
**The Relationship between
Entrepreneurship and
Economic Development:
Is It U-Shaped?**

The Relationship between Entrepreneurship and Economic Development: Is It U-Shaped?

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The Relationship between Entrepreneurship and Economic Development: Is It U-Shaped?

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Abstract

Following a centuries-long decline in the rate of self-employment, a discontinuity in this downward trend is observed for many advanced economies starting in the 1970s and 1980s. In some countries, the rate of self-employment appears to increase. At the same time, cross-sectional analysis shows a U-shaped relationship between start-up rates of enterprise and levels of economic development. We provide an overview of the empirical evidence concerning the relationship between independent entrepreneurship, also known as self-employment or business ownership, and economic development. We argue that the reemergence of independent entrepreneurship is based on at least two ‘revolutions’. If we distinguish between solo self-employed at the lower

end of the entrepreneurship spectrum, and ambitious and/or innovative entrepreneurs at the upper end, many advanced economies show a revival at both extremes. Policymakers in advanced economies should be aware of both revolutions and tailor their policies accordingly.

Keywords: Entrepreneurship, self-employment, business ownership, business start-ups, economic development, U-shape, L-shape.

JEL Codes: L26, J24, M13, O14, O31.

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Summary

Following a centuries-long decline in the rate of self-employment, a discontinuity occurred in this downward trend for many advanced economies starting in the 1970s and 1980s. In some countries the rate of self-employment appears to increase. Weighing the evidence, it is too early to conclude that the historical, decreasing relationship between economic development and the *level* of business ownership has become U-shaped. Nonetheless, a trend break is beyond doubt, and this discontinuity is all the more remarkable as there is no obvious reason why independent entrepreneurship should not continue decreasing. Yet we know that powerful new driving forces are at the fore since the mid-1970s. These include the rapidly growing services sector with its smaller scale and lower entry barriers, an increasing differentiation of consumer preferences, declining transactions costs, and a trend in occupational preferences toward more autonomy and self-realization. Additionally, globalization in concert with the spread of ICT (information and communication technologies) enables solo entrepreneurs and small firms to reap the fruits of scale economies through loosely organized networks. And last but not least new technologies create opportunities for new technology-based business start-ups.

2 *Summary*

Early-stage entrepreneurial activity may be an even more important measure of entrepreneurship. Although there are no long time series for any measure of gross entry, cross-sectional analysis for recent years shows a significant U-shaped relationship between early-stage entrepreneurial activity and levels of economic development. Two ‘revolutions’ seem to drive the upward trend of this U-shaped curve. If we distinguish between solo self-employed at the lower end of the entrepreneurship spectrum, and ambitious and/or innovative entrepreneurs at the upper end, advanced economies show a revival at both ends. In sheer numbers the rise of self-employment without employees appears dominant. This trend has strong implications for the labor market and for the external organization of the business sector. However, at the upper end of the entrepreneurship spectrum an apparent positive correlation between the prevalence of ambitious, export-oriented and innovative business start-ups on the one hand and average per capita income on the other may be dominant in qualitative terms. This stylized fact represents the onset of an innovation-driven stage of economic development while marking a regime switch in the relationship between entrepreneurship and innovation. In addition, this correlation probably masks bidirectional causality.

Entrepreneurship has become a key policy issue. Insight in the relationship between entrepreneurship and economic development across countries is important for policymakers because it provides them with a beacon for their endeavors. Insight in the two revolutions driving the re-emergence of entrepreneurship is especially valuable. First, the rise of solo self-employment is important because it increases the flexibility and productivity of the economic system and contributes to a higher degree of job satisfaction, although it also increases insecurity for those involved as well as income inequality. Second, the upward trend of innovative and/or ambitious entrepreneurship is of particular importance for competitiveness, economic growth and job creation. Policymakers in advanced economies should be aware of both revolutions, recognize their determinants and implications, and tailor policies accordingly.

