

Demographics and Entrepreneurship: The Role of Institutions and Culture¹

Eckhardt Bode

Kiel Institute for the World Economy, Kiel, eckhardt.bode@ifw-kiel.de

Alina Sorgner

John Cabot University, Rome; Kiel Institute for the World Economy, Kiel; IZA, asorgner@johncabot.edu

Abstract

Older societies tend to have lower levels of new business formation, a key source of economic growth and innovation (Lamotte and Colovic 2013; Liang et al. 2018). Population ageing is a global megatrend that might therefore depress economic prosperity in the long run. Under what conditions can entrepreneurship be promoted in ageing societies? To answer this question, we focus on the role of institutions and culture in moderating the relationship between demographics and entrepreneurship. Previous literature has demonstrated that institutions (both formal, such as laws and regulations, and informal, such as social norms and values) are important determinants of entrepreneurship (Baumol 1990; van Stel et al. 2007; Lusardi 2008; Singh and DeNoble 2003). At the same time, institutions and culture may affect opportunities for individuals of different age to accumulate entrepreneurship-relevant human, social, and financial capital. For instance, in older societies, younger workers may have restricted access to managerial jobs if a higher fraction of these jobs is blocked by older workers, which may vary depending on a country's institutional setting. We empirically assess how a country's institutional framework moderates the relationship between demographics and entrepreneurship in the EU countries by drawing on several established data sources, such as the Global Entrepreneurship Monitor (GEM), the World Bank database (e.g., the Doing of Business index) as well as the European and the World Values Survey (EVS, WVS) containing data on social norms and cultural values.

Extended Abstract

Older societies tend to have lower levels of new business formation, a key source of economic growth (Lamotte and Colovic 2013; Liang et al. 2018). Population ageing is a global megatrend that might therefore depress economic prosperity in the long run. Under what conditions can entrepreneurship be promoted in ageing societies? To answer this question, we focus on the role of institutions and culture in moderating the relationship between demographics and entrepreneurship. Previous literature has demonstrated that institutions (both formal, such as laws and regulations, and informal, such as social norms and values) are important determinants of entrepreneurship (Baumol 1990; van Stel et al. 2007; Lusardi 2008; Singh and DeNoble 2003). At the same time, institutions and culture may affect opportunities for individuals of different age to accumulate entrepreneurship-relevant human, social, and financial capital. For instance, in older societies, younger workers may have restricted access to managerial jobs if a higher fraction of these jobs is blocked by older workers, which may vary depending

¹ The authors gratefully acknowledge financial support by the Horizon Europe Project "ECONOMIC, SOCIAL AND SPATIAL INEQUALITIES IN EUROPE IN THE ERA OF GLOBAL MEGATRENDS" (ESSPIN).

on a country's institutional setting. We empirically assess how a country's institutional framework moderates the relationship between demographics and entrepreneurship in the EU countries by drawing on several established data sources, such as the Global Entrepreneurship Monitor (GEM), the World Bank database (e.g., the Doing of Business index) as well as the European and the World Values Survey (EVS, WVS) containing data, for instance, on age-related attitudes of population.

This paper investigates the complex interplay between demographics and entrepreneurship with a special focus on the role of countries' formal institutional settings and cultural values. Demographics is a key determinant of a country's entrepreneurial potential, and multiple studies show that older societies tend to have lower levels of new business formation compared to younger societies (Lamotte and Colovic 2013; Liang et al. 2018). There are several reasons for this effect. For instance, older individuals tend to be less likely to set up new businesses because of their on average lower risk tolerance, more family responsibilities, higher opportunity costs of becoming entrepreneurs, and due to health issues becoming increasingly important when people age. A study by Liang et al. (2018) demonstrates that in older societies, individuals in all age cohorts are less likely to become entrepreneurs compared to countries with younger demographics. The authors attribute this effect to the fact that, in older societies, managerial positions are blocked by elderly individuals, thus, preventing younger individuals from accumulating entrepreneurship-relevant human capital. To sum up, population and workforce ageing is a global megatrend that may negatively affect entrepreneurial potential of affected countries and, through this channel, depress economic prosperity in the long run.

Thus, in this paper, we ask the following main research question: Under what conditions can entrepreneurship be promoted in ageing societies? More specifically, what institutional settings, both formal, such as laws and regulations, and informal, such as attitudes and cultural values, are more promising in achieving this objective? Relatedly, can any specific pro-entrepreneurial institutions and cultures be identified that become less efficient in older societies?

