers	-.095172	.343
Collaboration to create new products or services to new customers?	.068839	.495
Collaboration to make your business more effective	.034179	.576
HDI	-.160421	.265
HDI*Collaboration to produce goods or services	-.104846	.278
HDII*Collaboration to procure supplies	**-.253999**	**.005**
HDI*Collaboration to sell your products or services to your current customers	.169545	.107
HDII*Collaboration to sell your products or services to new customers	**-.200370**	**.063**
HDI* Collaboration to create new products or services to your current customers	.128507	.329
HDI* Collaboration to create new products or services to new customers?	.033613	.801
HDI*Collaboration to make your business more effective	-.022530	.782
a. Dependent Variable: INNO.		

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Table 7: Entrepreneurs' innovation affected by the inter-firm network moderation TRUST

Parameter	Estimate	Sig.
Intercept	1.526131	.000
Gender(M = 0, F=1)	-.000255	.980
Age	-.042459	.009
Size of Firm	.012184	.628
Collaboration to produce goods or services	.016691	.483
Collaboration to procure supplies	-.038550	.202
Collaboration to sell your products or services to your current customers	**.091806**	**.005**
Collaboration to sell your products or services to new customers	.020106	.615
Collaboration to create new products or services to your current customers	.063900	.113
Collaboration to create new products or services to new customers?	.033553	.199
Collaboration to make your business more effective	.012184	.628
TRUST	.000241	.483
TRUST*Collaboration to produce goods or services	-.000376	.373
TRUST*Collaboration to procure supplies	-.000455	.274
TRUST*Collaboration to sell your products or services to your current customers	.000646	.208
TRUST*Collaboration to sell your products or services to new customers	-.000883	.110
TRUST* Collaboration to create new products or services to your current customers	-.000288	.643
TRUST* Collaboration to create new products or services to new customers?	.000871	.183
TRUST*Collaboration to make your business more effective	-.000154	.733

a. Dependent Variable: INNO.