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# A portfolio perspective on entrepreneurship and economic development

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**Abstract** Because the large majority of new ventures remain small, their economic contribution is questioned. Shane (Small Bus Econ 33(2):141–149, 2009) has argued that designing public policies which encourage more people to become entrepreneurs is counterproductive, and the exclusive focus should be high-growth ventures, or gazelles. As a counter to Shane's position, four types of start-up ventures are considered, with each having differing needs and making unique contributions to the economic welfare of a nation, region, or locality. Based on this typology, seven counter-arguments to Shane's position are presented, addressing issues related to the cost of entry and exit, rates of efficiency and failure, employment levels, sector differences, ecosystems, and venture emergence. Based on these counter-arguments, a portfolio perspective is advocated, where

societal risks and a variety of returns are balanced across all four types of new ventures. An example of a portfolio approach to policy design is provided, and implications are drawn.

**Keywords** Entrepreneurship · Public policy · Entrepreneurial performance · Portfolio approach

**JEL Classifications** L26 · L25

## 1 Introduction

Do all start-up ventures matter? Would society be better off if some ventures were never launched, or at least not encouraged to start? The conventional thinking among many economic development experts, public policy officials and other observers is that entrepreneurial activity is good and should be encouraged (Acs et al. 2009; Acs and Stough 2008; Lazear 2005; Morris et al. 2013). New ventures contribute to levels of competition, create value for customers, employ people, pay taxes, and otherwise contribute to societal economic well-being (Birch 1987; Reynolds 1987; Storey 1994; Thurik and Wennekers 2004). Hence getting more people to start ventures is said to be a worthy objective. But is this true?

When a new business is launched, it is consuming societal resources, but is thought to be relatively inefficient in using those resources, and has a strong

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likelihood of failing (Carree and Thurik 2003). Moreover, because most new ventures start small and stay small, they are seen as not creating a lot of jobs or wealth (Birley and Westhead 1990; Sexton and Bowman-Upton 1991; Wiklund and Shepherd 2003). And the majority of start-ups are not creating major innovations or significant technological advances. All of this led Shane (2009) to argue that policies which encourage more people to become entrepreneurs represent bad public policy (see also Acs and Mueller 2008; Lerner 2010). The central crux of his provocative argument is that start-up ventures that create the real economic growth are few and far between. For every Amazon or Google or eBay (so-called gazelles) there are thousands of lifestyle ventures that create little in the way of jobs, income, wealth, innovation, or infrastructure. Shane (2009, p. 163) notes “we need to recognize that only a select few entrepreneurs will create businesses that... create jobs, reduce unemployment, make markets more competitive, and enhance economic growth.”

Shane (2009) uses terms such as “dangerous” to describe a belief that simply encouraging more start-ups is the key to the future economic vibrancy of society, or to revitalizing stagnant or declining economic regions. The exclusive focus, particularly of our public policies, should be high growth (HG), high potential ventures that are introducing major product and process innovations. His position would actually seem to reflect the dominant perspective within the emerging discipline of entrepreneurship (Brush et al. 2004; Delmar et al. 2003; Stangler 2010). What we might label the “dogma of high-growth ventures” is reflected in the editorial policies of some of our leading journals (i.e., samples used in empirical research must focus on innovative or growth-seeking firms), case studies used in teaching entrepreneurship (e.g., Dropbox rather than a computer repair business), and a preoccupation with equity funding and especially venture capital firms (which fund less than 1 % of start-ups) among scholars and educators.

The purpose of this research is to explore the complexities that lie behind Shane’s (2009) thesis. Specifically, we posit that neither the public policy orientation, nor the larger public sentiment, should be on encouraging HG ventures to the exception of all other types of ventures (non-HG). Failing to encourage these other types of ventures can actually harm the longer-term economic well-being of a nation, region,

or community. The paper proceeds as follows. We introduce a typology of entrepreneurial ventures so as to better define the new venture landscape. Building upon this typology, seven arguments are presented regarding the central economic importance of each type of venture. Based on these arguments, we advocate for a portfolio approach to supporting new venture creation. We then develop implications from this portfolio perspective for the design of public policy and related societal efforts directed at encouraging entrepreneurial activity. Conclusions are drawn and suggestions for further research are provided.

## 2 A typology of start-ups

Entrepreneurs create ventures that take many different forms, suggesting a very heterogeneous landscape (Davidsson 2005). If we consider the entire range of possibilities, focusing on the for-profit sector, at least four major categories of ventures can be identified. As articulated by Morris et al. (2015), these include survival, lifestyle, managed growth, and aggressive or high growth (HG) ventures. This perspective builds on a synthesis of earlier work and particularly the commonalities among twenty different categorizations of venture start-ups appearing in the literature over a 50-year period (see, as examples, Carland et al. 1984; Cooper and Dunkelberg 1981; Filley and Aldag 1978; Hisrich and Peters 1998; Sexton and Bowman-Upton 1991; Smith and Miner 1983; Vesper 1990; Kuratko 2014; Kuratko et al. 2015). It focuses on capturing venture types between the time of launch and the emergence of a sustainable business model and so does not include categories of more mature businesses. Morris et al. (2015) also provide empirical support for their typology, demonstrating fundamental differences in organization identity across the four categories.

The four categories are distinguished based on their relative emphasis on growth, innovation, and reinvestment in the business, their means of extracting income or returns, the principal kinds of stakeholders involved with the business, and the primary managerial challenges confronting the founder. Each is further explained below:

- *Survival ventures* Provide basic subsistence for the entrepreneur and his/her family, in effect allowing

little more than a hand-to-mouth type of existence. These ventures may or may not be formally registered, typically have no premises, very few assets, and no business banking relationship, and they operate on a cash or barter basis. As these businesses exist to provide for basic personal financial needs, once costs are covered there is generally no capacity to reinvest into these ventures. Launch of these ventures is often necessity-driven or motivated by “push” factors, and the businesses typically operate in highly competitive, price-based, and largely undifferentiated markets.

