

Entrepreneurship Policies: Principles, Problems and Opportunities

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Abstract

In this paper, we discuss the current status of the literature on entrepreneurship policy. The purpose is to discuss and assess several fundamental questions pertaining to entrepreneurship policies, such as “What is the optimal rate of entrepreneurship?” and “What entrepreneurship policies to pursue to remedy market failures and to avoid policy failures?”. In the entrepreneurship policies literature several contributors make distinctions between five types of entrepreneurship policy: government intervention on the demand side, as well as on the supply side; government policies aiming at influencing the supply of input factors of entrepreneurship, plus the preferences of potential entrepreneurs; along with government policies directly targeting the decision-making processes of potential and actual entrepreneurs. We conclude in this paper, there is a need for both a broad and a narrow definition of entrepreneurship policies. A broad perspective implies that the analysis also must consider the general conditions for entrepreneurship in terms of, for instance, institutions. If the general conditions are wrong it can be meaningless as well as a waste of time and resources to develop sophisticated policies targeting entrepreneurs. In these cases, the important entrepreneurship policies are those directed towards the general conditions. When the general conditions are reasonable, then it might be appropriate to develop and apply narrow entrepreneurship policies. Furthermore it is important to analyze how entrepreneurship policies should be designed for countries and regions with different economic histories, different levels of economic development, different economic specializations, and different institutions.

Keywords: Entrepreneurship Policies; Rate of Entrepreneurship; Market Failures; Policy Failures; Government Intervention; Entrepreneurial Opportunities

JEL classification codes: O38; L52; L22; D40

I. INTRODUCTION

Today, entrepreneurship policies are a hot topic among policy makers all around the globe, despite being a relatively recent phenomenon (Audretsch, 2002). A search of the Internet March 2008 gave more than 7.6 million hits for entrepreneurship policy/policies. Researchers also pay a substantial interest to the subject, with a Google Scholar search giving more than 60,000 hits. Why this large interest in entrepreneurship policies? One obvious explanation is the rapid globalization in recent years which fundamentally changed the comparative advantages for countries and regions and the world's competitive climate. While rich western countries lost their comparative advantages in labor-intensive manufacturing and in some service sectors,¹ they gained comparative advantages in knowledge-based economic activities. However, the preferred locations of the new knowledge-based activities differ from the traditional manufacturing locations. The parallel emergence of knowledge-based agglomerations with a high volume entrepreneurial activities and decline of employment in many traditional manufacturing regions has of course intrigued policy-makers and researchers thus stimulating the development of a rich flora of entrepreneurship policies as well as a large volume of research on entrepreneurship and entrepreneurship policies.

Verheul, et al. (2001, p.3) remark that "There is very little that generates consensus in the field of entrepreneurship". We claim that 'there is very little that generates consensus in the field of entrepreneurship policies', even if it seems to be consensus that policy measures can influence the level of entrepreneurship (Storey, 1991 & 1994). However, it is not obvious which economic policies should be labeled entrepreneurship policies. Reynolds, Storey & Westhead (1994) define entrepreneurship policies as policies which:

1. encourage economic agents to conceptualize business ideas
2. facilitate the entry of new businesses
 - a. indirect measures, i.e. the facilitation of entry by modifications or improvements of institutions, regulations and/or infrastructures
 - b. direct measures, i.e. the facilitation of entry by measures directly targeting economic agents, which potentially might start a business
3. facilitate the growth of businesses
4. facilitate the exit of businesses.

This definition is consistent with the definition suggested by Lundström & Stevenson (2001, 19): "Entrepreneurship policy consists of measures taken to stimulate more entrepreneurial behaviour in a region or a country ... We define entrepreneurship policy as those measures intended to directly influence the level of entrepreneurial vitality in a country or region." Thus, entrepreneurship policies focus on the process of change.

¹ In a parallel process, developing countries in particular in Asia have gained comparative advantages in the same industries.

The definition implies that we do not include general macroeconomic policies with the entrepreneurship policies even if such policies and a number of other policies obviously influence the level of entrepreneurship. As we will show in this paper, there is a need for both a wide and a narrow definition of entrepreneurship policies.

Going through the scientific literature on entrepreneurship policies one is struck by certain features. Firstly, it is obvious that some authors see policies directed towards small businesses as entrepreneurship policies even if some authors such as Audretsch (2002) stress that an important distinction should be made between traditional small business policies and entrepreneurship policies. Small businesses *per se* have nothing to do with entrepreneurship. Many businesses must remain small given the product they supply and their accessible demand. Secondly, there is a general lack in the literature of the fundamental principles, problems and opportunities of entrepreneurship policies.

There are several fundamental questions pertaining to entrepreneurship policies:

- What is, for example, the optimal rate of entrepreneurship?
- As all other public policies, entrepreneurship policies should focus on remedying existing market failures. This leads to the question; what are the fundamental market failures?
- What are the risks of policy failures and how can they be avoided?
- What entrepreneurship policies to pursue to remedy market failures and to avoid policy failures?
- Entrepreneurial activities are located but different locations offer very different conditions for entrepreneurship and the factors stimulating entrepreneurship tend to differ between different locations. This implies that there is a need for different entrepreneurship policies in different types of locations. How can this be achieved?

The purpose of the current paper is to discuss and assess the above questions. The paper is organized as follows: In Section 2 we discuss the economic problems facing economic agents intending to start or expand a business or to let their business leave the market. The question of the optimal rate of entry, growth and exit of businesses is discussed in Section 3. The issue of market failures is dealt with in Section 4. We then turn to policy failures in Section 5. Our conclusions are presented in Section 6.

2. THE ENTRY, GROWTH AND EXIT OF FIRMS AS AN ECONOMIC PROBLEM

Decisions by economic agents² to start or expand a firm or to let their firm leave the market are economic decisions concerning the future, i.e. they are based upon expectations concerning the expected lifetime of the firm (L). From an economic

² In the entrepreneurship literature there is much focus on the entrepreneur as an individual. By using the more general concept of an economic agent, we stress that the entrepreneur can also be a group of people, a firm, or a group of firms.

point of view a risk-neutral economic agent will start a firm, if the following surplus or profit condition holds:

$$\left[\int_{t_0}^L [E(p_t)E(q_t) - E(q_t)E(c_t)]e^{-\delta} dt - E(C_0) \right] [1 - E(\tau_F)] > [1 - E(\tau_O)] \int_{t_0}^L E(Y_t)e^{-\delta} dt + R \quad (1)$$

where $E(p_t)$ is the expected product price, $E(q_t)$ is the expected sales volume, $E(c_t)$ is the expected unit cost, $E(C_0)$ is the expected fixed start-up cost, $E(\tau_F)$ is the expected average effective tax on business incomes, $E(Y_t)$ is the expected opportunity income, $E(\tau_O)$ is the expected average tax on the opportunity income, R is the risk premium demanded by the economic agent to take the risk to start a firm, and $e^{-\delta}$ is the discount factor for future costs and incomes. This simple formulation illustrates that entrepreneurship policies can influence the probability that economic agents under given macroeconomic conditions will start new firms in several ways. They can focus the costs of running a firm c_t , the costs to start a firm C_0 , the tax burden of firms and business owners τ_F , and the risk R , taken by economic agents who start new firms.

