Startup Rates, Economic Growth, and Entrepreneurship Quality: A Multilevel Model

Bao Hoang
Southern Arkansas University

Bruce Walters
Louisiana Tech University

John Kirk Ring
Louisiana Tech University

Based on behavioral entrepreneurship and institutional theory, we build a conceptual framework that describes the nature of the relationship between startup rates and economic growth. Our model indicates that the effects of startup rates on economic growth are contingent on entrepreneurship quality that is characterized by innovativeness, high growth, and export orientation. Then we investigate what factors determine the quality of entrepreneurship. We presuppose that entrepreneurial behaviors including entrepreneurial motivation, opportunity recognition, and resource construction are crucial antecedents of entrepreneurship quality. The linkages between entrepreneurial behaviors and entrepreneurship quality are positively moderated by environment factors according to institutional theory. These macro factors include economic freedom, policy supportiveness, cultural openness, and social supportiveness. We draw implications for research as well as the policy community.

Keywords: entrepreneurial motivation, opportunity recognition, resource construction, entrepreneurship quality, economic growth

INTRODUCTION

Entrepreneurship is considered a source of job creation, an engine to boost economic growth (Bradley and Klein, 2016; Career and Thurik, 2010), and a solution for poverty in many countries (Hitt, Ireland, Sirmon, and Trahms, 2011; Mair, Marti, and Ventresca, 2012). Two million new ventures are established each year in the United States alone, contributing approximately seventy percent of economic growth (Figueroa-Armijos and Johnson, 2016). On a global scale, startups are expected to help create 40 million jobs yearly to match the growth in the global population (Kim, ElTarabishy, and Bae, 2018). Numerous countries in Africa, Latin America, Asia, and the Middle East have built a variety of programs to encourage more new venture initiatives in the last two decades (Smith, Judge, and Nair, 2016; Van Praag and Stel, 2013), including investments in higher education (Van Praag and Stel, 2013), tax credits, entrepreneurial finance, and entrepreneur-friendly bankruptcy laws.

The relationship between entrepreneurship and growth has been carefully investigated (Career and Thurik, 2010), but researchers struggle to explain the nature of this linkage (Bjornskov and Foss, 2016; Bradley and Klein, 2016). Some studies suggest entrepreneurship positively affects economic growth (Marcotte, 2013; Mason and Brown, 2013; Van Pragg and Versloot, 2007). Others have found this relationship to be negative (Stel, Caree, and Thurik, 2005; Williams and Huggins, 2013; Zaki and Rashid, 2016) or insignificant (Sabella, Farraj, Burbar, and Quaimary, 2014). In practice, many countries report failures in entrepreneurial programs with economic growth remaining stagnant. These failures call into question entrepreneurship theories that are guiding policy makers around the world (Anokhin and Wincent, 2012).

Most researchers agree that high-quality entrepreneurship—characterized by innovative, high-growth, and export-oriented ventures—results in economic growth (Acs, Asterbro, Audretsch, and Robinson, 2016; Giotopoulos, Kontolaimou, and Tsakaikas, 2017). Numerous scholars have explored how to promote high-quality entrepreneurship (Autio and Acs, 2007; Boundreaux, Nikolaev, and Klein, 2019; Hessels, Gelderen, and Thurik, 2008; McMullen, Bagly, and Palich, 2008). Yet many countries report failure in their implementation initiatives. Theoretical justifications to promote high-quality entrepreneurship in the literature are currently incomplete and inconclusive. Previous studies tend to underemphasize entrepreneurship as a fundamentally individual endeavor including entrepreneurial motivation, opportunity recognition, and resource construction. We advocate simultaneously considering the effects of both individual- and country-level factors of high-quality entrepreneurship and subsequent economic growth.

Based on the behavior-based perspective on entrepreneurship and institutional theory, we build a conceptual model explaining the nuanced nature of the relationship between entrepreneurship and economic growth by focusing on antecedents of high-quality entrepreneurship. Our contributions are fourfold. First, our study supports the research stream that focuses on the behavioral aspect of entrepreneurship (Gartner, 1985; Hayton, George, Zahra, 2002; Low & MacMillan, 1988). Second, our study enriches our understanding of institutional theory (Baumol, 1990; Bradley and Kein, 2016; Boundreaux et al., 2019; Bruton, Ahlstrom, and Li, 2010; Minniti, 2008) as it applies to entrepreneurship. In this study, we argue that the effectiveness of entrepreneurial behaviors on entrepreneurship quality is contingent on the efficacy of a country's institutional arrangements, exemplified by economic freedom, policy supportiveness, cultural openness, and social supportiveness. Third, we support the call to treat entrepreneurship as a multilevel phenomenon (Boundreaux et al., 2019; Johnson and Schaltegger, 2020; Schmutzler, Andonova, and Diaz-Serrano, 2019). Entrepreneurship is a product of the interaction between individual and institutional factors (Autio and Acs, 2007; Autio, Pathak, & Wennberg, 2013; Bruton et al., 2010; Hayton et al., 2002). Finally, we provide much needed guidance for policy communities aiming to boost high-quality entrepreneurship, resulting in economic growth (Mason and Brown, 2013; Shane, 2009).

CONCEPTUAL BACKGROUND

Behavior-Based Entrepreneurship

Recent years have seen a paradigm shift in entrepreneurship research with scholars moving from equating entrepreneurship to innovation (Schumpeter, 1911; 1934) and individual traits and characteristics (McClelland, 1961), to the study of behavioral phenomena. Stevenson (1983) pioneered this research stream by arguing that entrepreneurship should not be defined by specific traits and characteristics, but rather should be investigated as a process. Since then, researchers have increasingly studied what constitutes the entrepreneurial process by specifying actions carried out in this process. Shane and Venkataraman (2000) suggest that entrepreneurship is the process of opportunity recognition and exploitation, key components of the formation and growth of new ventures. Shane and colleagues (2003) later argue that entrepreneurial motivation should be a starting point of any entrepreneurial process. The entrepreneurial behaviors including entrepreneurial motivation, opportunity recognition, and resource construction are deemed to determine the likelihood of entering high-quality entrepreneurship that is innovative, export-oriented, and high-growth (Giotopoulos et al., 2017; Hessels et al., 2008).

