

INNOVATIVE START-UP PERFORMANCE AND THE ROLE OF HUMAN, SOCIAL AND ORGANIZATIONAL CAPITAL: EVIDENCE FROM ITALY

Colombelli, A.*, Molino, M.** , ***

* Department of Management and Production Engineering, Politecnico of Turin

** Human Plus Foundation, Turin

*** Department of Psychology, University of Turin

Corresponding author: Molino, M.

General theme: “Innovative start-ups”

Entrepreneurship is today more critical for economic growth than it has ever been. The financial crisis and the following economic downturn have indeed generated severe resource constraints and unpredictable market conditions that have significantly challenged both developed and emerging countries. Such adverse environmental conditions have fostered a greater need for rethinking the policy agenda both in the EU and overseas to boost economic growth in the years to come. Entrepreneurial activities are indeed critical for both stagnant economies to recover and developed ones to growth, as they foster new-job creation and generate wealth (Kauffman, 2013).

In this vein, at the end of 2012 the Italian Ministry of Economic Development approved a Law Decree on “Further urgent measures for Italy’s economic growth”, providing for specific measures which are aimed at promoting the creation and development of start-ups. This was the first time the Italian legislation took this kind of companies into consideration. The law recognizes that start-ups are important for the promotion of sustainable growth, technological development and employment, in particular youth employment, and aims at developing a new business culture, creating an environment which is more favorable to innovation, increasing social mobility, as well as attracting to Italy investments and talented people from abroad. Under this law, at the end of 2013 more than 1500 innovative start-ups registered at the Chambers of Commerce in Italy.

However, although scholars, practitioners and policy makers acknowledge that new firm formation can be beneficial for economic growth, some distinctions are required. Indeed, the literature has shown that human, social and organizational capital exert a preeminent impact on the post-entry performances of new firms. Many studies suggest that entrepreneurs’ cognitive characteristics, such as intention and motivation, are good predictors of firm entry and performance (Creedy and Johnson, 1983; Vivarelli 2004; Carree et al., 2007; Acs et al., 2008). Entrepreneurs’ human and social capital are key as well (Colombo et al., 2004; Colombo and Grilli, 2005; Acs et al., 2007; Crook et al., 2011). As for the human capital, recent meta-analyses and reviews provide evidence for the predictive validity of personality traits and competence in entrepreneurship research (e.g., Mitchelmore and Rowley, 2010; Rauch and Frese, 2007). Moreover, previous studies highlighted the importance of contextual factors, such as family characteristics, network and social support (Schmitt-Rodermund, 2004). Also the origin of entrepreneurs, like prior knowledge, past positions and industry experience may affect the development and growth of new firms (Roberts et al., 2011). Finally, empirical evidence reveal a positive link between organizational capital and firm performance (Lumpkin and Dess, 2001; Wiklund and Shepherd, 2005).

Despite the abundant literature on the topic, we believe that more research is needed to shed further light on the determinants of innovative start-ups performances. By focusing on human, social and organizational capital, the aim of the study is to develop a general model of the antecedents of

innovative start-ups performances. To this aim, the present study adopts a multidisciplinary approach and combines the economic and psychology literature.

To test our model, we collected information on a convenience sample of 112 Italian individuals having founded an innovative start-up (defined in accordance with the Italian Law) in the years 2009-2011. Each Entrepreneur was involved in an assessment center session to collect self- and other-reported data about his/her individual and company profile. Specifically, the participants filled-in a questionnaire (to measure social and organizational factors and company performance indicators), and a test (to measure psychological traits and motivations). Moreover, they were involved in an individual interview and a teamwork activity to observe and measure their skills.

The statistical packages SPSS 20 and Stata12 will be used for descriptive analysis (means and standard deviation), internal consistency of each scale and to analyze the correlations among variables through Pearson's coefficient. Moreover, the Mplus 7 software package (Muthén and Muthén, 1998-2007) will be used to test the overall model through structural equation modeling (SEM).

Starting from the SEM results we expect to find out which factors, among the ones considered in this study and clustered into human, social and organizational capital, are more predictive of the start-up post-entry performance.

This study and its findings may have many theoretical and practical implications. First, the results can be the starting point for future research, mainly longitudinal research, in order to go into deeply in the relationships between start-up success and its antecedents and overcome limits of the cross-sectional design of this research. Second, the study may give important practical indications to build up a methodology and a kit of tools to assess entrepreneurial teams, useful for both investors, to select potential successful start-ups, and entrepreneurs, to support them with professional training and vocational guidance interventions. Finally, our results may support policy makers in designing more effective and targeted policy measures.

References

Acs Z.J., Armington C. and Zhang T. (2007), The Determinants of New-firm Survival across Regional Economies: The Role of Human Capital Stock and Knowledge Spillover, *Papers in Regional Science* 86, 367–91.

Acs, Z.J., Desai S. and Hessels, J. (2008), Entrepreneurship, Economic Development, and Institutions, *Small Business Economics*, 31, 219-34.

Carree, M., Van Stel, A., Thurik, A.R. and Wennekers, S. (2007), The Relationship between Economic Development and Business Ownership Revisited, *Entrepreneurship and Regional Development*, 19, 281-91.

Colombo, M.G., Delmastro M. and Grilli, L. (2004), Entrepreneurs' Human Capital and the Start-up Size of New Technology-based Firms, *International Journal of Industrial Organization*, 22, 1183-211.

Colombo, M.G. and Grilli, L. (2005), Founders' Human Capital and the Growth of New Technology-Based Firms: A Competence-Based View, *Research Policy*, 34, 795-816.

Creedy, J. and Johnson, P.S. (1983), Firm Formation in Manufacturing Industry, *Applied Economics*, 15, 177-85.

Crook, T.R., Todd, S.Y., Combs, J.G., Woehr, D.J. and Ketchen Jr., D.J. (2011), Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96, 443-456.

Kauffman Foundation Research Series (2013), Firm Formation and Economic Growth The Return of Business Creation.

Lumpkin G.T. and Dess G.G. (2001), Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle. *J Bus Venturing* 16, 429–451.

Mitchelmore, S. and Rowley, J. (2010), Entrepreneurial competencies: a literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, 16, 92- 111.

Muthén, L.K. and Muthén, B.O. (1998-2012), *Mplus user's guide*. Seventh Edition. Los Angeles, CA: Muthén & Muthén.

Rauch, A. and Frese, M. (2007), Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16, 353–385.

Roberts, P.W., Klepper, S. and Hayward, S. (2011), Founder Backgrounds and the Evolution of Firm Size, *Industrial and Corporate Change*, 20, 1515-38.

Schmitt-Rodermund, E. (2004), Pathways to successful entrepreneurship: Parenting, personality, early entrepreneurial competence, and interests. *Journal of Vocational Behavior*, 65, 498–518.

Vivarelli, M. (2004), Are All the Potential Entrepreneurs So Good?, *Small Business Economics*, 23, 41-9.

Wiklund J, Shepherd D (2005) Entrepreneurial orientation and small business performance: a configurational approach. *J Bus Venturing* 20, 71–91.