The economic decision to let an existing firm grow can be analyzed in a similar manner:

$$\left[\int_{t_G}^{L_2} [E(p'_t)E(q'_t) - E(q'_t)E(c'_t)]e^{-\delta} dt - E(C_G) \right] > \int_{t_G}^{L_1} [E(p_t)E(q_t) - E(q_t)E(c_t)]e^{-\delta} dt + R_G \quad (2)$$

where $E(p'_t)$, $E(q'_t)$, and $E(c'_t)$ are the (expected) price, output and unit cost after the firm has grown, $E(C_G)$ is the investment cost associated with the expansion of the firm and R_G is the risk premium demanded by the economic agent to let the firm grow. The question of whether the firm shall grow or not is considered at time t_G and we assume that an investment in the expansion of the firm might change the time horizon from L_1 to L_2 . We see clearly that entrepreneurship policies focusing the costs to run a firm, the costs to make a firm grow and the risk taken by economic agents who are interested in let their firms grow can stimulate firm growth.

The third type of economic decision we consider here is the exit decision. This decision might be analyzed using the following formulation:

$$\left[\int_{t_E}^L [E(p_t)E(q_t) - E(q_t)E(c_t)]e^{-\delta} dt \right] [1 - E(\tau_F)] > [1 - E(\tau_O)] \int_{t_E}^{L_2} [E(Y_t) + E(K_E)E(r_t)]e^{-\delta} dt \quad (3)$$

where $E(K_E)$ is the expected net value of the firm. The expected net value can either be the expected scrap value after the expected fixed costs for closing down the business or the expected sales value of the firm after expected sales costs. $E(r_t)$ is the expected rate of return from investing the expected net value of the firm in the

capital market or in another venture and t_E is the time when the decision is considered. The obvious entrepreneurship policies to stimulate the exit of firms are on the one hand to keep the costs of closing down a business at a reasonable level and on the other hand to provide an efficient market infrastructure for successful business owners who want to sell their business or to make an IPO.

An analysis of entrepreneurial decisions as pure economic decisions does not imply that economic factors are the only factors determining such decisions. On the contrary, there is a rich literature convincingly showing that other factors influence such decisions (see, for example, Gimeno, et al., 1997; Hamilton, 2000; Scott Morton & Podolny, 2002; Baden-Fuller, 1989). However, we claim that these other factors are either difficult or impossible to influence by economic policies alone and that entrepreneurship policies, to the extent they are needed, should focus the involved economic factors.

The framework presented above can serve as a general background for a discussion of entrepreneurship policies. It focuses on the central entrepreneurial decision, which is about comparing different alternatives with different risk-reward profiles. It illustrates that government can influence the general conditions for entrepreneurship by influencing the demand side, i.e. changing the opportunities for entrepreneurship, or the supply and cost side in the economy, i.e. changing the resources available for entrepreneurship and their costs. Furthermore, the government can influence the costs of entrepreneurial actions and it can influence the risk level experienced by entrepreneurs.

3. THE ACTUAL VERSUS THE OPTIMAL RATE OF ENTREPRENEURSHIP

For entrepreneurship policies to make sense, the actual rate of entrepreneurship must diverge from the optimal rate of entrepreneurship, where the rate of entrepreneurship represents the entry, the growth and the exit of firms. In this section, we discuss the concept of the optimal rate of entrepreneurship and some fundamental reasons to why the actual rate of entrepreneurship might diverge from the optimal rate. We discuss the role of the institutional framework, the size of the public sector and the role of taxes for the actual rate of entrepreneurship. The actual rate of entrepreneurship is also influenced by the existence of different types of market failures. The influence of market failures on the actual rate of entrepreneurship is discussed in Section 4.

3.1 The optimal rate of entrepreneurship

Reading the most popular literature on entrepreneurship policy one quickly gets the impression that the rate of entry of firms and the propensity of firms to grow is too low, while the exit rate is too high. Although this may be true in some countries and regions, it is not a universal truth. Theoretically one identify cases where the polar opposite is true: too many firms are formed and too few firms exit. In an optimal situation, the rate of entry should be at the level where the marginal social revenue of an entry equals the marginal social cost. Similar conditions should prevail for firm growth and exit of firms.

When analyzing the effect of various factors on the level of entrepreneurship it is essential to distinguish between the observed actual rate of entrepreneurship resulting from the short-term interaction between supply and demand, and the long-run optimal equilibrium rate determined by the overall state of the economy, e.g. demography, technology, industrial structure, and market structure in different industries. However, there is no general agreement about what factors determine the equilibrium rate of entrepreneurship (Lucas, 1978; De Wit & van Winden, 1991).^{3 4}

Of course, the actual rate of entrepreneurship can deviate from the optimal equilibrium rate. In a well-functioning market economy market forces should, in principle, ensure that deviations disappear. When the rate of entrepreneurship is higher than the optimal rate, firms face lower profitability due to higher competition which results in higher exit or failure rates and correspondingly lower entry rates. However, there are reasons to believe that the rate of entrepreneurship and in particular the rate of entry may be too high for extended periods. It might, for example, be the case that the rate of entry is too high since the entering firms do not internalize the rents they destroy by displacing incumbents (Boadway & Tremblay, 2005). This is an example of a negative external effect. In particular, the rate of entry might be too high when economic agents compete to be the first to make an innovation (Futia, 1980), or when product markets are imperfectly competitive (Parker, 2007). In the latter case, competition generates too much product diversity, and too little informative advertising (Grossman & Shapiro, 1984). Parker (2007) presents two more reasons to why the rate of entrepreneurship might be too high: i) excessive participation in entrepreneurship owing to problems of asymmetric information in credit markets (de Meza & Webb, 1987, 1988, 1989, 1990, 1999 & 2000; Boadway & Keen, 2002), and ii) over-optimism by entrepreneurs (Manove & Padilla, 1999; Coelho, de Meza & Reyniers, 2004; Arabsheibani, et al., 2000; Puri & Robinson, 2005; Cooper, Woo & Dunkelberg, 1988; Pinfold, 2001).