Entrepreneurial Motivation

Researchers argue that entrepreneurs are involved in the process of new venture formation because they are first willing to be involved (Shane et al., 2003), so entrepreneurial motivation should be the starting point of the entrepreneurial process (Giotopoulos et al., 2017; Webb, Tihanyi, Ireland, and Sirmon, 2009). Actively choosing the entrepreneurial career is synonymous with the acceptance of the uncertainty and unpredictability of new ventures' outcomes. Entrepreneurs are stimulated by different motives, including rent seeking, survival needs, profit maximization, and social approval (Hessels et al., 2008).

Opportunity Recognition

Opportunity recognition, a major tenet of the entrepreneurial process (Brown, Davidsson, and Wiklund, 2001; Shane and Venkataraman, 2000; Stevenson, 1983), is the capability to identify "situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships" (Eckhardt and Shane, 2003, p.336). The process of recognizing opportunities is effortful and complicated because entrepreneurs must integrate fragmented data and unconnected information to form specific business ideas (Baron, 2006).

Resource Construction

Once business opportunities are realized, the entrepreneurs need necessary resources in order to serve their new venture formation and growth (Fisher, 2012; Shane and Venkataraman, 2000; Venkataraman, 1997). Due to the liability of newness of their new venture ideas, entrepreneurs are less likely to receive resource support compared to incumbent firms. Entrepreneurs must be capable of innovatively gathering, combining, and reconfiguring resources to serve their new venture formation and growth activities (Acs et al., 2016; Baker and Nelson, 2005; Bjornskov and Foss, 2016).

Entrepreneurship Quality

Entrepreneurship research has long discussed the effects of entrepreneurship quality on the economic growth. Indeed, researchers have divided entrepreneurship into three types including productive entrepreneurship, unproductive entrepreneurship, and destructive entrepreneurship (Baumol, 1990). Current research also tried to develop measurement to evaluate the quality of entrepreneurship.

Institutions and Entrepreneurship

Institutions are divided into two groups: formal institutions (i.e., institutions, laws, government regulations) and informal institutions (i.e., cultural norms, values, traditions) (North, 1991; 1994; Williamson, 2000). Institutions dictate all social and economic transactions based on sanction and incentive systems (North, 1991; 1994). In order to survive, organizations must follow institutional rules created by these systems. As a result of following the rules, institutions confer legitimacy to economic activities so that participating actors can obtain resources (DiMaggio and Powell, 1983). An increasing body of research using institutional theory investigates how environmental and country-level factors affect entrepreneurial activities in a region or country (Baumol, 1990; Bradly and Klein, 2016; Bruton et al., 2010; Minniti, 2008; Sobel, 2008). From this research, we believe that economic freedom, entrepreneurial policy, cultural openness, and social support have profound impact on entrepreneurs' possibility of becoming involved in high-quality entrepreneurship.

Economic Freedom

Economic freedom describes the quality of a country's formal institutional environment regarding trade freedom, fiscal freedom, monetary freedom, investment freedom, property rights, business freedom, and freedom from corruption (Boundreaux et al., 2019; Bradley and Klein, 2016; McMullen et al., 2008). Economic freedom generally creates an environment conducive to economic activities, characterized by rule-based markets in which both mature and young firms have fair competition, equal treatment, and government protection.

Policy Supportiveness

Given the vital role of entrepreneurship in promoting economic development globally, numerous governments have put enormous efforts into creating various policies and programs to promote entrepreneurial activities (Hitt et al., 2011; Mair et al., 2012; Smith et al., 2016; Van Praag and Stel, 2012). Whereas components of economic freedom target the overall business environment of a country, entrepreneurial policies are aimed at stimulating entrepreneurial activities. These policies include entrepreneurial education, entrepreneurial finance, innovation and technology policy, and entrepreneurial economy (Parker, 2008).

Cultural Openness

Besides formal institutions, informal institutions such as national culture play a role in shaping entrepreneurial behaviors (Chowdhury, Audretsch, & Belitski, 2019; Meek, Pacheco, and York, 2010; Mueller and Thomas, 2001; Stephan and Uhlaner, 2010; Stephan, Uhlaner, and Stride, 2015). People living in open cultures have the propensity for new experiences (McCrae, 1987), are willing to interact with other cultures and traditions (Sabah, Carsrud, & Kocak, 2014), and are tolerant of uncertainty and ambiguity (Nga and Shamuganathan, 2010). These characteristics of cultural openness (Sabah et al., 2014) are conducive to creativity and innovation, which are antecedents of high-quality entrepreneurship (Acs et al., 2016).

Social Supportiveness

Although the level of social support toward entrepreneurship varies among countries, the social status of entrepreneurs has generally become more favorable, and in some cases, entrepreneurs are considered national heroes (Malach-Pines, Levy, Utasi, & Hill, 2006). In addition, the more favorable entrepreneurs' socialstatus, the more people in a country are likely to enter entrepreneurship (Malach-Pines et al., 2005). Lastly, social networks play an important role because they enable entrepreneurs to obtain social support, including necessary resources and encouragement, in order to serve their new venture formation and growth (Hoang and Antoncic, 2003; Greve and Salaff, 2003; Shepherd, Covin, & Kuratko, 2009).

