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# Entrepreneurship and Local Economic Development: Policy Innovations in Industrialized Countries

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The observations contained in this short paper are largely drawn from the recent Organization for Economic Cooperation and Development (OECD) book, *Entrepreneurship and Local Economic Development*.<sup>1</sup> That publication reviews the evidence on the relationship between the birth of new firms and local economic and employment development. It is shown that entrepreneurship is a critical component of local development. However, there are a number of potential limits to entrepreneurship-oriented strategies. These limits and how they might be countered are carefully examined. The economic rationales for policy also are considered in detail. The book's main contribution is a set of comprehensive policy recommendations for local and national governments, as well as economic development agencies. The recommendations cover the thematic areas of strategy formulation, finance, and program design. Best practice is considered in the entire range of programs used to increase entrepreneurial activity in local economies. The book also describes the types of research that should be undertaken to improve understanding of the key policy issues. The current paper briefly reviews some of the salient features of the linkages between entrepreneurship and local economic development, and then it considers selected areas of policy innovation.

In many OECD member countries, unemployment, ill health, poor-quality housing, crime, and social exclusion are concentrated in deprived local communities. Thousands of programs have been experimented with as a part of the attempt to reduce joblessness and raise standards of living in distressed

localities. One of the most widely used categories of scheme involves supporting the creation and development of new businesses. Indeed, fostering entrepreneurship is also one of the principal measures used to accelerate economic development in more prosperous localities, and for a variety of reasons, promoting entrepreneurship support from governments at both ends of the political spectrum. Pro-entrepreneurship policies have been embraced as a means of increasing economic growth and diversity, ensuring competitive markets, helping the unemployed to generate additional jobs for themselves and others, countering poverty and welfare dependency, encouraging labor market flexibility, and drawing individuals out of informal economic activity. In short, an enterprise imperative has been charged with addressing an extremely broad array of economic and social aspirations. And increasing the rate of enterprise creation is now an almost universal concern for local authorities, as well as for central governments wishing to accelerate development in disadvantaged localities. Furthermore, in some localities, especially those that have limited prospects for attracting inward investment, promoting entrepreneurship is the only significant economic development strategy available at the local level.

However, given the widespread interest in promoting enterprise, it is perhaps surprising that relatively few empirical studies have systematically examined the relationship between the birth of new firms and local economic change. Considerably greater understanding exists about the interactions between entrepreneurship and *national and regional* economies. Differences in enterprise dynamics

across distinct types of locality—such as rural areas, the inner city, peripheral estates, and places dependent on a small number of economic activities—also are underexplored.

Rates of enterprise creation differ markedly across regions within OECD countries. Determinants of rates of company creation across regions include demographics, unemployment, wealth, the educational and occupational profile of the workforce, the prevalence of small firms, the extent of owner-occupied housing, infrastructure endowment, and a region's history. Research indicates that fast-growing regions generally have high rates of enterprise start-ups. At the local level, there appears to be a broad positive association between incomes and entrepreneurship. Nevertheless, this relationship is not straightforward. And areas of significant deprivation also can experience high rates of firm creation. There are a number of reasons why this can occur. For instance, businesses sometimes operate with weak links to local product and labor markets. There are also a variety of conceptual, measurement, and labor market considerations that are likely to cloud statistical links between entrepreneurship and local employment outcomes.

There are various channels through which the birth of new firms positively can affect local economic development. These include: employment and income growth, with indirect employment effects operating over time; increase in tax revenue, although of uncertain and possibly small magnitude; enhanced provision of services for local consumers and businesses, with consequent increases in local income retention; and difficult to quantify but important demonstration and motivational effects.

#### A SET OF RELATED CONSTRAINTS CAN IMPEDE ENTREPRENEURSHIP IN DEPRIVED LOCALITIES

A set of interrelated conditions is likely to hinder entrepreneurship in disadvantaged areas. These obstacles influence both the extent and form of entrepreneurial activity. They also affect the likelihood that new firms, once established, will survive. Impediments to entrepreneurship in deprived communities are seen to include:

- Limited social and business networks;
- Low levels of effective demand in the local economy;
- The system of tenure and low value of housing;
- Constraints in access to finance;
- A lack of work experience and skills among residents;
- A lack of role models—with respect to which the report examines various conjectures regarding the role of imitation in the spread of entrepreneurship;
- Cultural obstacles, such as linguistic barriers and a lack of affinity with mainstream institutions;
- Lack of personal motivation;
- Sectoral clustering;
- High rates of crime;
- Problems of transition from reliance on benefits; and
- Inappropriate government regulation.