3.2 Institutions and the rate of entrepreneurship⁵

The actual and the optimal rate of entrepreneurship in a market economy as well as the speed with which any gap between the two will be closed depend on the quality of the institutional framework of the specific economy, which consists of formal and informal institutions. The institutional framework consists of constitutions, laws, regulations, and collective agreements, to name a few. The formal institutional framework has two basic functions (North, 1990). First, it determines how well the property rights of all economic agents in the economy are guaranteed and protected. Secondly, it determines the transaction costs in the economy, which includes, but is not limited to the costs of finding trading partners, negotiating contracts, inspecting transactions, and taking legal actions when contracts are not fulfilled. It is the primary responsibility of government to see that economic agents can operate within a proper institutional framework. The reason is that the institutional framework

³ Carree, et al. (2002) provide theoretical and empirical evidence of a long-term U-shaped relationship between the stage of economic development of an economy and the equilibrium rate of entrepreneurship.

⁴ Given that the level of entrepreneurship in an economy influences economic, productivity and employment growth (Karlsson & Nyström, 2007), governments may of course based upon political goals define their own "optimal" levels of entrepreneurship.

⁵ "The importance of institutions for the development of entrepreneurship is paramount and deserves further study." (Carree & Thurik, 2003, 465)

defines the incentives for economic agents to transform their business ideas to action, and determines to what extent unnecessary barriers will hamper them (Carree & Thurik, 2003).

The institutional framework contains both general and specific institutions. The general institutions apply for all markets, while the specific institutions apply to specific, markets, and products. General institutions, for example, regulate the general rules, which apply to the entry and exit of firms in an economy. Specific institutions may on the other hand regulate the entry and exit of firms in a specific sector, such as nuclear power production, to take an extreme example. All markets need institutions, the common rules and regulations, to properly function properly. Dysfunctional markets where, for example, the rate of entrepreneurship is too high or too low compared to the optimal rate, often have dysfunctional institutions, which in some cases is the same as an absence of rules and regulations. The deregulation of some markets seems, for example, to have generated a too high rate of entrepreneurship due to the lack of a proper institutions being introduced.

3.3 The public sector and the rate of entrepreneurship

One important factor influencing the rate of entrepreneurship in the economy is the size of the public sector. There are basically three major reasons why one should expect a connection between the size of the public sector, reflected in the total overall tax rate, and the rate of entrepreneurship. Firstly, the larger the public sector, the smaller the accessible market for potential entrepreneurs. Because the public sector not only finances a number of service activities but, in many economies, it organizes the production in publically held organizations. Secondly, a generous social security system influences the individual incentives to become entrepreneurs. Thirdly, generous social security systems, with broad coverage, reduce the incentives for individuals to save, which consequently reduces individual possibilities to become entrepreneurs since access to own savings is important to be able to establish entrepreneurial ventures (Henreksson, 2005). Cross-country studies show that there is a negative relationship between the size of the public sector and the rate of entrepreneurship (Bjørnskov & Foss, 2008; Nyström, 2007).

3.4 Taxes and the rate of entrepreneurship

The effects of taxes on the rate of entrepreneurship are not clear-cut. On the one hand, one can claim that taxes reduce the profitability of entrepreneurship, which impedes new firm start-up ups well as the expansion of established firms (OECD, 1998). Furthermore, high marginal income taxes and high corporate taxes may in particular penalize rapidly growing firms (Verheul, et al., 2001). On the other hand, there is the possibility that new firms are started to avoid taxes. Firm owners have the possibility to hide some income from the tax authorities, to let the firm pay for some consumption and to transfer income of work to income of capital (Parker, 1996; Hall & Sobel, 2006). Empirical studies in a number of European contexts indicate that taxes have a negative influence on the entry, survival and growth of firms (Rees & Shah, 1994; Poutziouris, et al., 2000). Storey (1994) emphasize that since the tax system reduces the funds available to business owners, the growth of new and small firms is retarded since such growth mainly is financed by reinvested profits.

However, it is not only the general tax level that matters for entrepreneurship. One also has to consider the effect of various types of taxes on the rate of entrepreneurship (Verheul, et al., 2001). High taxes on dividends may, for example, lead to a reliance on retained earnings to finance growth. Accordingly, there will be fewer ventures for risk capital firms to finance. Overall, there are plenty of examples of how the tax system can generate distortions in an economy and in different markets (Davis & Henrekson, 1999).

4. MARKET FAILURES AND ENTREPRENEURSHIP POLICIES

Ever since Adam Smith laid the foundation of modern economics it has been a widespread opinion among economists that an economic system with free markets can achieve an effective resource allocation, the Pareto optimality. It is one of the great achievements of modern welfare theory that it has shown what conditions that must be fulfilled for such a conclusion to hold in theory. In the welfare theory it has been proven that the conditions for Pareto optimality are fulfilled in perfect competition equilibrium, a system where:

1. all consumers within the limit of their budgets and given market prices chose the combination of consumer products that maximizes their utility,
2. all firms under given market prices and given production technologies chose that combination of inputs and outputs that maximizes their profits, and
3. the prices are the same for all consumers and all firms and are such that all markets are cleared, i.e. demand equals supply in all markets.

In such an economy there is no need for any entrepreneurship policies and, strictly speaking, there are no entrepreneurs. However, the strict assumptions underlying the perfect competition equilibrium are not fulfilled in the real world. There are a number of market failures, which implies that the Pareto optimality is never achieved. In terms of entrepreneurship, such situations imply that the rate of entrepreneurship might be both below and above the optimal rate. This is an important observation and it implies that the assumed positive link between entrepreneurship and the economic performance of countries and regions does not automatically justify public policy intervention (Audretsch, 2002). The mandate for public policy intervention must be motivated by the existence of fundamental sources of market failure. When market failures prevail, there is a gap between the evaluation of entrepreneurial activities by private economic agents and the value of such activities from a social point of view. In the sequel, we discuss various types of market failures and their implications for entrepreneurship policies.

However, it is important to realize that market failure is neither a necessary nor a sufficient condition for government action (Auerswald, 2007). One reason is that the market outcome of a perfectly competitive market is not necessarily an equitable one. Naturally, concerns over equity can be a legitimate motivation for government action. However, from some aspects an un-equitable market outcome is ultimately a market failure. More problematic is that if rigorously defined, market failures are present almost everywhere. Furthermore, as we will discuss in Section 5, there is no guarantee that the policies implemented will be optimal. We also have the problem with the second-best, which implies that in an economy where many markets exhibit

market failures, it is not given that policies trying to alleviate market failures in one market is the optimal policy response for all. Actually, one might claim that entrepreneurship and entrepreneurship policy exist in a world of second-best options and that entrepreneurship policies should address the various challenges that entrepreneurs face, such as uncertainty, asymmetric information, indivisibilities and high transaction costs (Auerswald, 2007).

