Introduction*

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In this book we look at the phenomenon of entrepreneurship in emerging regions in India, China, Ireland, Eastern Europe, North and South America, and North and South east Asia. The ten chapters in this book were presented in a 2006 academic conference held at the Indian School of Business in Hyderabad, India, a fast emerging entrepreneurial region. The chapters were double blind peer reviewed and completed three to four rounds of revisions before they were accepted for publication in this volume.

The book is organized into four parts to take the reader from a general framework for understanding the relationship between economic development and entrepreneurship in emerging regions to more specific examples of how entrepreneurs and their firms respond to the opportunity and threats that are dynamically evolving in such places. There are two ways to read the chapters in this book. The first is to simply read them as a series of interesting case studies, grounded in extant theories of entrepreneurship and regional economic development. This would be to short change the potential of the book. The second way is to read them for theoretical insights into why entrepreneurship is so robust even in regions that appear not to have the ingredients (such as risk capital) for such activity.

It is not surprising that self-employment naturally arises where the opportunities for meaningful employment are few, such as in rural economies. This kind of self-employment has been referred to as subsistence entrepreneurship. However we are particularly taken by the fact that value-creating entrepreneurship can occur in these regions and note that rural value-creating entrepreneurship is a distinct form of economic activity. For example opportunities are identified almost always as the fulfillment of human needs with technology (broadly understood as knowledge embedded

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in products and services), whereas traditional notions of technological entrepreneurship allow for technology to create its own markets. This may be due to the fact that consumers in rural regions do not have the resources for discretionary consumption. A second explanation could be that the rural entrepreneurs have gateways to larger domestic and international markets, as is reflected in the case of the Brazilian furniture cluster (Chapter 2). One implication may be that the explanatory power of individual differences for the level of entrepreneurial activity may be higher in rural regions than in urban areas, where institutions may matter more.

In addition to the possibility that the chapters in this volume offer interesting extensions to theories in use, they consistently cite the role of government intervention in emerging economies. Without expositing on the political economy of such regions, we surmise that the reason governments figure so prominently is because emerging regions often lack the critical mass of inputs (capital, human talent and technology) required to ignite entrepreneurial action. Hence, in models of entrepreneurship in emerging regions, government bridges the supply side causes of market failure in entrepreneurial activity. Hence a common theme in these chapters is the notion that the occurrence of entrepreneurship in emerging regions is not accidental. The chapters consistently show that the development of entrepreneurial activity can be traced to a confluence of initial conditions comprising resource endowments, institutions and markets. This is exemplified by the first two chapters of the book in which the authors discuss the formation of what have become easily identifiable entrepreneurial regions in such diverse places as New York State, Ireland, Brazil, the Balkans and India. This pre-eminent role of governments in the emergence and sustenance of entrepreneurial regions is consistent with and confirms the findings of a large body of research in this area (for example, Alesina and Giavazzi (2002); Bresnahan et al. (2002); Saxenian (1994)).

Part 1 focuses on explicating parts of the dynamic model articulated by Venkataraman (2004). Venkataraman (2004) tries to explain how the institutional and resource endowment conditions in a defined geographic area create the market opportunities that form the basis for new firm formation. As a consequence, in contrast to traditional foreign direct investment theories of economic development, the starting conditions also determine the prospects for sustainable economic growth in a region. This 'virtuous cycle' is the framework for understanding Part 1. The chapters in this part also suggest a level of dynamism in the phenomenon that has largely been ignored in the literature. Studies that rely on standard linear models typically cannot deal with notions of path dependence, recursive interactions between the factors that drive entrepreneurial activity, and agent decisions that are conditioned on institutional constraints (Phan, 2003). Models of entrepreneurially driven regional development often begin with discussions of initial conditions, as many of the chapters in this volume, but do not always allow for those conditions to evolve with the introduction of agent actions. The chapters in this part try to address this issue by offering a view of the entrepreneurial development process that is both recursive as well as evolutionary.

Part 2 takes off from the previous one. Here the authors are concerned about the role of a particular stakeholder in the transformation of a region. In most parts of the world, including some emerging regions in the United States, governments at all levels figure prominently in the allocation of resources toward entrepreneurial development. Early attempts by government to influence economic development, a legacy of Keynesian economic thought, were manifest in policies on public expenditure including military spending, encouraging foreign direct investment, non-tariff incentives for technology and knowledge transfers, and monetary policy to encourage exports. In recent years, with the successful transformation of regions like Ireland and Scandinavia through the technological entrepreneurship, government policy has become more nuanced, targeting the traditional macroeconomic factors like the money supply but also focusing on microeconomic factors like labor supply (through education policy), risk capital (through bankruptcy law reform and publicly funded and privately managed venture funds for specific areas, such as information and communications technologies (ICT) and biotechnology), personal incentives (through tax policy) and innovation capacity (through intellectual property rights protection). Much of the research on the policy implications of technology entrepreneurship have to do with the identification of successful formulae. Recently, the research has become more fundamental, concentrating on characterizing the dynamics of growth, explaining new firm formation, and offering limited models that test conjectures from evolutionary economics, knowledge spillovers theory and absorptive capacity theory, with less concern for building 'all-weather models' for policy purposes. This does not mean that the research is less useful to policymakers. It does imply that we are more careful in deriving prescriptive implications. This is a good thing for, as the chapters in this part demonstrate, it can be problematic when government expends public resources to manage a phenomenon that is at best partially understood, as we shall see in Part 3.

