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# Entrepreneurship, globalization, and public policy

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#### Abstract

This paper examines the impact of governmental policies in influencing the path of internationalization of small- and medium-sized enterprises (SMEs). It focuses on the role of institutions mandated to assist internationalization, as exemplified by Canada's Export Development Corporation (EDC). We illustrate and examine critically the role that governments typically play in assisting and influencing the international expansion of domestic firms. We argue that the activities of agencies such as EDC — mainly in financing and in insuring against the risks inherent in export activities — may actually be counterproductive to the long-term interests of many SMEs by skewing managers' decisions toward direct exporting, rather than toward indirect exporting by entering the value chain of already-established multinational enterprises (MNEs). A consequence may be to divert the constrained resources of entrepreneurial firms away from their greatest comparative advantage — innovation — toward managing direct entry into international markets in which they are at a comparative disadvantage relative to larger established MNEs. Highly innovative SMEs might be better off by leaving the internationalization of their innovations to MNEs and sharing some of the international direct exporting profits with them instead. The implications are relevant for governmental

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policies toward internationalizing SMEs not just in Canada but in open, market-oriented economies everywhere. © 2001 Elsevier Science Inc. All rights reserved.

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## 1. Introduction

This paper is about the importance of small entrepreneurial firms in the global economy and about whether current government policies towards assisting exports by small firms are appropriate. Much confusion exists about the proper definition of entrepreneurship. Some observers use the term to refer to all small businesses; others, to all new business. In practice, however, many well-established businesses engage in highly successful entrepreneurship. The term, then, refers not to an enterprise's size or age but to a certain kind of activity. At the heart of that activity is innovation: what Peter Drucker defines as "the effort to create purposeful, focused change in an enterprise's economic or social potential." In this paper, we are interested in the subset of small firms that innovate and are, therefore, entrepreneurial.

On the threshold of the 21st century, in a single global economy, knowledge about events and opportunities in other countries has never before been as deep or immediately available. This knowledge has favored a rapid and dynamic growth in international trade and international financial flows. Consequently, nations are becoming increasingly dependent on each other's rational behavior.

As economies become more interconnected with global trade and investment patterns, small- and medium-sized enterprises (SMEs) are becoming increasingly important pillars of the economies of the major trading partners. Smaller firms in the 1990s increased their share in exports and in-and-outward foreign direct investment in the OECD countries and in many Asian countries (OECD, 1996).

This is not by chance. SMEs are likely to become more important as economies become more globally integrated because globalization is itself a process of entrepreneurial discovery. Firms that succeed in the global market must be innovative and able to hold on to the profit opportunities their innovations present. These are the same attributes a successful SME needs anywhere.

Large established multinational firms are often poor places in which to launch radical innovations. Most large multinational firms are bureaucratic and hierarchical. They have grown large and successful using the techniques and routines they developed over decades and they are often profoundly conservative. Employees or managers with ideas about radical innovations are unlikely to gain much support within such a firm. Consequently, people with radical innovations typically establish their own companies, allowing them to control the innovation as it develops, and giving the innovators clear property rights over the innovations they create. However, this brings another set of problems. Small firms often have difficulty

<sup>&</sup>lt;sup>1</sup> See Acs and Yeung (1999a,b) for an overview of this subject.

accessing resources needed to grow rapidly and reach world markets. The latter point is especially important, for quick access to large markets is often critical to the financial viability of a radically new product or process.

If a small firm owns an innovation and is having difficulty taking it to foreign markets, government assistance is often available. For example, firms in the United States can obtain various types of financial assistance from the US Small Business Administration, the US Export–Import Bank, the Overseas Private Investment Corporation (OPIC), and the US Trade & Development Agency (TDA). These institutions offer a wide spectrum of support, ranging across long-term general loans, shorter-term trade credit financing, default insurance, advocacy, and information. Other governments have analogous programs though the precise type of assistance and the organizational structure of the agencies that provide it vary.

In this study, we examine a typical institution of this kind, the Export Development Corporation (EDC), a Canadian state-owned enterprise that provides Canadian exporters with financial assistance such as trade credit arrangements and default insurance. We argue that this sort of support may not be the best approach. Large established multinational firms, regardless of what industry they are in, are present in many major markets, and they are experienced in applying or transferring ideas born in one country to operations or markets in another. Thus, small firms with innovations and large multinational firms might efficiently combine forces using the multinationals' foreign presence and experience at transferring technology and other ideas to foreign markets to bring the SME's innovation onto the world stage, especially when the innovation is radical and its life cycle short.<sup>2</sup>

Section 2 of this paper discusses the emergence of globalization. Section 3 examines the internationalization of innovation. Section 4 discusses direct versus indirect access to foreign markets by entrepreneurs. Section 5 discusses public policy as a response to market failure, and conclusions are presented in Section 6.