These obstacles are not exclusive to deprived localities. However, their prevalence, the likelihood that they will operate simultaneously, and their severity are often greater in poorer communities.

#### PROMOTING ENTREPRENEURSHIP OFFERS IMPORTANT POTENTIAL BENEFITS, BUT ALSO HAS A NUMBER OF LIMITATIONS

While enterprise creation and development is clearly a critical component of local growth and development, it does not constitute a developmental panacea. For instance, entrepreneurship-centered policy inevitably favors those who possess superior financial, human, and social assets. When entrepreneurship programs expand and eligibility is extended, positive impacts often weaken, as marginal participants are attracted. Businesses that employ others also tend to be run by entrepreneurs from among the better qualified. And the job creation brought about by increased levels of entrepreneurship need not contribute to a significant expansion in employment opportunities for the most disadvantaged in the labor market. In addition, poor localities are often characterized by multiple and interrelated forms of distress. There are many causes of this distress. Enterprise creation and development clearly can operate on a number of these variables but not on all of them. In areas of concentrated poverty a range of other actions besides business support—such as in housing, education, health, and policing—also is required. The success of programs in affecting area development also depends greatly on initial conditions, as well as on factors outside of local control (such as interest rates and the state of the macroeconomy).

Pro-entrepreneurship policies also require extended time horizons. The encouragement of entrepreneurship is unlikely to yield major benefits in the short run. Entrepreneurship strategies, then, should be policy constants rather than responses to short-term employment crises. Competition from start-up firms also can cause losses of output and/or employment

among existing enterprises. Unfortunately, this displacement effect is likely to be most severe among firms in mature, low-growth, easy entry markets. Such firms often are predominate in poor localities. However, displacement is not uncomplicated. For instance, economic gain might result if new firms are more efficient than those they displace. Also critical to the magnitude of displacement effects is the state of demand and supply in local markets. Displacement outcomes are likely to vary over time. As new firms mature, they tend to diversify their customer bases and gradually reach out to wider regional, national, and international markets.

#### GENERAL TRENDS IN POLICY INNOVATION

Policies and programs that appear to be innovative in one context may have been tried and tested in another. Most subnational authorities—and central bodies seeking to foster enterprise in local areas—employ broadly similar sets of measures. Programs to facilitate access to management training, advisory services, micro-credit, small volumes of equity investment, physical workspace, entrepreneurship education, etc. are almost ubiquitous and, in many cases, have a long pedigree. Often, innovation occurs in new ways in which long-standing programs are designed and implemented—rather than the appearance of entirely new forms of policy. However, one can discern a number of trend changes. For example:

- In Europe, in particular—both at the level of national policymaking and at the level of the supranational programs sponsored by the European Commission—there has been a move away from the granting of financial resources toward various forms of financial engineering. Other *soft* forms of support, such as facilitated access to business advice, also have become prevalent. In a related fashion, the merits of commercial approaches to the provision of business development services have become more widely accepted. Local and regional policymakers often

appear to overlook the role of markets. But it is now more commonly recognized that, if properly harnessed, the creativity, resources, and know-how of markets can provide powerful support to policy. Adopting a commercial orientation will help to avoid the displacement of private suppliers and the crowding out of private-sector jobs. It also will help to reduce unfair competition between program beneficiaries and nonbeneficiaries. Attending to market signals is likely to increase the probability that programs are relevant. Working through markets can mobilize resources additional to those of the public sector. A market orientation also has the potential for greater sustainability and, therefore, larger overall impact. In this connection, institutions such as Shorebank Corp. in Chicago and Greater London Enterprise Ltd. provide examples of evident success.