4.1 Information failures

There are multiple types of information failures with strong implications for entrepreneurship policies. The first type is the well-known case with asymmetric information (Akerlof, 1970). Asymmetric information characterizes a number of markets and implies that economic actors on both the demand and supply side either do not have or possibly cannot get full information about the product involved. One obvious example is the market for entrepreneurial ideas, which does not work as a free market due to existing asymmetric information. It is certainly not obvious whether economic agents possessing an entrepreneurial idea emanating from technological and/or entrepreneurial knowledge, should try to appropriate returns from that knowledge, transforming it into an innovation, by becoming entrepreneurs. They may not possess the necessary skills, motivation and/or financial resources. The natural thing to do in such a situation would be to try to sell the idea to an existing firm or to another economic agent who might be interested in becoming an entrepreneur. The problem is that it often is difficult to find buyers to new entrepreneurial ideas, since the buyer may not be able to evaluate the idea's potential. This implies that the best way to appropriate returns from such mixtures of technological and entrepreneurial knowledge is entrepreneurial action; that the economic agent in question becomes an entrepreneur himself. This implies that there on the one hand is a substantial probability that firms will be started by economic agents who don't have the necessary qualities and, on the other hand, that a number of business ideas are lost since the economic agents possessing them might not find a willing buyer and not be willing and/or able to become entrepreneurs themselves.

Markets that are particularly vulnerable to information asymmetries are the market for credit and the risk-capital market. Situations of credit rationing may emerge when these asymmetries are strong (cf. Stiglitz & Weiss, 1981). The amount of information about potential entrepreneurs is often limited and costly to obtain. The information about an existing firm is not neutral to the firm's size and age. Thus, it follows that potential entrepreneurs and small and young firms are more exposed to information asymmetries than large and old firms, and therefore to the risk of credit rationing.

These matters are further complicated by information paradoxes (Arrow, 1962). To the extent that an entrepreneurial idea can not be protected by patents, and copyrights the economic agent possessing the idea might well be in a position where it is impossible to sell the idea without disclosing its major elements to the buyer and by doing so make it uninteresting for the potential buyer to pay for it since he has already received it for free. This illustrates that to stimulate entrepreneurship it is important that there exist well-functioning systems whereby economic agents can protect their entrepreneurial ideas, either to exploit them themselves or to sell them to existing firms or other potential entrepreneurs.

One more information problem is that the future state of the economy is unknown, which implies that entrepreneurs have to act under genuine uncertainty (cf. Arrow, 1962).

4.2 Collective goods

A pure collective good is a good, which have the character that it can not be divided into pieces and sold in the market place. This, implies that pure collective goods are non-rivalrous and non-excludable (Cornes & Sandler, 1986). A classical example is national defence. However, pure collective goods are relatively rare but there are many goods that have a partially collective character. Infrastructure and R&D are common examples of goods with a partially collective character. For example, the new knowledge and ideas from R&D produce have, at least partially, the nature of a collective good (Arrow, 1962). The problem here is that markets do not function as allocation mechanisms for collective goods, since the individual user of the collective good is not motivated to reveal his/her true willingness-to-pay for the goods in such a market. Thus, economic agents with business ideas regarding collective goods will normally be unable to launch firms with an expected positive profit.

The collective good nature of new knowledge and new ideas is partly related to intellectual property rights since the non-exclusivity of knowledge property makes the appropriation of R&D outcomes problematic. This creates low incentives to do R&D in cases where the rights to exploit or commercially exploit new knowledge or new ideas are not properly assigned. This creates problems not least for firms engaged in early stage basic research, and creates divergences between the social and private returns from such R&D (Mansfield, et al., 1977; Link & Scott, 1997; Martin & Scott, 2000).⁶ Because of the collective goods characteristics, private provision will be sub-optimal, opening the case for public intervention.

4.3 External effects

There are many examples where market mechanisms do not catch all components in the consumers' utility valuations or the resource uses in the production sector. One obvious example related to entrepreneurship policies is the existence of localized positive external effects generating clusters of firms. Such external effects can be described as proximity externalities (Johansson, 2005). Proximity externalities imply that the value of a firm's capabilities is conditional upon the geographical proximity offered by its actual location. According to the theoretical scheme introduced by Marshall (1920) there are three major sources to proximity externalities: i) accessibility to non-traded local inputs, ii) local skilled-labor supply, and iii) information and knowledge spillovers⁷ (See also Jaffe, Trajtenberg & Henderson, 1993; Ogawa, 1997; Feldman & Audretsch, 1999; Porter, 2000).

Since to a great degree entrepreneurial activities take place where potential entrepreneurs and existing firms are localized, the variation in the strength of proximity externalities between different locations has direct effects on the rate of entrepreneurial activities in different locations. Thus, the existence of proximity externalities implies that the expected profit of becoming an entrepreneur or of

⁶ Often these problems are compounded with market distortions in the credit market.

⁷ Since knowledge, which involves new ideas, at least partly is a public good, its production generates externalities, which are more accessible close to the source.

expanding an existing firm is conditional on what a given locality can offer in this respect.

One important factor, which differs between locations, is the available information and knowledge concerning how to become an entrepreneur and how to run a firm successfully. Spatial variation in this type of information and knowledge is one important reason behind the high degree of path-dependence regarding the rate of entrepreneurship, where successful localities continuously outperform less successful localities. Even entrepreneurial firms that fail create positive economic values for existing and potential entrepreneurs. The failure rates for knowledge-based activities are especially high since such activities are associated with a greater degree of uncertainty. However, the failure of a knowledge-based firm does not imply that it created no value. Business ideas created by failed firms often become integral parts of other successful firms (Audretsch, 2002).

The market failure here is that the individual firms in their management do not value the external effects of their operations for the other firms in the cluster. This implies that there exists a reason for entrepreneurship policies to stimulate both the establishment of more firms in clusters and the growth of existing firms to guarantee that all positive external effects of clusters are exhausted, i.e. that the cluster reaches its optimal scale.

4.4 Economies of scale and other barriers to entry

A market structure which approximately corresponds to the perfect market conditions will not necessarily emerge by itself or be preserved by itself. If there are scale economies in production⁸, such that unit costs decline with output, then it can happen that the optimal firm size from a private point of view is such that a firm can influence the market price. If the economies of scale are very large the result will be a natural monopoly. Of course, monopolies can also be created by government decisions. In cases like this, it will not be optimal for profit maximizing firms to offer a price equal to the marginal cost, thus implying that the resource allocation in such a market will not fulfill socio-economic efficiency criteria.

More generally we can say that there is no incentive for private firms to facilitate or encourage perfect competition. If the opportunities emerge, it is in the interest of the individual actors to establish a position in the market such that he gets influence over the market and thus cause a twist away from a resource allocation, which is efficient from a social point of view.

