Entrepreneurial Strategies

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Edited by Arnold C. Cooper, Sharon A. Alvarez, Alejandro A. Carrera, Luiz F. Mesquita and Roberto S. Vassolo



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Entrepreneurship and Innovation in Emerging Economies

Sharon A. Alvarez, Luiz F. Mesquita and Roberto S. Vassolo

The evolving twenty-first century may well be termed a time of uncertainty. Cycles of boom and bust in the rising global competitive landscape have presented firms with complexities and increasing difficulties to predict the future, as new technologies, products and methods of production are destroyed and replaced by even newer ones. Such dramatic changes have led practitioners to broaden their speculation about emerging trends in management, organization, and strategy, often questioning the adequacies of practices hailed in recent years. Emerging managerial practices are often found to be astoundingly dissimilar and habitually conflicting; yet the essential matter for managers today still seems to come down to one thing: coping with dramatic uncertainty (Barkema et al., 2002).

Paradoxically, while uncertain conditions have their own unique managerial challenges, these conditions also foster unique situations and opportunities that can be exploited by entrepreneurs and entrepreneurial firms (Audretsch, 1995). Entrepreneurship and innovation have come to be perceived as engines of economic and social development in many nations throughout the global competitive landscape (Acs and Audretsch, 2003; Holcombe, 2003). In fact, entrepreneurship and innovation have become essential managerial features for young and old firms, for large and small firms, for service companies and manufacturing firms as well as high-technology ventures (Thomke, 2003). Thus, because the very essence of entrepreneurship and innovation in these firms relates to identifying and exploiting new environmental conditions where new goods and services can satisfy evolving needs in the market (Meyer et al., 2002), it is not surprising that the importance of entrepreneurship and the management of innovation has grown over time, at par with the evolving complexity of the new global competitive landscape.

The sources of uncertainty and the factors leading to entrepreneurial activity, however, differ dramatically not only from industry to industry and firm to firm, but most conspicuously from country to country. Specifically, while in developed economies companies face uncertainties which are mostly related to technological and process development of new products and ideas, the conditions of uncertainty in the business environments of emerging economies are often magnified by phenomena of macroeconomic and institutional instabilities. Such phenomena are often observed to evolve into conditions of currency fluctuations, political disorders and even prevarication of existing property rights defensive laws. Yet, emerging economies are seeing record rates of entrepreneurship and innovation relative to developed economies. For example, the empirical evidence of the Global Entrepreneurship Monitor (GEM) studies find that emerging economies in continents as far apart as Latin America (e.g. Argentina, Brazil), Africa (e.g. Uganda) and Asia (e.g. China, India) have greater total entrepreneurial activity (TEA) than other countries of similar size but with more stable environments (GEM, 2005).

While an increasing number of scholarly and managerial publications address the phenomena of entrepreneurship and innovation, it is unclear how these many different sources of uncertainty, so pervasive in emerging economies, shape and affect entrepreneurial opportunities as well as how they affect entrepreneurial decision making. Understanding such links can be not only beneficial to multinationals entering emerging markets through wholly owned investments or partnerships but also to national entrepreneurs and public policy makers. In order to shed more light on such links, we have crafted this book. Specifically, our goal is to help academics, policy makers and business practitioners understand how the different conditions of uncertainty in emerging economies affect entrepreneurial opportunities in the market place, as well as how entrepreneur-managers navigate through these emerging market specific conditions.

To describe how firms produce and manage innovation in emerging economies, we consider several topics in this book, as follows.

Part I: Entrepreneurial Theory and Uncertain Environments

Chapter 2 by Alvarez and Barney begins to lay the foundation for a theory of the firm that addresses why firms would form when value creation is the central question. They challenge whether current theories of the firm such as transactions cost economics and incomplete contracts appropriately address firm formation under conditions of uncertainty when the source of this uncertainty is value creation. While Alvarez and Barney acknowledge that both of these theories have much to say about appropriation issues and conditions of uncertainty as they pertain to appropriation, they point out that neither theory sufficiently address fundamental issues of firm formation in the early stages of the value creation process.