- Another trend has been to give greater attention to groups of firms, team, and interfirm networks, rather than individual firms. Good practice in this area is discussed in greater detail below.
- There also has been change relating to the widely debated policy choice on whether to direct support to established firms and/or enterprises with high-growth potential, or whether to prioritize support for the creation of new enterprises. In some cases, an emphasis on promoting business creation has been tempered by experience and critical policy analysis. Focusing assistance—particularly advisory services—on newly created businesses has been argued against essentially for two related reasons. The first is that failure rates are significantly lower in established enterprises. So, there will be resource waste if programs support new firms because, as a group, these have high mortality. The second is that only a small number of fast-growth enterprises accounts for the bulk of private-sector job creation, and these firms are hard to identify at start-up.
- Another area of change, and perhaps innovation, relates to initiatives to promote public awareness of entrepreneurship and enhance its social legitimacy. These have become more common, and often more sophisticated, and have gone hand-in-hand with the expansion of entrepreneurship education in tertiary (and sometimes secondary and even primary) education.
- There also have been a range of policy initiatives to encourage small firm usage of the Internet. Some of these have been generic, involving, for instance, a general shift to taking government on-line and promoting awareness of new information and communications technologies (ICT). The transition to on-line provision of government services can encourage small firms to explore Internet-based business opportunities. Small firms that engage with public authorities via the Internet experience a demonstration of this medium's utility, as well as gaining familiarization with certification and security systems. Other policy initiatives have raised awareness of the benefits of electronic commerce, provided training, awarded the adoption of new technologies, and ensured the availability of specialized advisory and support services.
- Innovation also has been seen with regard to specialized schemes to assist target firms and population groups. These include programs designed for women, ethnic minorities, youth, and social enterprises. Entrepreneurial activity in a number of these target groups has grown significantly in recent years and is often closely linked to local communities.

The final point to be made here is that innovation is in part a function of the recognition of past failures and achievements. The limits of some program types are becoming better understood. For instance, programs to provide small volumes of credit to those intending to start or expand a business are now widespread in OECD member countries. In the United

States in the mid-1990s, the United States Department of the Treasury allocated the Small Business Administration \$125 million per year to support innovative micro-lending initiatives. The multiplication of programs and the growth of policy interest have been inspired, in part, by examples of successful schemes in the developing world. Important benefits have been reported from micro-credit schemes. For example, among clients of a number of major micro-credit programs in the United States, reliance on public assistance has fallen significantly, while enterprise profitability, equity growth, and take-home pay have risen markedly. Some programs have reported increased employability among borrowers, especially when borrowing occurs in conjunction with training and mentoring. But it is now realized that micro-lending entails complex institutional and policy challenges. Few banks specialize in this area (indeed, the key role of banks is likely to be as wholesalers of funding for special micro-finance institutions). Programs typically require extended periods of planning and experimentation. Many micro-credit initiatives eventually serve only small numbers of clients and make few loans per year. Programs often have experienced high loan losses, excessive overhead costs, and limited outreach. The kinds of innovations needed to improve the effectiveness of micro-credit schemes—in lending techniques, the types of financial and nonfinancial services provided, and in management procedures—only can become standard practice after past program shortcomings are fully understood and acknowledged. Achieving improved understanding requires a serious commitment to a culture of policy and program evaluation.

#### SELECTED EXAMPLES OF POLICY INNOVATION

The following paragraphs describe a small selection of program types in which various forms of innovation have been evident over recent years. In some cases, as with business networks, the innovation has occurred in terms of the increased emphasis given to this particular class of initiative. In others,

such as business incubation, the innovation is evident in evolving approaches to providing industrial real estate. Comments are included on what appears to constitute best practices in these program types (best practices in the entire range of entrepreneurship support schemes are discussed at length in *Entrepreneurship and Local Economic Development*) (OECD, 2003). All of the remarks below are pertinent to the promotion of entrepreneurship in a rural, as well as an urban context.