The literature on industrial organization offers numerous examples of barriers to entry in different markets. They include

- predatory pricing;
- the existence of legally protected intellectual capital, such as patents, trade marks, and copyrights;
- customer loyalty based upon loyalty systems or extensive and expansive marketing ;

⁸ Other sources of economies of scale is distribution networks, R&D laboratories, etc.

- indivisibilities;
- high R&D costs to develop new products;
- network effects;
- restrictive practices;
- exclusive distribution agreements;
- exclusive delivery agreements; and
- in-elastic demand.

All these barriers to entry make it difficult for new actors to enter the market in question. This implies that effective antitrust policies that limit barriers to entry are a vital ingredient of entrepreneurship policy. However, large firms are often eager to restrict competition and they have the resources to lobby for regulations restricting competition (Holmes & Schmitz, 2001).

4.5 Unemployment

In the perfect competition model, there is no room for unemployment. Clearing of markets implies that with given prices all economic agents can buy and/or sell the quantities they want. Unemployment, on the other hand, means that at the prevailing wages not everyone can sell the volume of work he or she wants. Since the breakthrough of Keynes' ideas in the 1930s, it has become increasingly accepted among politicians that the government has a responsibility to try to hold the total level of economic activity in the economy so that as much unemployment as possible can be avoided.

For a long time it has been a common view that measures stabilizing the general level of unemployment should be general policies. It is theoretically possible to stabilize economic activities at the full employment level by adjusting the level of public spending, taxes and general monetary measures. Over time the ambitions in the stabilization policy has been extended to cover also stabilization within different sectors and different regions. This has made it necessary to use more selective measures, which makes it more probable that conflicts will emerge between the stabilization goal and the demand for socio-economic efficiency in the resource allocation.

In recent decades, following in the foot-steps of globalization and de-industrialization, unemployment has increased and entrepreneurship has emerged as a major avenue to restore full employment both generally and for different disadvantaged groups in the labor market. This implies a quite different set of measures from the traditional stabilization policies. However, macro-economic stability in terms of the rate of inflation and interest rates is important for entrepreneurs too.

4.6 Market failures – a round-up

From the above survey of market failures, we may generally conclude that control of market failures is important also in the era of the entrepreneurial economy. There are, however, problems with abating market failures, which we will revisit in the next section. Furthermore, one must realize that the entrepreneurial economy differs in many respects from the traditional managed economy that prevailed during the early post-war period. In the entrepreneurial economy comparative advantages are increasingly based upon new knowledge. Of course, public policy must respond to this. Even if well-functioning markets still are important, focus must still be placed on enabling the creation, appropriation, adoption, diffusion, application and commercialization of new knowledge. However, knowledge creation activities are highly concentrated spatially. This implies that enabling policies on the one hand increasingly must target such agglomerations of knowledge creation activities and, on the other hand, support knowledge transfers to areas without knowledge creating capacity. Furthermore, since even the largest agglomerations of knowledge creating activities only produce a tiny share of all knowledge produced in the world, it is essential for all such agglomerations, which want to secure their long-term position, to be connected to other knowledge producing agglomerations.

5. POLICY FAILURES IN ENTREPRENEURSHIP POLICY

Even with the existence of market failures it is important to discuss whether public interventions create further distortions while attempting to address the original market failure. Interestingly, as far as we have been able to see there is very little discussion of possible policy failures in entrepreneurship policy in the scientific literature. Not even a standard work such as Parker (2004) offers such a discussion.

There are two major potential sources for policy failures in entrepreneurship policy: i) the policy lag problem, and ii) the policy incentive problem.

5.1 The policy lag problem

There are strong pressures on politicians to show that they are active regularly introducing new policies that meet perceived problems in the economy. There are many problems with such reactive policies. The first problem is that it takes time to identify that a new potential problem of some kind has emerged. We may call this the observation lag. The second problem is that it takes time to study and analyze whether the potential problem is legitimate. We may call this the analysis lag. If the potential problem is real, then it takes time to formulate an appropriate policy and to analyze the policy's potential negative effects. This is the policy formulation lag. Once formulated, policies must be approved, through, for example, parliament. Such processes takes time, imposing a policy decision lag. Once decided, there is an implementation lag. Finally, even after implemented, policies take time to have an effect, creating an effect lag. Cumulatively, these lags cause a considerable delay between observation and effectiveness.

Since the different markets in the economy are in more or less constant flux as a result of different rapid processes, there is a high risk that such interventionist policies will miss their target. The general conclusion from this is that entrepreneurship policies should focus on the slow processes within the economy, where the politicians can exercise much more control. Examples of such policy areas are hard and soft infrastructures.

5.2 The policy incentive problem

The discussion in Section 4 around the neoclassical standard model for a market economy and its extension into the Pigouvian welfare theory with different kinds of desirable corrections of market failures has its distinct problems when we also consider how decisions are taken by politicians and in public bureaucracies. To be able to contribute to efficient entrepreneurship policies it is important to know how decisions about interventions in the private sector actually are made, that is which rules and incentives govern politicians and bureaucrats in public administration. These problems with such decision making are discussed in the public choice literature, which has been developed in the 1950s, 1960s, and 1970s by among others Downs (1957), Buchanan & Tullock (1962), Olson (1965), Buchanan (1967, 1968 & 1975), and Riker & Ordeshook (1973).⁹ One common starting point for the public choice literature is that the room for pure altruism is very limited and that the

⁹ For early surveys, see Mueller (1967).

individuals normally try to increase their own welfare based upon they can gain as individuals as they maximize their individual utility.

One problem identified by the above authors is that majority voting in political decision making generates different types of external effects or failures in political decision making, the so-called government failures. Furthermore they showed that the behavior of vote maximizing politicians and parties in a multi-party system with representative democracy and majority voting generates several interesting effects. It has also been argued that politicians and different interest groups may direct subsidies in ways that benefit themselves either directly or indirectly, rather than increasing the general welfare (Stigler, 1971; Becker, 1983).

The decisions made by the political decision makers are normally prepared and implemented by public administrators and bureaucracy. It is certainly naïve to assume that these administrative functionaries are obedient automats with an altruistic focus on what is best for society. While politicians and parties strive for vote maximization, administrations can be assumed to strive for size maximization, since leaders in administrations normally get higher status, higher salaries and/or more fringe benefits as the organization grows (cf. Downs, 1967 & Niskanen, 1971).

A general conclusion seems to be that political decision making and decision making in public administration is connected with as many or even more deficiencies and imperfections as the decision-making in the market place.

5.3 The targeting problem

Parker (2007) raises two problems regarding entrepreneurship policies that target specific entrepreneurial groups. His first remark is that any targeting of entrepreneurial groups should focus on possible marginal effects and not on average effects. In this connection, he also raises the problem of identifying the relevant target groups *ex post* as well as *ex ante*.