## 2. Globalization as a process of creative destruction

"Creative destruction" is the term economists use to describe the ultimate engine of growth in a market economy. According to the Austrian School, firms compete to create new technology, new products, and new uses for old products. The first successful innovator grows rapidly and takes customers away from rivals that failed to innovate, ultimately destroying those firms; hence, the term "creative destruction." Creative destruction was first proposed in 1911 by Joseph Schumpeter as an explanation for the rapid technological advances of the early 20th century. Theories of the "knowledge-based economy," "endogenous growth," "the end of work," and many other descriptions of the "new economy" are all variants of this idea.

Creative destruction and globalization are intimately connected. Globalization is a process of creative destruction on a global scale. The modern business world is characterized by

<sup>&</sup>lt;sup>2</sup> This kind of alliance can be optimal even if a firm operates locally.

globalization, which is the international connectivity of markets and the interdependence of national economies. This connectivity means a firm's competitors, suppliers, and customers are to be found throughout the world. For example, a French magazine printed in Belgium on Canadian paper might contain ads for electronic appliances designed in Japan, made in Taiwan, insured in Hong Kong, and marketed by a British multinational retailer using American cartoon characters to attract the reader's attention!

Most observers agree that three forces drive this globalization of business. The first is the explosive growth in low-cost technology connecting people and locations. Better information processing and communications technology creates a greater awareness of international economic opportunities. It also lets companies divide their production processes more. For example, a software designer in Canada can hire computer programmers in India to test her software. Despite the fact that the Canadian designer communicates with her Indian programmers only by e-mail, detailed oversight, feedback, and real-time interaction are all possible.

A second driving force behind the globalization of business is the steady dismantling of the trade barriers the world erected just before and during the Great Depression of the 1930s. Free-trade agreements have generated a more wide-open playing field for innovative firms. For example, NAFTA has been a boon for innovative Canadian and American companies. Morck and Yeung (1991, 1992), in a statistical study of large US firms, found that a dollar of R&D adds more value in a firm with access to large and rich foreign markets than in a firm whose operations are restricted to the United States. This makes sense because financial success for an innovator often hinges critically on the size of his market. For example, an innovation costing a million dollars can generate 10 times as much profit when sold into the US market than if it is restricted to Canada because there are 10 times as many potential customers in the United States. Recent Canadian governments have wisely supported liberalized trade just as other smaller countries are joining regional trade liberalization organizations such as the EU and Mercosur.

A third force motivating the globalization of business is the widespread economic restructuring and liberalization that followed the fall of socialism in Russia and Eastern Europe. These hitherto closed areas are becoming new markets and magnets for investment, opening further opportunities for growth and investment.

In this dynamic world of global entrepreneurial discovery, two features stand out. The first is the widespread effort to innovate and bring innovations to the global marketplace. The second is the wider and deeper competitive pressure forcing firms to scan the globe for more efficient ways to do business. As a result, the landscape of competition changes.

#### 3. The internationalization of innovation

## 3.1. Multinationals conducting entrepreneurial discovery

Why are some firms multinationals? The simple answer is that firms become multinationals because they see and capture profitable international opportunities. This is a poor

explanation, for local firms usually have a "home court advantage" over outsiders. For a multinational to compete abroad, it needs an advantage of its own to offset local firms' home court advantage. A wealth of empirical evidence suggests that the "edge" multinationals use is usually unique technology, marketing advantages, or other skills that indigenous firms simply do not have.<sup>3</sup>

The next question is why the owners of these skills — multinationals — actually have to set up operations in many countries. Why do they not just use arm's-length contracts, such as licensing their technology to local firms in return for royalties? Then, the multinational would not have to spend money to overcome local competitors' home court advantage. The answer is that setting up reasonable arm's-length arrangements is harder than it looks — especially for radical innovators. It is impossible to license "soft skills" like training and decision-making. Firms with unique technology are always afraid of intellectual piracy, reverse-engineered knock-offs, and the like. Analogously, firms with valuable brand names worry about shoddy goods the licensee might market under their logos, collapsing the values of brand names built up over time at great expense. These are reasonable fears and they drive many firms to extreme lengths to protect their intellectual property.

If arm's-length contracts are problematic, why, then, do firms not just export into foreign markets? The problem here is that this works only for some goods. Many high-technology goods, like software and hardware, are mixed packages of both the good itself and a promise of service and technical assistance, requiring people on the ground in the foreign market. And even when the goods being exported are not of this type, shipping across most international borders still causes delays, inspection hassles, and added costs. Tax complications frequently arise as well. And if a cross-border deal goes sour, dealing with foreign laws and courts can be expensive and difficult.