PROPOSITIONS

Entrepreneurship Quality, Startup Rates, and Economic Growth

Entrepreneurship is an engine bolstering economic growth in many countries around the world (Bradley and Klein, 2016). The impact of startup rates on economic growth occurs through various mechanisms such as job creation (Baptista, Escaria, and Madruga, 2008), new knowledge generation, promotion of competition, efficient use of resources (Clough, Fang, Vissa, and Wu, 2019), and the enrichment of entrepreneurship capital (Campbell, 2013). But others opine that entrepreneurship is not always good for economic growth (Shane, 2009; Stel et al., 2005; Wennekers, Stel, Thurik, and Reynolds, 2005; Williams and Huggins, 2013). Not all startups generate innovations (Anokhin and Wincent, 2012). Indeed, some new ventures are innovative, high growth, and export orientated while others are imitative and low growth with only domestic aspirations. Regardless of these mixed assessments, most authors agree that startup rates are positively related to economic growth. Disagreement is generally found when considering the types of entrepreneurial ventures being started. We argue that only high-quality entrepreneurship can generate the aforementioned positive externalities, resulting in economic growth.

Proposition 1: *The relationship between startup rates and economic growth in a country will be positively moderated by the country's level of entrepreneurship quality.*

Entrepreneurial Motivation, Entrepreneurship Quality, and Quality of Institutions

Motivation provides people with persistence and grit so they can stay strong in the face of obstacles and impediments (Bandura, 1986; Wood and Bandura, 1989). In the process of forming and growing new ventures, entrepreneurs cope with the uncertainty and unpredictability of their new ideas, and

entrepreneurial failures and setbacks are sometimes unavoidable (Giotopoulos et al., 2017; Shane et al., 2003; Webb et al., 2009). Entrepreneurial motivation would incite mental strength, diligence, and tenacity to cope with these setbacks and challenges. If they are driven into entrepreneurship by value creation, they are inclined to initiate innovative, high-growth ventures (Giotopoulos et al., 2017; Hessels et al., 2008). Additionally, to create value for customer and society, they have to come up with novel ideas and sometimes radical innovations that are not often welcomed by others. Strong motivation can help entrepreneurs persist when facing obstacles and impediments. Thus, entrepreneurial motivation enables entrepreneurs to be involved in high-quality entrepreneurship.

Proposition 2a: *Entrepreneurial motivation will be positively related to entrepreneurship quality.*

According to institutional theory, economic transactions are dictated by institutions via incentive and sanction frameworks (North, 1991; 1994). Entrepreneurs are inclined to channel their efforts and resources into activities where profits can be reaped (Baumol, 1990; Boudreaux et al., 2019). We argue that entrepreneurial motivation provides entrepreneurs with the willingness, tenacity, and persistence to overcome the obstacles and impediments to entering high-quality entrepreneurship. Institutional efficiencies characterized by strong enforcement of property rights, low corruption, and an open environment for doing business further incentivize entrepreneurs who would like to create value via new products and services. Economic freedom will enhance the value-added entrepreneurs' propensity to commit to high-growth and innovative startups (Boudreaux et al., 2019; Bradley and Klein, 2016; Chowdhury et al., 2019).

Proposition 2b: *Economic freedom will positively moderate the relationship between entrepreneurial motivation and entrepreneurship quality.*

In the past two decades, many countries have created various policies specifically promoting entrepreneurship to achieve economic growth. These government programs include innovation policy (Woolley and Rottner, 2008), technology policy (George and Prabhu, 2003), entrepreneurship education policy (O'Connor, 2013), entrepreneurial finance policy (Cumming and Johan, 2017), and entrepreneurial economy (Parker, 2008). These policies are believed to positively affect innovative and high growth new ventures. As discussed previously, entrepreneurial motivation enhances entrepreneurs' willingness to cope with challenges and obstacles in the process of forming and growing ventures. The linkage between entrepreneurial motivation and entrepreneurial quality is likely strengthened in countries where governments strongly support entrepreneurship.

Proposition 2c: *Policy supportiveness will positively moderate the relationship between entrepreneurial motivation and entrepreneurship quality.*

In addition to formal institutions, informal institutions including social norms, traditions, and cultural values influence entrepreneurial activities (Meek et al., 2010; Mueller and Thomas, 2001; North, 1991; 1994; Williamson, 2000). Individualistic cultures tend to accept and value divergent thinking and different ideas, and are open to new experiences (McCrae, 1987). Also, a culture with low uncertainty avoidance is characterized by a willingness to interact with other cultures and traditions and a tolerance for uncertainty and ambiguity (Nga and Shamuganathan, 2010). These are characteristics of cultural openness (Sabah et al., 2014), which likely encourages more entrepreneurs to explore their indigenous ideas and resulting in innovative startups. Entrepreneurs in such a culture are more confident that their novel ideas manifested by new products and services will be accepted.

Proposition 2d: *Cultural openness will positively moderate the relationship between entrepreneurial motivation and entrepreneurship quality.*

Cultural openness seems to affect a country's overall business environment, including entrepreneurship. Cultural openness, with its individualism and uncertainty avoidance, tends to be innate and persists over long time periods (Williamson, 2000). But some countries deemed to have low cultural openness are flourishing with vibrant entrepreneurial activities. The commonality among these countries is that they have strong social support for entrepreneurs in recent years (Brieger and Gielnik, 2021; Bull and Willard, 1993; Chen et al., 1998; Peterman and Kennedy, 2003; Stephan and Uhlaner, 2010). A favorable image of entrepreneurs is likely to encourage more people to become entrepreneurs (Malach-Pines et al., 2005). Social support for entrepreneurship also boosts the supplies of resources needed for the formation and growth of new ventures, and increases the confidence of entrepreneurs motivated to enter into innovative and high-growth ventures.

Proposition 2e: *Social supportiveness will positively moderate the relationship between entrepreneurial motivation and entrepreneurship quality.*

Opportunity Recognition, Entrepreneurship Quality, and Quality of Institutions

The opportunity recognition process is complicated and complex. Some researchers believe entrepreneurial opportunities can be discovered by chance (Kirzner, 1979); but most argue that business opportunity is recognized through a process in which entrepreneurs systematically search for opportunities that can be turned into new products, services, or production processes (Eckhardt and Shane, 2003; Shane, 2003). Entrepreneurs connect fragmented information and knowledge to arrive at a viable business idea, requiring them to be effortful so they can activate their cognitive structure via various mechanisms, including structural alignment (Gregoire et al., 2010), pattern recognition (Baron, 2007), and alertness (Kirzner, 1973). We believe that these special cognitive properties are conducive for the entrepreneurs to establish innovative and high-growth ventures.

