Factors That Influence Entrepreneurial Activity

Sul Kassicieh, University of New Mexico, Albuquerque, NM 87131
Ricardo Flores, University of New South Wales, Sydney NSW 2052, Australia

E-mail: sul@unm.edu

Introduction. Does the place in the world where an entrepreneur engages in the creation of new ventures matter? Although current theories exploring entrepreneurship activity levels across countries have contributed significantly to our understanding of the constraints and opportunities faced by local entrepreneurs, all of these arguments only use local conditions (economic, institutional and even cultural factors) to explain the focal country’s entrepreneurship level. Our project develops and tests empirically a framework uncovering the role of the location (a focal country in a relation to the world’s economic networks) when explaining differences across countries on the level of entrepreneurship activity. In testing these ideas we rely heavily on the Global Entrepreneurship Monitor (GEM) and Global Entrepreneurship and Development Index (GEDI) datasets and recent developments in assessing the place of focal countries in the world economy from multiple perspectives. Implications of preliminary findings for research and local policy makers are discussed.

The creation of new business has been an important economic activity for countries and regions as they strive for job and wealth creation. Although entrepreneurs, as individuals, are at the heart of this process the economic and institutional environments in which they build their new companies also play a critical role in shaping these new ventures and their eventual success or failure. In fact, previous studies have shown that several factors explain differences in entrepreneurship rates across countries. These factors include cultural differences, country-level variables such as economic freedom and corruption perception, the presence of skilled labor force and feeder industries, the countries’ institutional profiles in terms of regulatory, cognitive and normative dimensions. What this literature has failed to explore so far is whether the ‘position’ of a country within the global networks that channel the economic activities of local entrepreneurs may impact these activities.

Others scholars, have built upon these ideas suggesting that is not only culture what explain the different entrepreneurship rates across countries, but other environmental or contextual factors, also play a pivotal role. They singled out economic, political, legal and social institutional conditions as equally important contingencies to consider when explaining entrepreneurial propensities across countries.

Computational Modeling. The dataset used is the Global Entrepreneurship Monitor (GEM) data for 2000-2011 for 47 countries. The dataset is about 917MB and we are using multilevel mixed-effects logistic regression to analyze the data using the STATA14 code. This method is used to model binary outcome variables, in which the log odds of the outcomes are modeled as a linear combination of the predictor variables when data are clustered or there are both fixed and random effects as in our data set. Given the size of the data and the computational needs of multilevel mixed-effects logistic regression, some of the computational models have been running on a fast-chip 16-core machine for upward of 144 hours. The refinement of the model to produce meaningful results in reasonable computational times is our goal at this stage. More reports on the analysis and the results will be forthcoming as we refine our computational models.
Acknowledgements
We would like to acknowledge Dr. Ryan Johnson of the UNM Center for Advanced Research Computing (CARC) as well as the other Systems staff at CARC for all of the support provided that allowed us to experiment with the models used.

References