The solution the most innovative firms of the early 20th century developed to all these problems was the "multinational firm." These firms can quickly introduce an innovation in many countries simultaneously, greatly magnifying the innovation's return. Most importantly, they can do this without exposing or losing control over their intellectual property. According to this theory, by their very nature, multinational firms are vehicles for internationalizing Schumpeterian creative destruction.<sup>5</sup>

The evidence strongly supports this theory of multinational firms. Morck and Yeung (1991) showed that a multinational firm's share value rises with the number of countries in which it has subsidiaries, but only if it devotes substantial resources to R&D or advertising. The share values of multinationals that spend little on R&D and advertising actually decline as the number of countries in which they have subsidiaries rises. Morck and Yeung (1993) showed further that making a foreign acquisition increases share value of a US firm only if it has spent substantial funds on R&D or advertising in recent years; otherwise, making a foreign acquisition reduces its share value.

<sup>&</sup>lt;sup>3</sup> See Morck and Yeung (1991, 1992) for empirical evidence and a summary of earlier work.

<sup>&</sup>lt;sup>4</sup> See Caves (1996).

<sup>&</sup>lt;sup>5</sup> See Schumpeter (1934).

This means that most successful, established multinationals were once innovators themselves. Once established, multinationals have a threefold advantage in creating and marketing further innovations. First, their past successes often leave them with abundant financial resources for developing and commercializing other innovations. Second, multinational firms can watch for innovations throughout the world and for the profit opportunities an innovation in one country might have in another. Third, multinationals are already present in many foreign markets, so they have eroded local firms' home court advantage, at least to some extent. These advantages enable a multinational to implement viable innovations quickly, on a global scale, at relatively low risk and cost.

## 3.2. Small firms as radical innovators

Truly radical innovations tend to come from small firms, not from large, established firms. Yet the continuous development of radical innovations — ideas that build new industries or shake old ones — probably underlies most of the 20th century's economic growth. Personal computers (PC), not better typewriters, created millions of jobs in the 1980s and 1990s.

Innovations arise only when property rights are properly protected. Acs et al. (1997) argue that an innovator in a large company has only very limited property rights protection. The innovation generally belongs to the corporation, not to the employee who invented it. This creates a tendency to free-ride on others' innovative efforts in a large company. Some large firms try to alleviate these problems with incentive contracts. However, this can put yesterday's successful innovators and today's at loggerheads. A radical innovation, such as the PC, can jeopardize the ongoing profits from past innovations, such as mainframe computers. If yesterday's innovators manage the firm in question, they may actually discourage or suppress the radical innovations. Betz (1997) argues that this is precisely why IBM missed the initial PC revolution in the 1980s.

Almeida and Kogut (1997) argue further that the approach of small firms to innovation is different from that of large firms. They point out that SMEs have fewer resources than large firms, and consequently, rely more on local networks for important inputs to their innovation processes. They use patent citation data to show that start-up firms in the semiconductor industry, compared to large and established firms, innovate in less "crowded" areas (i.e., those with fewer patent applications), and cite neighboring firms' patents more. Because of these advantages, SMEs are often better than established multinationals at creating radical innovations.

<sup>&</sup>lt;sup>6</sup> For example, Almeida and Kogut (1997) use patent citation data to show that start-up firms in the semiconductor industry, compared to large established firms, innovate in less "crowded" areas (i.e., those with fewer patent applications). Acs et al. (1997) provides further evidence on this point. See also Acs and Audretsch (1988).

<sup>&</sup>lt;sup>7</sup> According to Betz, IBM managers, and experts in all aspects of frame computer production and marketing, feared for their careers if IBM were to refocus on PCs, and consequently, delayed IBM's entry into that industry. In contrast, innovators running their own small firms are in control, have clear property rights over their innovations, and get rich from pushing radical innovations forward.

# 3.3. Small and large firms as symbiotic partners

International entrepreneurial success requires not just the discovery of a valuable innovation. It also requires that the innovation be introduced successfully into world markets, and that the innovators get at least a large part of the resulting profits.

SMEs have limited resources compared to multinationals and are at a disadvantage in internationalizing their innovations. SMEs and established multinationals often have symbiotic relationships that bring the SMEs' innovations to world markets quickly and to their mutual profit (see, for example, Acs et al., 1997; Etemad et al., in press).

An SME's innovation and a multinational's market access often complement each other. That is, each can add value to what the other already has. The small firm has a valuable innovation and the multinational has conduits to markets all over the world. The small firm can sell its product to the multinational and let that firm worry about dealing with foreign laws, customs, and customers. Indeed, the SME can expand its operations dramatically, producing for the entire global market without doing any export business directly, and without establishing any subsidiaries of its own in foreign markets. The SME gets the profits from globalizing its innovation without the costs of building its own marketing operations in foreign countries. Instead, the SME pays the multinational for the use of its existing conduits into foreign markets.