Proposition 3a: *Opportunity recognition will be positively related to entrepreneurship quality.*

In addition to the capabilities of recognizing and evaluating business opportunities, institutional factors are crucial in affecting commitment to innovative, high-growth, and export-oriented ventures. Institutions dictate economic transactions by imposing incentive and sanction systems (North, 1991; 1994; Williamson, 2000). Strong enforcement of property rights increases confidence that innovations will be protected. Low corruption levels reduce costs associated with paying government officials for expedient approval of business entities. Economic freedom is likely to incentivize entrepreneurs capable of recognizing and evaluating business ideas to enter high-quality entrepreneurship.

Proposition 3b: *Economic freedom will positively moderate the relationship between opportunity recognition and entrepreneurship quality.*

Economic freedom is conducive to overall business activities. Currently, many countries have devised programs including innovation policy, technology policy, education policy, entrepreneurial finance policy, and so forth in order to target high-growth entrepreneurship. Possession of strong capabilities to recognize and evaluate feasible business ideas is favorable to being an effective entrepreneur. They also consider other environmental factors including government regulations and policies that may encourage or discourage them from entering productive entrepreneurship (Baumol, 1990; Minniti, 2008; Sobel, 2008). We argue that policy supportiveness toward entrepreneurship is likely to enable the entrepreneurs who have strong capabilities of recognizing opportunities to enter high-quality entrepreneurship.

Proposition 3c: *Policy supportiveness will positively moderate the relationship between opportunity recognition and entrepreneurship quality.*

Informal institutions such as cultural values, social norms, and traditional customs profoundly influence entrepreneurial activities (Chowdhury et al., 2019; Meek et al., 2010; Mueller and Thomas, 2001; Stephan and Uhlaner, 2010). Cultural openness is characterized by high individualism and low uncertainty avoidance that promote creativity and innovation. People in open cultures tend to be willing to explore different ideas and cope with uncertainty and ambiguity (Nga and Shamuganathan, 2010). Entrepreneurial actions are affected by cognitive and environmental factors (Shepherd et al., 2009; Wood and Bandura, 1989). Cultural openness likely encourages entrepreneurs to enter high-quality entrepreneurship (Chowdhury et al., 2019). For those with the capability to identify and evaluate viable business opportunities, cultural openness is likely to boost their confidence.

Proposition 3d: *Cultural openness will positively moderate the relationship between opportunity recognition and entrepreneurship quality.*

Whereas cultural openness tends to be stable, social support can be fostered in a shorter time period. A high level of social supportiveness for entrepreneurship has been shown to generate more entrepreneurs (Malach-Pines et al., 2005) and enhance access to resources through their social networks (Hoang and Antoncic, 2003; Greve and Salaff, 2003; Shepherd et al., 2009). Such an environment increases confidence in the testing of new ideas crucial to high-quality entrepreneurship. Therefore, we argue that the beliefs in their capabilities in identifying and evaluating business opportunities will be strengthened with strong social support.

Proposition 3e: *Social supportiveness will positively moderate the relationship between opportunity recognition and entrepreneurship quality.*

Resource Construction Capability, Entrepreneurship Quality, and Quality of Institutions

After entrepreneurs recognize business opportunities, their next move is to exploit them. At this stage, entrepreneurs need to tap into necessary resources to serve new venture formation (Fisher, 2012; Shane and Venkataraman, 2000; Venkataraman, 1997). Due to the liability of newness of their new venture ideas, entrepreneurs are less likely to receive resource support from formal investors. Overcoming these obstacles and impediments requires the development of capabilities to gather, combine, and reconfigure resources appropriate for new venture endeavors (Acs et al., 2016). This process is called resource construction (Baker and Nelson, 2005). Innovative and high-growth ventures require more resources than their non-innovative and low growth counterparts. As a result, entrepreneurs who have capabilities of resource construction would be more likely to enter high-quality entrepreneurship.

Proposition 4a: *Resource construction will be positively related to entrepreneurship quality.*

An environment favorable to entrepreneurial activities is likely to encourage people who are capable of resource construction to actually make an entrepreneurial entry. Furthermore, the institutionalist perspective contends that government policy and regulations dictate economic transactions, including entrepreneurial activities, via reward and sanction systems (North, 1991; 1994; Baumol, 1990; Sobel, 2008). Incorporating these two perspectives, we suggest a country with high economic freedom characterized by effective property rights and low corruption would encourage entrepreneurs to engage in resource construction and enter high-quality entrepreneurship.

Proposition 4b: *Economic freedom will positively moderate the relationship between resource construction and entrepreneurship quality.*

Besides economic freedom, the entrepreneurship-focused policies including innovation policy, entrepreneurial finance policy, and encourag greater quantity and quality of entrepreneurship (Chowdhury et al., 2019). A country's resources are not unlimited, so effective entrepreneurship-focused policies help

governments to allocate resources efficiently to support entrepreneurial activities. This government supportiveness will be carefully evaluated by entrepreneurs before they make an entrepreneurship entry (Boudreaux et al., 2019). We previously argued that entrepreneurs who have high resource construction capabilities are likely to enter high-quality entrepreneurship, and this linkage may be strengthened if government policies are more supportive of entrepreneurial activities.

