

**White Paper No.1**  
**EXECUTIVE SUMMARY**  
**April 2013**

(full paper - [www.enterpriseresearch.ac.uk/publications/ERC-White-Papers/](http://www.enterpriseresearch.ac.uk/publications/ERC-White-Papers/))

**GROWTH AND GROWTH INTENTIONS:  
A META-ANALYSIS OF EXISTING EVIDENCE**

**Jonathan Levie**

Hunter Centre for Entrepreneurship,  
Strathclyde Business School, University of Strathclyde, Glasgow,  
G4 0QU, UK.  
j.levie@strath.ac.uk

**Erkko Autio**

Innovation and Entrepreneurship Group,  
Imperial College Business School  
Tanaka Building, South Kensington Campus, Exhibition Road, London SW7 2AZ, UK  
erkko.autio@imperial.ac.uk

This white paper summarises what we know about the connection between entrepreneurs' growth intentions and realised enterprise growth. It addresses the following questions: How strong is the association between entrepreneurial growth intentions and subsequent performance? What affects entrepreneurial growth intentions at the individual level and national level, and how big are these effects? What can be done to raise entrepreneurial growth intentions in the UK? What further research needs to be done in this area?

Growth intentions matter. Large scale studies have concluded that the proportion of entrepreneurs with growth intentions in the population is a more significant predictor of economic growth than general start-up rates or self-employment rates. This suggests that "quality" of entrepreneurship is more important than "quantity" of entrepreneurship.

The paper draws on a technique known as meta-analysis which uses statistical analysis to summarise the strength of associations between specific factors as “effects” based on all the data available from a systematic review of the literature.

### **Entrepreneurial Growth Intentions and Subsequent Growth**

In this section, we drew on 13 longitudinal studies that obtained growth ambition, aspiration, intention or willingness perceptions from business owners and at a later point measured actual growth, and which provided correlations that could be used for comparison. We did not use studies that were found to be measuring growth intentions or realised growth in hindsight, or which did not provide the statistical data necessary to calculate effects.

These 13 studies employed different measures of growth intention and realised growth and sampled business owners at different stages in the entrepreneurial process.

- Small to medium but positive and robust effects were found for established businesses when studies were separated into those that considered sales growth and those that considered employment growth.
- At least some of the effect of growth intentions on realised growth may be through its effect on innovativeness (and possibly pro-activeness and risk-taking propensity).

These results confirm the importance of growth intentions as directly affecting subsequent growth. What’s more, the effect is not small. Growth intentions do matter.

### **Variables associated with Growth Intention**

We drew on 39 studies of associations between growth intentions and individual or business level characteristics at the individual level, and five studies at the country level. We examined studies of nascent, new or established business owners separately.

- Individuals’ age and gender showed no consistent effect on growth intention.
- Individual education levels generally showed a small but robust positive effect on growth intention.
- Previous entrepreneurial experience had a small but positive and robust effect on growth intention of established business owners, and very small but negative and robust effect on nascent entrepreneurs.
- No clear pattern emerged for prior managerial or industry experience.
- Risk-taking propensity, need for achievement and innovativeness had small but positive and robust effects.

- Wealth-seeking may act as a motivator of growth intention for nascent entrepreneurs, at least in the US, but independence seeking is not an important motivator.

In terms of firm characteristics:

- Studies vary widely in results on whether age, size or technology level of the business was associated with growth intentions. This does not mean that these factors have no effect, but rather that if these factors are associated with growth intentions, they are influenced by other factors.
- Limited evidence suggested a positive effect between export propensity and growth intention (of course, causation could work both ways here).

In regard to country level effects on country level prevalences of growth-oriented entrepreneurs:

- The prevalence of wealth motives for start-up among entrepreneurs had a large positive effect on prevalence of entrepreneurs with growth intentions, while the prevalence of independence motives for start-up among entrepreneurs had the opposite effect.
- Burdensome regulations affecting entry, growth and exit of businesses had a large negative effect on relative prevalence of growth-oriented entrepreneurs, while rule of law had a medium positive effect. One of these studies found that the impact of burdensome regulations on the prevalence of growth intentions among early stage entrepreneurs is greater in countries where rule of law is strong.

### **Raising Entrepreneurial Growth Intentions: Implications for Policy**

Because of the link between the relative prevalence of growth intentions and the size of the home market, if UK entrepreneurs were to think of the European Union as their home market, rather than just the UK, the prevalence of growth intentions might increase.

A focus on the burden of regulations is warranted given that rule of law is strong in the UK. While the burden of regulations is relatively light in the UK, employment protection regulations may still act as a barrier to growth orientation in the UK in comparison with the US.

Employment legislation aside, favourable tax legislation means that potential growth-oriented entrepreneurs in the UK can reasonably expect that any financial rewards from growth will not be expropriated. Unfortunately, fewer entrepreneurs in the UK than in the US seem to be motivated by greater financial rewards. More detailed research is needed on this topic, but lower parental aspirations, lack of knowledge on entrepreneurship as a career option, more rigid social structures and lower levels of participation in tertiary education could be explored further as possible reasons.

Potential innovative, growth-oriented entrepreneurs may have choices over the context in which they can express their innovativeness and/or need to achieve challenging tasks. Businesses in the UK provide a relatively good environment for intrapreneurship (i.e. entrepreneurial activity by employees) and the UK's rate of private sector entrepreneurial employee activity is the same as that in the US. More research is needed on this area, but in the UK, it could be easier to encourage growth-oriented intrapreneurship than growth-oriented entrepreneurship.