- *Lifestyle ventures* Provide a relatively stable income stream for owners based on a workable business model and a maintenance approach to management. Relatively modest reinvestments are made to maintain competitiveness in a local market where these firms are embedded. These ventures typically have premises, usually a single location, and do not seek expansion or meaningful growth. Numbers of employees remain relatively constant. Given limited capacity, it is difficult for these ventures to achieve economies in operations.
- *Managed growth ventures* Have a workable business model and seek stable growth over time, as reflected in occasional new product launches, periodic entry into new markets, steady expansion of facilities, locations, and staff, and development of a strong local and regional brand. Ongoing reinvestment in these businesses and continuous but moderate regional growth guide ongoing business development.
- *Aggressive/high-growth ventures* Referred to as gazelles, these are often technology-based ventures with strong innovation capabilities that seek exponential growth and are funded by equity capital. Launch of these ventures is opportunity-driven, with the founders (often a team) seeking to create new markets. Their market focus is typically national or international, and they often become candidates for initial public offerings or acquisition.

Morris et al. (2015) further elaborate on how the four types of ventures differ in fundamental ways, ranging from their time orientations and management styles to their entrepreneurial orientations, funding sources, and exit strategies. Surveys of the emerging venture landscape suggest that survival and lifestyle businesses may constitute as much as 85% of ventures

in developed economies (Dennis 1997; Acs et al. 2009). However, it is argued that the managed growth and high-growth firms create a disproportionate amount of job and wealth creation (Birch 1987; Malchow-Moller et al. 2011).

Each category type represents a range of possibilities, such that sub-categories likely exist. For instance, survival ventures might be distinguished based on those that are unregistered or formally registered, or those with and without any business infrastructure. Similarly, high-growth ventures might be sub-grouped based on whether or not the growth is technology/innovation-driven. In this vein, Mason and Brown (2013) demonstrate that, while policy makers have tended to look in the technology sector for HG firms, they are actually quite diverse in the sectors they fall in, as well as their age, size, origins, and ownership.

### 3 The impact of different types of ventures

It is our position that all venture types matter and should be encouraged, but they play fundamentally different roles in the economy. As such, they should be approached from a portfolio perspective. Thus, the survival business can serve to move people out of poverty and joblessness into a mode where they are able to meet basic economic needs. A lifestyle business can play a stabilizing role in local economies, providing markets for locally made goods, paying local taxes, and reinvesting in the community. A managed growth firm can serve a similar role, but here the market reach is greater, more jobs are created, efficiencies are greater, and the potential for innovation is stronger. The HG firm can produce the dynamic breakthroughs and major innovations that create new markets, create large numbers of jobs, and enhance the global competitiveness of a nation. Let us further consider seven major arguments regarding the relative importance of HG versus other types of ventures.

#### 3.1 The cost of entry and exit argument

The new venture context in the twenty-first century is arguably unlike that in any previous economic era. Where size, scale and control of resources were historically significant sources of competitive

advantage, such advantages have been undermined by an increasingly turbulent business environment (Chandler 1990a, b; Nadler and Tushman 1999; Hitt et al. 2010). The contemporary environment is one that rewards speed, flexibility, and adaptability (Morris et al. 2011). At the same time, dynamic changes in technology, social patterns, market structures, labor practices, supply chains, the ability to outsource, and related areas have served to lower entry barriers, enabling firms to operate virtually, from home, or from wherever the entrepreneur happens to be, and with relatively little in the way of fixed assets or permanent resources (Contractor et al. 2010; Robinson 2002). Jobs are of shorter duration, and concepts such as lifetime employment with a single employer are increasingly rare. Meanwhile, markets are more heterogeneous, producing many unique niches that represent distinct opportunities for the small venture (Schindehutte et al. 2008).

These patterns have paralleled a shift away from a manufacturing-centric or services-centric economy to one that is more information and innovation centric. Thurik and Audretsch (2004) suggest this shift has produced a reversal of some longer-term trends. This reversal includes decreases in GDP per firm begin to grow (average firm is smaller) and increases in the business ownership rate and the small business share of total manufacturing revenues. Evidence provided by van Stel et al. (2005) suggests the importance of entrepreneurship for economic growth is increasing, particularly in more advanced economies.

All of this suggests it can be easier to start ventures, there is room for more ventures, and the relative costs of entry and exit are lower than has historically been the case. Such ease of entry and lower costs would seem to especially apply to survival, lifestyle, and managed growth ventures. Alternatively, with HG ventures, particularly the large number that are technology-based, the initial investment required is significant, the regulatory barriers are higher, and the windows of opportunity are shorter than has historically been the case (Delmar et al. 2003; Gruber et al. 2010). These realities may be at work in fostering the lean start-up movement, where the emphasis is on producing a minimum viable product and on getting variations of something new into the market and seeing what works before completely committing to a given development path (Blank 2013; Hamel and Prahalad 1990; Moogk 2012).

The implication is that an economy today may have less to lose and more to gain from efforts to encourage survival, lifestyle, and managed growth ventures. With HG ventures, the picture is less clear. As we have seen with policies that placed large public monies into high-growth ventures focused on commercializing alternative energy ventures (Mufson 2011; Schow 2012), much can be lost with relatively little to show for it. When HG ventures do succeed, such as with what Amazon has accomplished after years of investment and continued losses, the net benefit to the economy can indeed be dramatic. Yet even here, as we shall see, there are caveats.