Proposition 4c: *Policy supportiveness will positively moderate the relationship between resource construction and entrepreneurship quality.*

Besides formal institutions, cultural values and social norms also prominently affect entrepreneurial activities (Hayton et al., 2002; Mueller and Thomas, 2000; Wennkers et al., 2007). Regarding cultural values, we emphasize the role of cultural openness in encouraging entrepreneurs to explore new ideas and accept a degree of uncertainty and ambiguity (Nga and Shamuganathan, 2010). Cultural openness also promotes innovation and creativity, determinants of innovative, high-growth, and export-oriented ventures. Previously, we suggested that entrepreneurs with significant capabilities of constructing resources are more likely to initiate innovative and high-growth ventures. The relationship between entrepreneurs' resource construction capabilities and entrepreneurship quality is likely further enhanced by a country's cultural openness.

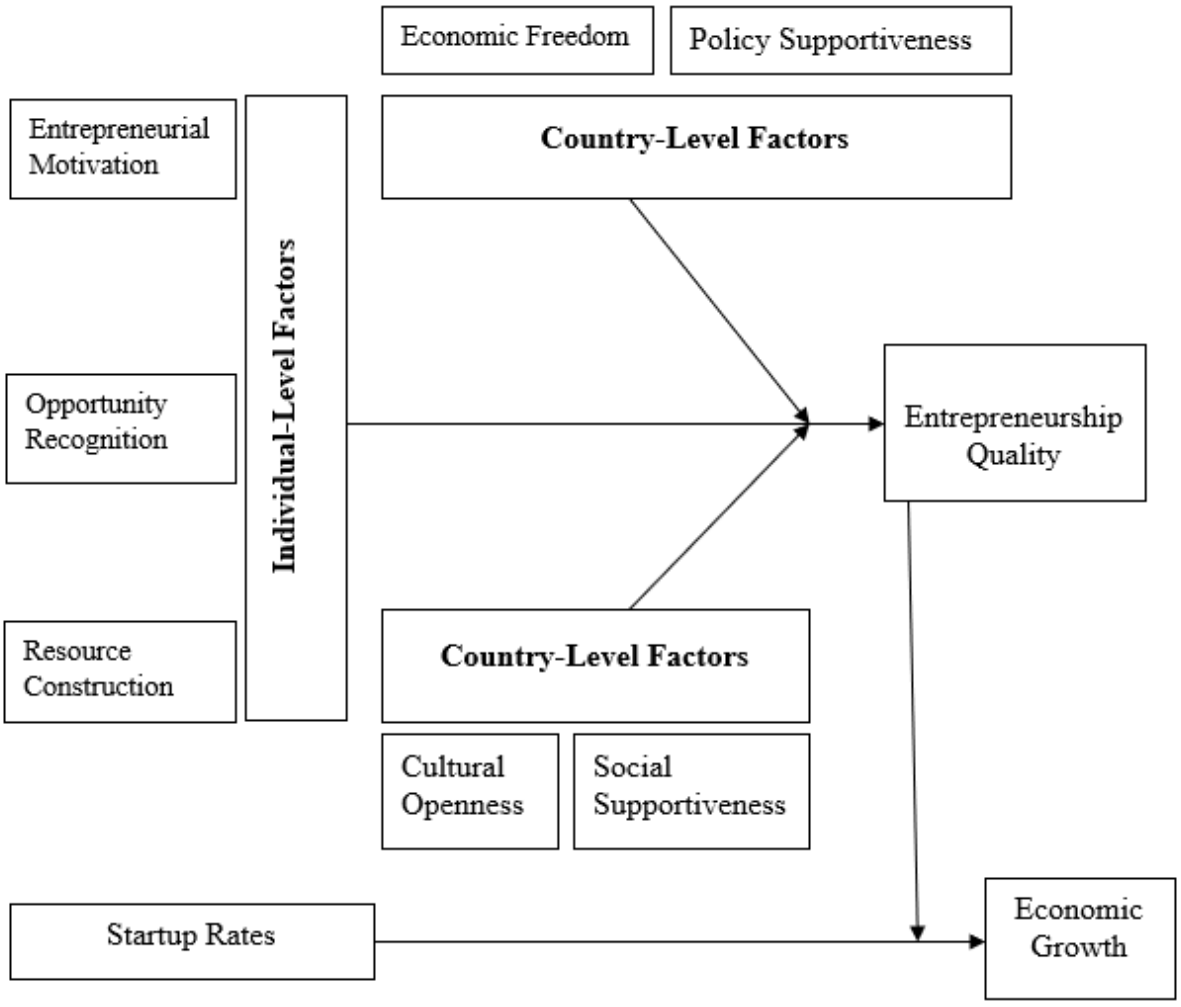
Proposition 4d: *Cultural openness will positively moderate the relationship between resource construction and entrepreneurship quality.*

Research points out that the more favorable entrepreneurs' image is in a country, the more likely people are to become entrepreneurs (Malach-Pines et al., 2005). As mentioned, in some countries entrepreneurs become role models for young people to become entrepreneurs themselves. Strong social supportiveness toward entrepreneurship also encourages entrepreneurs to test their novel ideas and facilitates resource acquisition through social networks (Hoang and Antoncic, 2003; Greve and Salaff, 2003; Shepherd et al., 2009). Strong social supportiveness toward entrepreneurs encourages capable entrepreneurs to commit to high-quality entrepreneurship.

Proposition 4e: *Social supportiveness will positively moderate the relationship between resource construction and entrepreneurship quality.*

In summary, we believe that entrepreneurship quality positively moderates the relationship between startup rates and economic growth. The quality of entrepreneurship is determined by three entrepreneurial behaviors: entrepreneurial motivation, opportunity recognition, and resource construction. The impacts of these factors on entrepreneurship quality are in turn moderated by economic freedom, policy supportiveness, cultural openness, and social supportiveness. All propositions are summarized in Figure 1.

