

WORLD ENTREPRENEURSHIP FORUM
2008 EDITION

Some conclusions about entrepreneurship and its support

Per Davidsson

Queensland University of Technology, Australia, and Jönköping International
Business School, Sweden

Introduction

In this manuscript I will argue a) that at least in developed economies the rate of new firm formation is crucially important for economic development; b) that it varies considerably over time and space; c) that policy programs aimed at increasing or supporting entrepreneurial activity have a disappointing track record, and d) that institutional reform aiming at the creation and maintenance of a transparent and stable formal institutional framework that is conducive to entrepreneurial activity is the most suitable task for entrepreneurship policy. In support of my argument I will build heavily on experiences from my own research – because it is what I know best – but even more heavily on the 'big names' in this branch of research – because it represents the most compelling evidence. I will only make cursory references to other parts of the now relatively voluminous field we call 'entrepreneurship research'. In order to enhance the credibility of my conclusions I would like to emphasize that for the most part they do not reflect what my own research has tried to prove; neither do they reflect any ideology I had as baggage when first entering the field. Rather, they are a reflection of what the totality of knowledge development in this area over more than twenty years has led me to believe.

Entrepreneurship is important

There is little doubt that entrepreneurship is important. In theory, entrepreneurship – understood as the entry of new firms in the market – drives the market process and develops the economy through the following mechanisms (cf. Davidsson, 2003, 2004a; Kirzner¹, 1973):

- It provides buyers with new choices which some of them will consider better than extant alternatives.
- It provides incumbent firms with an incentive to shape up their game in order to survive the new competition.
- If successful, it attracts followers that further augment the two above effects.

Empirical research supports the notion that entrepreneurship is important. Based on data from the *Global Entrepreneurship Monitor* (GEM) an estimated 500 million people around the globe are involved in on-going or recent business start-ups at any one time (Reynolds², 2007; Reynolds, Bygrave, & Autio, 2004). This sheer volume of the phenomenon makes it very important. In the late 1970s, David Birch³ sparked much of the political and academic interest in entrepreneurship with his (surprise) finding that small firms created the bulk of all new jobs (Birch, 1979). This finding has since been replicated in many countries/studies including my own

(Davidsson, Lindmark, & Olofsson, 1994, 1996), which also singled out new firm formation as an important driver of regional economic well-being. Importantly, later works attribute the positive effects either to the influx of new firms or to a small elite of rapidly growing young firms rather than to the population of established small firms (Birch & Medoff, 1994; Davidsson, Lindmark, & Olofsson, 1998). Newness is closely linked to innovation. Regarding this topic Arrow⁴ (1983) has provided theoretical rationales why small, owner-managed organizations can be expected to be over represented as innovators as long as development costs are not prohibitive. Careful empirical analysis by Acs and Audretsch (1990)⁵ largely confirms his predictions.

Importantly, it is not only the net additions to the economy that drive development, but the churning and displacement as well. While this goes to the heart of Joseph Schumpeter's (1934) ideas of 'creative destruction' the first part of that notion seems easier to embrace than the second part. New firms improve the economy not only by introducing newness that is in one way or the other more efficient or effective; they also force inefficient firms out of business so that their resources can be redeployed for better use. Similarly, if no firms exited an economy at full capacity there would be no affordable physical or human resources available for new start-ups. In my research this importance of the 'churning' has been indicated by gross measures of regional economic dynamism explaining more of the development of regional economic well-being than what net measures can explain (Davidsson et al., 1998). In a more sophisticated analysis using unique, longitudinal data, Aviad and Vertinsky (2008) have recently shown empirically that exits of old firms increase entry and that on average new entrants are more productive. Persistent high local rates of exit, however, deter entry.

This alleged importance of entrepreneurship is not based on idiosyncrasies of a few studies. Through a careful review of 87 analyses in 57 recent studies of high quality, van Praag and Versloot (2007) found support that young and small firms contribute heavily to employment creation – both directly and via regional spill-over – as well as to productivity growth and high quality innovations. However, as the authors point out this does not mean that larger and more established firms are in any way unimportant, it is just that different categories of firm perform different roles in the economic system. The review by van Praag et al. demonstrates that there is little doubt that in developed economies, entry of individuals into self-employment/business ownership, and of independent firms into the market, are major forces in economic development⁶.