### 3.2 The efficiency and failure arguments

As Shane (2009) notes, start-up ventures make sense where they convert less productive to more productive resources. His argument, however, is that early-stage firms are less efficient than incumbent firms and that new ventures become efficient only when they age. He does not allow for the fact that the new firm will make up for early inefficiencies by ultimately becoming much more efficient, on the assumption that the typical start-up fails before this can happen. The problem with this latter argument is that failure rates are much lower than Shane suggests (he suggests failure is the norm) and vary considerably by industry sector (Lowe et al. 1991; Stangler 2010). The definition of failure, often approached as discontinuance of ownership or bankruptcy, could also use clarity, as ventures cease to operate for a wide range of reasons (Headd 2003; Watson and Everett 1999).

The notion that new start-ups do not contribute to economic growth because they are not more productive than existing companies would seem overly simplistic and misses much of what entrepreneurship is about. The entrepreneurial path is one of launching something new without much in the way of guidelines or a script, making misjudgments and errors, learning quickly, and adapting until a sustainable business model is realized. It is a path filled with novel events (Morris et al. 2012b). So the issue becomes one of doing something novel where by definition the venture will be less productive initially (but where learning and improvement are the norms, not failure), versus continuing to do something that has already been done for some time. It is the new value being created, the

new need being served, and the new approach being introduced that is the essence of entrepreneurship.

Using a number of existing metrics, the initial cell phone companies were far less efficient than the traditional landline telephone companies. While some failed, others succeeded, learned, and improved. Yet, even if the new firms eventually became more productive than the incumbent firms on those conventional metrics of productivity, it may be that the value offering of the new firm requires the introduction of new productivity metrics. While productivity is about the ratio of inputs to outputs, entrepreneurship is about changing both the kinds of inputs and how they are combined, and the nature of the outputs.

With regard to types of start-ups, HG firms predicated on scalable business models and innovative technologies that enable dramatic productivity improvements offer far more possibilities in terms of transforming society's utilization of resources. In fact, HG entrepreneurs have been instrumental in staving off the dire Malthusian predictions regarding the resource implications of ongoing population increases. At the same time, while HG ventures are bringing new efficiencies to the market spaces in which they operate, they may be less efficient if they attempted to operate in the niches where non-HG ventures compete.

Non-HG firms are not inherently inefficient. Robbins, et al. (2000) find that the higher levels of productivity growth (and lower inflation and unemployment rates) in the USA are in those states with higher proportions of very small businesses (less than twenty employees). A reliance on bootstrapping, bricolage, resource leveraging, and guerrilla tactics can find the new firm able to do far more with relatively little in resources (Baker and Nelson 2005; Winborg and Landstrom 2001). Lifestyle ventures also find ways to greatly enhance their efficiencies through cooperatives or other forms of collaboration (cooperative buying among independent hardware stores or shared marketing and reservation systems among local bed-and-breakfast establishments). In a similar vein, Eddleston et al. (2008) have provided evidence of efficiencies and productivity enhancements within family firms.

When it comes to survival ventures, where the benefits of capital equipment, production or purchasing economies, and technology are nonexistent, one might conclude that they are so inefficient as to

warrant that we strongly discourage their creation. The reality, from a societal standpoint, may be quite different (Morris and Pitt 1995; Webb et al. 2009). For many, such ventures convert non-productive resources (those without an economic livelihood) into more productive resources. It lessens the cost to society in terms of social welfare investments. The survival venture can also serve as a developmental context that teaches the entrepreneur basic business skills and enables the venture to evolve into a stable lifestyle venture (Cassar 2010).

Lastly, if we return to the concept of failure of many of these small ventures, what are its implications in the aggregate? New venture failure is actually not well conceptualized, understood, or properly tracked across the globe (Shepherd et al. 2009). However, our position is that failure is inherently good, especially early failures, and that higher start-up rates are associated with higher failure rates. The case could be made that the nations (or communities) with the highest business failure rates over time are most typically the ones with the most robust and dynamic economies. One of the great strengths of the US economy, then, is its venture failure rate, and the associated ease of exiting.

If as many as fifty to sixty percent of new ventures fail, then, this does not necessarily indicate an inefficient use of society's resources. In fact, it may actually reflect efficiency. When one is focused on creating novel or new sources of value, some number of failures is likely necessary for there to be a major success, and a forty to fifty percent efficiency rate might be quite good at the societal level. Resources of the "failed" ventures can serve as building blocks for existing and new ventures (and other actors in the marketplace), lowering costs and thereby improving productivity and survival among the rest. Failure spurs knowledge, learning, adaptation, and resilience, while policies that lessen the perceived costs of failure encourage more entrepreneurs to try and then try again (Shepherd 2003). Failures produce an improved class of entrepreneurs, as the evidence suggests success rates and growth are higher for entrepreneurs on the second or third venture (Sarasvathy et al. 2013). The subsequent payoff may well be enhanced global competitiveness based on a larger community of tested entrepreneurs.

In effect, then, the value of the investment in new ventures may actually be understated to the extent that

we fail to consider the real options that they represent. Real options theory (McGrath 1999) suggests, from a societal vantage point, new ventures can be considered as equivalent to projects in a portfolio in which relatively small amounts are invested, and knowledge is generated. Whether or not they fail, they offer potential options for future action that can be quite valuable. McGrath (1999, p. 16) explains, “the key issue is not avoiding failure but containing the cost of failure by limiting exposure to the downside while preserving access to attractive opportunities and maximizing gains.” Thus, even a high failure rate can be a positive thing (Lee et al. 2007).