Parker's second remark concerns the observation made by Lucas (1976) that government policies implemented in the private sector do not fully take into account that the responses of the economic agents in the private sector can lead to unintended and perverse consequences. This implies that the responses of the targeted economic agents can be such that their actions weaken, undo, or even reverse the government's intended outcome (cf. Li, 2002). Parker discusses five types of inappropriate pro-entrepreneurship policies. His first two examples dealing with a strict enforcement of debt contracts (Zazzaro, 2005) and income taxation on entrepreneurs (Boadway, Marchand & Pestieu, 1991; Black & de Meza, 1997; Parker, 1999) demonstrate how private economic agents can completely neutralize well-meaning government policies, leading to what Parker calls policy irrelevance. The last three examples which deal with i) tax breaks to small firms to encourage entry (Holtz-Eakin, 2000), ii) policies designed to encourage innovation by new firms (Klette, Moen & Griliches; Boadway & Tremblay; Futia, 1980; Grossman & Shapiro, 1984), and iii) the policy of health insurance deductibility in the US (Perry & Rosen, 2004), are examples of superficially attractive policies, which turn out to be counter-productive.

5.4 The crowding-out problems

One problem with many entrepreneurship policies is that they are expensive to implement. Accordingly, governments must spend tax money to finance their entrepreneurship policies, money that cannot be allocated to other types of public spending, which generates an opportunity cost which can be larger than the value of the entrepreneurship policy. However, there is a second opportunity cost related to entrepreneurship policies: taxation crowds-out private incomes and private capital while distorting private efforts and incentives. This implies that the costs of public funds very well can be larger than unity (Parker, 2007).

5.5 The information problem

The information problem is a serious problem for in terms of formulating and implementing entrepreneurship policies. It is extremely difficult for governments to collect enough information and knowledge about available policies; their potential positive and negative effects; and the timing of said effects. There is also too little evaluation of the rate of success with past policies with many governments lacking the expertise to evaluate existing information and knowledge. This implies substantial risk that most entrepreneurship policy formulation (as in many other fields) is based upon a too narrow information and knowledge base, thus becoming influenced by the strong need by politicians to show that they doing something, even if it is not the right thing.

There is no guarantee that the public sector is better informed than the private sector (Parker, 2007). Traditionally, public support for entrepreneurship seems to be rather ineffective (Robson & Bennett, 2000).

5.6 Government policies and perverse incentives

One interesting side-effect of government policies is that they may encourage potential and actual entrepreneurs to engage in unproductive rent-seeking activities rather than in productive activities (Baumol, 1990; Murphy, Schleifer & Vishny, 1993). If so, the result can be negative effects on productivity, innovation, competition and in the end economic growth (Dennis, 1998; Djankov, et al., 2002).

5.7 Policy goals and goal conflicts

Much entrepreneurship policy literature assumes that governments have clear goals for different policy areas. This is often not true: many programs have either unclear goals or contradictory goals (Parker, 2004). One example of conflicting goals are the programs set up to encourage the unemployed to start their own businesses, where the economic goals, such as high survival rates, profitability and employment creation conflict with social goals of putting the hardest to employ to work (Bendick & Egan, 1987; Storey, 1994). There is also often a goal conflict between the goals specified for entrepreneurship policies and the goals specified for other policy areas.

5.8 Conclusions for entrepreneurship policies

Given that modern economies are mixed with profit maximizing firms, utility maximizing firms, vote maximizing parties, and size maximizing public administrations which are strongly integrated into the global economy there is a need to develop advanced foundations for entrepreneurship policies. These foundations must be

anchored in decision theory, game theory and theories for complex interdependent systems. It is interesting that even if economists have strong comparative advantages for such analyses compared to other social scientists, there is still a gulf between in our understanding of the need for entrepreneurship policies and how such policies should be designed when needed.

6. CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

In the entrepreneurship policies literature several contributors make distinctions between five types of entrepreneurship policy (see, e.g., Verheul, et al., 2001):

1. Government intervention on the demand side, i.e. measures, which influence the number and type of entrepreneurial opportunities,
2. Government intervention on the supply side, i.e. measures, which influence the number and type of potential entrepreneurs,
3. Government policies aiming at influencing the supply of input factors of entrepreneurship, i.e. qualified labor, information and knowledge, capital, services, etc.
4. Government policies aiming at influencing the preferences, i.e. the values and attitudes, of potential entrepreneurs, and
5. Government policies directly targeting the decision-making processes of potential and actual entrepreneurs.

In this paper, we discuss the current status of the literature on entrepreneurship policy. As stressed by, Audretsch & Beckmann (2007), entrepreneurship policy is a new policy field. As a policy field, it developed because policy makers were dissatisfied with the results of existent policies. To a great extent, entrepreneurship policies have been developed through real world trial-and-error rather than theoretically developed by academics before being adopted by policy makers. As a variety of entrepreneurship policies have been applied in different countries, researchers have started evaluating the policies, thus creating a relatively new research field.

In terms of future research, there is a need develop the concept of entrepreneurship policies from both broad and narrow perspectives. A broad perspective implies that the analysis also must consider the general conditions for entrepreneurship in terms of institutions, the role of the public sector, and the influence of market failures to name a few. If the general conditions are wrong it can be meaningless as well as a waste of time and resources to develop sophisticated policies targeting entrepreneurs. In these cases, the important entrepreneurship policies are those directed towards the general conditions. When the general conditions are reasonable, then it might be appropriate to develop and apply narrow entrepreneurship policies. However, in both cases it is important to consider the capacity of the political system and the public administration to decide on and implement policies without high costs and government failure.

Furthermore it is important to analyze how entrepreneurship policies should be designed for countries and regions with different economic histories, different levels of economic development, different economic specializations, and different institutions. For example, the financial sector and the banking system functions very differently in different countries. Obviously, the mix of entrepreneurship policies which should be recommended differs substantially, depending upon how the financial sector and the banking systems function, since access to financing is a critical problem for potential as well as actual entrepreneurs.

