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ENTREPRENEURIAL CLIMATE AT DACH REGION UNIVERSITIES – A HIGHLY RELEVANT LEVER FOR THE CONTRIBUTION TO PUBLIC VALUE BY ACADEMIC VENTURES?

Academic paper

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Abstract text:
PURPOSE

Higher education institutions have long adopted an additional goal to their historical origin of focusing on education and later on research. This so-called Third Mission (e.g., Fini et al., 2018) emphasizes economic and societal development in an attempt to increase universities' contribution to public value.

We know that the aspired effects are driven by universities through academics engaging in university-industry relations as well as collaborative research (D'Este & Perkmann, 2011; Perkmann et al., 2013) and by transferring intellectual property into spin-offs (Fini et al., 2011). Several university-level measures that foster such academic engagement and academic entrepreneurship have been explored in recent literature, with a particular focus on technology transfer offices (O'Kane et al., 2015) and incubators (Kolympiris & Klein, 2017). Furthermore, Bergmann et al. have recently established a new construct in this field, showing that institutional antecedents like entrepreneurship education affect the perceived entrepreneurial climate at universities (Bergmann et al., 2018).

However, the link to economic and societal outcomes, e.g. through successful academic start-ups, is still scarce (Hayter et al., 2018). This missing connection is a highly relevant issue because it leaves academics and policy makers in the dark when hypothesizing about ideal institutional entrepreneurship support. Specifically, Bergmann et al. (2018) didn't manage to connect their construct to an outcome beyond the entrepreneurial climate itself due to their sample selection of current students. However, students are shaped for life by their university and higher education institutions are a significant societal lever. I hence postulate that such a link will be hugely beneficial in understanding whether university-level entrepreneurship support plays a significant role in fulfilling the public mission through global and local economic impacts of subsequently established firms.

Consequently, a substantial research gap emerges from the research by Bergmann et al. that they also acknowledge by asking researchers to study "long-term effects of the entrepreneurial climate" (Bergmann et al., 2018, pg. 15). I address this gap empirically by surveying founders that have been active at a university while founding their business.

ORIGINALITY AND VALUE

This research effort is the first one to add an outcome perspective to the construct of university entrepreneurial climate and the first one to extend the analysis of product/service innovativeness and process innovativeness beyond publicly listed firms based on a multi-national sample.

The contribution to theory is threefold: (1) I will create a new link between organizational climate theory in the institutional sphere and dynamic capabilities theory. This will significantly enhance the academic understanding of how institutions shape individuals and their firms. (2) I will extend the

analysis of innovativeness to firms founded by academic entrepreneurs that are not listed publicly. While research on publicly listed firms is quite established, my research will indicate relevant specifics of academic entrepreneurs, caused by their unique skills and experiences. (3) I will offer an in-depth examination of innovativeness and its effects on firm success to fully establish a new theoretical link between university level specifics and economic outcomes.

DESIGN AND METHODOLOGY

My research group has created a unique sample through gathering government-collected data from 6.9 million company entries in DACH region business registers. The founding shareholders of these firms have then been mapped with social network data to determine whether they have been enrolled or employed at a DACH region university while founding their business between 1998 and 2018. The survey data collection amongst these academic founders has been finished last week with 270 respondents and a response rate of more than 11%.

University-level data has also been collected for the same time period to enable controlling for macro-level factors like university size. To ensure generalizability, the disciplinary scope covers a diverse set of public and private institutions, fulfilling research calls e.g. by Perkmann et al. (2013).

My independent variable is the founders' perceived entrepreneurial climate at their previous university, enhancing the construct by Bergmann et al. (2018). The dependent variable is firm success measured by a combination of strategic and financial performance operationalized by the scales of Schilke (2014) and Sheng, Zhou, & Li (2011). I hypothesize that the relationship between entrepreneurial climate and firm success is mediated by radical product/service innovativeness (Tellis et al., 2009) and process innovativeness (Schilke, 2014; Wang and Ahmed, 2004).

I plan to complete all calculations until December 2020.

RESULTS AND FINDINGS

I predict that the relationship between the perceived university entrepreneurial climate and firm success is an inverse U-Shape. On the one hand, a lack of entrepreneurial climate creates an obstacle to founding. On the other hand, and quite controversially, too much of an entrepreneurial climate pushes individuals that are "not made for it" to found inferior companies.

This effect is assumed to take place through a mediation with firm level innovativeness as a mediator between founders' experiences at the university and the subsequent success of their ventures. I predict to confirm positive relationships between firm innovativeness and success in line with dynamic capabilities theory (Tellis et al., 2009) as one sub-aspect of this mediation.

I expect all mentioned effects to be positively moderated by a high degree of technology as these firms are typically more closely linked to prior university research and thereby the university setting than low-tech firms.

LIMITATIONS AND IMPLICATIONS

In addition to the aforementioned theoretical contributions, there is a high impact for practitioners. My work will give indications on the extent to which creating an entrepreneurial climate at universities leads to successful firms. This can help universities optimally balance their corresponding efforts. Large amounts spent on entrepreneurship support by universities as well as governmental programs can be analyzed in terms of their effectiveness. Lastly, these insights will add to the societal understanding of the role of higher education institutions for economic and public good.

Despite our broad and extensive data collection as well as diligent research design, some limitations were unavoidable. Future research should try to take survival bias into consideration by looking at academic start-up data at multiple moments in time. Furthermore, public value creation beyond the

economic success of these ventures should be explored in detail. Finally, the observed scope could be extended beyond the DACH region.

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