A similar conclusion can be drawn by considering recent work on knowledge spillovers and entrepreneurship (Acs et al. 2013). Here, the creation of a new venture is a response to opportunities arising from the failure of existing firms to recognize the potential value of new knowledge opportunities. Such knowledge “spills over” and is seized by potential entrepreneurs to create ventures. Thus, entrepreneurship is the channel to transform knowledge spillovers into new ventures and eventually contributes to economic growth. Ghio, et al. (2015) further discuss how new knowledge generation has the effect of creating new ideas, yet it is entrepreneurial activity that serves as is the channel for commercialization of these innovations. Block et al. (2013) link the knowledge spillover theory of entrepreneurship to innovation economics and analyze the effect of entrepreneurship on the transformation of knowledge into innovation. They demonstrate that having high rates of entrepreneurship, even while producing potentially high rates of failure, positively impacts the likelihood that knowledge will be translated into new to the market innovation.

### 3.3 The employment argument

When it comes to job creation, the economy might be approached at two levels, the ongoing level of economic activity, and the dynamics of growth. The ongoing level of activity is concerned with the general level of employment, the quality of jobs in existence, income levels, the level of competition in different markets, and general rates of inflation. Dynamics are concerned with rates of growth or decline, patterns in market structures, the pace of change in technology, and modifications to economic policy variables, such as the money supply.

Start-up activity is a key factor in explaining dynamics, particularly with the rate of entrants and exits, or churn, over time. Here, as Shane (2009) emphasizes, HG firms are more efficient in creating jobs and account for a disproportionate share of new employment annually. Arguably, they also produce large numbers of higher-quality, better-paying jobs. This employment impact should be considered with some caveats. These new jobs might be somewhat offset, however, by the sizeable proportion of these firms that get acquired fairly early on. When this occurs, some jobs are eliminated and others are absorbed into an existing entity. Further, as we will discuss subsequently, job creation by HG firms does not occur in isolation—it can be facilitated by the efforts of non-HG ventures.

While survival, lifestyle, and managed growth firms play some role in dynamics, they play a more significant role in the sustained economy (Gohmann and Fernandez 2014). Arguably, they are the backbone of the economy. For every new medical equipment company, there are many smaller medical testing laboratories. In fact, small businesses, most of which have fewer than twenty employees, account for 49.2 % of private sector employment, and this is a relatively stable percentage (U.S. Small Business Administration 2012). If non-HG start-ups are not encouraged, the question becomes one of determining the impact this has on aggregate employment patterns.

Empirical research has found mixed results with respect to the relationship between unemployment levels and the founding of a new venture. In a recent study on proprietorship and unemployment, Gohmann and Fernandez (2014) found that small firms can reduce long-term unemployment and suggest implementing policies that lessen the costs of starting a venture. The relationship between unemployment and entrepreneurship (of any type of new venture) also depends on the frame of reference. As Acs and Mueller (2008) found in their study, the combination of firm and regional characteristics plays a significant role in employment growth. More specifically, the level of diversification in metropolitan areas positively correlated with employment growth (Acs and Mueller 2008).

Finally, significant measurement problems persist in attempts to determine the job creation impact of entrepreneurial ventures. We start with the number of actual start-ups. Shane (2009) claims two million

ventures are started in the USA each year, while the Kauffman Foundation pegs the number at 500,000 (Stangler 2010). Clearly, sizeable numbers of start-up ventures may not be captured by the statistics. Examples include many sole proprietorships, home-based businesses, unregistered businesses, seasonal enterprises, new ventures operating under the auspices of an already registered small business, and franchises, among others. Beyond this, the job creation numbers are understated to the extent that they do not fully capture casual labor, employees who are paid but not properly documented, contract labor, part-time labor, labor that is compensated through equity or some other non-financial means, and so forth. The numbers must also be adjusted to include job destruction. For instance, while Shane (2009) stresses the jobs created by high growth and larger firms, if we take a firm such as Walmart and consider the jobs created when a new store opens, these might be offset by small businesses that are forced to eliminate similar kinds of jobs in response. Mielach (2012) concludes that there is redistribution in sales estimated at \$25 million annually, such that nearly \$660,000 in wages is lost annually.

### 3.4 The industry sector and labor displacement argument

How we interpret the net contribution to an economy of new ventures may also depend on the industry sector one considers. Industries vary in their failure rates, how labor intensive and mature they are, their relative levels of market saturation and competitive intensity, and the nature of any entry barriers (Auh and Menguc 2005; Bates 1995; Brush and Chaganti 1999). These and other industry characteristics suggest significant differences in risks and rewards in starting any type of venture in a given industry.

As such, to simply conclude that our only focus should be HG ventures is to ignore the relative impacts of different types of ventures across sectors. If we consider a high growth online venture that connects car owners with potential buyers, the virtual nature of this exchange platform may find relatively few jobs are created and spending by the company centers on marketing and salaries for Web site maintenance and customer service staff once the site is up and running. Alternatively, with a managed growth regional restaurant chain, given differences in labor intensity it may

be that a greater number of jobs are created and the venture has larger spillover economic impact in terms of all the facilities it builds with ongoing purchases of equipment, food, and related items.

Within a given sector, new small firms not seeking significant growth can also be sources of ideas that are transformative for an entire industry (Agarwal et al. 2007). Do we really want to discourage or ignore the non-HG firm that develops a new manufacturing technique, logistical approach, or pricing method that is then mimicked and expanded upon by other firms to produce major cost savings or new value propositions? These types of firms can also be market pioneers, laying the foundation with a small business that inspires and enables a subsequent entrepreneur to discover a way to scale what the pioneer is doing. And, of course, it is impossible to know in advance which firms they will be.