There is considerable variance in entrepreneurship across space and time

There is considerable variability in the 'amount' of entrepreneurship exercised in different economies. For example, the GEM research shows that among the 42 countries participating in the 2006 survey, the proportion of the working age population that is involved in 'early stage entrepreneurial activity' – either an on-going business start-up effort or a firm that got up and running within the last 42 months, or both – varies between 2.7 percent (Belgium) and 40.2 percent (Peru). A quick inspection of which countries have the highest and lowest prevalence rates shows it is not a simple case of 'the more business start-ups, the better', although within the sub-sample of developed countries that generalization largely seems to hold. In a harmonized, seven country study on the causes of regional variation in new firm activity (Reynolds, Storey⁷, & Westhead, 1994) found that the regional rates of formation typically varied by a factor of two to four across regions within countries; less than the enormous variability across countries in GEM but still very substantial considering the apparent importance of new firm formation for economic development.

As regards variation over time, Gartner⁸ and Shane (1995) show that a stock measure of entrepreneurship – the number of organisations per 1000 population – varies considerably over time. In the United States this measure was below 10 when records started in 1857. It then increased steadily until it reached about 18 in 1890. This was followed by a period of oscillation between 15 and 18 from 1890 to 1950, after which time it started to decline steadily for three decades eventually levelling off at around 12. From 1982 their data show a sharp increase of unprecedented strength and in the early 1990s – the end of the data series – the number of organizations per capita reached about 35 per 1000 people. While there are some questions marks regarding the consistency of data quality and the suitability of a stock measure mean these estimates are surrounded by some uncertainty, very high quality Swedish data confirm a high level of variability over time. The number of genuinely new firms entering the Swedish economy per annum in 1997-2006 varied between 34,000 and 44,000 – about 30 percent up or down – in a limited amount of time (ITPS, 2007). Taking more of a historians perspective and applying a broader notion of entrepreneurship, Baumol⁹ (1990) provides a fascinating account of how expressions of productive entrepreneurship have swung over time, with particular emphasis on ancient Rome; Medieval China and the earlier vs. later middle ages in Europe.

Accounts like these leave little doubt that there is considerable variation in the level of entrepreneurship over time and space. There must be reasons for this

variation – perhaps manageable reasons – and this leads us to the topic of the next section.

It is very difficult to ‘manage’ the variation in entrepreneurship

A very popular idea, which also directed much of the early empirical research, is that entrepreneurs are ‘a breed apart’; that their entrepreneurial inclination is the result of some unique entrepreneurial personality that most of them have in common. By and large, this is a false conjecture. It is likely rooted in a general human tendency to seek reasons for outcomes in the characteristics of the actors even when these characteristics have no influence on the outcome whatsoever – what psychologists have called ‘the fundamental attribution error’ (Ross, 1977). Consequently the early, personality-focused research yielded meagre results and fell into disrepute (Gartner, 1988). More recent, conceptually as well as methodologically more sophisticated research has shown that personality does play a role in entrepreneurship (Baum & Locke, 2004; Ciavarella, Buchholts, Riordan, Gatewood, & Stokes, 2004; Collins, Hanges, & Locke, 2004). However, stable personality characteristics provide at best a small part of the full explanation. More importantly, personality is not ‘manageable’ so knowledge of such relationships could be used for selection at best. The results suggest that even for that limited purpose they would be rather blunt and ineffective tools.

A consistent finding in many studies is that many business founders have self-employed parents (Davidsson, 2004b). More recent research has ventured into investigating the exact mechanism of this parental role model effect (Aldrich¹⁰, Renzulli, & Langton, 1998). However, the relationship is very far from deterministic. It is probably true in most countries and eras that a majority of business founders do not have a close, parental role model and – conversely – that most children of business founders do not choose an entrepreneurial career. And again we are dealing with an effect that is not very useful for policy purposes; people have the parents they have.

The third major type of explanation of entrepreneurial behaviour and success on the individual level is *Human Capital* (Becker¹¹, 1964) – the comprehensiveness, quality and suitability for the task of people’s education and work experience. Arnold Cooper¹² was one of the first to research the role of human capital for entrepreneurship (Cooper, Gimeno-Gascon, & Woo, 1994). The effects found were usually positive. This has been confirmed by other studies (e.g., Dahlqvist, Davidsson, & Wiklund, 2000). However, while there is overwhelming evidence that investing in general human capital is a good idea for nations, it is hardly something

policy makers would do for the specific purpose of furthering entrepreneurship in the form of independent business start-ups. In the hypothetical case that they did there is no guarantee the policy would be effective because for people with more valuable education and experience the non-entrepreneurial alternatives at hand would also increase in attractiveness (Gimeno, Folta, Cooper, & Woo, 1997). Besides, many of the positive effects in an entrepreneurship context are ascribed to specific rather than general human capital – e.g., prior start-up experience and experience from the particular industry (Davidsson & Honig, 2003; Shane, 2000) – and these are not easy for policy-makers to invest in.

