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## 4 Policymakers beware!

*Simon C. Parker*

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### **Introduction**

This chapter casts a skeptical eye over pro-entrepreneurship public policies. I explain why intervention might backfire or be rendered ineffective by the responses of entrepreneurs and financiers. In addition, I discuss why some apparently innocuous pro-entrepreneurship policies are actually misguided. Some examples of inappropriate and ineffective entrepreneurship policies are given; and a case for discouraging rather than promoting entrepreneurship is made.

In this short chapter, I do not offer a detailed survey of pro-entrepreneurship and small business policies. This task has been performed elsewhere: see, for example, Storey (2003) and Parker (2004, Chapter 10). Nor is it my aim to discredit the viewpoint that entrepreneurship might generate positive spillovers (though it seems likely that negative externalities from entrepreneurship will exist as well). I simply want to discuss important drawbacks to public policy interventions in this area, in the interests of stimulating a more balanced debate about the merits of public policies that take a (sometimes instinctively) pro-entrepreneurship stance.

The chapter has the following layout. The next section focuses on two logical fallacies involved with policies that target particular groups of entrepreneurs. The third section discusses five examples of pro-entrepreneurship policies that are either misguided or frustrated by private sector responses. The fourth section makes a case for discouraging support for start-ups, and the fifth section concludes with a discussion of some of the practical dangers of government intervention in entrepreneurship.

### **Two problems with policies that target entrepreneurial groups**

I make two points in this section. First, any targeting of entrepreneurial groups should be done with an eye to the marginal, rather than average, benefits that are generated; and second, incentive problems generally accompany targeting policies. More generally, it is not unusual for policy advice to be given on the basis of average benefits; and it is even more common for policy makers to ignore the reactions of private sector entrepreneurs to the imposition of their policies.

#### *Average benefits are not the same as marginal benefits*

Consider two different types of entrepreneur, A and B. Each entrepreneurial type generates output using production functions that exhibit the same diminishing marginal returns to inputs. Consider just one input, capital  $k$  that is thought to be in short supply, and which generates greater social than private returns, perhaps because of borrowing constraints. A government policy is proposed that makes extra capital available to entrepreneurs, at constant marginal cost.

An expert now appears on the scene, and makes the following proposal: 'You should focus scarce public resources on the entrepreneurial type that is proven to be the most

successful', the expert tells the government, 'and give the subsidy to A-type entrepreneurs. You want to back winners, not losers, after all'. This is precisely the kind of advice discussed by Westhead and Wright (1999) in their descriptive treatment of serial, novice and habitual entrepreneurs.

However, if government allocates resources on the basis of average benefits, and if these correspond to lower marginal benefits, then the extra benefits are lower than they could be, for any given marginal cost.

The problem just described arises when the targeting is performed *ex post*, that is, after the different entrepreneurial groups are discerned. A more challenging problem arises when targeting must be done *ex ante*. Problematically, the two entrepreneurial types might not be easily distinguishable. Both types want the subsidy, so both have incentives to claim to be the type that is favored by the policy maker. Now the government must invest extra resources into trying to distinguish which type is which. Arguably, it is hard enough for seasoned lenders to accomplish this, let alone bureaucrats who lack business experience.

#### *Private sector responses: incentive problems*

Thirty years ago, Robert E. Lucas (1976) pointed out that government policies imposed on private sector agents that do not fully take into account the responses of those agents lead to unintended, and sometimes perverse, consequences. This includes the possibility that private sector agents respond to the policy in such a way that they weaken, undo, or even reverse the government's desired outcomes. Despite its prominence in macroeconomic research, this critique has not yet been widely acknowledged in entrepreneurship policy circles.