1

Introduction

After more than a century of declining business ownership rates in the labor force, a reversal of this trend is observed in many, though not all, highly developed economies, including the US and Germany. Since 1980, the revival of independent entrepreneurship not only refutes the long-standing Marxist prediction that the small business sector would evaporate, but it also suggests that the more recent Lucas hypothesis of a negative relationship between a country's level of per capita income and its rate of entrepreneurship no longer holds.¹ Using the literature on stages and patterns of economic development and structural change (Syrquin, 1988; Porter et al., 2002) as well as the literature on the determinants of entrepreneurship at the level of countries (Acs et al., 1994; Audretsch et al., 2002) as a foundation, an alternative, U-shaped relationship between economic development and the rate of entrepreneurship has been hypothesized (Acs et al., 1994; Wennekers and Thurik, 1999; Carree et al., 2002; Wennekers et al., 2005). This survey summarizes and updates the empirical evidence and presents the main lines of reasoning behind the relationship between economic

¹See Lucas (1978) and Steinmetz and Wright (1989, pp. 981–982).

4 *Introduction*

development and entrepreneurship. It is essential reading for policy makers because it provides them with a benchmark how to evaluate their country's specific entrepreneurship — economic development ratio as well as with an understanding what the developments are and how to influence them.

1.1 Definitions

Sternberg and Wennekers (2005) distinguish between the occupational and behavioral notions of entrepreneurship. The occupational notion centers on the individuals owning and managing businesses for their own account and risk, and is usually denoted as self-employment, independent entrepreneurship or business ownership. The behavioral notion centers on behavior related to pursuing an entrepreneurial opportunity, and it is generally denoted as entrepreneurial behavior or simply as entrepreneurship. It is clear that the occupational and behavioral notions are not mutually exclusive, but overlap to a substantial degree (Verheul et al., 2005).

This survey focuses on the occupational notion of entrepreneurship. Behavioral entrepreneurship will be taken into account in as far as it is incorporated in occupational entrepreneurship. A further distinction is that between a static perspective relating to the number of business owners and a dynamic perspective focusing on the creation of new businesses. Following the Global Entrepreneurship Monitor, we also refer to the dynamic perspective as 'early-stage entrepreneurial activity' (Reynolds et al., 2005; Bosma et al., 2008). This notion includes the activities of both nascent entrepreneurs and owner-managers of young businesses. Early-stage (independent) entrepreneurship usually involves at least some degree of entrepreneurial behavior as defined above,² while some scholars (Gartner and Carter, 2003) consider entrepreneurial behavior as identical to new firm organizing activity. Within the realm of independent entrepreneurship one can also distinguish between business owners with personnel (employers) and those without personnel (own account workers). The latter are also

²Exceptions are 'quasi entrepreneurship' and parts of 'necessity entrepreneurship', as will be discussed in Section 4.

known as ‘solo self-employed’ (Boegenhold and Fachinger, 2007). In the present survey, we will come across various other relevant subdivisions of entrepreneurship, including ‘necessity’ versus ‘opportunity’ entrepreneurship (Acs, 2006), ‘real’ versus ‘quasi’ entrepreneurship (Kautonen et al., 2009), and ‘replicative’ or ‘routine’ entrepreneurship versus ‘innovative’ or ‘high impact’ entrepreneurship³ (Acs, 2008; Baumol, 2008; The Economist, 2009). Finally, for evidence of increasing heterogeneity of entrepreneurship across occupational categories, we refer to Arum and Müller (2004).

1.2 Structure of the Paper

Section 2 reviews the long historical decline in the rate of independent entrepreneurship. This includes the statistical evidence as well as a summary of the main driving forces behind this long term development. Section 3 investigates the evidence supporting the alleged revival of independent entrepreneurship. Against this background Section 4 interprets the various findings. First, it investigates to what extent the shift from the so-called ‘managed’ to the ‘entrepreneurial’ economy (Audretsch and Thurik, 2001) is a labor market phenomenon. Then, it considers to what extent these new push and pull factors in the labor market share the stage with a changing relationship between entrepreneurship and innovation. Section 5 presents conclusions and policy implications.

³ A related notion is ‘ambitious entrepreneurship’ (Kirchhoff, 1994).

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