FIGURE 1
THE CONCEPTUAL MODEL EXPLAINING THE RELATIONSHIP BETWEEN STARTUP RATES AND ECONOMIC GROWTH



DISCUSSION AND CONCLUSION

The impact of startup rates on economic growth has been largely contentious and inconclusive. Studies have supported effects that are positive (Mason and Brown, 2013; Van Pragg and Versloot, 2007), negative (Stel et al., 2005; Wennekers et al., 2005; Williams and Huggins, 2013; Zaki and Rashid, 2016), insignificant (Sabella et al., 2014), and mixed (Stam and Van Stel, 2011). These findings may reflect a focus on different types of entrepreneurship, including productive, unproductive, and destructive entrepreneurship (Baumol, 1990; Minniti, 2008; Sobel, 2008). Without a clear picture of the nature of this relationship, policy makers do not have effective guidance on how to build efficacious entrepreneurial programs. Consequently, enormous resources supporting entrepreneurial activities may be misallocated.

Given the theoretical and practical urgency of the issue, our exploration is an attempt at building a conceptual model to explain and justify the startup rate-economic growth linkage. We believe the effects of startup rates on economic growth depend on entrepreneurship quality. Our major proposition is that entrepreneurship quality will moderate the relationship between startup rates and economic growth. In turn, entrepreneurship quality is determined by entrepreneurial motivation, opportunity recognition, and resource construction. Researchers argue that entrepreneurship is essentially an individual phenomenon (Autio et al.,

2013; Stephan and Uhlaner, 2010), so these factors will have decisive impact on aggregate outcomes, including entrepreneurship quality characterized by innovation, high growth, and export-orientation (Chowdhury et al., 2019; Giotopoulos et al., 2017; Hessels et al., 2008). We also believe that institutional factors including economic freedom, policy supportiveness, cultural openness, and social supportiveness strengthen the linkages between these entrepreneurial behaviors and entrepreneurship quality.

Theoretical Implications

This exploration supports the belief that we should pay more attention to entrepreneurial behaviors that happen at the individual level but are mainly responsible for aggregate outcomes (Gartner, 1985; Hayton et al., 2002; Low & MacMillan, 1988), including entrepreneurship quality. Our view deviates from the popular belief that the quality of entrepreneurship at the aggregate level is primarily determined by macro factors such as government rules and regulations (Baumol, 1990; Chowdhury et al., 2019; McMullen et al., 2008; Minniti, 2008; Sobel, 2008). We believe that entrepreneurial motivation directs entrepreneurs' attentions and alertness for business opportunities so that they can actualize who they are. Entrepreneurial motivation is a source of commitment and persistence necessary in face of obstacles in the entrepreneurial journey. Opportunity recognition helps entrepreneurs differentiate the promising and feasible business ideas from those with less potential. Resource construction plays a vital role in the opportunity exploitation stage. Entrepreneurs need to reconfigure resources into innovative combinations in order to serve their new venture establishment and growth. We contend that entrepreneurs are not passive products of their environment, but rather are capable of enacting environmental changes so they can achieve their goals thanks to the proactive nature of their entrepreneurial behaviors.

Our work also reaffirms the usefulness of institutional theory in entrepreneurship research (Bradley and Klein, 2016; Boundreaux et al., 2019; Chowdhury et al., 2019; McMullen et al., 2008; Meek et al., 2010; Mueller and Thomas, 2001; Stephan and Uhlaner, 2010; Stephan et al., 2015). Scholars have long recognized the role of institutional factors in promoting different types of entrepreneurship, including productive, unproductive, and destructive entrepreneurship (Baumol, 1990; Minniti, 2008; Sobel, 2008). We argue that quality of institutions—represented by economic freedom, government supportiveness, cultural openness, and social supportiveness—profoundly influences entrepreneurship quality. Although these institutional components cannot replace the entrepreneurial behaviors discussed above, but they likely strengthen the linkages between these entrepreneurial behaviors and the quality of entrepreneurship. Regarding this aspect, our study supports for the current scholarship in entrepreneurship research that considers entrepreneurship as a multi-level phenomenon.

Practical Implications

Given the vital role of entrepreneurship in creating jobs, alleviating poverty, and stimulating economic growth, numerous governments have attempted to increase entrepreneurial activities in hopes that these programs would result in job creation, economic development, social mobility, and so forth. These efforts are not always successful, perhaps because public policies are often misguided (Acs et al., 2016; Shane, 2009; Van Praag and Stel, 2012). Our paper generates valuable insight for policy makers targeting entrepreneurs with characteristics conducive to high-quality entrepreneurship. Indeed, we suggest that and public programs should target people who enter entrepreneurship based on the value-creation motivation. Only this type of entrepreneurs is likely to establish innovative and high growth ventures, resulting in high-quality entrepreneurship. Besides entrepreneurial motivation, public policies should target individuals who are capable of recognizing business opportunities and configuring resources into various combinations. The entrepreneurs who are stimulated into entrepreneurship by opportunities are inclined to innovative and high-growth ventures. The entrepreneurship process would not be complete if entrepreneurs lack the capabilities of gathering and bundling resources in innovative manners in order to serve the process of new ventures formation and growth. In addition, public policies are not fully efficacious and comprehensive if they do not consider institutional factors, including economic freedom, policy supportiveness, cultural openness, and social supportiveness.

Limitations and Future Research

Based on extensive literature review, we have attempted to build a conceptual framework that helps explain the relationship between startup rates and economic growth. Although we provide insight regarding this relationship for research and policy, our study is not without limits. First, future studies that empirically test our conceptual model can make use of multilevel models currently popular in organizational research. Entrepreneurship' cross-country data has been more available, so we hope that our conceptual model becomes a futile avenue on which more empirical studies are developed. Second, our study treats entrepreneurial motivation, opportunity recognition, and resource construction as behaviors. However, the processes of recognizing opportunity and constructing resources also involve cognitive and affective factors. Future research may look at how cognitive and affective factors play in these processes. Third, our study argues that entrepreneurs' agentic role primarily determines entrepreneurship quality. Future research may tease out how much variance in entrepreneurship quality is attributed to individual and macro factors.