#### Business Networks

It is a widely supported proposition that entrepreneurs who develop and maintain ties with other entrepreneurs outperform those who do not. Formal business networks—those that are structured, rules-based, or governed through contracts—operate with varied forms and objectives. Some aim at general sharing of information, while others tackle more specific goals. Networks can allow rapid learning—and small companies often favor the peer-based learning that networks permit. Networks also can facilitate the reconfiguration of relationships with suppliers. In some instances, networks have led to a new division of labor in a group of firms, allowing individual companies to reap economies of scale and scope. Indeed, some network initiatives, such as the Danish Network Program, begun in the early 1990s, explicitly have aimed to help small firms acquire efficiency, as a group, on a par with larger enterprises. In fact, networks have spurred cooperation on issues as diverse as training, technological development, product design, marketing, exporting, and distribution. Furthermore, some government agencies have realized that networks can serve as a vehicle for aggregating demand and delivering services to small firms. Hence, in the United States, networks have been employed for federal programs, such as the Manufacturing Extension Partnership (for supply chains and joint research and development), the Department of Commerce (for marketing cooperatives), and the Department of Labor (for training alliances) (Rosenfeld, 2001).

The following recommendations are suggested for the development of business networks:

- (i) *Implement broad campaigns to introduce the networking concept to businesses.*

It is important to create informed demand for network services. Some comprehensive network schemes have failed to secure financial support from private firms once the public subsidy was withdrawn. In part, this may reflect the fact that the private sector is sometimes presented with a menu of services previously determined by public development agencies. In terms of influencing corporate performance, the most successful business networks typically organize around specific commercial objectives. Therefore, public authorities and business associations should seek to raise awareness of the benefits and opportunities of networks. This is in order to increase informed demand for programs built around goals specified by the private sector. Participants' expectations also affect the longevity of networks (Huggins, 2000). For instance, business clubs and fora membership of which usually entail little expectation of short-term financial gain often operate over extended periods of time. This again suggests that networks should be formed around objectives determined by businesses and incorporate private-sector expectations into program design. Lastly, policy induced networks that have taken on a formal structure, such as through contractual agreements, often require significant time and skill to create. If resources are limited, a superior use of public funds might be to pursue the marketing of the network concept—possibly combined with the creation of informal networks—with the aim of reducing barriers to associative activity. More formal networks might then be left to firms to organize themselves.

- (ii) *Expect to provide some financial support for feasibility work, start-up activities, and the costs of network brokerage.*

Barriers to the spontaneous emergence of networks include aversion to and/or unfamiliarity with interfirm cooperation, as well as problems of coordination. Public action, at least in a catalytic role, is frequently needed. One practical way for the public sector to encourage networks might be to emphasize support for projects submitted jointly by groups of firms. However, funding for networks should be phased out as participants start to associate more formally and receive benefits.

- (iii) *Work with realistic time frames.*

Public policy needs to be patient, with a period of three to four years often required for a significant business network program. Moreover, programs of network development should be a constant in the enterprise support landscape, with the formation of new networks around new goals being an ongoing practice.

- (iv) *Ensure the presence of experienced network brokers.*

As with many forms of enterprise support, the quality of management is critical. Persons with direct experience of Small and Medium Enterprise (SME) development should be employed as network brokers, providing advice and guidance for firms hesitant at the prospect of cooperation. By acting as a source of neutral mediation, network brokers also can help allay concerns over loss of control and unfair appropriation of benefits. Establishing teams of brokers and facilitating exchanges of experience among them can help to improve effectiveness.

## Networks of Business Angels

Access to institutional equity investment is essential for many growing companies. A number of studies show that the supply of and demand for for-

mal venture capital is highly geographically concentrated. Companies that provide venture capital are scarce in less dynamic regions and areas without substantial activity in financial services (Mason and Harrison, 1991). Governments have created a wide range of schemes to expand equity investment in small firms and poorer communities. However, it is not evident that measures to increase levels of formal venture capital investment will have a large impact in disadvantaged locations. First, formal venture capital activity is relevant to only a small minority of firms. Barely two in each 1,000 European start-ups receive institutional venture capital—despite the proliferation of public support programs. In the United States, only a little over a half of 1 percent of new companies were funded with formal venture capital in 1999 (NCOE, 2001). Second, firms with high growth potential that are most likely to attract venture funding are less prevalent in poorer communities. Furthermore, scale is critical to the operation of venture funds. This fact, combined with the small volume of potentially viable deals at the local level, means that the most appropriate level of intervention is generally not local, but regional and national.