At the sector level, we also often see significant job displacement effects and reduced numbers of competitors based on the successes of HG firms (e.g., the impact of Home Depot on local hardware stores). Such displacement is tied either to the relative efficiency/economic power of the HG firm compared to incumbent firms, or to an enhanced value proposition based on some kind of innovation. The value of encouraging high-growth firms would seem greater where they are able to expand or grow the sector, or create entirely new market opportunities. A related assumption made by Shane (2009) is that the quality of jobs created by the HG venture is necessarily superior to the jobs they displace. This certainly can be the case, but there are plenty of circumstances where job benefits and the quality of work life may well be comparable or superior in the incumbent enterprise.

### 3.5 The ecosystem and community externality argument

It has become popular to refer to entrepreneurial ecosystems within communities or geographic regions (Nambisan and Baron 2013; Cohen 2006). An ecosystem in this context is defined as an agglomeration of interconnected individuals, entities, and regulatory bodies in a given geographic area (Isenberg 2010; Malecki 2011). Examples include start-ups, banks, venture capitalists, incubators, accelerators, universities, professional service providers, and government agencies that support entrepreneurial activity. The



very idea of an ecosystem is predicated on the dependence of these elements upon one another. Ecosystems, however, are inherently complex, and little is known about how the different components interact with each other.

Supporters of HG venture policies often “cherry pick” the benefits of higher productivity HG ventures without addressing their reliance on non-HG ventures. The productivity argument, therefore, is often detached from a more integrated view of different types of entrepreneurial firms interacting in an entrepreneurial ecosystem. Similar to an ecological ecosystem, where different species form a set of interactions in the so-called food chain (Ives and Carpenter 2007; Kondoh 2003), different sets of entrepreneurial ventures feed on each other, providing a diverse set of services and products. Removing, what some authors characterize as resource-wasting ventures could potentially damage the entrepreneurial “food chain.”

Extending existing measures of diversity in economics (inequality, polarization, heterogeneity) (Alesina et al. 2004; Wolfson 1994) and biology (alpha, beta, gamma, Simpson’s Diversity Index, Species Richness Index) (Whittaker 1960; Alatalo 1981; Spellerberg and Fedor 2003), our typology of entrepreneurial ventures provides a rudimentary diversity measure for entrepreneurial ecosystems. If we take eBay as a sample HG venture, their business model and growth rate are built on a community of buyers and sellers, the latter group of which contains a variety of small and so-called marginal businesses. Similarly, the models of Amazon and other large online retailers are built around a set of managed growth, lifestyle, and survival businesses.

Another important aspect in this discussion is the divergence of financial, social, and human capital resources that entrepreneurs have access to in different ecosystems (many of which are provided by non-HG firms). Comparing early-stage entrepreneurs in Silicon Valley and Detroit, Michigan, one has to come to the conclusion that latter have to operate in much more adverse conditions that limit their overall economic productivity. Connecting to our efficiency argument, “marginal” entrepreneurs are often critical to the functioning of low-performing economic systems, demonstrating ingenuity and resourcefulness that is comparable to entrepreneurs of high-growth ventures (Baker and Nelson 2005; Senyard et al. 2010; Gundry et al. 2011). With Silicon Valley, which is often used

as a benchmark, the critical resources for success have been accumulating since the 1940s (Sturgeon 2000). The accumulation of these resources has caused a quasi-monopoly when it comes to the use of venture capital to develop and distribute new technologies. This has not come without cost. Research has shown that this “closed” ecosystem produces a high level of inequality with regard to women and minorities (Phillips 2005; Bochner et al. 2015). Non-HG ventures, on the other hand, are associated with a more diverse set of entrepreneurs that can benefit the overall economy.

The ecosystem argument ultimately reminds us that entrepreneurial firms are embedded in communities. As more are created, they can serve to stabilize local economies, bring down crime rates, support community initiatives, and contribute to the tax base. The value of such contributions is measured not only through social benefits, but in economic returns and potentially more productive use of public monies. The implication is that public policy might be better served if it encourages entrepreneurial ecosystem development rather than exclusively focusing on HG venture development, and this implies encouraging all types of ventures. Such investments can encourage a culture of entrepreneurship, which in turn facilitates even more entrepreneurial activity in a given geographic area.

### 3.6 The emergence argument

Perhaps the greatest flaw in the Shane’s (2009) argument is that it assumes we know what kind of venture an entrepreneur is going to create. Yet this is hardly the case. While a given entrepreneur may intend to create a high growth venture, or least hopes that this is the outcome, the reality is that ventures emerge (Gartner 1993; Lichtenstein et al. 2006; Lichtenstein 2014). They become something they were not before, something that is more than and distinct from the combined inputs that go into the venture.

Emergence suggests that what is created is often not what was intended and that the entrepreneurial process is largely both unknowable and uncontrollable (Morris and Webb 2014). What was intended as a lifestyle venture becomes a high growth venture, or vice versa. What is fundamentally a regionally based, managed growth venture recognizes a new dimension of a given opportunity and transitions to becoming high growth.

Emergence leads to an important conclusion: When a venture is started, we not only cannot be certain it will survive, but we also do not know what will emerge. Even venture capitalists, who, as a rule, only invest once a business has established revenues and what appears to be a working and potentially scalable business model, have a relatively low success record in terms of picking the major winners (Gompers et al. 2009; Michel 2014). The implication of emergence may be that we simply need to encourage a greater number of start-ups of all kinds—not knowing what they will become—as a greater pool is likely to mean more of all four types of ventures will ultimately result.