Overall, the individual level determinants of entrepreneurial behaviour and success do not appear very useful from an entrepreneurship policy point of view. For one thing, they explain at best who becomes an entrepreneur; not how many will do so. Additional limitations have been discussed above. This gives reason to look more closely at aggregate level determinants. While research on such determinants has been comparatively successful in terms of explanatory power a main lesson learnt from such research is also that influencing the amount or quality of entrepreneurial activity on, for example, the regional level is anything but easy. In the aforementioned, harmonised seven-country study the conclusions were summarised as follows:

Analysis of the processes associated with new firm births across seven advanced market economies...indicates three processes having a positive impact on firm birth rates:

- growth in demand, indicated by population growth and growth in income
- a population of business organizations dominated by small firms
- a dense, urbanized context, reflecting the advantages of agglomeration (...)

Other processes—related to unemployment, personal wealth, liberal political climate or government actions—had weak or mixed impact. (p. 453)

Few conclusions about entrepreneurship have as solid empirical backing as these. Several things are worth noting about these results. First, the three factors that have a consistent effect are not suitable targets for specific entrepreneurship policy. Instead, they are such fundamental structural and dynamic forces that one can start to understand what policy programs intended to stimulate business start-ups are up against.

As a case in point our own research (Davidsson et al., 1994, 1996) suggested that government business development expenditure per capita had a positive effect on gross start-up rates but no effect on net start-up rates. On a more detailed level, we found that in both time periods – the economic upturn of the late 1980s and the deep recession of the early 1990s – a particular, sparsely populated region in the northern inland of Sweden consistently made the 'top ten' list of regions for gross start-ups and equally consistently ended up among the bottom ten in net start-up rates. This was also one of the regions receiving the highest government investments in direct government support for business development. More recently Greene, Mole and Storey (2007) have provided much more comprehensive evidence of the same kind. Following the development of the 'disadvantaged' northern English region of Teesside over three decades they conclude that while some effects on financing and business advice can be noted, the total effects of the varied and rather massive business development support investments this region has received are very limited. Findings like these illustrate the difficulty of achieving any real effects when more fundamental factors like relative costs and local demand are not supportive. Consequently, the level of investment is hard to defend from a cost-benefit perspective.

What should be 'managed' if we could manage it?

A first aspect of this question is what category of start-up should be encouraged. Roughly speaking, at least 80 percent of all independent start-ups – sometimes denoted the 'mice' – tend to be relatively mundane, imitative start-ups in mature industries, showing little innovation and having limited growth prospects and/or growth aspirations. The remaining 20 percent are somewhat more innovative and growth orientated but the proportion that is based on truly radical innovation, have Venture Capital backing and are heading for an eventual stock market listing – the true 'gazelles' as the category is sometimes called – is much smaller still; down to fractions of a percentage point (cf. Reynolds, 2007; Reynolds & Curtin, 2008).

This begs the question of what category is more important – the gazelles due to their innovation and growth or the mice because of their sheer numbers and marginal effects on many customers and incumbents. Some have concluded that it is really the small elite of higher-potential start-ups that makes all the difference (Birch & Medoff, 1994; Wong, Ho, & Autio, 2005). Based on my own research I have concluded for Sweden in the 1985-1996 period that it was actually the many 'mice' that added up to the large, positive effects of new firms on job creation and regional economic development; there simply weren't enough true 'gazelles' around to add up

to very impressive figures in the aggregate (Davidsson et al., 1994, 1996; Delmar & Davidsson, 2006).

The true, relative importance of 'mice' vs. 'gazelles' is likely to vary across time and space. However, one thing about the alleged job creation prowess of 'gazelles' is worth noting here. Almost no studies distinguish between organic growth and growth obtained through acquisition. From a job creation point of view this distinction is crucial. Our analysis showed that the majority of jobs 'created' by high-growing firms were in fact jobs taken over via acquisitions. Somewhat larger and older gazelles in particular were unlikely to show much organic growth – arguably 'true' job creation – at all.

In all likelihood the economy needs both the large pools of start-ups and a significant sub-population of higher potential firms among them. The former is important for keeping incumbents on their toes and facilitates the making of as many important discoveries of new business opportunities as possible while the latter ascertains that the full potential of the more important discoveries be exploited to the full, often via copying or acquisition of what was first initiated elsewhere.

This brings us to the second aspect of what to support: How can we make individuals more prone to create these two types of business start-ups? Perhaps by trying to change the individuals themselves? Such an exercise in social engineering would hardly be successful. As regards relevant personality and personal background attributes people essentially are what they are; trying to change these through policy measures would be hard or impossible (not to mention unethical). It makes sense for a society to invest in general human capital but probably not for the narrow purpose of increasing entrepreneurial activity in the form of independent business start-ups.