In seeking to enlarge the volume of equity investment, supporting business angel networks is likely to have the greatest payoff for local policymakers. Networks of so-called business angels aim to match informal investors with ventures seeking small amounts of equity finance. Because of the informal nature, the volume of equity provided by business angels is uncertain. But it appears to exceed the size of the formal venture capital pool. Business angels generally invest in the early stages of enterprise start-up, often in firms that are not yet ready for formal venture capital. Informal equity investors are often successful entrepreneurs themselves. Such investors, therefore, bring significant knowledge and experience to the investee firm. And the time horizons over which informal investments are allowed to mature are frequently greater than in the formal industry. Business angels also are not averse to investing in technology based firms (Mason and Harrison,

1997). Furthermore, and important for territorial development, business angels are geographically dispersed and invest locally (Mason and Harrison, 1994). Informal equity investors also can play a role in raising the quality of investment proposals put to early-stage venture capital funds.

Public policy toward business angel networks is justified, in principle, by obstacles to the efficient functioning of the informal equity market. An information barrier may exist in this market, if business angels are reluctant to publicize their willingness to invest and entrepreneurs are disinclined to reveal innovative ideas. Furthermore, informal investors tend not to be organized as a group. They often rely on friends and business acquaintances for referrals of investment opportunities. This reliance on networks and contacts reflects the time required to search for and appraise potential investments, as well as the fact that many business angels invest on a part-time basis (Mason and Harrison, 1997). Information and search-cost barriers on both the supply and demand sides of this market can be lowered through policy support for business angel networks. An innovative idea aimed at lowering aversion to making informal equity investments is to use information from tax returns to identify potential business angels. Persons thus identified could be sent a letter outlining the tax provisions that apply for business angel investments. This could help to pre-empt fears about tax disadvantages from such investment. The author is unaware whether such an approach has been used anywhere to date.

Most business angel networks are local in scope and operate with public support on a not-for-profit basis. Experience suggests that there are critical constraints in attempting to run such networks on a for-profit basis, despite the recent emergence of privately operated initiatives. Angel networks also are making increased use of information technologies to reduce informational and search costs (Lange and others, 2002). New information technologies may lead to a degree of disintermediation in network

operations, permitting entrepreneurs to bypass standard introduction services. It has been conjectured that this will force at least some networks to seek to add greater value through other activities. They may, for instance, become more closely involved in structuring and guiding new ventures, selecting only the most promising projects, and linking revenue streams more directly to the success of investee firms, such as in equity-for-service arrangements (Lange and others, 2002). Business angel networks possess features particularly attractive for local development policy—being nondistortionary, addressing market imperfections and mobilizing local savings and know-how.

### Aiming for Visible Points of Referral to Professional Advisers

In a number of countries, in recent years, policy has shifted from public provision of business advisory services to a much greater emphasis on ensuring that entrepreneurs have easy access to private-sector sources of information and advice. Firms use a wide variety of sources for obtaining information and advice. These include banks, accountants, solicitors, suppliers, customers, trade associations, public agencies, and social-professional groupings. Private sources are predominate in terms of frequency of use. Studies suggest that this predominance reflects the specialist knowledge possessed by private sources, as well as the confidence engendered by the self-regulation that governs professions, such as banking and accounting (Bennett and Robson, 1999). Different information sources appear to be used for different purposes. For instance, customers often are used for information on issues, such as product development and determining how to sell in new markets. A multipurpose and particularly highly valued information source is a small firm's network with other firms (Malecki and Poehling, 1999).

Government programs that provide or subsidize the supply of business advice for small firms are wide-

spread. For example, Small Business Development Centers are present in all states of the United States and offer a broad spectrum of business counseling services. However, evidence on the impact of advisory services is limited. One recent study suggests that growth in recipient firms is most closely associated with private sources of advice, such as lawyers, accountants, customers, and friends in business. This research—which did not include start-up firms—indicates that government-supported advisory services have little effect on growth but do help to rescue ailing firms (Bennett and Robson, 1999). There also may be a tendency for government agencies to provide survival rather than growth-oriented advice. This is because clients often approach government services when they are experiencing difficulties, while survival-oriented advice also is appropriate to most firms (Mole, 2000). So, it appears that, by comparison with private sources, public advisory services tend to be different and cater to a dissimilar segment of the small business population.