This conclusion is reinforced when considering Shane's (2009) argument suggesting that government incentives for people to start ventures tend to attract the worst kinds of entrepreneurs. While it is not clear what constitutes the best and worst entrepreneurs, the inference is that responding to some government incentive is more likely among those who are unemployed or otherwise experiencing less than full employment when it comes to their skills and capabilities. Further, because these are "less ideal" entrepreneurs, it is assumed they start less attractive or lower potential ventures. Yet, the reality is that, in spite of many years of research, we still know relatively little about the makeup of a successful entrepreneur. Not only is there no ability to predict who will succeed or fail at entrepreneurship, the notion of higher-quality or lower-quality entrepreneurs is not well developed. Clearly, an absence of any sort of work ethic or passion for what one is doing might be expected to undermine the performance of a venture. Beyond this, the inventory of personal qualities that may relate to venture success is pretty extensive. In actuality, while entrepreneurs create ventures, it can actually be the venture experience that forms the entrepreneur—suggesting that the individual emerges as an entrepreneur (Morris et al. 2012b). As such, the linkage from personal qualities associated with venture success to one's responsiveness to government incentives for starting a venture would seem specious at best.

### 3.7 The human capital argument

Finally, one who creates an entrepreneurial venture is pursuing a dream and is impacted in a number of ways regardless of what type of firm results. Numerous studies have examined the psychological aspects of

venture creation. Studies on entrepreneurial cognition (Baron 1998; Mitchell et al. 2002; Grégoire et al. 2011) have initiated an interest in the way entrepreneurs use knowledge structures to assess opportunities and create businesses. That has led to studies on the behavioral side of venture creation, such as research on the roles of passion (Cardon et al. 2009; Murnieks et al. 2014) and optimism (Hmieleski and Baron 2009), or the role of grief when failures are encountered (Shepherd 2003, 2009). These types of scholarly efforts speak to the importance of understanding the deeper connection that many entrepreneurs make with the initiation of a venture, whether it be survival, lifestyle, managed growth, or high growth.

As Morris et al. (2012a) explain, the creation of a venture presents unique experiences as new value is created, new needs are served, or new approaches are introduced. They point out that entrepreneurs do not preexist, but actually emerge as a function of the novel, idiosyncratic, and experiential nature of the venture creation process. Venture creation is a lived experience that, as it unfolds, forms the entrepreneur. In fact, the creation of a sustainable enterprise involves three parallel, interactive phenomena: emergence of the opportunity, emergence of the venture, and emergence of the entrepreneur. None are predetermined or fixed—they define and are defined by one another. This experiential view of the entrepreneur captures a more dynamic process that involves numerous events. It allows for the fact that the many activities addressed as venture unfolds are experienced by different entrepreneurs in different ways. Moreover, it acknowledges that venture creation transcends rational thought processes to include emotions, impulses, and physiological responses as individuals react to a diverse, multifaceted, and imposing array of activities, events, and developments.

Hence the human side represents an important noneconomic aspect that should also be of relevance to policy makers. Venture experiences of any kind have the potential to enhance self-efficacy, enhance one's knowledge base, build skills, and develop elements of an entrepreneurial mindset that can be applied in all facets of one's life.

## 4 The need for a portfolio approach

The four categories of ventures also vary in terms of their relative riskiness, with the HG venture

representing both greater risk and potential returns. Hence it may be useful to think of our four venture types using the analogy of a financial portfolio that must be balanced. A societal approach that emphasizes a portfolio of ventures serves to effectively balance both the risk equation and the mix of benefits that accrue from different type of start-ups. As with any portfolio, then, by encouraging all four types of ventures, society is ensuring a mix of objectives are accomplished. Included here are the needs to ensure: (a) Breakthrough innovations are produced that secure the future competitiveness of the economy together with more incremental innovations that better serve existing markets; (b) local market niches are served, while entirely new markets are created; (c) a mix of employment opportunities are produced that vary in skill requirements and stress; developmental potential, stability, and levels and types of compensation; (d) the potential loss of resources when ventures fail; and (e) ventures are created that pay off in the shorter versus the longer term. A portfolio perspective also acknowledges that different types of ventures fuel one another.

Over time, failing to encourage ventures other than those focused on high growth will systematically undermine economic well-being and quality of life. The fact that a non-HG venture survives over time suggests it is serving a market niche, likely one that is not attractive to the high growth firm. There are millions of these niches in any developed market economy, and they tend to be highly competitive, resulting in reasonably prices, consumer choice, quality options, and often offerings customized to reflect local market requirements. If they are not encouraged, their role will not necessarily be displaced by high growth entrepreneurs. Rather, competition, employment, and consumer choice will decline.

The niches served by non-HG firms are only attractive to the investors behind HG firms when they can be combined and scaled in some manner, as Uber has done with the local personal transport business. Even here, however, the aggregated niches are not sufficient. Uber is attractive because it results in the creation of new primary demand, attracting large numbers of new users to the marketplace.

Assessing the contribution of a venture such as Uber is better understood using a portfolio perspective. The existence of local taxi companies (lifestyle and managed growth ventures), some of which will

ultimately be put out of business by this HG venture, in effect contributed to the opportunity behind Uber. Non-HG firms may also have provided products, services, and resources (including learning) to Uber that prove to be instrumental in its development. As it succeeds, Uber will also motivate adaptation by existing taxi or transport companies and entry of new ones to serve niches and market needs that are inconsistent with the Uber model. Some of these entrants may themselves become HG ventures, displacing Uber. For its part, Uber creates new jobs for thousands of independent contractors (survival and lifestyle ventures), while also eliminating the jobs of companies being displaced. Further, Uber is made better or declines as new entrants of all types seek to compete with it, sell things to it, and find niches it is not serving.