There are ample examples for small firms using large firms' global access to internationalize their market reach. Gomes-Casseres (1997) reports cases of small electronic firms forming alliances with large firms to increase their capability to exploit their niches on grander scales. Etemad et al. (in press) provide further examples from several other industries. Much of the commercialization of new products in biotechnology has been done by new technology-based firms, while the marketing was carried out by large pharmaceutical multinational companies. A high-profile Canadian example of "intermediated internationalization" is Ballard Power's relationships with the world's largest automakers. Ballard developed a new fuel-cell technology that makes nonpolluting cars "almost" economically viable. Rather than develop, commercialize, and sell its product into global markets on its own, Ballard is establishing ongoing relationships with Ford, Daimler-Chrysler, and other major auto makers. As long as the multinational's "cut" is less than the SME's expected cost of bringing its product to global markets itself, the SME does better by sitting at home and growing through further innovations.

In summary, large and small firms are playing complementary roles in creating innovations and bringing them to global markets. Multinational firms are better equipped to internationalize innovations — that is what they do best. Small firms are often better at creating innovations, especially radical ones. Small firms' innovations and large firms' market access are often complementary. By working together, they can exploit real synergies in developing global markets for the innovation, enhancing the profits of both.

### 4. Direct versus indirect access to foreign markets

R&D and other expenses related to innovation are mainly up-front costs. Once these are paid, a larger scale of operations translates into greater profits. The critical aspect of

globalization for SMEs is that they can magnify the returns on their innovations if they sell into world markets, rather than just the domestic market. The developments discussed above mean that, in today's global economy, an SME has two options for entering foreign markets: (1) intermediated or indirect entry; and (2) direct entry.

An intermediated entry occurs when an SME sells its product to an established multinational operating in its domestic market. The multinational then either resells the product abroad or uses it in a product it markets abroad. An example of the latter is a car marketed by an American automaker, using an innovative Canadian-made auto part. The important point is that the Canadian part maker can achieve the scale of operations the global market allows by selling just to the multinational automaker in Canada (or in NAFTA).

A direct entry, on the other hand, requires the SME either to export into the foreign market or to establishing a subsidiary there. Direct entry preserves the SME's property rights and associated returns over its innovation, but it also raises the SME's costs and risks. Intermediated entry reduces those costs and risks, but requires the SME to split its profits with the multinational intermediary. Which makes more sense? The answer differs for different firms selling different sorts of products. It also differs over time as technological changes alter the trade-offs in this decision.

# 4.1. Costs and benefits

Direct entry into a foreign market, either by exporting or by setting up a presence on the ground in the form of a subsidiary, is costly. Foreign buyers who do not pay their bills are often difficult to chase down — especially in countries with corrupt or inefficient legal systems. Extending trade credit to buyers can be more difficult if they are located in such countries. Performance and bid guarantees can also be harder to cover when doing business abroad. Foreign investment may be subject to political and other risks that are not usually factors in domestic investment decisions. The mandate of many government agencies is to help domestic firms meet these costs. This has been the traditional approach of the US export promotion agencies mentioned earlier, as well as those of other countries, including EDC in Canada.

In contrast, intermediated entry involves a domestically oriented SME selling to an existing multinational firm, which then takes the product to global markets, either directly or as an input to a final product it sells globally. As long as the multinational can do this at a cost below what the SME would have to pay to enter global markets directly, intermediated entry should be preferred.

It is worthwhile to go through a concrete example of the costs and benefits considered by an SME choosing between direct or intermediated entry into foreign markets. Suppose an SME in Canada has developed an innovative auto part that should add \$1000 to the value of a car and that costs no more to make than the part it replaces. Suppose the SME estimates average unit costs of \$500 per part to ship the parts to auto plants all over the world directly—consisting of marketing costs, tariffs, quality control, etc., as well as shipping costs. Suppose, further, that the SME is reluctant to set up subsidiaries to manufacture the part

abroad for fear of losing control of the technology to intellectual pirates. Its unit profit from direct export into global markets is, thus, \$500 per part.

Now suppose the Canadian SME sells the parts directly to multinational automakers that are already operating in Canada (or elsewhere in NAFTA). Suppose it costs multinational automakers only \$100 per part to ship the parts to their assembly plants worldwide. A multinational automaker will, therefore, pay no more than \$900 extra per part, rather than \$1000. As long as the multinational pays more than \$500, the SME should opt for intermediated globalization.

## 4.2. The importance of bargaining power

The price the multinationals pay could be anywhere between \$500 and \$900 per part. If the SME has more bargaining power than the multinationals, the agreed price will be closer to \$900. If the multinationals have more bargaining power, the price will be closer to \$500. The SME's bargaining power is greatest when it alone knows how to make the part (or it has solid patents), and when there are many multinationals with which it might do business. The SME can sit back and consider the best rival bids from the multinationals. The multinational's bargaining power is greatest when it is the only plausible conduit between the Canadian SME and world markets.