That is a pity, as the following example testifies. Li (2002) evaluated a US federal government policy that subsidizes interest payments to new business start-ups. Calibrating a computable general equilibrium model, Li demonstrated that this policy decreases the incentives for would-be entrepreneurs to save. So total investment rises by less than the government (which assumed entrepreneurs would not change their behavior in response to the policy) hoped. This is a straightforward example of *crowding out* of private sector saving by public sector capital. Worse, the taxes needed to finance the rather ineffective subsidy also blunt incentives to work. Li concluded that interest subsidies to entrepreneurs have the consequence of *decreasing* rather than increasing net output.<sup>1</sup>

What if the objective of this policy was merely to increase the number of entrepreneurs? Even then it cannot be regarded as an unqualified success. Li observed that the number of entrepreneurs switching into the targeted group would increase, but the number in the untargeted group would decrease. It turns out that the latter generally outnumber the former, so the policy – which seemed so obviously bound to promote entrepreneurship – backfires completely. Lest this appear just an extreme example, it is worth pointing out that Gale's (1991) evaluation of a wide range of US federal government lending programs targeted on particular groups, also showed them to have large allocation effects but only modest investment effects – for similar reasons. Nor is strategic switching by entrepreneurs in response to policy initiatives confined to the issue of start-up finance. For example, in their study of affirmative action programs in the US, Blanchflower and Wainwright (2005) discovered that some women appear to have served as 'fronts' for a business actually owned by their husbands, in order to benefit from the positive gender discrimination at the heart of the program. And in a study of German regulations designed to maintain the

authenticity of Chinese restaurants by restricting the kinds of individuals allowed to work as chefs in these establishments, Leung (2003) documented that an unintended outcome is for some restaurateurs to move into fast food, with lower skill requirements – and presumably less authenticity!

### **Five examples of inappropriate policies**

In this section I discuss five inappropriate pro-entrepreneurship policies. The first two demonstrate how private agents can completely neutralize well-meaning government policies, leading to policy irrelevance. The last three examples illustrate policies that may look superficially attractive but turn out to be counter-productive.

First, consider Zazzaro's (2005) analysis of credit allocation to entrepreneurs. It might seem that stricter enforcement of debt contracts, for example more draconian bankruptcy laws, might afford greater protection to banks' asset base and so improve banks' willingness to lend to entrepreneurs. But if anything, such a policy weakens banks' incentives to screen borrowers, and leads to higher business failure rates. In response, banks might actually *decrease*, not increase, their lending to entrepreneurs. Zazzaro points out that a better policy would be to improve accounting standards to reduce the costs of screening and hence improve the quality of credit allocation.

Second, consider the effects of income taxation on entrepreneurship. Entrepreneurs are a particularly risk-prone group, and so can benefit from redistributed income taxation as a risk-sharing device (Boadway et al., 1991; Black and de Meza, 1997; Parker, 1999). However, income taxation might be ineffective if risk bearing fulfills a socially useful purpose. For example, suppose venture capitalists fund a risky entrepreneurial project and pay entrepreneurs a combination of base salary and profit share in order to counteract moral hazard and elicit optimal entrepreneurial effort. For optimal effort to be forthcoming, entrepreneurs must bear risk; so venture capitalists will redesign entrepreneurs' compensation packages and thereby undo a non-redistributive tax with social insurance characteristics in order to restore incentives (Keuschnigg and Nielsen, 2004). So in this case a policy of using the tax system to make entrepreneurship more attractive is neutralized by the responses of the private sector.<sup>2</sup>

Third, consider a policy that gives small firms a tax break to encourage entry. For example, the UK Corporation Tax rate levied on small firms is about two thirds of that levied on firms above a certain threshold (in 2005/06, the threshold is taxable profit above £300 000). This policy might appear reasonable and justifiable, but it has important secondary effects. It reduces the pre-tax rate of return that entrepreneurs require to launch a new venture, and encourages investment in inefficient projects, since rational investors might forsake investments with higher (pre-tax) rates of return in favor of the less productive tax-favored investments (Holtz-Eakin, 2000). A further problem is that tax-favoring small but not large firms involves withdrawing the subsidy as small firms grow. This acts as a perverse tax on growth.