Future research on less developed countries can use this theory of the firm as a lens to understand value creation in settings when such conditions as property rights are unstable such as in China. Moreover, this theory can be applied when problems of creation cannot be separated from problems of appropriation because the problems associated with potential appropriation are not only in the form of opportunistic behavior from individuals but perhaps from governments as well.

Finally the chapter has some novel ideas about why organizing a firm under conditions of value uncertainty is important. Certainly a research question that can be derived from this theory is: if different cultural norms are applied where opportunistic behavior is not acceptable and the society itself polices against this type of behavior, do firms still exist and why would they exist if not to create value?

In chapter 3, Peng offers findings which are consistent with the Alvarez and Barney theory of uncertainty that the more dynamic, hostile, and complex the environment, the higher the level of innovation, risk-taking, and "proactivity" among the most successful entrepreneurial firms in transition economies. Specifically, Peng explicitly addresses the increase of entrepreneurial activity in the transition economies of Central and Eastern Europe, the former Soviet Union and East Asia. In this chapter, the author strongly posits that the rise in entrepreneurship in these economies is the result of uncertainty from political change and changes in business practices as a result, also pointing out that entrepreneurial firms in these economies are formed – despite poor property rights protections – in order to create wealth.

The chapter suggests that network ties in these economies replace many institutional safeguards that are typically found in developed countries. Peng suggests that in an environment where personal ties figure prominently, entrepreneurs without deep and strong network relations may have a lot of difficulties in getting things done. However, network ties are necessary but not sufficient for good performance, good management practices such as hiring, motivating and retaining talented employees also give these firms an advantage at value creation.

Finally, Peng addresses the issue of value appropriation by entrepreneurs. He suggests that some of this value might be appropriated not by the entrepreneurs creating the value but by other entrepreneurs and even by government officials. Peng further suggests that this type of appropriation behavior might induce either shortterm goals on the part of entrepreneurs or even be a deterrent to entrepreneurial behavior.

In chapter 4, Ireland and Webb add to the list of concerns outlined in Peng and also expands their scope to a broader international perspective. Specifically, the authors look at a specific form of entrepreneurship in international contexts, termed as "international entrepreneurship," as a way of explaining the process through which firms discover and exploit opportunities that lie outside a firm's domestic markets in the pursuit of global competitive advantages. Their perspective adds to existing literature which often takes firms as "born global," and does not enable a more thorough analysis of the entrepreneurial initiatives of entering international markets.

Ireland and Webb enrich our understanding of entrepreneurship in emerging economies in that they describe the roles of resource bundles formed with financial capital, human capital, and social capital in the exploration and exploitation of entrepreneurial opportunities in emerging economies. They posit that while certain resource bundles are necessary to flexibly accommodate the identification of entrepreneurial opportunities in the dynamic uncertainty associated with emerging economies, other resource bundles are more appropriate for undertaking entrepreneurial efforts in an international context. Because large and small firms may differ in regards to their resource bundles, they may differently possess certain competencies that enhance their competitive advantage in different phases of their international entrepreneurship efforts. Thus, large firms, who often own ample financial resources and experiential knowledge of routines are often more successful in exploiting opportunities. On the other hand, smaller firms who often lack "deep pockets" are more likely to be successful when leveraging human-technical and social capitals to maneuver through the maze of changing institutional forces in emerging markets and more quickly and flexibly identify opportunities while engaging in exploration-oriented actions.

Part II: National Context and New Enterprises

Previous empirical studies notice important differences on entrepreneurship and innovation across countries. In order to shed light on the nature and relationships explaining these differences, our book incorporates several different empirical perspectives. Chapter 5 by Cooper and Yin surveys the literature about entrepreneurship and innovation across countries, and examines the factors that bear upon the creation of innovative and growth oriented firms. They stress the relevance of the GEM studies as a source of information about the relationship between entrepreneurship and innovation in emerging economies. One of the apparent paradoxes of emerging economies is their important amount of entrepreneurial activity. However, as the GEM studies show, this higher rate of entrepreneurship is partially explained as "entrepreneurship by necessity" as opposed to "entrepreneurship by opportunity." Entrepreneurship by opportunity leads to growth-oriented firms, which are more willing to attract venture capitalist and are more innovative. Therefore, an important percentage of the entrepreneural activity in emerging economies will face severe problems of survival.