References

- Akerlof, G.A. (1970), The Market for 'Lemons': Qualitative Uncertainty and the Market Mechanism, *Quarterly Journal of Economics* 84, 488-500
- Arabsheibani, G., et al. (2000), And a Vision Appeared to Them of a Great Profit: Evidence of Self-Deception among the Self-Employed, *Economic Letters* 67, 35-41
- Arrow, K.J. (1962), Economic Welfare and the Allocation of Resources for Invention, in Nelson, R.R. (1962) (Ed.), *The Rate and Direction of Economic Activities: Economic and Social Factors*, Princeton University Press, Princeton, NJ, 609-626
- Audretsch, D.B. (2002), Entrepreneurship: A Survey of the Literature, prepared for the European Commission, Enterprise Directorate General (mimeo)
- Audretsch, D.B. & I.A.M. Beckmann (2007), From Small Business to Entrepreneurship Policy, in Audretsch, D.B., I. Grilo & A.R. Thurik (2007) (Eds.), *Handbook of Research on Entrepreneurship Policy*, Edward Elgar, Cheltenham, 36-53
- Auerswald, P.E. (2007), The Simple Economics of Technology Entrepreneurship: Market Failure Reconsidered, in Audretsch, D.B., I. Grilo & A.R. Thurik (2007), *Handbook of Research on Entrepreneurship Policy*, Edward Elgar, Cheltenham, 18-35
- Baden-Fuller, C.W.F. (1989), Exit from Declining Industries and the Case of Steel Castings, *Economic Journal* 99, 949-961
- Baumol, W.J. (1990), Entrepreneurship: Productive, Unproductive, and Destructive, *Journal of Political Economy* 98, 893-921
- Becker, G. (1983), A Theory of Competition among Pressure Groups for Political Influence, *Quarterly Journal of Economics* 98, 371-400
- Bendick, M. & M.L. Egan (1987), Transfer Payment Diversion for Small Business Development: British and French Experience, *Industrial and Labor Relations Review* 40, 528-542
- Bjørnskov, C. & N.J. Foss (2008), Economic Freedom and Entrepreneurial Activity: Some Cross Country Evidence, *Public Choice* (forthcoming)
- Black, J. & D. de Meza (1997), Everyone May Benefit from Subsidizing Entry to Risky Occupations, *Journal of Public Economics* 66, 409-424
- Boadway, R. & M. Keen (2002), Imperfect Information and Public Intervention in Credit Markets, Queens University, Kingston, Canada (mimeo)
- Boadway, R. & J.-F. Tremblay (2005), Public Economics and Start-Up Entrepreneurs, in Kannianen, V. & C. Keuschnigg (2005) (Eds.), *Venture Capital, Entrepreneurship and Public Policy*, MIT Press, Cambridge, MA, 181-219
- Boadway, R., M. Marchand & P. Pestieu (1991), Optimal Linear Income Taxation in Models with Occupational Choice, *Journal of Public Economics* 46, 133-162
- Buchanan, J.M. (1967), *Public Finance in Democratic Process: Fiscal Institutions and Individual Choice*, University of North Carolina Press, Chapel Hill
- Buchanan, J.M. (1968), *The Demand and Supply of Public Goods*, Rand McNally & Co., Chicago
- Buchanan, J.M. (1975), *The Limits of Liberty: Between Anarchy and Leviathan*, University of Chicago Press, Chicago
- Buchanan, J.M. & G. Tullock (1962), *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, University of Michigan Press, Ann Arbor
- Carree, et al. (2002), Economic Development and Business Ownership: An Analysis Using Data of 23 Modern Economies in the Period 1976-1996, *Small Business Economics* 19, 271-291

- Carree, M.A. & A.R. Thurik (2003), The Impact of Entrepreneurship on Economic Growth, in Acs, Z.J. & D.B. Audretsch (2003) (Eds.), *Handbook of Entrepreneurship Research*, Kluwer Academic Publishers, Dordrecht, 437-471
- Coelho, M.-P., D. de Meza & D.J. Reyniers (2004), Irrational Exuberance, Entrepreneurial Finance and Public Policy, *International Tax and Public Finance* 11, 391-417
- Cooper, A.C., C.Y. Woo & W.C. Dunkelberg (1988), Entrepreneurs' Perceived Chances of Success, *Journal of Business Venturing* 3, 97-108
- Cornes, R. & T. Sandler (1986), *The Theory of Externalities, Public Goods and Club Goods*, Cambridge University Press, Cambridge
- Davis, S.J. & M. Henrekson (1999), Explaining National Differences in the Size and Industry Distribution of Employment, *Small Business Economics* 12, 59-83
- de Meza, D. & D.C. Webb (1987), Too Much Investment: A problem of Asymmetric Information, *Quarterly Journal of Economics* 102, 281-292
- de Meza, D. & D.C. Webb (1988), Credit Market Efficiency and Tax Policy in the Presence of Screening Costs, *Journal of Public Economics* 36, 1-22
- de Meza, D. & D.C. Webb (1989), The Role of Interest Rate Taxes in Credit Markets with Divisible Projects and Asymmetric Information, *Journal of Public Economics* 39, 33-44
- de Meza, D. & D.C. Webb (1990), Risk Adverse Selection and Capital Market Failure, *Economic Journal* 100, 206-214
- de Meza, D. & D.C. Webb (1999), Wealth, Enterprise and Credit Policy, *Economic Journal* 109, 153-163
- de Meza, D. & D.C. Webb (2000), Does Credit Rationing Imply Insufficient Lending?, *Journal of Public Economics* 78, 215-234
- Dennis, W. (1998), Business Regulation as an Impediment to the Transition from Welfare to Self-Employment, *Journal of Labor Research* 19, 263-276
- Djankov, S., et al. (2002), The Regulation of Entry, *Quarterly Journal of Economics* 117, 1-37
- Downs, A. (1957), *An Economic Theory of Democracy*, Harper & Row, New York
- Downs, A. (1967), *Inside Bureaucracy*, A Rand Corporation Research Study, Boston
- Feldman, M.P. & D.B. Audretsch (1999), Innovation in Cities: Implications for Innovation, *European Economic Review* 43, 409-429
- Futia, C. (1980), Schumpeterian Competition, *Quarterly Journal of Economics* 93, 675-695
- Gimeno, J., et al. (1997), Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms, *Administrative Sciences Quarterly* 42, 750-783
- Grossman, G. & C. Shapiro (1984), Informative Advertising with Differentiated Products, *Review of Economic Studies* 51, 63-82
- Hall, J.C. & R.S. Sobel (2006), Public Policy and Entrepreneurship, Technical Report 06-0717, Centre for Applied Economics, University of Kansas, Lawrence, KS
- Hamilton, B.H. (2000), Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-Employment, *Journal of Political Economy* 108, 604-631
- Hayek, F.A. (1945), The Use of Knowledge in Society, *American Economic Review* 35, 519-530
- Henrekson, M. (2005), Entrepreneurship: A Weak Link in the Welfare State, *Industrial and Corporate Change* 14, 437-467
- Holmes, T.J. & J.A. Schmitz (2001), A Gain from Trade: From Unproductive to Productive Entrepreneurship, *Journal of Monetary Economics* 47, 417-446