Fourth, consider a policy designed to encourage innovation by new firms. Public support for innovation might be justified on the grounds that innovators are unable to prevent free riders from imitating their innovation. Innovators bear all of the costs while imitators bear only part of them, leading in the end to under-investment in innovation (Klette et al., 2000). Also, greater entry might promote competition and reduce the appropriation of rents by incumbents. These kinds of argument certainly seem to be the

rationale for policies like the Small Business Innovation Research program in the US, the budget of which in 1997 exceeded \$1 billion, and the SMART scheme in the UK. But there are several reasons to believe that there is already too much innovation by entrants. As Boadway and Tremblay (2005) point out, entrants do not internalize the value of the rents that they destroy by displacing established firms, so they innovate too much. The problem of excessive entry is especially pronounced when entrepreneurs engage in a contest to be the first to make a new discovery (Futia, 1980), or when product markets are imperfectly competitive. In the latter case, innovation by entrants generates too much product diversity and too little informative advertising (Grossman and Shapiro, 1984). Thus there may be too little innovation by incumbents and too much by entrants, suggesting that while pro-innovation policies may be worthwhile on balance, they should, if anything, favor incumbents rather than new entrants.

Finally, consider the policy of health insurance deductibility. Since 2003, the self-employed in the US have been able to deduct the entire health premium from their business expenses. In fact, according to Perry and Rosen (2004), the health of self-employed Americans (and that of their children) is no worse, and if anything is slightly better, than that of their employee counterparts. The self-employed also utilize similar levels of health services to employees; and transitions to self-employment appear to be independent of workers' health. Hence in terms of the self/paid employment occupational choice this does not obviously appear to be an appropriate policy.<sup>3</sup> Perhaps the best case that can be made for it is that it promotes some degree of horizontal equity with wage and salary workers.

### **The case for discouraging new start-ups**

In this section I make a case for governments to adopt policies that discourage, rather than encourage, new start-ups. There are two primary justifications for discouraging entrepreneurship. One is based on excessive participation in entrepreneurship owing to problems of asymmetric information in credit markets. The other relates to over-optimism by entrepreneurs. No doubt additional reasons could also be proposed that are based on underlying objections to the value of entrepreneurship itself. For example, small firms destroy as well as create numerous jobs (Davis et al., 1996); small business failures often disproportionately harm customers, employees and suppliers; and entrepreneurship often imposes enormous strains on personal relationships (Blanchflower, 2004). I will not delve into these objections here.

#### *Over-investment*

In a classic article, de Meza and Webb (1987) proposed a model of credit markets operating under asymmetric information. Entrepreneurs are well informed about their projects but banks are not; but able entrepreneurs cannot credibly signal their higher ability to banks. Banks therefore have to offer the same ("pooled") debt contract to all loan applicants. De Meza and Webb assumed that able entrepreneurs have a greater probability of business success than less able entrepreneurs, and so are more likely to repay their debt to the bank. Under a pooling debt contract, the ablest entrepreneurs end up cross-subsidizing the least able, which entices into entrepreneurship individuals with projects that do not cover their resource and opportunity costs. The outcome of investment in projects that do not cover their social and opportunity costs is called *under-investment*.

It arises because of asymmetric information, since if information were symmetric lenders would be able to charge the less able riskier types higher payments, which could allow them to break even. The problem is that banks cannot distinguish able from less able types and have to pool them together, leading to the cross-subsidy. De Meza and Webb showed that over-investment is *bound* to occur when projects' returns are ranked by first-order stochastic dominance. In effect, too many entrepreneurial projects are undertaken. Everyone could be made better off if the least able individuals were discouraged from becoming entrepreneurs.