In Part 3 the chapters more narrowly focus on the role of government policy in encouraging or impeding the development of a major input into the entrepreneurial production function – venture capital. Venture capital has been a prime focus for researchers in regional economic development because it has been closely associated historically with the rejuvenation and sustenance of high technology regions such as Silicon Valley, USA and more recently with their emergence (such as the ICT cluster specializing in security related applications in the Washington DC area). The two are nowadays closely related because risk capital, of which venture capital forms a major part, is seen as a key input for innovation projects with difficult to forecast cash flows, and therefore subject to the market failure of traditional forms of financing such as bank debt and corporate equity. This function was earlier performed by governments. For example in the 1940s and 1950s the Office of Scientific Research and Development (OSRD), a US federal agency, awarded US$ 330 million in research contracts and played a significant role in the emergence of what we now know as Route 128 (Rosengrant and Lampe, 1992). Thus an implication for the development of technological entrepreneurship in emerging regions is the necessity for either government funding with a sufficiently long time horizon or the rise of a robust venture capital industry with the appropriate risk-reward profile.

In one example, Ireland, the impact of government is assessed to be positive, generally creating the conditions that encouraged the creation of a risk capital market, whereas in the other example, South Korea, the influence of government is less positive. In the latter case the authors believe that the government's impact has been at best neutral, and more likely to be negative given the subsequent lack of development of a risk capital free market in the post-Internet boom era. In reading Part 3 one must also take into consideration the way that economic production has traditionally been organized in the two countries, and by extension in other jurisdictions. In Ireland the concentration of market power in the hands of a few large companies is relatively low, which provides the basis for a dynamic economy characterized by high levels of firm foundings that can absorb the supply of venture capital.

In South Korea, in particular, the occupation of the *chaebol* or family network form of organization through all niches of the economy and the heavy influence of the family enterprise dominant logic with its focus on loyalty and reciprocity probably precludes the development of an independent risk capital market. Risk capital markets depend on the existence of information on opportunities to the reorganization of production and the ability for production to be reorganized into more efficient forms. However, in South Korea, the inability for firms to restructure because of social mores and government policy causes a market failure on the demand side for risk capital. The population of all conceivable market niches by the *chaebols* crowds outs the supply side driver of new firm formation, which implies lower demand for risk capital. Finally, the internal financing of new production by large corporations reduces the availability of capital to domestic institutional risk investors, which in turn makes the capital market for foreign investors who have one less avenue for exit (that is, the IPO market). Hence, in spite of the government's efforts to encourage venture capital, the structure of the country's economy tends to attenuate the incentives offered.

Part 4 turns our attention to the entrepreneur and venture level of analysis. Here we look at the how entrepreneurs and their firms respond to the opportunities and threats inherent in the dynamism of emerging regions. The authors have picked a wide range of examples to illustrate different aspects of the entrepreneurial mindset (flexibility, persistence, commitment to a vision and adaptability), while also demonstrating the evolutionary dynamics common to all the chapters in this book, which provide us with valuable insights on how the entrepreneur influences her environment. The chapter on initial conditions by Supapol, Fischer and Pan is particularly notable in this regard because it explicitly links the starting conditions given by the institutional environment of an emerging region with the entrepreneur and firm level responses to opportunities as they are impacted by these conditions. The chapter also demonstrates how starting conditions are not static and therefore a key entrepreneurial challenge, and a potential focus for future research is the adaptation of the entrepreneurial dominant logic to these changes. The chapter by Rubesch provides a counter-intuitive finding on the ability of border traders to compete based on value added services with authorized distributors, in spite of being burdened by a price disadvantage.

In conclusion we believe this book takes a significant step forward in the research on entrepreneurship in emerging regions. The most important, we believe, is the theoretical orientation of the studies. In this regard the chapters are exemplars of the type of research that will enhance our ability to disconfirm hypotheses and hence advance the field. The choice of subject areas and geographic locations additionally demonstrate the generalizability of the extant theories in the field, which moves us closer to acceptable models that will eventually form a paradigm for the domain. Finally, because this book demonstrates how unique aspects of the entrepreneurial phenomenon in specific locations, such as Indonesia, the Balkans, Korea and Silicon Alley, can be highlighted for further study by first explaining the institutional environment and its relationship to the general theory on new firm formation.

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