

Self-employment and Local Growth

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Rapid growth in self-employment in some economies, of which the UK is a notable example, has raised the salience of whether growing self-employment (SE) contributes to economic growth and regional development (RD). The UK experience is that self-employment growth is not spatially uniform (Henley, 2017), and so this question is often framed in terms of local economic benefits. While researchers typically argue that SE is an indicator of entrepreneurialism, higher SE also raises concerns about the growth of employment casualization and the gig economy (Taylor, 2017). Nevertheless, more prosperous locations, such as in and around London, appear to experience stronger local SE activity. The key research issue here concerns whether this self-employment, through its impact on entrepreneurial dynamism, causes improvements in RD, or is merely a reflection of it.

This review places this question in its wider context and reviews the relatively limited range of extant analysis on the SE-RD nexus. The findings from this literature are, *prima facie*, consistent and supportive of a positive link. However, the review identifies a number of concerns, both conceptual and empirical, and in doing so highlights gaps in the available evidence base.

Background

The question of whether entrepreneurship, more widely conceived, contributes to economic development is significant (Audretsch et al., 2006; Müller, 2016). Over the past 25 years a range of econometric studies have investigated the link between various definitions of entrepreneurial activity (for example new firm formation) and economic growth (see Parker, 2018, pp. 250ff for a focused summary and references). Theoretical justification focuses on the role of new venture formation in raising competition in markets, stimulating innovative activity or stimulating further job creation. However, where small firms are more prevalent in the business population there may be a less pronounced relationship with growth, compared with indicators of new business formation (or its individual-level analogue - transitions into self-employment). Furthermore, a robust empirical strategy ought to address the possibility that entrepreneurship and RD might be simultaneously determined.

The majority of studies address the linkage between regional firm formation rates and regional employment rates (Parker, 2018). The relationship appears to be complicated by the offsetting effects of job creation by new entrants and incumbent downsizing, as this balance changes over time (Fritsch and Noseleit, 2013). Studies focusing specifically on regional SE rates are fewer in number. SE activity is highly heterogeneous (Millán et al., 2014, 2015), and individual choices may be driven by both financial and non-pecuniary motives (Simoes et al., 2016). The majority of the self-employed do not employ others (Henley, 2005), although they may create demand for a wide range of other business-to-business activities. These effects may have been heightened by the phenomenon of the gig economy (Taylor, 2017).

Notwithstanding that SE may be an imprecise indicator of entrepreneurial activity, behind any linkage between SE and RD there lies a range of factors. A useful way to conceptualise these is in terms of 'push' and 'pull' effects (Audretsch et al., 2014; Henley, 2017). On the one hand a strong local economy may raise perceived new venture opportunities and 'pull' aspiring entrepreneurs into switching from paid employment to self-employment, in turn creating economic value and, in some cases, jobs for others. On the other hand, in lagging areas the switch into self-employment may reflect reluctant entrepreneurship, towards which individuals are 'pushed' in the face of a lack of decent local job opportunities. Such business venturing may be poorly resourced (because of lower local house prices or labour market skills), but may succeed if hiring other employees is cheaper and support is available through regional business development policy intervention.

Evidence

International cross-sectional evidence is sceptical about any association between higher SE rates and improved economic performance (Blanchflower, 2000). On the other hand, cross-country panel data system modelling has found evidence for both 'pull' and 'push' effects between SE and wider prosperity, with the former the stronger of the two (Thurik et al., 2008).

Prima facie recent UK data show a significant association between local area economic growth and local area SE, consistent with the 'pull' story. Figure 1 illustrates this for NUTS2 level GB regions, and shows the strong growth performance of high self-employment areas, particularly in London and the South East, compared to many northern urban regions. A one percentage point increase in the SE rate is associated with an increase in annual growth of gross value added of 0.13 percentage points.