## 5 The portfolio of start-ups and public policy

Based on these seven arguments, the core conclusion is that our focus with public policy, as well as with the support efforts of educational institutions, non-profits and others, should be on “letting a thousand flowers bloom,” to borrow from Mao Tse-tung. Beyond the critical need to support HG ventures, public policy and the larger public sentiment should encourage entrepreneurial activity in all of its forms. As we have seen, the nature (and ultimately the purpose) of the four types of start-ups differs significantly, suggesting their needs are also unique. Public policy should not be put in the position of “picking the winners” as the venture capitalist attempts to do. Instead, policy makers should instead focus on enlarging and improving the total pool of ventures being launched, and encouraging a level of diversity that maximizes interactions among actors in the entrepreneurial ecosystem.

Mason and Brown (2013) found that public policy efforts are not well targeted when it comes to entrepreneurial activity. They point to a range of needs within start-up firms suggesting specific forms of support must be designed for these differing needs. Thus, Shane (2009) is correct in concluding that all entrepreneurs are not created equal, but the implication should not be that most of them should be ignored. Instead, we must develop differential policies targeted to categories of ventures. Even more so, developing adaptive policies that can address the dynamic

environment of entrepreneurial ecosystems is a key challenge that has to be addressed (Swanson et al. 2010). The foundational challenge in adaptive policy development would appear to be one of determining the type of venture in question (e.g., survival, lifestyle, managed growth, and aggressive growth) and the stage of venture development (e.g., pre-start-up, start-up, stabilization, growth) one is attempting to facilitate. Related here is the relative emphasis on supporting general business functions (operations, marketing, bookkeeping) versus innovation activities.

Let us assume the focus is on encouraging start-up and early stabilization of each of our four types of enterprises. Notably, this differs from Shane's (2009) public policy prescriptions, which would typically only apply when the venture has already been started, is generating revenues, and is producing outcomes that clearly qualify it as having HG potential. To achieve Shane's HG perspective, research by the Kauffman Foundation suggests that ventures aged 3–5 years would be the focus (Stangler 2010).

As modern public policy takes a wide range of forms, let us consider four general categories of policies that might foster a greater pool of entrepreneurial start-ups: financial investments, non-financial support programs, taxation incentives, and regulation. These policy elements can interact with one another and other variables to affect entrepreneurial activity over time. With regard to specific impacts, they can serve to influence the supply of entrepreneurial ventures, demand for the goods and services of start-up ventures, the availability of skills, knowledge, and resources for early-stage firms, how entrepreneurs make decisions, and general preferences for entrepreneurship (Audretsch 2002). While the policy scope will also vary depending on levels of government (local, provincial/regional/state, and federal), our approach here is more general.

In Table 1, we provide an example of a portfolio of policies that might resonate across our four categories of ventures (see Table 1). Here, for the survival venture, programs that make it easy to enter the market and that provide seed grants, basic business training, and inexpensive ways to utilize small business service providers (e.g., vouchers) would be examples of priorities. For the lifestyle venture, government-backed bank loans, small business counseling and mentoring programs, and access to small business procurement programs can be valuable. Tax policy becomes more

important with the managed growth venture (incentives for expansion and job creation) and even more so with the high growth venture (incentives related to R&D spending, innovation, and capital gains). With the managed growth firm, regulatory relief, particularly associated with the cost of employees, can be an important facilitator. The high growth firm needs access to venture accelerators, development of managerial capacity to scale a venture, and greater protection for its intellectual property. There are, further, many policies that affect more than one type of venture, such as the role of government-backed loans with both lifestyle and managed growth ventures, or the impact of limited liability protection and liberal bankruptcy laws especially on ventures that have more downside risk, such as managed growth and HG businesses.

Finally, a key element of public policy from a portfolio perspective concerns business failure. Policies that make it more difficult to shut down a business, or that severely penalize the entrepreneur in terms of unmet financial liabilities to lenders or suppliers, serve as a disincentive to start in the first place. Lee et al. (2007), using real options reasoning, conclude that making it easier to exit can increase the willingness of society's members to take risks, positively impact factor productivity, and stimulate economic growth. They explain (p. 267) "similar to the saying 'no pain, no gain,' we believe that an economy unwilling to shoulder the costs of certain entrepreneurial failures is not likely to reap the benefits of a vibrant entrepreneurial sector and the growth it may bring." Liberal bankruptcy laws represent an important example of a policy that can reduce both the actual and perceived costs of failing should one start a venture. The same can be said for policy inventions such as the limited liability company (LLC) in the USA.

Our purpose is not to advocate for these particular policies, but to demonstrate the need for unique policy levers directed at broad categories of entrepreneurial start-ups. When it comes to proactive approaches to facilitating entrepreneurship, public policy is a rough and generally limited tool. It is more equivalent to shining a flashlight rather than using a laser surgical tool. And, in spite of Shane's (2009) suggestion to the contrary, public incentives are not the sole motivator for actually starting a venture. Government incentives take many forms and play a wide range of roles, typically in concert with a number of other variables, in affecting start-up activity.