This conclusion is surprisingly robust to extensions of the model that relax its assumptions. Introducing costly screening (de Meza and Webb, 1988), variable venture sizes (de Meza and Webb, 1989), risk aversion (de Meza and Webb, 1990), and moral hazard (de Meza and Webb, 1999) does not change the basic result that there are too many entrepreneurs. When ability also affects returns from non-entrepreneurial activities, and individuals make free occupational choices, the over-investment result is no longer guaranteed to hold; but it does re-emerge in many special cases (Parker, 2003).

The other principal model of credit markets and entrepreneurial finance, by Stiglitz and Weiss (1981), assumes that entrepreneurs differ in terms of the *risk* of their projects. This model generates under-investment rather than over-investment. But it turns out that the Stiglitz–Weiss model is subject to logical objections that the over-investment model is immune to, including the fact that debt finance is no longer the financial instrument of choice in that model (de Meza, 2002). Furthermore, structures that 'mix' aspects of the de Meza–Webb and Stiglitz–Weiss models (e.g. de Meza and Webb, 2000) generate outcomes in which over-investment occurs once again. It is true that other, less structured, mixture models generate more ambiguous results (e.g. Hillier and Ibrahimo, 1992). But as Boadway and Keen (2002) showed, when equity contracts as well as debt contracts are available on competitive terms, and there is no costly state verification of ex post project returns, over-investment in these less structured models once again emerges.

The policy implications of over-investment are clear-cut. Subsidizing credit reduces efficiency, a conclusion that is strengthened if agency and deadweight costs are entailed by subsidies. A better policy is to discourage inefficient entrepreneurs without deterring their efficient counterparts whose ventures add value. Fortunately, despite the presence of hidden types caused by asymmetric information, this kind of policy is relatively easy to implement in practice. Any policy that taxes loans, deposits or interest will suffice. These policies have the added advantage of avoiding distortions in labor supply – though taxing the incomes of entrepreneurs would do just as well in the absence of such distortions. These policies can even end up increasing the equilibrium number of entrepreneurs if they improve sufficiently the average quality of the borrower pool such that banks reduce interest rates and fund more entrepreneurs (de Meza, 2002). Note that government action is needed to increase the cost of capital in order to improve the average quality of the borrower pool. Banks cannot do it themselves because the pressure of competition forces each one to price capital at the lowest possible rate.

Finally, equity contracts can also be beset by excessive entrepreneurial participation. With too much entry by entrepreneurs, output prices are competed downwards: this decreases venture capitalists' returns, which reduces their incentives to add value via the provision of costly managerial advice to entrepreneurs (Keuschnigg and Nielsen, 2005). While there are potential gains from lower prices in terms of higher consumer surplus, the

appropriate policy here is nevertheless to tax, rather than to subsidize, the investment costs of new start-ups.

### *Unrealistic optimism*

Psychologists have established that most human beings are prone to unrealistic optimism. Numerous studies have shown that optimism tends to be highest when individuals have emotional commitments to outcomes they believe to be partly under their control, and about which objective information is not widely diffused (see Manove and Padilla, 1999, for references to this literature). This is relevant to entrepreneurship because entrepreneurs commonly tie up their personal wealth in their businesses and so have tangible emotional commitments; setting up new ventures is likely to entail illusions of control; and starting entirely new ventures is inevitably uncharted territory so there is scope for unchecked fantasizing (Coelho et al., 2004).

Evidence certainly suggests that entrepreneurs are more unrealistically optimistic than non-entrepreneurs. Entrepreneurs have more unrealistic upward-biased expectations about their future incomes (Arabsheibani et al., 2000) and longevity (Puri and Robinson, 2005) than employees do – and more than is warranted. Entrepreneurs also over-estimate their prospects of business survival and relative performance (Cooper et al., 1988; Pinfeld, 2001). This creates two kinds of problems: one borne by the entrepreneurs themselves and the other by society as a whole.