- Holtz-Eakin, D. (2000), Public Policy toward Entrepreneurship, *Small Business Economics* 15, 283-291
- Jaffe, A.B., M. Trajtenberg & R. Henderson (1993), Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations, *The Quarterly Journal of Economics* 108, 577-598
- Johansson, B. (2005), Parsing the Menagerie of Agglomeration and Network Externalities, in Karlsson, C., B. Johansson & R.R. Stough (2005) (Eds.), *Industrial Clusters and Inter-Firm Networks*, Edward Elgar, Cheltenham, 107-147
- Karlsson, C. & K. Nyström (2007), *Nyföretagande, näringslivsdynamik och tillväxt i den nya världsekonomin*, Underlagsrapport nr 5 till Globaliseringsrådet, Globaliseringsrådet, Stockholm
- Klette, T.J., J. Moen & A. Griliches (2000), Do Subsidies to Commercial R&D Reduce Market Failure? Microeconomic Evaluation Studies, *Research Policy* 29, 471-495
- Li, W. (2002), Entrepreneurship and Government Subsidies: A General Equilibrium Analysis, *Journal of Economic Dynamics and Control* 26, 1815-1844
- Link, A.N. & S.J. Scott (1997), Evaluating Technology-Based Public Institutions: Lessons from the National Institute of Standards and Technology, in Papaconstantinou, G. & W. Polt (1997) (Eds.), *Policy Evaluation in Innovation and Technology*, OECD, Paris, 255-277
- Lucas, R.E., Jr. (1976), Econometric Policy Evaluation: A Critique, in Brunner, K. & A. Meltzer (1976) (Eds.), *The Phillips Curve and Labor Markets. Vol. 1 of the Carnegie-Rochester Conference Series on Public Policy*, North-Holland, Amsterdam, 19-46
- Lucas, R.E., Jr. (1978), On the Size Distribution of Business Firms, *Bell Journal of Economics* 9, 508-523
- Lundström, A. & L. Stevenson (2001), *Entrepreneurship Policy for the Future*, Swedish Foundation for Small Business Research, Stockholm
- Manove, M. & A.J. Padilla (1999), Banking (Conservatively) with Optimists, *Rand Journal of Economics* 30, 324-350
- Mansfield, E., et al. (1977), Social and Private Returns from Industrial Innovations, *Quarterly Journal of Economics* 91, 196-240
- Marshall, A. (1920), *Principles of Economics*, 8th edition, Macmillan, London
- Martin, S. & J.T. Scott (2000), The Nature of Innovation Market Failure and the Design of Public Support for Private Innovation, *Research Policy* 29, 437-447
- Mueller, D.C. (1976), Public Choice. A Survey, *Journal of Economic Literature* 14, 395-433
- Murphy, K.M., A. Schleifer & R. Vishny (1993), Why Is Rent-Seeking so Costly to Growth?, *American Economic Review Papers and Proceedings* 83, 409-414
- Niskanen, W.A. (1971), *Bureaucracy and Representative Government*, Aldine, Chicago, IL
- North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge
- Nyström, K. (2006), *Entry and Exit in Swedish Industrial Sectors*, JIBS Dissertation Series No. 032, Jönköping International Business School, Jönköping
- Nyström, K. (2007), The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data, *Ratio Working Paper No. 114*, Ratio, Stockholm
- OECD (1998), *Fostering Entrepreneurship. The OECD Jobs Strategy*, OECD, Paris
- Ogawa, S. (1997) Does Sticky Information Affect the Locus of Innovation? Evidence from the Japanese Convenience-Store Industry, *Research Policy* 26, 777-790
- Olson, M. (1965), *The Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard University Press, Cambridge, MA

- Parker, S.C. (1996), A Time Series Model of Self-Employment under Uncertainty, *Economica* 63, 459-475
- Parker, S.C. (1999), The Optimal Linear Taxation of Employment and Self-Employment Incomes, *Journal of Public Economics* 73, 107-123
- Parker, S.C. (2004), *The Economics of Self-Employment and Entrepreneurship*, Cambridge University Press, Cambridge
- Parker, S.C. (2007), Policymakers Beware!, in Audretsch, D.B., I. Grilo & A.R. Thurik (2007) (Eds.), *Handbook of Research on Entrepreneurship Policy*, Edward Elgar, Cheltenham, 54-63
- Perry, C.W. & H.S. Rosen (2004), The Self-Employed Are Less Likely to Have Health Insurance than Wage Earners. So what?, in Holtz-Eakin, D. & H.S. Rosen (2004), *Public Policy and the Economics of Entrepreneurship*, MIT Press, Cambridge, MA, 23-57
- Pinfold, J.F. (2001), The Expectations of New Business Founders: The New Zealand Case, *Journal of Small Business Management* 39, 279-285
- Porter, M.E. (2000), Clusters and Government Policy, *Wirtschaftspolitische Blätter* 47, 144-154
- Poutziouris, P., et al., (2000), Taxation and the Performance of Technology-Based Small Firms in the U.K., *Small Business Economics* 14, 11-36
- Puri, M. & D.T. Robinson (2005), Optimism, Entrepreneurship and Economic Choice, Working Paper, Duke University, Durham, NC
- Rees, H. & A. Shah (1994), The Characteristics of the Self-Employed: The Supply of Labour, in Atkinson, J. & D.J. Storey (1994) (Eds.), *Employment in the Small Firm and the Labour Market*, Routledge, London, 317-327
- Reynolds, P.D., D.J. Storey & P. Westhead (1994), Cross-National Comparisons of the Variation in New Firm Formation, *Regional Studies* 28, 443-456
- Riker, W.H. & P.C. Ordeshook (1973), *An Introduction to Positive Political Theory*, Prentice-Hall, Englewood Cliffs, NJ
- Robson, P.J.A. & R.J. Bennett (2000), The Use and Impact of Business Advice by SMEs in Britain: An Empirical Assessment Using Logit and Ordered Logit Models, *Applied Economics* 32, 1675-1688
- Scott Morton, F.M. & J.M. Podolny (2002), Love for Money? The Effects of Owner Motivation in the California Wine Industry, *Journal of Industrial Economics* 50, 431-456
- Stigler, G. (1971), An Economic Theory of Regulation, *Bell Journal of Economics* 2, 3-21
- Stiglitz, J. & A. Weiss (1981), Credit Rationing in Markets with Imperfect Information, *American Economic Review* 71, 93-110
- Storey, D.J. (1991), The Birth of New Firms – Does Unemployment Matter? A Review of the Evidence, *Small Business Economics* 3, 167-178
- Storey, D.J. (1994), *Understanding the Small Business Sector*, Routledge, London and New York
- Verheul, I., et al. (2001), An Eclectic Theory of Entrepreneurship, *Tinbergen Institute Discussion Paper TI 2001-030/3*
- Wit, G. de & F.A.A.M. van Winden (1991), An m-sector, n-group Behavioral Model of Self-Employment, *Small Business Economics* 3, 49-66
- Zazzaro, A. (2005), Should Courts Enforce Credit Contracts Strictly?, *Economic Journal* 115, 166-184

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