Chapter 5 Leveraging Entrepreneurial Ambition Through Innovative Technologies and Knowledge Transfer Within a National Defense Technological and Industrial Base

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ABSTRACT

While active agents of an entrepreneurial ecosystem, governments can play a crucial role as catalysts of entrepreneurial ambition as they develop modern defense capabilities, and in the process, by focusing on technological innovation and knowledge transfer. The supporting argument to this claim lies in the assumption that by exploiting the potential of these innovative technologies, namely their dual-use capacity and spillover effect, they may prove to have a contagion effect in new business formation. Drawing on secondary data, namely a literature review, this chapter raises the discussion for further research on how governments', as active agents of an entrepreneurial ecosystem, can leverage entrepreneurship while developing superior defence capabilities. By linking the development of these capabilities, through an innovative national technological industrial base (DTIB), to new business formation, the notion that entrepreneurship is far from being rooted in a commercially competitive market setting alone is equally reinforced in the context of the chapter.

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INTRODUCTION

History has shown that economic and social progress has been throughout the time the result of individuals' needs and willingness to change. In fact, the initiative to introduce change, either by thinking new ways and means of doing things, or through an open mind to perceive the world in a novel way, has been at the core of change in our economic systems and social structures. However, within the realm of a globalized world as the one we live in nowadays, and due to these rapid and somewhat disruptive changes, societies have become far more complex. As a result, governments are now either too small or too big to respond, alone, to the new emerging challenges and unable to assume, per se, the burden of change. Consequently, dealing with these challenges requires individual effort and a strong will to step forward and assume one's share of the responsibility to change and act in the light of these challenges. Progress and development are now more than ever dependent on individual initiative and a strong entrepreneurial mindset. In fact, societies are becoming today more dependent of the ordinary citizen's ability to identify and convert, in an innovative manner, the opportunities found in their environment into economic and social value. Finding new forms of leveraging entrepreneurial activity and business formation is essential in today's world. These forms are found by exploiting changes, either in technology, materials, a new type of business, or even consumer behavior and needs. Entrepreneurship, as a social and economic value-creating process, is a combination of creativity and innovation in identifying and converting these various forms of entrepreneurial activity. Another relevant aspect identified in the literature that is central to one of the characteristics of an entrepreneur, and that determines his capacity to thrive and succeed, is the way change is successfully managed and dealt with.

However, although entrepreneurship has been widely acclaimed and applied in business, government, and all other forms of social and economic activities, one can assume from the vast body of literature that as a concept, there is no consensus as to its meaning. According to Ma and Tan (2006), "entrepreneurship as a theoretical construct and practical phenomena remains poorly defined and its interpretation fragmented" (p.704). As a complex topic, it seems to be challenging to obtain a standard definition (Binnui & Cowling, 2016). While for some, it is perceived as an economic function, carried out by individuals acting independently or within organizations (Carlson et al. 2013), for others, it is a particular type of mindset (Ma & Tan, 2006) an attitude or a kind of drive.

Irrespective of the valid concept or meaning of entrepreneurship, an issue that is not central to the main topic under debate within this chapter, there is still general acceptance as to the role it plays in economic growth, due to three reasons (Burns, 2011). Firstly, entrepreneurship is known to increase the number of companies, which itself leads to economic growth. Secondly, entrepreneurship is known as a mechanism for knowledge spillovers, a key factor underlying endogenous growth and start-ups. Finally, entrepreneurship tends to generate diversity and variety among enterprises in any location, and by doing so, contributes to economic growth too.

Therefore, facilitating entrepreneurship in its various forms has become a crucial priority. Society and governments, in particular, need to work together in favor of a robust and dynamic entrepreneurial ecosystem, one in which entrepreneurship is recognized as being transversal to all social and economic activities within both the public and private domains. So, for entrepreneurship and entrepreneurial behavior to thrive, entrepreneurs must look for opportunities in every economic sector and area of activity, including the public sector in all its various activities.

Since governments are also an essential part of the entrepreneurial ecosystem, their role as catalysts for new business formation, influenced by public policy and intervention in key strategic areas, should

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