Figure 1: Regional Economic Growth and Self-Employment in the UK

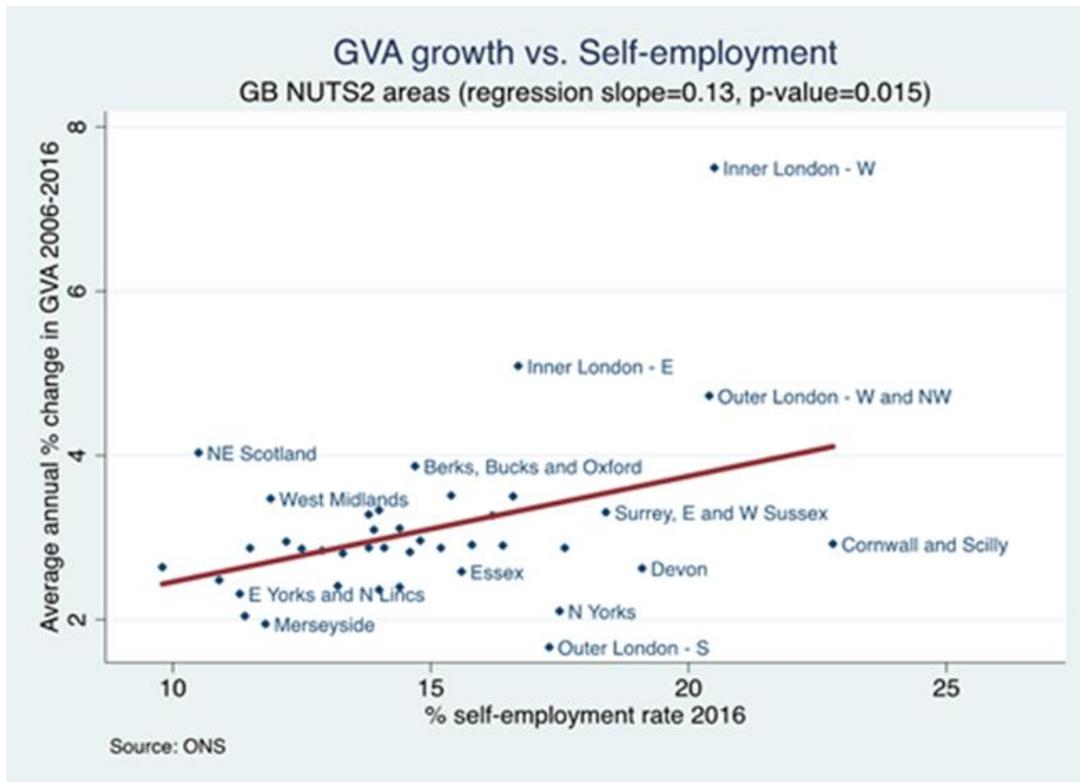


Figure 1 succinctly illustrates the most common finding in the limited number of regional econometric studies. These findings are detailed in Table 1. Nearly all studies find a statistically significant association between self-employment (independent variable) and local prosperity (dependent variable). In most cases the latter is measured by local employment growth, although some studies use data on local per capita income growth or other indicators. One recent study (Stephens et al., 2013) examines the impact of SE on industrial structure, to see whether SE causes a shift towards more creative or technology-based activity. Ideally local economic prosperity might be measured by local per capita gross value added (as in Figure 1). However spatially disaggregated GVA data can be difficult to measure and is often not published by statistical authorities. Issues relate to survey sample sizes or to differences between where value added is generated and appropriated (because of commuting activity or internal accounting within multi-site organizations). Nearly all available studies are for the United States, and are in effect re-analyses of the same population of data. In part the absence of European and Asian research arises because researchers have preferred to focus on available data on new firm formation rates (Parker, 2018). However, differences in research findings between SE and new firm formation may need to be reconciled.

Table 1: Econometric estimates of impact of self-employment on local economic activity

	<i>Method</i>	<i>Dependent variable(s)</i>	<i>Findings</i>
Fölster (2000)	Panel data 24 Swedish counties, 1976-1995	Regional employment rate	+ve *** (self-employment rate)
Acs and Armington (2004)	Cross-sections 394 US labour market areas, 1990, 1993, 1996	Local employment growth rate	+ve *** 1990 (self-employed proprietors rate) no effect 1993 no effect 1996
Shrestha et al. (2007)	Panel data, spatial weighting, 3035 US counties, 1990-2004	County employment growth rate	+ve *** (growth of self-employed proprietors rate)
Henderson and Weiler (2010)	Panel data 3035 US counties, 1991-2001	County employment growth rate	+ve *** (self-employment level) +ve *** (self-employment growth)
Stephens and Partridge (2011)	Cross-section 555 counties in US Appalachian region, 1990-2006	County employment growth rate, county per capita income growth rate	+ve *** (self-employed proprietors rate)
Li et al. (2012)	Panel data 29 China provinces, 1985-2004	Regional GDP growth rate	no effect (self-employment rate)
Rupasingha and Goetz (2013)	Panel data, spatial weighting, 3046 US counties, 1970-2000	County per capita income growth rate, county employment growth rate, county family poverty rate	+ve *** (self-employed proprietors rate) on income and employment no direct effect on poverty

Note: *** denotes regression slope coefficient has p-value < 0.01

Overview and Evidence Gaps

Interpretation of this apparently strong association is critical. Different studies adopt different approaches to addressing concerns about potential endogeneity between SE and RD. (Some studies also control for spatial spill-overs in local economic activity.) Most use lagged measures of the independent self-employment variable to address this, effectively treating the SE > RD > SE process as a recursive system. However, this requires caution because local self-employment rates are known to be highly persistent through time for deep-seated reasons unrelated to short-term changes in prosperity (Fotopoulos and Storey, 2017).

Does this positive association square with micro-econometric evidence focused on individual self-employment decisions? Research on how individuals choose SE as local economic conditions (unemployment rates) vary has produced mixed conclusions. The most recent research does however suggest two-way causality in that the 'pull' effect from local prosperity to SE is stronger (Henley 2017). This suggests upward bias in OLS estimates of the causal impact of SE on RD. However, micro-econometric work does not readily identify causality from (individual decisions

about) SE to RD. Studies on job creation by the self-employed, if they include local economic controls, may shed some light on this (Henley, 2005, Parker, 2018).

To conclude, there is a need to develop a sharper theoretical and empirical conceptualisation of the SE > RD / RD > SE linkage, with appropriate attention to the range of potential economic, socio-cultural and institutional drivers. Drawing on an earlier meta-analysis with a wider remit than this present review (Müller, 2016), the potential research agenda might be summarised under three headings:

- The achievement of greater clarity about what is meant by RD, and how it should be measured;
- The need for multiple perspectives on the 'reciprocity' between entrepreneurship and RD, with greater consideration given to non-economic influences;
- The need for greater consideration of different spatial and temporal contexts, and their implications for potential differences in the SE-RD nexus .

Finally, it is important to say something about policy. It would be tempting to conclude that more self-employment ought to support local development. However, it might be risky to conclude that stimulating SE in lagging regions is inherently desirable, because self-employment decisions made in poorer areas reflect the 'initial conditions' of those areas. This will be seen in the quality rather than the quantity of any resulting entrepreneurial activity and therefore the prospects for its success. The existing research base on self-employment and regional development is mainly silent on this point.

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