If only one multinational is present in the SME's domestic market, it can offer, say, \$501 knowing that no higher bids will appear. In economics terminology, the monopoly multinational is "extracting a rent" (i.e., unearned income) from the SME of \$399 per part. Of the \$1000 value, the part adds to a car, the multinational gets \$499 and the SME \$501. The multinational's distribution costs are \$100 per unit so its rent is \$399. The SME's \$501 per unit is its return on its innovation.

If many multinationals compete to serve as conduits, the innovative SME can hold out for the best bid. Different multinationals will continue entering rival bids as long as they can profitably link the SME with the outside world — that is, until the multinational's rent all but disappears. Consequently, the SME ends up with, say \$899 per unit, and the multinational that won the bidding contest earns \$100 to cover all its costs and \$1 in pure profit per unit — making the venture still profitable, though much less so.

### 5. Public policy as a response to market failure

As a case in point, the above considerations have immediate public policy implications. First, public policy towards multinationals affects the value of a country's innovative SMEs. Second, policies regarding exporting assistance skew SMEs' decisions about direct versus intermediated exporting. While the liberalization of foreign direct investment has increased in the past decade, status quo is likely in the near future given the tug-of-war between free-market advocates and protectionists. We, therefore, consider government assistance to direct exporters as a crucial policy consideration at this time. We shall continue to use Canada as a case in point.

Canada currently assists SMEs that export directly into foreign markets through EDC, a federal crown corporation. Although EDC's purpose is to promote exports in general, it emphasizes its increasing support for Canadian SMEs. In 1998, more than 85% of EDC's customers were SMEs (firms with sales of Can \$25 million or less). EDC provides Canadian exporters with insurance against the risks inherent in exporting, and their buyers abroad with financing. Do such policies make sense in the world described in the preceding sections of this paper?

Government assistance for direct exporting is the equivalent of a subsidy. The above analysis implies that subsidies can be wasteful. Returning to the previous example, a unit export subsidy of \$100 raises the profits from direct exporting from \$500 to \$600. Hence, the SME rejects any bids by multinationals operating in Canada below \$600. There are two possible outcomes:

- The multinationals and the SME strike an intermediated exporting deal with less rent extraction by the multinational. If we make the very simplistic assumption that all the multinational's rent extraction is lost to the Canadian economy, the net benefit to Canada is \$100. Note, however, that a simpler and less costly way to reduce the multinational's rent extraction is to allow many competing multinational firms onto the scene.
- The subsidy can be so generous that the SME opts for direct exporting, even though intermediated exporting would occur in the absence of government intervention. For example, a unit subsidy of \$450 would raise the SME's unit profit from direct exporting to \$950, higher than any possible intermediated exporting arrangement. Even given the assumption that the multinational's rents would have been wholly lost to the Canadian economy, the government is now spending \$450 to prevent a loss of \$400 and, in doing so, causes the exporter to pay the \$500 unit cost of direct exporting.

The SME clearly benefits and is perhaps stimulated to come up with more innovations. Yet, the subsidy nonetheless reduces Canada's gains from SME innovations. This is, of course, based on simple arithmetic. Closer scrutiny of the behavioral aspect of export subsidies suggests that the actual economic effect of such programs may be even more negative.

## 5.1. Market failures in financial services and insurance

The operations of financial firms, and insurance companies in particular, are known to be influenced by economic distortions that arise when the two parties to a transaction have different information about the real value of the goods or services being exchanged. In the context of EDC, the two most important distortions are called "adverse selection" and "moral hazard."

Adverse selection problems occur when only sick people buy medical insurance and when only financially imprudent people seek loans. If SMEs only seek EDC insurance when exporting to buyers they know to be untrustworthy, EDC's claims rise and so must its insurance premiums. As the premiums rise, exporters restrict EDC insurance or financing to

deals with buyers they know to be very untrustworthy. The claims rise further, as do the premiums.<sup>8</sup>

Moral hazard problems occur when having insurance makes people less careful. If SMEs who have EDC insurance or financial backing grow careless about screening deals for untrustworthy buyers, this raises EDC's insurance and financing costs. Adverse selection ranges along a spectrum from carelessness through negligence and recklessness to outright fraud.<sup>9</sup>

Once these problems get started, they tend to grow as more and more people discover them. Private sector firms are usually quick to adjust their operations to limit moral hazard and adverse selection problems. Public agencies have been slower. The government deposit insurance provided to US savings and loan banks is a recent example of a case where these twin problems grew to enormous proportions. The virtual collapse of the US Government's Pension Benefit Guaranty is another.

Moral hazard and adverse selection problems make financial institutions and insurance companies wary of businesses with no track records or spotty track records. Thus, SMEs may find themselves unable to obtain financial backing and insurance at reasonable rates. It is this market failure that EDC is charged with correcting.