In spite of these limitations, new and small firms in developing countries will operate with some advantages. Cooper and Yin identify at least two: proximity to focal markets will allow them to better identify market opportunities, and production in such countries will permit firms to take advantage of lower factor costs. It is still unclear, however, whether these advantages are enough to lead to growthoriented innovative firms. Nonetheless, as Cooper and Yin conclude, *most new ventures will not be very innovative or lead to much growth, regardless of the country setting.* For new entrepreneurial ventures in emerging economies, much will depend upon the human and financial capital they can bring to the entrepreneurial process.

As these resource conditions may vary country by country, the question that naturally evolves is to what extent performance differences can be sustained across different markets. In other words, to what extent does "country" matter, as an explanatory factor for competitive success? In chapter 6, Brito and Vasconcelos present an important methodological study assessing this question. Following a long tradition in strategic management of measuring the firm and the industry effect on performance (Rumelt, 1991; Schmalensee, 1985; McGahan and Porter, 1997; Brush and Bromiley, 1997) they incorporate another variable – the country effect. Although most previous studies decomposing performance variances focus on industry and firm effects, Brito and Vasconcelos' novel methodological approach enables us to confirm what economic and strategic management theorists have long posited – that local works as an important determinant of firm heterogeneity.

Although they find that country *does* matter, their study also enables one to assess *how much* country matters. Their conclusion is that country effects are not the main

factor in explaining performance variance. Factors associated with the individual firm, such as entrepreneurial drive and mind-set for example, are still the most important source of explanation for performance. Country effects compete in the second rank of factors like industry membership. Moreover, country effects also vary across economic sectors. Specifically, they find that country effect is low in sectors like Transportation and Services and rich by up to 20 percent of total performance in sectors like Agriculture.

As these studies suggest that entrepreneurial mind-sets and entrepreneurship management can help firms gain an edge in the higher volatility of emerging economies, in chapter 7 Rocha investigates how a firm's positioning within a social network can explain different performances. Rocha uses a meta-study to explore if clusters are conducive to new entrepreneurial activities in Latin American countries. As the study assesses, clusters are not only an agglomeration of firms, but also networks within geographical boundaries. From a theoretical perspective, clusters foster entrepreneurship for multiple reasons like lowering entry and exit barriers and fostering competitive climate. However, the empirical evidence in Latin America is not conclusive on this relationship. Rocha hypothesizes that clusters foster entrepreneurship in traditional manufacturing or specialized suppliers' clusters such as software, given the more flexible governance structures in these types of industries. Instead, clusters inserted in value chains with vertical structures not embedded in the local community, such as some automotive clusters, are likely to hinder firm creation.

Rocha also explores the relationship between entrepreneurship, clusters, and economic development in Latin America. Its unique conditions are the emergent nature and especial configuration of its clusters and the higher level of entrepreneurial activity in terms of both necessity and opportunity driven entrepreneurship.

In chapter 8, McDermott complements the previous chapter by analyzing how a country's policy makers' approach to institution building interacts with network reproduction and, therefore, with social capital. Since firms are embedded in a concrete socio-political establishment, the distribution of public power affects economics networks. McDermott examines how existing institutional and political factors in the Czech Republic inhibit or enhance network adaptation to external technological and economic shocks in the mechanical engineering industry. Therefore, this study stresses that the political approaches that governments take to build new institutions alter not only their network authority structures but their network stability and reconfiguration.

Emerging economies suffer from institutional volatility, a fact which in turn seems to erode social capital. Given these changes, McDermott's study highlights the importance of providing alternative institutional arrangements to mediate disputes and share risks. Under this framework, to the extent that political leaders are able to empower and monitor a variety of public actors to experiment with new institutional roles, network firms appear to be more likely to extend their time horizons and pursue negotiated modes of reorganizations. On the other hand, to the extent that political leaders seek to insulate and centralize public power, fragmentation and winner-take-all strategies are likely to prevail in the network. This study gains especial relevance given the spur in liberalization of emerging economies across Asia, Latin America, and Eastern and Central Europe. Vissa and Chacar, in chapter 9, stress the positive impact of social ties on new ventures performance in emerging economies, since such ties are often substitutes for underdeveloped institutions. Analyzing the software industry in India, they show that external network contacts provide informational advantages that, giving the uncertainty of managing a new venture, results in superior strategic decision making and, therefore, in superior venture performance. Uncertainty is mitigated and the informational advantage is enhanced by trustworthiness. Therefore, trustworthiness emerges as an important moderator between external network contacts and new business performance in an environmental context with weak institutions like that of emerging economies.