**Table 1** Examples of public policies addressing unique needs of venture types

	Survival	Lifestyle	Managed growth	High growth
Financial investment	No or low-interest micro-loan programs	Government-backed bank loans	Government-backed bank loans for expansion	Small business innovation research grants State-backed seed funding for high-growth ventures
Non-financial support program	Community micro-incubators Mentoring and counseling for the socioeconomically disadvantaged Vouchers for business Services Welfare-to-work programs	Small disadvantaged business certification programs Preferential government procurement programs targeting small businesses Small business consulting centers	Government contracts for a variety of products and services Programs to facilitate export sales Growth-oriented local incubation programs	Support for venture accelerators Programs to give entrepreneurs access to government-owned technologies Programs to build high growth management capacity
Tax policies	Earned income tax credit applied to ventures started by low-income entrepreneurs No tax audits	Home office tax deduction More liberal write-off of current period expenses	Tax credits for job creation Tax incentives for facility expansion Carry forward loss provisions	R&D tax credits Low capital gains taxes R&D Partnerships Tax credits for job creation Increasing tax write-off on start-up costs
Regulation and regulatory policies	Policies that lower entry barriers such a more liberal licensing	Regulatory exemptions until venture reaches a certain size	Loosening labor market regulatory requirements and ease of terminating employees Liberalizing rules on accredited investors and crowd funding	Intellectual property protection Liberal bankruptcy laws Support for transfer of university technologies

Yet, approached from a portfolio perspective, a more coordinated mix of policies can, over time, help address an imbalance where a society or community finds a given type of venture is significantly unrepresented within its population of start-ups (see Audretsch et al. 2008). The value of such a mix is consistent with the conclusion of Patzelt and Shepherd (2009) that the appropriate combination of entrepreneurship policy measures can multiply their perceived benefits for entrepreneurs. They explain (p. 335) that "...if newly launched policy measures are considered as being part of a bundle of existing measures rather than in isolation, policy makers may be able to launch policy programs that are perceived as more useful by entrepreneurs."

This type of approach is different from both the generic policy approach that seeks to stimulate entrepreneurship in general and an approach that

discriminates in favor of ventures with HG potential. It is a variation on what Henrekson and Stenkula (2010) call a "targeted approach," yet one that need not overly complex. A portfolio approach does not favor any one type of venture, but instead, by reflecting unique needs of four general categories of ventures, creates an environment favorable for all. Its concern is with encouraging the quantity of start-ups, but also the quality of ventures within each category.

## 6 Conclusions and future research directions

The value of high-growth ventures to societal economic well-being is significant. Far more valuable, however, is a dynamic flow of survival, lifestyle, managed growth, and aggressive growth ventures into and out of the economy. An entrepreneurial society is

one with a growing pool of ventures of all types. In the contemporary environment, the potential for any member of society to create some kind of venture has never been greater. These are ventures that are succeeding and failing, non-scalable and scalable, innovating incrementally and dramatically, better serving existing markets and creating new markets, and existing less than 1 year and for many generations. They empower individuals, enhance competition, create value, sustain communities, and generate economic growth and wealth. Importantly, ventures in these four categories fuel and enable one another.

For its part, there is not a need for more government involvement in the marketplace, but rather, more enlightened involvement. A holistic approach to public policy is needed that provides a balanced approach to fostering entrepreneurial activity. Such balance requires a portfolio perspective. This can be accomplished through a mix of financial investments, non-financial support programs, taxation incentives, and regulation tailored to each of the four broad categories of early-stage ventures.

This discussion gives rise to a number of suggestions for ongoing research. The economic and non-economic effects of our four types of ventures at different levels of analysis are not well understood. Also limited is the evidence regarding how public policy can impact start-up or survival rates of each category of venture. A core research challenge concerns the population of ventures itself. How many of each type of venture actually exist, and what are the entry and exit rates for each type? With such benchmark data, researchers can begin to determine the implications of greater proportions of any one type of venture during a particular period of time or under particular conditions. A related research question concerns the duration of the four types of ventures. For how long on average does each type of venture contribute to the economy? Further, we need more comprehensive empirical measures of the various contributions of each type of venture and the patterns in these contributions over time.

Research priorities can also be identified around the different arguments we have made for fostering all four types of ventures. For instance, as the costs and ease of entry into many types of ventures has fallen in recent decades, and as more operating costs can be leveraged and outsourced, does this have implications

for the equilibrium or optimal level of ventures a given economy can or should seek to support (e.g., Audretsch et al. 2007) Given the many ways in which entrepreneurs in the contemporary environment can engage in bricolage, resource leveraging, and guerrilla tactics, studies should more fully explore the relative efficiency or productivity of all four types of ventures. While there is a growing body of research on serial entrepreneurs, richer perspectives are needed on the extent to which those who started survival or lifestyle ventures their first time around (both as successes and failures) subsequently create growth-oriented ventures. A wide range of unanswered questions remain in the area of venture failure, but most pressing is the need for studies that examine both failure and discontinuation by venture category, while controlling for industry type. With regard to job creation, beyond numbers of jobs created, deeper insights are needed on the quality of jobs (e.g., Kalleberg et al. 2000; Zipp 1991) within each of our four venture types, as well as between high-growth ventures and the entrepreneurial firms they displace as they grow. The roles and interdependencies of survival, lifestyle, managed growth, and high-growth firms within entrepreneurial ecosystems is yet another area ripe for investigation. As we come to better understand and measure the qualities, critical elements, and various outcomes of these ecosystems, we can begin to clarify how important each type of venture is for the effective functioning of the overall system.

On the public policy side, researchers should focus on better clarifying which types of ventures are more impacted (both from a start-up and a survival/growth vantage point) by various policy initiatives and in what ways. With start-up activity, guidance is needed as to whether particular policies aimed at simply growing the overall pool of ventures disproportionately result in more of any one type of venture. Findings here can then lead to a deeper understanding of how policy can be used to influence the relative level of venture diversity within entrepreneurial ecosystems.

Studies are also needed to determine the combined impacts of different bundles of public policies on the relative balance of different types of ventures initiated. Developments in these and related areas can be instrumental in enabling societies to more optimally capture the benefits of venture creation in the various forms it can take.

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