### 5.2. EDC as a solution to market failure

EDC can attack this problem in two ways. One is to explicitly provide insurance and financial support at attractive rates for firms that, because of adverse selection and moral hazard fears, cannot obtain these services from private sector providers. While this approach is certainly feasible, it is a strategy that explicitly aims to lose money. If the government feels that losing money to adverse selection and moral hazard problems is an acceptable cost to bear in order to make financial services and insurance more accessible to SMEs, this strategy is appropriate. This is a political decision, not an economic one.

It is important to note that EDC cannot be expected to rectify market failure problems unless it is allowed to lose money consistently. If the business decisions in question could be done profitably, or even just without losing money, the market would not have failed and EDC's presence would have been unnecessary.

Fig. 1 shows the value of EDC claims paid out as a fraction of its business in each geographic area. The claims and business values for the United States and Caribbean are

<sup>&</sup>lt;sup>8</sup> Financial and insurance companies try to limit adverse selection problems by charging risk premiums on policies or loans. This works only if they can evaluate risk well. Financial and insurance companies generally must accept that some degree of adverse selection is inevitable and build its costs into their price schedules.

<sup>&</sup>lt;sup>9</sup> The last might involve a scam where a bogus Canadian exporter and bogus US importer set up a paper trail of successful deals with EDC backing and then, based on their past performance obtain EDC financing for a much bigger deal. They then take the money and run to a tax haven. Insurance companies try to limit moral hazard problems by using deductibles or copayments. The problem with these is that, if they are large enough to seriously cut into moral hazard behavior, they are often so large that they no longer provide adequate insurance. Again, private sector insurance and financial firms try to prevent moral hazard problems from getting out of hand, but usually accept that some degree of moral hazard is unavoidable.

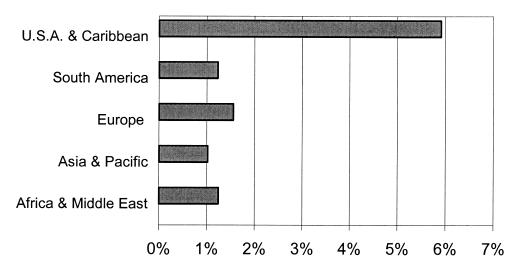


Fig. 1. EDC claims paid as percentage of total business: geographic breakdown.

mainly for deals in the US market. The amazingly high risk associated with EDC-backed activity in the United States certainly suggests that it might be following a strategy of accepting higher levels of adverse selection and moral hazard problems than private sector financial and insurance companies could absorb, at least in that market. Certainly, that EDC describes the United States as "the riskiest market for Canadian exporters" is worthy of further investigation if this is not a deliberate policy. The United States is not usually listed among high-risk markets like sub-Saharan Africa or the Middle East.

A second option EDC might follow would be to gather better information about its clients than private sector insurers or financial institutions could obtain. Using these data, it could charge more appropriate risk premiums, deductibles, and copayments, and in this way defeat the adverse selection and moral hazard problems that caused the market to fail in the first place.

To apply this approach in Canada may well be impractical. First, an arm of the government assembling financial and psychological profiles of citizens (including corporations) would raise very serious civil liberty issues. <sup>10</sup> Second, insurance and financial services companies already have a great deal of information about their customers and potential customers. It is hard to see how EDC could obtain better data. A more politically acceptable approach might be for EDC to use the sovereign power of the Canadian government to find and beggar defaulting buyers in foreign countries. It is conceivable that a government agency might be better at this than the private sector equivalent, "vulture capital" funds.

Market conditions change as technology changes, legal institutions evolve, and political environments shifts. What was unquestionably a serious market failure 20 or 10 years ago

<sup>&</sup>lt;sup>10</sup> Such concerns are exemplified by Human Resources Development Canada's recent decision (under intense public pressure) to dismantle its Longitudinal Labor Force File, a 15-year panel of individual financial and employment data on 33.7 million Canadians. In the aftermath of this debacle, no government agency is likely to gain approval to mount large new data collection efforts.

may now have become a trivial matter. Telephone service in 1970 was a natural monopoly. The idea of two sets of wires running side by side to every house in Canada so that two phone companies could compete for everyone's business was rightly seen as absurd. The solution to this market failure was to have a monopoly phone company subject to rigorous government regulation. Today, with cell phones, direct to satellite phones, and Internet telephony, the telephone business is one of the most competitive industries in the economy.

## 5.3. The cost of the medicine

We have argued above that Canadian SMEs can enter foreign markets either directly, by exporting into them or establishing subsidiaries there, or indirectly via an existing multinational — what we called intermediated entry. EDC's activities are generally aimed at subsidizing direct entry by Canadian firms into foreign markets. This may not be helpful to Canada's overall economic growth if multinationals would have intermediated entry by these firms into global markets anyway. An argument can be made that helping Canadian firms access foreign markets lets them operate at large enough scales that innovation becomes more profitable for them. However, if EDC is merely subsidizing direct entry at the expense of intermediated entry into foreign markets, its activities are of little overall value. Indeed, the availability of EDC support may even keep Canadian SMEs from looking for ways to use multinationals as intermediaries when this would actually be the most profitable way to enter foreign markets.