Conclusion

Our study proposes that entrepreneurial motivation, opportunity recognition, and resource construction are primary predictors of entrepreneurship quality. We also posit that institutional factors such as economic freedom, policy supportiveness, cultural openness, and social supportiveness strengthen the relationships between these entrepreneurial behaviors and entrepreneurship quality. The quality of entrepreneurship then moderates the relationship between startup rates and economic growth. Our study then draws some vital implications beneficial for research as well as policy making entities.

REFERENCES

Acs, Z., Astebro, T., Audretsch, D., & Robinson, D.T. (2016). Public policy to promote entrepreneurship: a call to arms. *Small Business Economics*, *47*, 35–51.

Anokhin, S., & Wincent, J. (2012). Startup rates and innovation: A cross-country examination. *Journal of International Business Studies*, *43*, 41–60.

Autio, E., & Acs, Z.J. (2007). Individual and country-level determinants of growth aspiration in new ventures. *Frontiers of Entrepreneurship Research*, *27*(19), 2.

Baker, T., & Nelson, R.E. (2012). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, *50*(3), 329–366.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359–373.

Baptista, R., Escaria, V., & Madruga, P. (2008). Entrepreneurship, regional development and job creation: The case of Portugal. *Small Business Economics*, *30*(1), 49–58.

Baron, R.A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs "connect the dots" to identify new business opportunities. *Academy of Management Perspectives*, *20*(1), 104–119.

Baron, R.A. (2007). Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal*, *1*, 167–182.

Baumol, W.J. (1990). Entrepreneurship: Productive, Unproductive, and Destructive. *Journal of Political Economy*, *5*(1), 893–921.

Bjornskov, C., & Foss, N.J. (2016). Institutions, entrepreneurship, and economic growth: What do we know and what do we still need to know? *Academy of Management Perspective*, *30*(3), 292–315.

Boudreaux, C.J., & Nikolaev, B. (2019). Capital is not enough: Opportunity entrepreneurship and formal institutions. *Small Business Economics*, *53*(3), 709–738.

Boundreaux, C.J., Nikolaev, B.N., & Klein, P. (2019). Socio-cognitive traits and entrepreneurship: The moderating role of economic institutions. *Journal of Business Venturing*, *34*(1), 178–196.

Bradley, S.W., & Klein, P. (2016). Institutions, economic freedom, and entrepreneurship: The contribution of management scholarship. *Academy of Management Perspectives*, *30*(3), 211–221.

Brown, T.E., Davidsson, P., & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior. *Strategic Management Journal*, *22*(10), 953–968.
Bruton, G.D., Ahlstrom, D., & Li., H.L. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, *34*(3), 421–440.
Campbell, B.A. (2013). Earnings effects of entrepreneurial experience: Evidence from the semiconductor industry. *Management Science*, *59*(2), 286–304.
Career, M.A., & Thurik, A.R. (2010). The impact of entrepreneurship on economic growth. In *Handbook of Entrepreneurship Research* (pp. 557–594). Springer, New York. NY.
Chowdhury, F., Audretsch, D.B., & Belitski, M. (2019). Institutions and entrepreneurship quality. *Entrepreneurship Theory and Practice*, *43*(1), 51–81.
Clough, D.R., Fang, T.P., Vissa, B., & Wu, A. (2019). Turning lead into gold: How do entrepreneurs mobilize resources to exploit opportunities? *Academy of Management Annals*, *13*(1), 240–271.
Cumming, D., & Johan, S. (2017). The problems with and promise of entrepreneurial finance. *Strategic Entrepreneurship Journal*, *11*(3), 357–370.
DigMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*, 147–160.
Eckhardt, J.T., & Shane, S.A. (2003). Opportunities and entrepreneurship. *Journal of Management*, *29*(3), 333–349.
Figueroa-Armijos, M., & Johnson, T.G. (2016). Entrepreneurship policy and economic growth: Solution or delusion? Evidence from a state initiative. *Small Business Economic*, *47*, 1033–1047.
Fisher, G. (2012). Effectuation, causation, and bricolage: A behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, *36*(5), 1019–1051.
Gartner, W.B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, *10*(4), 696–706.
George, G., & Prabhu, G.N. (2003). Developmental financial institutions as technology policy instruments: Implications for innovation and entrepreneurship in emerging economies. *Research Policy*, *32*(1), 89–108.
Giotopoulos, I., Kontolaimou, A., & Tsakaikas, A. (2017). Drivers of high-quality entrepreneurship: What changes did the crisis bring about? *Small Business Economics*, *48*, 913–930.
Gregoire, D.A., Barr, P.S., & Shepherd, D.A. (2010). Cognitive processes of opportunity recognition: The role of structural alignment. *Organization Science*, *21*(2), 413–431.
Greve, A., & Salaff, J.W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, *28*(1), 1–22.
Hayton, J.C., George, G., & Zahra, S.A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, *26*(4), 33–52.
Hessels, J., Gelderen, M.V., & Thurik, R. (2008). Entrepreneurial aspirations, motivations, and their drivers. *Small Business Economics*, *31*, 323–339.
Hitt, M.A., Ireland, R.D., Sirmon, D.G., & Trahms, C.A. (2011). Strategic entrepreneurship: Creating value for individuals, organizations, and society. *Academy of Management Perspectives*, *25*(2), 57–75.
Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing*, *18*, 165–187.
Hope, M. (2016). Policy and entrepreneurship education. *Small Business Economics*, *46*, 13–29.
Johnson, M.P., & Schaltegger, S. (2020). Entrepreneurship for Sustainable Development: A review and multilevel causal mechanism framework. *Entrepreneurship Theory and Practice*, *44*(6), 1141–1173.
Kim, K.C., ElTarabishy, A., & Bae, Z.T. (2018). Humane entrepreneurship: How focusing on people can drive a new era of wealth and quality job creation in a sustainable world. *Journal of Small Business Management*, *56*(1), 10–29.