From a practical standpoint, a comprehensive system of public outreach will be expensive, and prohibitively so, if attempting to provide one-on-one service for large numbers of microenterprises. Furthermore, firms in different sectors and at different stages of development require different information and advice. Expertise in such a breadth of subjects is difficult to bring together in a single advisory service. Furthermore, public advisory bodies often are staffed by persons who possess a general business education but have no first-hand business experience. This contrasts with entrepreneurs' frequent preference for advice from peers. All of the above considerations point to the need for a well-functioning referral service to privately provide advice and mentoring.

Many different sorts of providers of advice could be included in a referral system. Mainstream for-profit providers, industry associations, chambers of commerce, nongovernmental organizations, and business mentors all could play important roles. The institutional idiosyncrasies of different countries mean that



there is no optimal model of service delivery. Institutional visibility is important, given the often confusing plethora of organizations that offer support. Points of access to a referral system should be numerous and found in locations likely to be frequented by potential and actual business people. It also is important that banks, accountants, solicitors, training organizations, chambers of commerce, business associations, and others be encouraged to refer entrepreneurs for support to relevant public services. For instance, persons with failed loan applications might be referred to a development agency to improve the quality of loan applications, business plans, financial forecasts, etc. When the public sector becomes directly involved in supplying services, the achievement of International Organization of Standard (ISO) 9000 certification should be a goal. It should, likewise, be ensured that relevant information is accessible to the unemployed. Unemployed persons may visit banks or the other contact points mentioned above infrequently. There should be easy access to a one-stop function for potential entrepreneurs, where all relevant documentation and paperwork can be collected in a single visit.

Entrepreneurs should not face time-consuming procedures in finding advice. Authorities should prepare easily comprehensible guides to business support services, as well as directories of contacts. Steps also should be taken through local media to ensure awareness that this information exists. Where possible, business advisers also should possess a detailed knowledge of the local community (which a local referral system would make possible). It is not enough simply to publicize the availability of advisory services. The value of using such services also must be made known. For instance, various studies show low use of advisory resources among women (Carter, 1997) and ethnic minorities (Fadahunsi and others, 2000). Part of the reason for poor use might be a lack of understanding of the potential benefits of these services. It is reasonable to assume that this problem will be the most severe among the smallest firms.

In many countries, the Internet has led to a significant expansion in access to business information. National and subnational governments across the OECD area have established Internet sites containing extensive information for the self-employed and other entrepreneurs. In the United States, the Minnesota State Rural Development Council and Minnesota Rural Partners created BizPathways, which provides an electronic source of information on entrepreneurship development resources (National Governors Association, 2003). Once entrepreneurs have registered with BizPathways, they are automatically and continuously updated on the availability of relevant resources. Such a resource is likely to be particularly valuable in a rural context, where the availability of business development services is generally less than in an urban setting. However, to date, research on the effects of Internet-based advisory services appears to be nonexistent. There is also little evidence on which to base an assessment of whether distance learning is appropriate to the needs of entrepreneurs. Knowledge of the impacts of such services could be particularly valuable to development agencies serving remote and sparsely populated areas, as well as those serving large numbers of small firms.

#### ENSURING ACCESS TO HIGH-QUALITY PRESTART ADVISORY SERVICES

Prestart advisory services identify less viable business plans, caution prospective entrepreneurs, and improve the viability of nascent firms. For instance, preparing a business plan can facilitate access to finance and help ensure that the correct level of borrowing is sought. But self-employed people often act in isolation and infrequently develop detailed business plans. A number of studies have found that screening improves rates of survival among the self-employed. Self-screening through compulsory participation in training, counseling and/or the preparation of business plans appears particularly valuable. Redirecting persons who wish to establish a business for the wrong reasons is also

important, as the consequences of business failure for individuals and their families can be severe (e.g., loss of savings, pensions, or a family home, and reduced physical well-being and self-esteem). In this connection, prestart advice also could play a role in helping potential entrepreneurs to plan how to safeguard such critical assets as a home and a pension.

Persons who have been unemployed for some time are likely to require more prestart training. Prestart programs should, therefore, be sufficiently funded and flexible to cater to varied and possibly long-term needs for advisory services (Cowling and Hayward, 2000). Charging for business planning assistance is also likely to greatly decrease uptake by the unemployed (Metcalf and others, 2000). Research showing that the self-employed might be unreasonably optimistic about their business prospects highlights the potential benefit of prestart advice (DeMeza, 1999). There is some evidence that self-employed people systematically overestimate expected future income, compared with employed people.