As regards structural characteristics of regions we have noted that important structural determinants do not easily lend themselves to effective policy making for the purpose of increasing the number of start-ups. So what options remain? Perhaps the cultural dimension should be the target? Research has demonstrated that entrepreneurial activities seem to vary systematically with certain dimensions of 'culture' or prevailing attitudes in a society (e.g., Davidsson, 1995; Shane, 1992). However, while ideological competition for the voters' hearts and minds lie at the core of the democratic political system, effective 'brainwashing' through a ruling party's total control over the media and the education system most certainly does not. Moreover, the main findings from my own research into the issue were that a) possible cultural and structural determinants of entrepreneurial activities were highly correlated, and b) the structural determinants – basically the current make-up of the

human and business populations – were much more important than their cultural counterparts in explaining variations in levels of entrepreneurial activity (Davidsson, 1995; Davidsson & Wiklund, 1997). This indicates that to a considerable extent, 'culture' is an epiphenomenon that is influenced by the more fundamental structural (probably including institutional) conditions that are the more direct determinants of entrepreneurial activity. If this is the case successful direct manipulation of prevailing attitudes – if it were possible – would not in and by itself have the expected effects on the number and type of business start-ups that emerge.

The 'impossibility' of (selective) entrepreneurship policy

The above gives a rather pessimistic portrayal of the prospects for active entrepreneurship policy. While we know beyond reasonable doubt that in developed economies the level of new firm formation is an important, positive determinant of economic development we do not have any impressive, positive proof that further increases in firm start-up rates induced by specific, directed policies have the same positive effects as the 'naturally' occurring variation. Neither, I would argue, do we have positive proof that policy makers actually can exercise effectively the winner-picking strategies that would be right if it is only the 'high end' of entrepreneurial activity that really matters. As regards evaluation of specific policy measures the situation seems to be that most programs are not systematically evaluated at all and among those that are the ability to demonstrate positive effects seems inversely related to the quality of the evaluation (Storey, 1994, 2000).

Although I am not a trained political scientist and cannot even call myself an economist (but rather a 'behavioural management researcher' and perhaps 'general social scientist') let me offer some speculations about why policies aimed at stimulating entrepreneurship seem to have so limited effects. It is likely not because policy makers and their programs are inherently stupid. To suggest that would not only be offensive; it would also be exceedingly naive. Rather, I would argue, the limited success is attributable to the following three factors. First, the economic system is such an intricate, inter-woven system of relationships that it is almost impossible for anyone to correctly calculate, predict or trace even roughly the total effects of any specific measure. In particular, it is a challenge to adequately consider what would have happened in the absence of the measure: what else would that firm or individual have done and how would this have contributed to the economy? Similarly, it is almost impossible to know what did *not* happen as an unintended result of an action: the seemingly successful support of a particular firm or region may well crowd out an unseen and even more important development of another start-up or

region. Second, while the level of support is quite substantial in some countries and regions – way above the optimum in large parts of Europe would be my guess – its possible effects are still dwarfed by more fundamental forces like population growth; industry structure; macro-economic swings and major technological breakthroughs. For this reason micro level policies can at best expect to contribute on the margin. Third, because of human ageing; the logic of promotion in organizations, and the nature of the democratic political system, policy makers at all levels are relatively unlikely to have thorough experience in their current role. This in combination with the intricacies of the economic 'eco-system' increases the risk that the measures they suggest and implement, while enthusiastic and well intended enough, will in fact be ill conceived. Greene et al. (2007) give multiple examples of how specific policies are recycled or resurrected over time although they did not prove successful the last time it was tried, either. Even if well conceived there is considerable risk that at the local level front line the implementation will be handled by individuals who are either under qualified, under paid and unengaged, or by local champions who are enthusiastic enough but who have a tendency to tweak the intentions of the policy towards benefiting the visible, local businesses that exist today rather than to the optimal working of the economic system, including the more effective competitor that could have emerged tomorrow had not the policy been biased against it.

For these reasons I have come to believe that direct, selective, tax-funded support to business start-up activity that is economically efficient is largely a mission impossible. We simply lack the evidence that the tax funds spent that way does any more good to the economy than the spending or saving consumers or firms would choose to do, had they not been taxed that amount of money. Commercial providers and non-government organizations (NGOs) that offer selective, micro level assistance do not face the same impossibilities; at least not to the same extent. While the task at hand is difficult enough for them as well, market pressures and/or voluntary work may lower costs to the point that a positive net result is more achievable. At the very least they do not face the dilemma of possible sub-optimal use of taxpayers' contributions.

Instead I have come to embrace the idea that the proper way for policy to improve the contributions of entrepreneurial action lies in the development of sound, formal institutions. This largely means laws and law enforcement regarding such things as taxation, property rights, bankruptcy, employment contracts, etc. This theme will be elaborated on in the next section.