If EDC is distorting Canadian firms' behavior towards greater use of direct entry into foreign markets and less use of intermediated entry, it is actually encouraging waste. It is wasteful for an SME to develop its own in-house expertise about how to do business in each foreign market when that expertise already exists in established multinationals and can be purchased more cheaply by giving the multinational a cut of the SME's profits.

As Fig. 2 shows, most of EDC's activity has focused on assisting Canadian firms in exporting to other countries in North America, mainly to the United States, which, because of its geographical proximity to Canada, is a natural market for Canadian firms (though the 1999 data reflect a slight lessening of this focus).

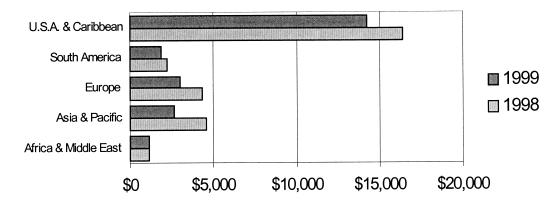


Fig. 2. The value of EDC-backed activity (in millions): geographic breakdown.

By entering the US market directly, Canadian firms can achieve the scale of operations needed to render innovations more profitable, and this can spur economic growth, and productivity gains. Entering the US market might also connect Canadian SMEs to US-based multinationals that do little business in Canada, but that would serve as good conduits for intermediated entry into other world markets.

However, this natural economic draw of the US market should render EDC assistance in reaching that market unnecessary. The high ex post risk of EDC-backed ventures into the US market illustrated in Fig. 1 suggests that EDC may be overly tolerant of adverse selection and moral hazard problems in that market. The concentration of EDC-backed activities in the US market, illustrated in Fig. 2, suggests possible scope for scaling back EDC support for the US market.

Finally, the distribution of EDC support across industries may distort the economy. The firms that should benefit most from access to global markets are those in industries where the pace of innovation is rapid. We know that quick access to large markets is the key to making such innovations pay for themselves. It would, therefore, make sense if EDCs were mainly assisting firms with demonstrably valuable innovations to enter foreign markets. Failing this, one might expect EDC assistance to focus on industries where a larger scale of operations associated with global market access might induce future innovations.

Fig. 3 breaks EDC activities down by industry. Note that EDC assistance is concentrated in forestry exports, with base and semimanufactured materials second. Although information technology, engineering, and industrial equipment all obtain EDC assistance, the primacy of raw materials exports is confusing. This might be reasonable if the forestry

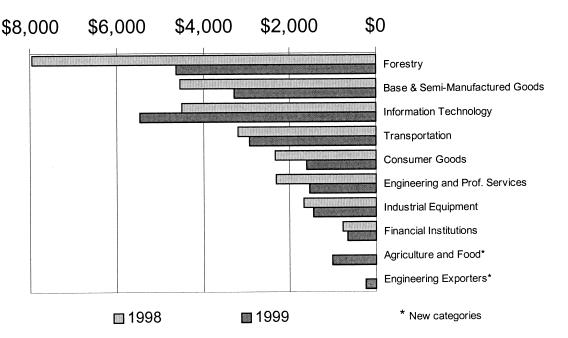


Fig. 3. EDC-backed activity (in millions): industrial sector breakdown.

sector were developing new technology and needed export assistance to gain a large market share quickly to pay for the R&D costs. Unfortunately, EDC provides little information on this point, leaving open the interpretation that EDC provides subsidies to politically connected, low-technology industries. There is some reassurance, however, in that support for "information technology" became EDC's most generously supported sector in 1999, though its total support for forestry and base and semimanufactured goods combined remains far larger.

## 5.4. EDC's role in the "new economy"?

EDC can probably find ways to limit its adverse selection and moral hazard exposure, to filter out scams, and to continue in business in its present form. The more basic question is, should it do so?

EDC itself can be expected to argue that it should. Indeed, the fact that it is currently operating in the black suggests that it is managing its risk exposure well. However, is EDC merely crowding private, taxable firms out of business they otherwise would have handled? If so, perhaps EDC should be privatized and allowed to compete with other financial institutions on a level field.

Exporters who benefit from EDC insurance or financing arrangements can be expected to argue that EDC support was essential to their successful penetration of foreign markets. This may be true in many cases. The problem is that this is not necessarily a good thing. An export deal here or there is nice for the exporter, but may do little to advance the firm into global markets if its optimal strategy is what we called "intermediated internationalization" above. Moreover, by assisting small Canadian firms in entering foreign markets directly, EDC may be impeding the natural use of intermediated entry via existing multinationals' operations.