#### ENCOURAGING THE CREATION OF TEAM-BASED FIRMS

Firms established by groups of entrepreneurs tend to register superior performance on a number of key criteria. In what appears to be a relatively recent development, various enterprise support schemes have specifically aimed to build team-based firms. Examples include the "Go" program in North Rhine-Westphalia, Germany, and the MIDAS Initiative operated by the University of Central England. Team-based firms comprise only a minority of the new firms, and the creation of cooperating teams that embody complementary skills can be challenging. Nevertheless, team-oriented initiatives appear promising for building viable firms likely to contribute to job creation.

#### PROMOTING PUBLIC AWARENESS OF ENTREPRENEURSHIP USING A VARIETY OF MEDIA

Public authorities in many countries have sought to influence attitudes toward entrepreneurship. A large number of schemes have been implemented in educational institutions ranging from primary schools to universities. For example, Denmark has created the "Action plan for promoting a culture of entrepreneurship in Denmark: Entrepreneurship and Innovation." This initiative aims to give 30 to 40 percent of young people exposure to training in entrepreneurship, with coverage spanning primary to tertiary and vocational education (Lundstrom and Stevenson, undated). Iceland has instituted the New Business Venture Fund, which sponsors a yearly nationwide business plan competition involving numerous public and private organizations. In Atlantic Canada in the early 1990s, widespread awareness-raising programs were delivered through mass media and the education system.

Scottish Enterprise, Scotland's principal development agency, has implemented one of the most comprehensive and innovative entrepreneurship promotion programs in the OECD. Its business birth rate strategy grew out of research showing that the Scottish public had low levels of interest in starting a business and limited appreciation of the economic function of entrepreneurs. Low rates of start-ups were also found among those predisposed to create a firm. In response, more than 100 initiatives were instituted to modify attitudes and encourage the creation of new firms. These included sponsorship of a television series, the designation of 1995 as Scotland's Year of the Entrepreneur, the creation of six Centers of Entrepreneurship at Scottish universities, the preparation of entrepreneurship materials for secondary and primary schools, and eight traveling exhibits addressing all facets of enterprise creation. From 1992-1997, there was a sizable increase in the number of people who categorized themselves as enthusiastic about starting a business. There is evidence that significant numbers of referrals

to some enterprise development centers were triggered by the campaign. The number of persons who could but didn't want to start a company also decreased. Between 1995 and 1997, annual growth in business start-ups exceeded 7 percent. The extent to which these changes are directly attributable to the business birth rate strategy is relevant to policymaking in a number of countries and merits further examination.

Attitudes about careers in small firms also are relevant. Many graduates face the prospect of working for small firms with reluctance. This is unsurprising given that employment in large firms usually is associated with superior remuneration, conditions of work, and prestige. At the same time, a bias often exists in small firms against the recruitment of graduates, who are sometimes wrongly judged to possess inappropriate experience. This labor market mismatch has a bearing on the development of small firms—given that graduates can be a source of new ideas and skills. It also has a more general bearing on entrepreneurship—given that employees in small firms frequently aspire to become owners of small firms themselves. Attempts have been made to narrow this mismatch through policy. Westhead (1998) analyzed an employee placement scheme for graduates targeted at small firms—the Shell Technology Enterprise Program—which sought to reduce recruitment and job-search biases. This research found that participating graduates came to look more favorably on a career in a small business, although this effect was not strong and many participants took advantage of their increased employability by joining large firms. After graduation, participants were significantly more likely to be offered full-time jobs than similar nonparticipating students. This work concluded that to bring about the greatest attitudinal change, schemes should target firms that do not already employ a graduate. Incentives also are needed to expand the supply and small-firm use of such programs, especially as the provision of training may not be in the short-term interest of the companies involved.