Institutions are the answer

On a somewhat personal note, let me explain that my conviction that 'institutions are the answer' does not reflect some political ideology I have always embraced or an economic-theoretic paradigm I was trained in. In fact, it does not even reflect what most of my research has been focused on. Early in my career (see, e.g., Davidsson, 1989) I freely suggested selective, micro level policy measures and I was highly sceptical regarding economists' and lobby groups' standard recipes related to taxes and labour market legislation. I thought I knew that most of the population of small business owner-managers would not change their behaviour much in response to this or that change in taxes or laws; they had much more fundamental reasons for defining their roles and goals the way they did and to act accordingly (which often meant rather low-risk, non-growth strategies). To a considerable extent I was right. However, I also totally missed the point. What is important about institutional reform is not predominantly to achieve behavioural change among current firms and entrepreneurs; it is about what the population of entrepreneurs and firms will look like in the future. Who will be attracted to entrepreneurship in the first place; how will they define their roles and goals; and how will they act in order to reach these goals? Institutional reform must look beyond current actors and create an economic system capable of continuously reinventing itself within a stable and transparent framework. The goal ought to be to promote *productive newness*, whatever specific form that may take in an unpredictable future.

One turning point for my thinking was the reading of William Baumol's 1990) 'Entrepreneurship: Productive, unproductive and destructive'. In this classical article Baumol performs an important thought experiment: Let's assume that the supply of entrepreneurship (or entrepreneurial talent or effort) is largely the same across time and space. What varies is instead how this constant supply is distributed across productive, unproductive and even destructive activities. While the underlying assumption may not be entirely true his argument is compelling and provides a foundation for a potentially productive refocusing of entrepreneurship policy: let's make sure the natural, spontaneous entrepreneurship that will come about is geared towards actions that do not only benefit the actors but also is beneficial to society. Other inputs that helped re-shape my thinking were various readings in Swedish economic history, which left little doubt that a series of institutional reforms in the second half of the 19th century created a vibrant economy so that around the verge of the 20th century direct involvement in various entrepreneurial projects was very much a normal part of middle class life (see, e.g., Gratzner, 1996)), This was also the time when what was to become the leading Swedish multinationals of the industrial era were created. A third element in convincing me of the importance of institutions were

Swedish colleague Magnus Henrekson's careful analysis of how institutions subsequently became geared towards supporting the continued success of these large exporters at the expense of securing an undergrowth of new firms in emerging industries (Davidsson & Henrekson, 2002; Henrekson, 2005).

To demonstrate the importance of institutions in empirical research is difficult for a variety of reasons. First, within a country at a particular time institutional conditions tend to be constants rather than variables so they cannot explain variance and hence their importance cannot be demonstrated with conventional methods. In addition, micro level studies often focus on current business owner-managers and not on those who refrain from (productive) entrepreneurship because current institutions make it unattractive. One opportunity to pin down the importance of institutions is when some specific law is changed, potentially affecting very specific behaviours of a likewise specific sub-population. An example is the Bayh-Dole act in the US, which changed the incentives for researchers and universities to commercialize research results. While some have concluded this institutional change was not responsible for the subsequent, general increase in university patenting (Mowery & Ziedonis, 2002) a more detailed analysis suggested it triggered a shift of patenting towards industry sectors more conducive of licensing by (Shane, 2004). Another research strategy is to systematically compare two countries that have different institutional frameworks. One example is Henrekson and Davis (1999) who convincingly explain under representation of certain industries in Sweden relative to the US in this manner (see also Carlsson, 2002, for a similar approach, although comparing Sweden with the similarly sized and structured economy of Ohio rather than the entire US). However, many factors other than the focal institutional dimensions also differ between countries or regions subjected to such pairwise analysis. Therefore the disbeliever has rich opportunities to suggest other explanations for the alleged effects.

This calls for research that assesses both levels of entrepreneurial activity and institutional factors in a larger number of countries. This would make other influences cancel out or be effectively controlled for. With data from over 40 countries and up to 10 years, the GEM studies therefore present an unprecedented opportunity to assess the influence of institutional factors, especially when the GEM data is combined with other sources like OECD or World Bank statistics. Such investigation has already commenced (see Small Business Economics, 2005, 2006). However, the most important findings from such research have likely not as yet reached publication in highly regarded academic outlets. Therefore, belief in the importance of the

institutional framework cannot at this point rely solely on solid empirical evidence; it also requires some faith in the logic of the underlying argument.

