Chapter 14

Positive Effects of the Innovative Start-Up on University Spin-Offs: A Recent Italian Legislation

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ABSTRACT

The third mission of the university has developed over the years, becoming a key aspect of university policy. The spin-offs are increasingly prosperous and innovative. Over the last decade University spin-offs in Italy have developed, but there are many difficulties that hinder the creation and success of such initiatives. A recent regulatory intervention, however, has created the conditions to overcome these difficulties by introducing the theme of innovative start-ups. Through the analysis of this issue we want to emphasize if these start-ups can contribute to the optimal development of spin-offs.

INTRODUCTION AND METHODOLOGY

A wide body of literature has focused on the role of knowledge, viewed as human and technical capital, in shaping economic growth. In particular, a growing interest has been devoted to the understanding of the interactions behind the generation, diffusion, and application of knowledge. Along these lines, the most competitive modern economies are often referred to as knowledge economies, meaning economies that are directly based on production, distribution, and use of knowledge and information (OECD, 1996).

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The main idea behind the concept of the knowledge economy is that a firm’s competitive advantage and economic growth in general, at both a national and a local level, are more frequently determined by knowledge creation and technical progress (Foray & Lundvall, 1995; Cooke, 2002; Smith, 2002).

The debate on the economics of knowledge has evolved through different steps; following the different phases in the debate, firms and local institutions, in particular universities and research centers, are assumed to play a changing role.

So, the third mission of universities, which allows the commercialization of research results, has assumed a strategic role and a primary importance in government policies in Europe as well as the rest of the world. Since the early 1980s, universities in developed countries have greatly increased their entrepreneurial activities, including patenting and licensing, establishing incubators, science parks, and university spin-offs (USOs), investing equity in start-ups and assisting regional economic development (O’Shea, Fitzgerald, Chugh, & Allen, 2014).

Although this attention has raised interest in topics such as technology transfers and university spin-offs, the scarcity of available resources and the conventional university culture still did not allow us an optimal use of the opportunities related to this type of activity.

USOs have become a popular method of obtaining value from research and transferring technology, and have attracted increased interest from scholars studying the commercialization of academic research results (Baldini, 2010; Clarysse, Wright, Lockett, Van de Velde, & Vohora, 2005; Gomez-Gras, Lapera, Solves, Jover, & Azuar, 2008; Mcqueen, 1982).

USOs can be considered one of the most important vehicles to create firms based on academic research (Carayannis, Rogers, Kurihara, & Allbritton, 1998; Clarysse et al., 2005, Degroof & Roberts, 2004; Nicolaou & Birley, 2000; Roberts & Malone, 1996; Pirnay, Surlemont, & Nlemvo, 2003; Steffensen, Rogers, & Speakman, 2000). In fact, the importance of the USOs as a vehicle for the development of university research results is underlined by the development that such companies have had in recent years (Netval1, 2016).

USOs are included into the category of New Technology-Based Enterprises (NTBFs), that play a major role in the development and commercialization of new technologies and the development of national economies (Bollinger, Hope, & Utterback, 1983; Kirwan, Van Der Sijde, & Groen, 2006; Storey & Tether, 1998;) but USOs are not limited to high-tech companies.

In fact, while NTBFs are firms recently established by a group of entrepreneurs, based on exploitation of an invention or technological innovation and which employ a high proportion of qualified employees (Little, 1977; Lutz, 2003), USOs are born for the exploitation of academic research not only technological or patented, but in all areas of research, even humanistic, social, economic, etc. (Chiesa & Piccaluga, 1996).

Indeed, whereas the traditional view implicitly assumes that USOs are technology-based firms, a notable shift occurred and the nature of academic spin-offs increased in diversity (Shah & Pahnke, 2014). In this work, we will refer only to the issue of USOs. So when we speak about USOs we refer too many and varied types of companies that develop from different academic backgrounds.

The beginning of a USO is a complex process that often must overcome many obstacles, such as in management, in corporate governance, and, above all, in finance, due to the difficulty in finding economical resources (Klofsten & Jones-Evans, 2002).

However, the difficulty in finding financing and poor government policies often slow down the creation and development of USOs (Munari, Rasmussen, Toschi, & Villani, 2016).