Previous literature has demonstrated that institutions (both formal, such as laws and regulations, and informal, such as social norms and values) are important determinants of entrepreneurship (Baumol 1990; van Stel et al. 2007; Lusardi 2008; Singh and DeNoble 2003). Entrepreneurship-friendly institutions may not only affect the level and the type of entrepreneurship in a country, but they may also significantly affect the well-being of entrepreneurs (Fritsch et al., 2019, 2021). However, only little is known about the effects of institutions and culture on opportunities for individuals of different age to accumulate entrepreneurship-relevant skills and capital (e.g., human, social, and financial capital). For instance, in older societies, younger workers may have restricted access to managerial jobs if a higher fraction of these jobs is blocked by older workers. The latter may vary depending on a country's institutional setting, for instance, regarding labor market regulation or pension regulation. In some countries, elderly people may find it difficult, if not virtually impossible, to continue working after having achieved the official retirement age, while other countries may apply a less rigid regulation. Also, in terms of culture, employees in leadership positions may be perceived differently depending on their age. In some countries, it might be more acceptable to have a young boss, while in other countries leadership may be attributed more willingly to senior individuals based on their age rather than objective competencies. Thus, it appears crucial to understand how institutions and culture may indirectly affect entrepreneurship through their impact on opportunities for acquisition of entrepreneurial abilities.

Such an analysis requires careful distinction between different types of entrepreneurship. For instance, it can be assumed that opportunity-driven entrepreneurship, growth-oriented entrepreneurship and innovative entrepreneurship require better entrepreneurial abilities, while necessity-driven

entrepreneurship and low-impact entrepreneurship may be a result of less favorable institutional settings and cultural values. Thus, merely observing a positive impact of certain institutions and cultures on entrepreneurship in general may not be sufficient in clarifying their role on productive entrepreneurship. Thus, in this study, we distinguish between different types of entrepreneurship to account for a) motivation for being an entrepreneur (push- vs. pull motives), and b) high-impact entrepreneurship in terms of high-growth aspirations and innovation output (i.e., introducing a new product or service).

More specifically, the present paper offers an empirical analysis of the determinants of (different types of) entrepreneurship rates at the national level in OECD countries covering the period since the early 2000s until shortly before the outbreak of the Covid-19 pandemic. Data on entrepreneurship rates are from the Global Entrepreneurship Monitor, a large-scale, representative and internationally comparable survey of entrepreneurial activity that has been among the most widely used databases for entrepreneurship research. Using established entrepreneurship indicators from this database, such as the total early-stage entrepreneurial activity (TEA) rates, we distinguish between opportunity and necessity entrepreneurship as well as between nascent entrepreneurs and new business owners who pay wages. Indicators of national institutions stem primarily from the World Bank's Doing Business and Worldwide Governance Indicators Databases. The Doing Business Database contains various pillars that reflect the ease of doing business in each country, such as starting a business, employing workers, getting credit, registering property, paying taxes, enforcing contracts and trading across borders. The Worldwide Governance Indicators provide the most comprehensive, internationally comparable rating of institutional quality and political stability. They summarize governance indicators from more than 30 sources, including research institutes, think tanks, non-governmental organizations, international organizations and private firms in six dimensions, which are voice and accountability, political stability and absence of violence or terrorism, government effectiveness, regulatory quality, rule of law and control of corruption. Moreover, we employ several sources to measure a country's social norms and cultural values. For instance, we use a rich set of indicators from the World Values Survey and the European Values Survey, a large-scale, representative and internationally comparable survey that has been used extensively in economic and social research. We use indicators on attitudes toward individuals of different age, personal initiative, individualism, egalitarianism, generalized trust and openness to innovations, among others. In addition, we use measures of entrepreneurship-friendliness of culture from the Global Entrepreneurship Monitor's National Expert Survey. This data source relies on a small sample of experts in each country but focuses on those values that are particularly supportive of entrepreneurship. It also provides time-varying ratings. These values include self-sufficiency, autonomy, and personal initiative; entrepreneurial risk-taking; creativity and innovativeness; and individual (vs. collective) responsibility.

Our econometric approach to identify the interplay between demographics and national institutional and cultural settings in their effects on entrepreneurship consists in regressing different indicators of entrepreneurship rates, including those for opportunity and necessity entrepreneurship, on an indicator of workforce ageing (a population shrinkage factor, proposed in Liang et al. (2018) and several alternative indicators used in a robustness check), a variety of indicators of national institutions and cultural values, and the interaction terms between them. Country fixed effects ensure that the parameters are identified from the variations within countries over time but not from the variation across countries. A rich set of control variables allows to control for possible alternative explanations for the observed changes of entrepreneurship rates, which include technological progress (digitalization, robots), globalization (trade integration), economic prosperity (GDP per capita), human-capital formation and unemployment.

Preliminary results of the multivariate analysis suggest, in line with the previous literature, that older demographics have a negative effect on entrepreneurship rates. In addition, we identify significant effects of specific institutions and cultural factors that may potentially help mitigate this negative effect of workforce ageing on entrepreneurship. Particularly cultural changes towards more entrepreneurship-friendly societal values seem to significantly diminish the negative effects of workforce ageing on (productive) entrepreneurship. With regard to formal institutional settings, preliminary results suggest that pro-entrepreneurial regulations pertaining to labor markets and property rights become less efficient in older societies. We cautiously interpret these findings by suggesting that entrepreneurship-friendly regulations should be designed more carefully by taking into account the demographic structure of the workforce population in the OECD countries analyzed in this paper. At the same time, initiatives aimed at promoting a generally positive culture of entrepreneurship (and, specifically, values of personal initiative, risk-taking, innovativeness and creativity) represent a promising tool for fostering entrepreneurship in ageing societies.