Economists – and not only those who regard themselves institutionalists – have of course long argued that changes in taxes and regulations are the key to increased entrepreneurship. However, arguments based on basic training in economics rather than the current frontier of the discipline (which may be the case with lobbyists and politically coloured journalists) are often based on assumptions of a single type of greedy, self-interested actors and over confidence in immediate behavioural effects among current business owner-managers. Developing to the full a fruitful institutional approach is beyond the scope of this paper and the abilities of its author. Besides, such work should start from a careful analysis of the institutions currently in place in a particular country, along with their likely effects. However, as a rough, first sketch; let us assume there are different types of potential entrepreneurs: optimists, realists and pessimists. On another dimension, let us assume there are the greedy – willing to do anything for personal gain – the average, and the altruistic – the latter prone to engage in good deeds despite personal monetary loss (or opportunity cost) and sometimes even though the project may be doomed because it is not financially sustainable. On a third dimension let us assume they have either low, medium or high levels of general human capital. We can now ask the fundamental questions that should guide the (re-)design of the institutional framework.

1. Who do we want to engage in entrepreneurship? For example, what does it mean for an economy if realists have very good, objective reasons to refrain from engaging in business start-ups and only people with rose-colored glasses ever do it? Is there any use in trying to convert pessimists at all? Should the framework entice those with the highest levels of human capital to strike out on their own? Perhaps they would get greater leverage from their talent as independents – but then again this might drain large, established organisations of so much talent that the leverage from the resources these organisations represent is diminished so much that the societal net effect becomes negative?

2. How will they define their role and their goals as a result of their early experiences as entrepreneurs? An important insight is that the future orientation of the firm is not carved in stone at inception. Rather, it will be shaped by early experience in the entrepreneurial role as well as through learning from peers. Entrepreneurs will gradually form or change their opinion as to whether it is worth the effort to be innovative or to take on responsibility as an employer. Arguably, it is early in their entrepreneurial career that these things are malleable; later on they may be

hard to change despite strong economic incentives to do so. In addition, the 'types' as sketched above are not fixed; to a considerable extent the entire spectrum resides within each individual. Consequently, aspects of the institutional framework can appeal to and cultivate either the greedier or the more altruistic side of those who venture into entrepreneurship.

3. *How will they go about pursuing their goals?* This speaks to Baumol's (1990) main point. How can the institutional framework be shaped so that the way for the greedy to achieve their goals is aligned with societal interests? So that the altruists find room to do their thing in financially sustainable ways? And how can it entice not only diehard optimists but also realists and perhaps even some pessimists to engage in risky endeavours with outcomes that are highly uncertain but potentially very beneficial for themselves and society?

Again, this is a sketchy outline by an amateur institutionalist. However, this is where my experience from 20 odd years of entrepreneurship research has led me to suggest policy makers look: to the experts in analysing the likely effects of current and possible future institutional arrangements (see, e.g., Henrekson, 2007). This advice comes with several caveats. First, there is reason to be alert to the possibility of self-interested greed as the dominant assumption about humans underlying the analysis. Importantly, a productive overview of institutions should not focus too narrowly on the conditions for new and emerging firms in some 'absolute' sense but also consider the 'other' alternative. That is, the self-employment option *relative to* employment, studies, retirement or unemployment; staying self-employed without employees *relative to* becoming an employer; the institutional conditions for start-ups *relative to* those facing incumbent firms, etc. In addition, the analysis and possible change should not only consider incentives for prospective entrepreneurs in a narrow sense but also the incentives of various parts of the surrounding, supporting system such as universities; private investors; venture capitalists, etc. For this purpose a 'competence bloc' perspective may prove fruitful (Eliasson, 2000).

Further, the secondary effects of institutional change in domains other than entrepreneurship also need to be considered; otherwise what in a narrow assessment looks like a successful change may in fact be detrimental in the bigger picture. To have their full effect institutional arrangements also need to be transparent and stable. Therefore, although initial changes are often likely to be necessary it is imperative that the most fundamental of the conditions for entrepreneurial activity achieve an almost 'constitutional' status. Therefore, overly enthusiastic introduction of controversial measures that risk being reversed when political majorities change may do more harm than good. Finally, no wonders should

be expected in the short run. Yes, the changes will likely affect – at least marginally – the behaviour of some current business owner-managers. And yes again, others may not change their behaviour directly but the outcome of their unchanged efforts may change (for example, they may become more profitable) and this may indirectly change their behaviour in the next time period. The main effect, however, is likely to emerge over time as a change in the size and orientation of the population of entrepreneurs and entrepreneurial ventures. Hence, considerable patience is called for; there are no quick fixes.