Moving towards network markets in India, in chapter 10, Madanmohan explores the growth process by which recently established firms attain substantial size and they keep growing. The study points out different capabilities endowments required at different stages of the life of a high-tech venture. At initial stages, the key organizational capability is employee recruitment and training and strategy setting. In more developed stages, the key capabilities are quick imitation and strategic extension. Thinking in the long run, however, firms not only need to have the right capabilities at the right moment, but also be in condition to update this set when they move at a different development stage. This is a core dynamic capability that new start ups should develop since their creation if they want to achieve sustainability.

Conclusions

In the first paragraphs of this introduction, we stressed that uncertainty is a doubleedge sword that a successful entrepreneur in emerging economies should know how to handle. Innovation characterizes growth-oriented ventures, and entrepreneurs should develop critical capabilities to succeed in hostile environments. Our primary concern involved in selecting the chapters of this book, thus, has been with categorizing different sources of uncertainty which are more peculiar to emerging economies and illustrating how different managerial mind-sets, different entrepreneurial strategies in deploying resource bundles as well as different positioning tactics relative to changing environmental conditions enable a firm to sustain competitive advantages.

As a final comment, let us paraphrase Cooper and Yin: "Overall, entrepreneurship has demonstrated that it can be a major force in economic development. As millions of entrepreneurs all over the world start their businesses and try to develop them, countries benefit from their creativity, their energy, and their dreams."

References

Acs, Z. J. and Audretsch, D. (Eds.) 2003. Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction. (Vol. 1). The Netherlands: Kluwer Academic Publishers.

Audretsch, D. 1995. Innovation and Industry Evolution. London: MIT Press.

- Barkema, H. G., Baum, J. A. C., and Mannix, E. 2002. Management challenges in a new time. *Academy of Management Journal*, 45(5): 916–30.
- Brush, T. H., and Bromiley, P. 1997. What does a small corporate effect mean? A variance components simulation of corporate and business effects. *Strategic Management Journal*, 18(10): 825–35.
- GEM. 2005. Global Entrepreneurship Monitor: http://www.gemconsortium.org/.
- Holcombe, R. G. 2003. The origins of entrepreneurial opportunities. *Review of Austrian Economics*, 16: 25–54.
- McGahan, A. and Porter, M. 1997. How much does industry matter, really? *Strategic Management Journal*, 18 (Summer special issue): 15-30.
- Meyer, G. D., Neck, H. M., and Meeks, M. D. 2002. The entrepreneurship-strategic management interface. In M. A. Hitt, R. D. Ireland, S. M. Camp and D. L. Sexton (Eds.), *Strategic Entrepreneurship: Creating a New Mindset*. Oxford: Blackwell Publishers, 19–44.
- Rumelt, R. 1991. How much does industry matter? *Strategic Management Journal*, 12(3): 167-85.

Schmalensee, R. 1985. Do markets differ much? American Economic Review, 75(3): 341-51.

Thomke, S. 2003. R&D comes to services. Harvard Business Review, 81(4): 70-9.

Thompson, J. D. 1967. Organizations in Action: Social Science Bases of Administration. New York: McGraw-Hill.

PART

Entrepreneurial Theory and Uncertain Environments

- 2 Can Organizing a Firm Create New Economic Value? Sharon A. Alvarez and Jay B. Barney
- 3 How Entrepreneurs Create Wealth in Transition Economies *Mike W. Peng*
- 4 International Entrepreneurship in Emerging Economies: A Resource-based Perspective R. Duane Ireland and Justin W. Webb

Can Organizing a Firm Create New Economic Value?