#### ENCOURAGING USAGE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

Many public authorities have initiated programs to improve general familiarization with ICT. For example, the Irish town of Ennis ([www.ennis.ie](http://www.ennis.ie)) is home to the world's largest community technology project. Ennis gave a subsidized personal computer to every household in order to link the locality to wider markets and improve overall ICT literacy. Indeed, many initiatives are being implemented to encourage the use of information technology across entire communities. For example, OECD (2000) describes an initiative in the small French town of Moussac. In 1995, the local authorities were instrumental in creating a network of rural schools called "Réseau Vienne-Gartempe." The network aimed to equip the schools with multimedia computers and provide training for teachers. As a secondary effect, the project helped to raise computer awareness in the areas concerned because the adult population could access the facilities after classes ended for the day. Schemes also operate in which enterprises have given computers (or instituted cheap hire-purchase systems) to a large part of the workforce to improve understanding of ICT. For instance, Denmark's Danska Bank gave a personal computer to its entire staff (the Danish fiscal authorities were asked to consider this as a direct receipt, rather than a taxable in-kind donation). Local authorities could seek to work with corporate partners to encourage programs of this sort.

In regards to the regulatory framework, most advanced economies have universal service obligations without price discrimination for conventional telephone services. However, statutory comprehensive service is not the case for new ICT services. National ICT policies often have no territorial dimension. Municipalities generally lack regulatory powers over ICT industries. As the provision of ICT infrastructure reflects the level of demand for ICT services, the lack of universal service requirements will particularly affect areas of low-demand density and high initial investment costs, such as remote

rural sites. OECD (2000) reports that regulations in a number of countries are beginning to allow local authorities to take action on the supply of ICT-related infrastructure, if the private sector fails to make the necessary investments. In France, for example, a law passed in June 1999 authorizing local public investment in the case of inadequate private supply of wide-band services or infrastructure. Local authorities must then lease the infrastructure to an operator on a competitive basis.

## BUSINESS INCUBATION

The lack of suitable premises is cited as a common reason for why microenterprises migrate from under-supplied localities. Microenterprises and small firms require “easy-in, easy-out” forms of tenure. They also need to be able to graduate into different sizes of accommodation. For prospective tenants, it is access to flexible accommodation, rather than price that appears to be the greater constraint. While business incubators have been in operation for 20 years in some countries, in others this is still a young industry.

Past OECD work on business incubation has stressed the importance of aiming for scale in incubation schemes. Greater scale opens possibilities for cost and risk reduction, as well as the possibility for the leveraging of private finance. So, for small communities incubators should probably be treated with caution. If attempted, it may be advisable to embed the incubator in a larger umbrella organization or network. Indeed, a recent assessment of business incubation in rural areas of the United States found that successful schemes often operate within a broader institutional arrangement (Adkins and others, 2001).

So-called “virtual” incubators might be a cost-effective means of providing non-property-based services in areas—such as some rural locations—with small numbers of potential tenants. However, little is known yet, regarding the efficacy of virtual incubation programs.

The public policy response to imperfections in the market for industrial real estate need not involve government investment in incubator-type buildings. This is a capital-intensive use of public funds, with limited prospects of cost recovery through onward sale of the property. A preferred alternative may be for public authorities to guarantee rent payment for a privately funded building. Practice shows that this can be a low-risk undertaking if tenant firms are well-selected (and well-managed). This policy option, with the public sector acting as head tenant, helps to avoid tying up large amounts of public money in incubator buildings, while working in private finance.

Another way to address the problems associated with small firm property management is to adopt a portfolio management approach.<sup>2</sup> By offering more units of different sizes at different sites, a provider of small-firm accommodation can better diversify risk. It also can achieve important economies of scale, as well as economies of scope (e.g., by rehousing the same tenant firms a number of times). It will be better positioned to raise investment because of its larger asset base and turnover. An approach, based on providing incentives for the scaling up of commercial activities, may be superior to local public subsidy of private small firm accommodation (aimed at compensating for high transaction costs). Local subsidy may appear to be a reasonable response when the problem only is viewed from a local perspective.

## ENDNOTES

<sup>1</sup>To view this book, enter the OECD Online Bookshop home page (<http://oecdpublications.gfi-nb.com/cgi-bin/oecdbookshop.storefront>), and then type the name of the publication.

<sup>2</sup>See the comments of Greg Clark on a portfolio approach to property management in OECD/LEED-SOFIREM (2000).

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