Kirzner, I.M. (1973). *Competitive and Entrepreneurship*. University of Chicago Press: Chicago, IL.
Kirzner, I.M. (1979). *Perception, Opportunity and Profit: Studies in the Theory of Entrepreneurship*. Chicago: The University of Chicago Press.
Low, M.B., & MacMillan, I.C. (1988). Entrepreneurship: Past research and future research challenges. *Journal of Management*, *14*(2), 139v161.
Mair, J., Marti, I., & Ventresca, M.J. (2012). Building inclusive markets in rural Bangladesh: How intermediaries work institutional voids. *Academy of Management Journal*, *55*(4), 819–850.
Malach-Pines, A., Levy, H., Utasi, A., & Hill, T.L. (2006). Entrepreneurs as cultural heroes: A cross-cultural, interdisciplinary perspective. *Journal of Managerial Psychology*, *20*(6), 541–555.
Marcotte, C. (2013). Measuring entrepreneurship at the country level: A review and research agenda. *Entrepreneurship & Regional Development*, *25*, 174–194.
Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, *40*, 211–225.
McClelland, D.C. (1961). Entrepreneurial behavior. *The Achieving Society*, pp. 205–258.
McCrae, R.R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology*, *52*(6), 1258–1265.
McMullen, J.S., Bagly, D.R., & Palich, L.E. (2008). Economic freedom and the motivation to engage in entrepreneurial action. *Entrepreneurship Theory and Practice*, *32*(5), 875–895.
Meek, W.R., Pacheco, D.F., & York, J.G. (2010). The impact of social norms on entrepreneurial action: Evidence from the environmental entrepreneurship context. *Journal of Business Venturing*, *25*(5), 493–509.
Minniti, M. (2008). The role of government policy on entrepreneurial activity: Productive, unproductive, or destructive? *Entrepreneurship Theory and Practice*, *32*(5), 779–790.
Mueller, S.L., & Thomas, A.S. (2000). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, *16*, 51–75.
Nga, K.H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics*, *95*(2), 259–282.
North, D.C. (1991). Institutions. *Journal of Economic Perspective*, *5*(1), 97–112.
North, D.C. (1994). Economic performance through time. *American Economic Review*, *84*(3), 369–368.
O'Conner, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, *28*, 546–563.
Parker, R. (2008). Governance and the entrepreneurial economy: A comparative analysis of three regions. *Entrepreneurship Theory and Practice*, *32*(5), 833–854.
Sabah, S., Carsrud, A.L., & Kocak, A. (2014). The impact of cultural openness, religion, and nationalism on entrepreneurial intensity: Six prototypical cases of Turkish family firms. *Journal of Small Business Management*, *51*(2), 306–324.
Sabella, A.R., Farraj, W.A., Burba, M., & Qaimary, D. (2014). Entrepreneurship and economic growth in West Bank, Palestine. *Journal of Developmental Entrepreneurship*, *19*(1), 1450003.
Schmutzler, J., Andonova, V., & Diaz-Serrano, L.D. (2019). How context shapes entrepreneurial self-efficacy as a driver of entrepreneurial intentions: A multilevel approach. *Entrepreneurship Theory and Practice*, *43*(5), 880–920.
Schumpeter, J. (1911). The theory of economic development. *Harvard Business Studies*, Vol. XLVI.
Schumpeter, J. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
Shane, S. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad pub public policy? *Small Business Economics*, *33*, 141–149.
Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, *25*(1), 217–226.
Shane, S., Locke, E.A., & Collins, C.J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, *13*(2), 257–279.

Shepherd, D.A., Covin, J.G., & Kuratko, D.F. (2009). Project failure from corporate entrepreneurship: Managing the grief process. *Journal of Business Venturing*, *24*, 588–600.
Smith, A., Judge, W., Pezeshkan, A., & Nair, A. (2016). Institutionalizing entrepreneurial expertise in subsistence economies. *Journal of World Business*, *51*, 910–922.
Sobel, R.S. (2008). Testing Baumol: Institutional quality and the productivity of entrepreneurship. *Journal of Business Venturing*, *23*(6), 641–655.
Stam, E., & Van Stel, A. (2011). Types of entrepreneurship and economic growth. *Entrepreneurship, Innovation, and Economic Development*, pp. 78–95.
Stel, A., Carree, M., & Thurik, R. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economic*, *24*, 311–321.
Stephan, U., & Uhlaner, L.M. (2010). Performance-based vs socially supportive culture: A cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies*, *41*(8), 1347–1364.
Stephan, U., Uhlaner, L.M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, *46*, 308–331.
Stevenson, H.H. (1983). A perspective on entrepreneurship. *Harvard Business Review*.
Van Praag, C.M., & Versloot, P.H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, *29*(4), 351–382.
Van Praag, M., & Van Stel, A. (2012). The more business owners, the merrier? The role of tertiary education. *Small Business Economics*, *41*, 335–357.
Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in Entrepreneurship, Firm Emergence and Growth*, *3*(1), 119–138.
Webb, J.W., Tihanyi, L., Ireland, R.D., & Sirmon, D.G. (2009). You say illegal, I say legitimate: Entrepreneurship in the informal economy. *Academy of Management Review*, *34*(3), 492–510.
Wennekers, S., Stel, A.V., Thurik, R., & Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics*, *24*, 293–309.
Williams, N., & Huggins, R. (2013). Supporting entrepreneurship in deprived communities a vision too far? *Journal of Small Business and Enterprise Development*, *20*(1), 165–180.
Williamson, O.E. (2000). New institutional economics. *Journal of Economic Literature*, *38*, 595–613.
Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *The Academy of Management Review*, *14*(3), 361–384.
Woolley, J., & Rotter, R.M. (2008). Innovation policy and nanotechnology entrepreneurship. *Entrepreneurship Theory and Practice*, *32*(5), 791–811.
Zaki, I.M., & Rashid, N.H. (2016). Entrepreneurship impact on economic growth emerging countries. *The Business and Management Review*, *7*(2), 31–39.