Sharon A. Alvarez and Jay B. Barney

For some time now, economists (Smith, 1778; Marshall, 1930), strategic management scholars (Penrose, 1959), and entrepreneurship scholars (Knight, 1921; Schumpeter, 1934) have studied how various productive resources in an economy can be used to create new economic value. The ability of a variety of these resources – including labor, capital, and technology – to be sources of new economic value has already been examined by several scholars (Smith, 1778; Walras, 1954; Williamson, 1985). This chapter examines the ability of another productive resource in the economy – the firm as an organizing entity – to be a source of such value creation.

Unfortunately, the currently most influential theory that explains why firms come into existence – opportunism-based transactions cost economics – focuses on how organizing a firm can reduce transactions costs in completing an exchange rather than on how organizing a firm can create new economic value (Williamson, 1975; 1985).¹ Despite a few efforts to extend opportunism-based logic from cost minimization to value maximizing (e.g., Riordan and Williamson, 1985; Zajac and Olsen, 1993), most theoretical and empirical work that applies this theoretical tradition is still based on the assumption that "efficiency" is more important than "strategizing" in understanding why firms are created (Williamson, 1991).

This chapter acknowledges that the creation of firms often depends on the ability of these governance devices to reduce transactions costs in completing an exchange. However, when it is possible for new value in an exchange to be created, failing to recognize the impact that organizing a firm can have on realizing this potential might lead to misleading conclusions about whether or not a firm should be used to manage a given exchange.

Following Zajac and Olsen (1993), the purpose of this chapter is to extend current opportunism-based transactions cost logic to incorporate the notion that adopting a firm to manage an economic exchange can, in some settings, create new economic value. The chapter does this by analyzing the governance consequences of recognizing that exchanges can be characterized by market uncertainty as well as by behavioral uncertainty. The theory of the firm that is derived from this effort specifies conditions under which the creation of a firm is necessary if an exchange is to create

new economic value. The chapter concludes by discussing the relationship between this theory of the firm, opportunism-based transactions cost theories of the firm, and incomplete contract theories of the firm.

Opportunism-based Transactions Cost Economics²

The theoretical and empirical literature in opportunism-based transactions cost economics is vast, and no effort will be made to review this literature. Rather, the objective here is to summarize the basic arguments of this theory, especially as they relate to the conditions under which firms are created to manage economic exchanges.

Opportunism-based transactions cost economics takes as its unit of analysis a transaction between two economic entities. The theory examines the different ways that such a transaction can be managed, including markets, intermediate governance mechanisms, and hierarchies (or firms). The main driver of the choice among these governance devices is hypothesized to be what might be called "behavioral uncertainty," or the inability of one economic entity to evaluate the motives and objectives of another economic entity at low cost. In particular, high levels of behavioral uncertainty imply that the willingness of an exchange partner to behave opportunistically, if given the opportunity to do so, cannot be evaluated at low cost. In this context, opportunism is defined as "profit seeking with guile" (Williamson, 1975), and might include a broad range of adverse selection, moral hazard, or hold-up activities (Barney and Ouchi, 1986).

Given high levels of behavioral uncertainty, the theory further hypothesizes that profit seeking, but boundedly rational economic entities, will assume that those with whom they are contemplating an exchange will, if given the opportunity, behave opportunistically. Whether or not an economic entity has the opportunity to behave opportunistically is hypothesized to depend on the level of transaction specific investment that parties to an exchange must make if they are to complete that exchange. Transaction specific investments have more value in a particular transaction than they do in alternative transactions.

If it is possible to write and enforce a contract that fully specifies all the ways that parties to an exchange may behave opportunistically, then that exchange can be managed through some sort of market or intermediate market form of governance. But if such a contract is too costly to write or enforce, an exchange will have to be managed with hierarchical governance. Hierarchical governance, or a firm, is also a type of contract. However, this contract gives some people associated with an exchange the right to monitor and control the behavior of other people associated with that exchange, as long as those behaviors are not controlled by other contracts, by custom, or by law. Thus, in this sense, a firm is said to exist when rights to make decisions not otherwise specified in a relation are given to some individuals associated with an exchange, but not others.

The advantage of hierarchical governance under conditions of high behavioral uncertainty is that this form of contract does not have to anticipate all the different ways that parties to an exchange may behave opportunistically. Rather, through close monitoring, unanticipatable forms of opportunism can be identified over the life of