#### 6. Conclusions

We have argued that small firms are important parts of the global economy even if they do not export directly and have no foreign subsidiaries. We see globalization as a process of entrepreneurial discovery. The process involves creating innovations, discovering profitable applications of the innovations across borders, and capturing the profits that follow. The process is invigorated by technological progress in communications, by general economic liberalization, and by the liberalization of international trade and investment flows.

Because of better property rights protection, innovators often prefer to start their own firms. Thus, radical innovations often show up in SMEs. Due to their more limited resources, smaller firms also tend to search for innovations in less crowded areas of research. This also leads SMEs to find disproportionately radical innovations. In contrast, large multinational firms may be poor at creating radical innovations, but often possess well-developed global channels for moving products from one country to another.

These differences mean that SMEs and large multinationals can have a synergistic relationship in globalization. Smaller firms' profits from their innovations can sometimes

be higher if they use established multinationals as conduits to foreign markets, and so avoid the cost of "going global" alone. In turn, intermediating small firms' worthy innovations increase established multinationals' competitiveness and profits. Small and large firms can play complementary roles in the process of entrepreneurial discovery in the global economy.

As an example of governmental support institutions, Canada's EDC was formed to subsidize firms exporting directly into foreign markets. If many of these firms could have reached world markets using a multinational as an intermediary, EDC's efforts in this area may be redundant. EDC also provides insurance and financial backing to Canadian exporters. However, these services are available in various forms from the private sector, where successful firms in these lines of business are distinguished by their superior abilities to screen out adverse selection and moral hazard problems. It is implausible that EDC can screen its customers better than private firms can. If EDC is backing firms that could not be backed profitably by the private sector, it must, therefore, be bearing a more adverse selection and moral hazard cost than do private sector firms. If so, EDC cannot be expected to make money, or even to operate on a break-even basis in the long run. If EDCs were to continue operating on a break-even or better bottom line in perpetuity, it could not back deals a private sector firm would reject.

The overarching concern here is that any government initiative, no matter how successful and noble at inception, must be subject to periodic scrutiny because government failure is a persuasive phenomenon (Krueger, 1990). Government organs should not be granted eternal life, and when the circumstances that justified their creation change, they should often be dismantled. EDC may well have addressed genuine market failures at its inception. It is unclear that it does so anymore, for its current operations are essentially no different from those of private sector firms.

What does this portend for EDC's future? One alternative is for EDC to remain in the public sector and continue in its current activities. This alternative seems inadvisable. Even if current EDC management can resist government failure, their successors may not. As long as EDC remains an arm of the government, it runs the risk of succumbing to government failure of one sort or another. The risk of government failure is sometimes acceptable if the alternative is a severe market failure. When no private sector market failure is being remedied, as would seem to be the case here, the economy entertains government failure problems for no good reason by sustaining EDC as a state-owned enterprise.

A second alternative is for EDC to remain in the public sector, but to find a new mission to correct a different set of market failures. The civil servants working in a bureaucracy often favor this option whose original purpose is no longer valid. It allows them to continue without disruptions in their careers. Unfortunately, aimless bureaucracies searching for meaningful purpose can become real economic hazards. They are especially prone to capture by powerful interests that can provide budgetary stability and political support. They are also vulnerable to rent-seeking pressure as their new roles often suffer from a lack of political and economic legitimacy. Finally, there is no guarantee that an organization proficient at one task and designed for one purpose will do well at another. Modified missions for EDC, such as participating in regional development programs or industrial policies, would only be ways of casting the seeds of future trouble.

A third alternative is to privatize EDC and allow it to find its own way forward as a private sector financial firm. EDC could continue its current activities as long as they remain profitable, as they now are. Its future diversification into other lines of business would have to pass the test of survival in competitive markets. Allowing EDC to operate as an independent, private sector financial institution would also provide renewed competition for Canada's banks as they expand into all aspects of finance. Finally, a stock offering would provide a one-time cash infusion for the federal government, which could then reduce the huge accumulated debt it continues to carry from past deficit spending. We strongly endorse the view that it is time to privatize EDC.

Canada's experience with EDC provides lessons for other countries, especially the emerging market economies of ASEAN in Asia and Mercosur in Latin America. First, intermediated exporting may well be efficient for many companies and industries there. If so, countries in these regions can best help their growing firms access world markets by opening their doors widely to multinational firms. Second, the fact that Canada and other high-income countries used organs such as EDC in the past does not mean that such market failures still exist. Finally, the recent economic crises in both Asia and Latin America were certainly caused, in part at least, by rapidly growing concerns among investors about "corruption" — i.e., government failure. Thus, schemes to subsidize direct exports may cause economic distortions, address market failure problems that no longer exist, and create vulnerability to gratuitous government failures.

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