At the individual level, optimists are more likely to self-select into risky entrepreneurship and to devote excessive amounts of their own time and money to an endeavor (new venturing) that has only a low probability of paying off (de Meza and Southey, 1996). Thus many entrepreneurs end up ruining themselves and possibly also their families, while banks act like pawnbrokers and seize the entrepreneurs' collateral when business failures occur. And it is not only those entrepreneurs who have actually launched their venture who bear the personal costs of failure. In a study of Canadian inventors between 1976 and 1993, Åstebro (2003) calculated the proportion of new innovations reaching the market to be only 7 percent. Of these 'lucky' 7 percent, some 60 percent realized negative returns, and the average realized return among those that commercialized their inventions was -7 percent, even ignoring the cost of the inventor's often enormous efforts. (The fact that half of the inventors persisted with their idea even when paid advice recommended abandonment, is suggestive of pronounced over-optimism.) In short, over-optimistic entrepreneurs who are denied loans may be better off than those who obtain them; and government policies designed to provide funds to the former group may be particularly harmful.

There are also social costs to over-optimism. Even if entrepreneurs have unbiased profit expectations on average, the most optimistic entrepreneurs will crowd out the realists by over-producing, and possibly driving output prices below the industry break-even price. The over-optimistic entrepreneurs impose a negative externality on others because the realists could have made positive profits in the absence of the over-optimists. And, when factor markets are characterized by upward-sloping supply curves, over-optimistic entrepreneurs may overuse scarce resources in equilibrium and bid up input prices that realists must pay (Manove, 1998). Manove cites Warren Buffett in this context: 'It's optimism that is the enemy of the rational buyer.' Furthermore, Manove and Padilla (1999) rebutted the common lament that banks are too conservative and withhold credit

from worthy entrepreneurs. Manove and Padilla showed that, in the presence of over-optimistic entrepreneurs, the opposite is generally the case. Over-optimistic low-ability entrepreneurs pass up the chance to apply for smaller investments that would make them a profit, requesting unprofitable larger loan sizes because they over-estimate their ability. This causes a social efficiency loss, which competitive banks do not price into their loan repayments, since they do not bear any loss incurred by forgone efficient investment by over-optimists. Hence competitive interest rates are generally too low for the social good, which only encourages optimists further, leading to too much investment. Hence conservative bank policies may well be justified despite loquacious criticism from the small-business lobby.

To summarize, individuals and society could be made better off if policy makers discouraged individuals from becoming entrepreneurs. One practical way that this can be done is by relaxing bankruptcy laws (de Meza, 2002; and see also the discussion in the section on examples of inappropriate policies). With weaker asset protection in the event of bankruptcy, banks would have to raise interest rates to make their required rate of return, and reduce their lending. As noted in the preceding section, this is the correct response to over-investment in credit markets.<sup>4</sup> Another appropriate government response, at least in principle, might be to promote the transfer of information, education and management skill acquisition, to moderate and counteract the effects of over-optimism. However, we know of little extant research on this issue to date.

### **Practical dangers of intervention**

So far, this chapter has made the case on theoretical and empirical grounds for policy makers to restrain their urge to intervene in support of small and new enterprises. I conclude this article by mentioning several practical dangers of intervention when government cannot resist these urges, some of which are specific to entrepreneurship and some of which are not.

First, government intervention is not always justified when a market failure is identified. Not every problem is worth fixing, especially if it is costly to do so. For example, subsidies directed to entrepreneurs must be financed. The cost of public funds is often greater than unity, since taxation crowds out private effort and capital, and distorts incentives. If crowding out is substantial, the 'cure' might be worse than the 'disease'. Also, governments rarely possess information that is any better (it is often worse) than the private sector, making effective intervention difficult. So, for instance, it is hard to justify public expenditure on government-organized forums designed to connect business angels and entrepreneurs. An incentivized private sector could presumably do this job just as well, if not better. For similar reasons, one can also question government-funded assistance and advisory support to small businesses, which suffer from low take-up rates and vigorous competition from the private sector (Robson and Bennett, 2000).