References

- Acs, Z. J., & Audretsch, D. B. (1990). *Innovation and Small Firms*. Cambridge, MA: MIT Press.
- Aldrich, H. E., Renzulli, L., & Langton, N. (1998). Passing on privilege: Resources provided by self-employed parents to their self-employed children. In K. Liecht (Ed.), *Research in Social Stratification and Mobility*. Greenwich, CT: JAI Press.
- Arrow, K. (1983). Innovation in small and large firms. In J. Ronen (Ed.), *Entrepreneurship* (pp. 15-28). Lexington, MA: Lexington Books.
- Aviad, P., & Vertinsky, I. (2008). Firm exits as a determinant of new entry: Is there evidence of local creative destruction? *Journal of Business Venturing*, 23(3), 280-306.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587-598.
- Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive and destructive. *Journal of Political Economy*, 98(5), 893-921.
- Becker, G. S. (1964). *Human capital*. Chicago: The University of Chicago Press.
- Birch, D. L. (1979). *The Job Generating Process*. Cambridge, MA: MIT Program on Neighborhood and Regional Change.
- Birch, D. L., & Medoff, J. (1994). Gazelles. In L. C. Solmon & A. R. Levenson (Eds.), *Labor Markets, Employment policy and Job Creation*. Boulder and London: Westview Press.
- Carlsson, B. (2002). Institutions, entrepreneurship, and growth: Biomedicine and polymers in Sweden and Ohio. *Small Business Economics*, 19(2), 105-121.
- Ciavarella, M. A., Buchholts, A. K., Riordan, C. M., Gatewood, R. D., & Stokes, G. S. (2004). The Big Five and venture survival: Is there a linkage? *Journal of Business Venturing*, 19, 465-483.

- Collins, C. J., Hanges, P. J., & Locke, E. A. (2004). The relationship of achievement motivation to entrepreneurial behavior: A meta-analysis. *Human Performance, 17*(1), 95-117.
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing, 9*(5), 371-395.
- Dahlqvist, J., Davidsson, P., & Wiklund, J. (2000). Initial conditions as predictors of new venture performance: a replication and extension of the Cooper *et al.* study. *Enterprise and Innovation Management Studies, 1*(1), 1-17.
- Davidsson, P. (1989). *Continued Entrepreneurship and Small Firm Growth*. Doctoral dissertation. Stockholm: Stockholm School of Economics.
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development, 7*, 41-62.
- Davidsson, P. (2003). The domain of entrepreneurship research: Some suggestions. In J. Katz & D. Shepherd (Eds.), *Cognitive Approaches to Entrepreneurship Research* (Vol. 6, pp. 315-372). Oxford, UK: Elsevier/JAI Press.
- Davidsson, P. (2004a). *Researching Entrepreneurship*. New York: Springer.
- Davidsson, P. (2004b). Role models and perceived social support. In W. B. Gartner, K. G. Shaver, N. M. Carter & P. D. Reynolds (Eds.), *Handbook of Entrepreneurial Dynamics: The Process of Business Creation* (pp. 179-185). Thousand Oakes: Sage.
- Davidsson, P., & Henrekson, M. (2002). Institutional determinants of the prevalence of start-ups and high-growth firms: Evidence from Sweden. *Small Business Economics, 19*(2), 81-104.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing, 18*(3), 301-331.
- Davidsson, P., Lindmark, L., & Olofsson, C. (1994). *Dynamiken i svenskt näringsliv (Business Dynamics in Sweden)*. Lund, Sweden: Studentlitteratur.
- Davidsson, P., Lindmark, L., & Olofsson, C. (1996). *Näringslivsdynamik under 90-talet (Business Dynamics in the 90s)*. Stockholm: NUTEK.
- Davidsson, P., Lindmark, L., & Olofsson, C. (1998). Smallness, newness and regional development. *Swedish Journal of Agricultural Research, 28*(1), 57-71.
- Davidsson, P., & Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology, 18*, 179-199.
- Delmar, F., & Davidsson, P. (2006). High-growth firms and their contribution to employment: The case of Sweden 1987-96. In P. Davidsson, F. Delmar & J.

- Wiklund (Eds.), *Entrepreneurship and the Growth of Firms*. (pp. 158-178). Cheltenham: Elgar.
- Eliasson, G. (2000). Industrial policy, competence blocks and the role of science in economic development. *Journal of Evolutionary Economics*, 10.
- Gartner, W. B. (1988). "Who is an Entrepreneur?" is the wrong question. *American Small Business Journal*, 12(4), 11-31.
- Gartner, W. B., & Shane, S. (1995). Measuring entrepreneurship over time. *Journal of Business Venturing*, 10(4), 283-301.
- Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42, 750-783.
- Gratzer, K. (1996). *Småföretagandets villkor. Automatrestauranger under 1900-talet (Conditions for Small Firms. Automated Restaurants During the Twentieth Century)*. Stockholm: Almqvist & Wicksell.
- Greene, F. J., Mole, K., & Storey, D. (2007). *Three Decades of Enterprise Culture? Entrepreneurship, Economic Regeneration and Public Policy*. Basingstoke: Palgrave MacMillan.
- Henrekson, M. (2005). Entrepreneurship: a weak link in the welfare state? *Industrial and Corporate Change*, 14(3), 437-467.
- Henrekson, M. (2007). Entrepreneurship and Institutions. *Comparative Labor Law & Policy Journal*, 28(3).
- Henrekson, M., & Davis, S. J. (1999). Explaining national differences in the size and industry distribution of employment. *Small Business Economics*, 12(1).
- ITPS. (2007). *Newly-started enterprises in Sweden 2005 and 2006. Report S2007:0004*. Östersund and Stockholm.
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.
- Mowery, D., & Ziedonis, A. (2002). Academic patent quality and quantity before and after Bayh-Dole. *Res. Policy* 31, 399-418. *Research Policy*, 31, 399-418.
- Reynolds, P. D. (2007). New firm creation in the US: A PSED overview. *Foundations and Trends in Entrepreneurship*, 3(1), 1-151.
- Reynolds, P. D., Bygrave, W. D., & Autio, E. (2004). *Global Entrepreneurship Monitor 2003. Executive Report*. London, UK, and Kansas, MO: Babson College/Ewing Marion Kauffman Foundation, London Business School.

- Reynolds, P. D., & Curtin, R. T. (2008). Business Creation in the United States: Panel Study of Entrepreneurial Dynamics II Initial Assessment. *Foundations and Trends in Entrepreneurship*, 4(3).
- Reynolds, P. D., Storey, D. J., & Westhead, P. (1994). Cross-national comparisons of the variation in new firm formation rates. *Regional Studies*, 28(4), 443-456.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 10, pp. 173-240). Orlando, FL: Academic Press.
- Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Shane, S. (1992). Why do some societies invent more than others? *Journal of Business Venturing*, 7, 29-46.
- Shane, S. (2004). Encouraging university entrepreneurship? The effect of the Bayh-Dole Act on university patenting in the United States. *Journal of Business Venturing*, 19, 127-151.
- Small Business Economics (2005). Vol. 24, Iss. 3 (special issues devoted to analyses of GEM data).
- Small Business Economics (2006). Vol. 26, Iss. 4 (special issues devoted to analyses of GEM data).
- Storey, D. J. (1994). *Understanding the Small Business Sector*. London: Routledge.
- Storey, D. J. (2000). Six steps to heaven: Evaluating the impact of public policies to support small businesses in developed economies. In D. Sexton & H. Landström (Eds.), *The Blackwell Handbook of Entrepreneurship* (pp. 176-193). Oxford, MA: Blackwell Business.
- van Praag, C. M., & Versloot, P. H. (2007). The economic benefits and costs of entrepreneurship: A review of the research. *Foundations and Trends in Entrepreneurship*, 4(2), 65-154.
- Wennekers, S., Stel, A., Thurik, A. R., & Reynolds, P. D. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics*, 24, 293-309.
- Wong, P. W., Ho, Y. P., & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, 24, 335-350.

Endnotes

-
- ¹ Israel Kirzner was the 2006 recipient of the International Award for Entrepreneurship and Small Business Research (from 2009 ‘Global Award for Entrepreneurship Research’); the most prestigious award in this field of research.
 - ² Paul Reynolds was the initiator and coordinator of GEM and the 2004 recipient of the International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ³ David Birch was the recipient of the 1996 (inaugural) International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ⁴ Kenneth Arrow was (with J. Hicks) the 1972 recipient of “The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel” (generally known as he “Nobel Prize in Economics”).
 - ⁵ David Audretsch and Zoltan Acs were the recipients of the 2001 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ⁶ However, this may not be true for developing economies. GEM analyses suggest that in low-income countries, which tend to have very high and often necessity based self-employment, “investing in the management qualities of their population and fostering the exploitation of scale economies through foreign direct investment and the growth of young businesses” may be relatively more important (Wennekers, Stel, Thurik, & Reynolds, 2005).
 - ⁷ David Storey was the recipient of the 1998 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ⁸ William Gartner was the recipient of the 2005 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ⁹ William Baumol was the recipient of the 2003 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ¹⁰ Howard Aldrich was the recipient of the 2000 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).
 - ¹¹ Gary Becker was the 1992 recipient of of “The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel” (generally known as he “Nobel Prize in Economics”).
 - ¹² Arnold Cooper was the recipient of the 1997 International Award for Entrepreneurship and Small Business Research (cf. endnote #1).