Second, governments do not always intervene wisely. Large firms often have incentives to lobby for regulations that restrict competition (Holmes and Schmitz, 2001). Bad regulations come in many forms. One is paperwork that imposes a fixed compliance cost on firms, which large firms can spread over a greater scale, putting their smaller competitors at a competitive disadvantage (Brock and Evans, 1986). Other examples are local zoning ordinances that designate home-based businesses illegal in some cities, or that restrict the scope of their operations; while other legislation restricts the number of trading licenses

in certain occupations (Dennis, 1998). On a related issue, government interventions can sometimes encourage entrepreneurs to engage in unproductive activities ('rent-seeking') rather than in productive ones (Baumol, 1990; Murphy et al., 1993). This can hinder productive effort, whether entrepreneurial or not; restrict competition; and attenuate economic growth (Dennis, 1998; Djankow et al., 2002).

Third, there is now a large literature in political economy and public finance arguing that politicians and interest groups may direct subsidies in ways that benefit themselves, rather than increasing social welfare (Stigler, 1971; Becker, 1983). For instance, in the specific context of entrepreneurship, Lerner (2004) chronicled instances of 'regulatory capture' in US public venture capital programs. One simply cannot assume that government will always act in the public's best interest when it decides to intervene. And, once government departments are charged with delivery of particular programs, they can be very hard to remove after they have outlived their usefulness.

Fourth, the foregoing discussion presumes that governments have clear objectives – whether benign or otherwise. In fact many public programs have unclear or multiple objectives. As I have written elsewhere:

Governments invariably face conflicting aspirations and objectives. They want to target resources to achieve focus but are unable to pick winners; they want to make assistance selective to control budgetary costs but wish also to both remain inclusive and avoid spreading resources too thinly; and they want policies to make a big impact for political reasons while minimizing costs and program deadweight losses. These trade-offs are deep-rooted and probably inescapable. (Parker, 2004, p. 269).

A good example of a public program caught on the horns of this dilemma is unemployment assistance programs designed to encourage unemployed workers to start new businesses. These schemes, which have been widespread in Europe, subsidize unemployed workers who start a business to compensate for loss of welfare benefits, and often provide advice and assistance in the start-up process. As evaluators of these schemes have pointed out (Bendick and Egan, 1987; Storey, 1994), these schemes face a tradeoff between economic objectives (high survival rates, profitability and employment creation) and social objectives (e.g. putting to work the hardest to employ). On this point Bendick and Egan concluded:

The programmes in these countries [France and Britain] have succeeded in turning less than one per cent of transfer payment recipients into entrepreneurs, and an even smaller proportion into successful ones. They cannot be said to have contributed greatly to solving either social or economic problems, let alone both. (1987, p. 540).

Finally, multiple objectives can make specific government entrepreneurship programs difficult to evaluate. And when program evaluations are conducted in practice (which is usually infrequently), they are often selective, choosing to focus on particular interventions that place the government of the day in the most favorable light (Dennis, 1998; Storey, 2003). This might explain why some entrepreneurship programs, such as loan guarantee schemes, are most frequently reassessed, while other programs are effectively ignored. A plea for more consistent, regular, and wide-ranging entrepreneurship policy evaluations – ideally taking account of joint effects of different programs where this is relevant – seems an appropriate point with which to close.

## Notes

1. For Swedish evidence that capital subsidies are associated with lower total factor productivity growth, see Bergström (2000).
2. See also Keuschnigg and Nielsen (2001), who showed that while government spending on entrepreneurial training, subsidies to equipment investment and output subsidies stimulate entrepreneurship, they are at best welfare neutral.
3. The authors did not consider whether this policy additionally distorts the decision to become incorporated rather than remaining a sole proprietor.
4. Also, asset protection in the default state provides optimistic but risk-averse entrepreneurs with valuable insurance, even though they do not think they will need it (Berkowitz and White, 2004). This enhances social welfare.

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