Micro

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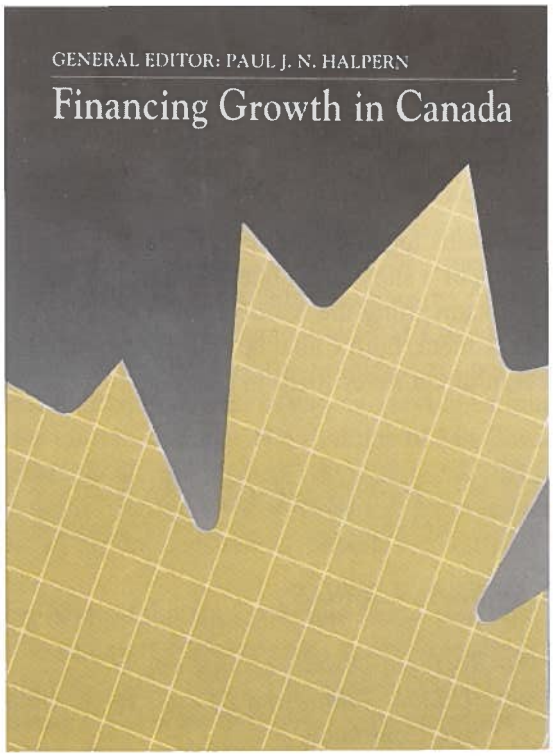
Can Canada's Capital Markets Function More Smoothly?

In this issue ...

Investment -- or more accurately, expanding investment -- is critical to growth. Sustained productivity advances depend critically on continued strong growth in business fixed investment in plant and equipment -- that is, in new machinery and equipment incorporating the technological advances that lie at the heart of realizable productivity gains. Without productivity growth, there can be no generalized improvement in living standards.



The financial sector is vital to this investment and economic growth process. Efficient capital markets ensure that savings are directed towards the most productive investments and that good projects do not go wanting for lack of funds. For this reason, in its most recent research volume Industry Canada focused on various aspects of the functioning of Canadian capital markets. Leading researchers in corporate finance, business, and economics were asked to take an empirical look at the access and impediments to financing in Canada, the costs of funds, and the possible role of government in improving the operation of Canada's capital markets. The results of their efforts are to be found in Financing Growth in Canada, the eighth volume in the Industry Canada Research Series. The project was overseen by Professor Paul Halpern of the University of Toronto, who also served as the General Editor for this volume.

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INDUSTRY CANADA RESEARCH AND PUBLICATIONS PROGRAM

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OCCASIONAL PAPER SERIES

No. 16: *Sustainable Development: Concepts, Measures, Market and Policy Failures at the Open Economy, Industry and Firm Levels*, Philippe Crabbé.

This paper identifies the main characteristics of sustainable development in the existing economics literature and develops a definition of sustainable development common to most approaches. The paper also examines the implications of sustainable development at the international, national, industry, and firm levels.

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FORTHCOMING

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No. 18: *Reducing Regulatory Barriers to Trade: Lessons for Canada from the European Experience*, Ramesh Chaitoo and Michael Hart.

ANNOUNCEMENTS

UPCOMING DISTINGUISHED SPEAKERS LECTURES

February 20, 1998: *What Can We Really Expect from Technology?*, Nathan Rosenberg.

February 26, 1998: *Knowledge and Growth: Creation and Flow of Ideas*, Kenneth J. Arrow.

February 27, 1998: *The Changing Nature of University-Industry Interactions*, Richard R. Nelson.

March 6, 1998: *Technological Progress and Long-Run Growth Paths*, Peter Howitt.

March 13, 1998: *General Purpose Technologies and Economic Growth*, Elhanan Helpman.

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The cost of capital disadvantage for a typical Canadian firm is almost two percentage points, compared against an American firm.

Can Canada's Capital Markets Function More Smoothly?

Many factors are critical to the investment decision -- among them is the question of funding and access to financial capital and services.

Internationally, financial markets have become more closely linked as capital has become more mobile. The information revolution, facilitated by rapid technological progress, has rendered the transfer of funds between international markets nearly instantaneous -- and no more complex than a transfer within domestic markets. Financial services are becoming increasingly integrated. With more firms offering more products and services to more customers, both domestic and international, financial markets have become more competitive.

The trends towards more open, competitive, and integrated financial markets are welcomed by investors. Every day, many companies located in Canada step back and examine the costs associated with prospective investments. The research assembled in this volume is intended to enhance our knowledge of the cost of capital for Canadian industry. The papers also examine the operation of markets for both debt and equity capital. In the latter case, issues confronting firms in need of high-risk or venture capital are addressed independently of other equity financing issues. By focusing on the efficiency of various capital market mechanisms, it is hoped the research will illuminate the challenges that government faces when attempting to remedy capital market inefficiencies.

Is the Cost of Capital Higher in Canada?

Corporations grow through the application of funds to purchase productive assets to generate cash flows. Several factors influence corporate investment decision making. The two major considerations discussed in the book are the cost of capital and taxation.

It stands to reason that the cost of capital will have an impact on the investment behaviour of the firm. Factors that increase the cost of funds to corporations will alter their investment behaviour. In an open economy with global capital markets, there should be no differences in the cost of capital across countries. However, while progress has been made towards globally integrated capital markets, the continued presence of regulatory impediments suggests that full integration has not yet been achieved. Thus the cost of capital may differ among countries and may lead to competitive advantages for an industry in one country over the same industry elsewhere. Empirical evidence on these matters would be of great help to policy makers.

The paper by Robert Chirinko and Andrew Meyer focuses on investment sensitivity issues -- what economists refer to as the elasticity of investment with respect to the user cost of capital. However, the authors encounter a formidable obstacle -- a lack of appropriate data. To overcome that problem, they select a panel of American companies for which data are available, choosing firms that provide a reasonable representation of 11 Canadian industrial sectors. Unfortunately, the problems are not easily overcome and are reflected in widely varying estimates across the chosen sectors. The findings of Mr. Chirinko and Mr. Meyer are not inconsistent with recent empirical work in other countries, which finds that increasing the user cost of capital does reduce business investment.

Albert Ando, John Hancock, and Gary Sawchuk attempt to compare the user cost of capital in the United States, Japan, and Canada. The main empirical finding of their analysis is that the before-tax cost of capital in Japan is some five to six percentage points lower than that for the United States over the period 1967-94. Unfortunately, the three researchers are unable to make such a clear conclusion for Canada. Nonetheless, they believe the user cost of capital in Canada is probably higher than that of Japan as well.

Canada's marginal effective tax rate for manufacturing appears in the international mid-range and at the high-end for services.

Vijay Jog takes a business approach to defining and estimating the cost of capital. This approach takes explicit account of the composition of finance, the weighted costs of debt and equity finance and their associated risks, and taxes. He concludes that the United States enjoys an advantage vis-à-vis other countries in the form of a lower cost of capital, thanks in large part to a low country-risk premium.* According to Mr. Jog, the cost of capital disadvantage for a typical Canadian firm relative to an American firm is almost two percentage points.

Taxation also influences investment, in particular by affecting the after-tax return on investment. The paper by Duanjie Chen and Kenneth MacKenzie has two parts to it. The first constructs "marginal effective tax rate" (METR) estimates for a number of countries and assesses the METR of a Canadian company investing in the United States. The second is an intersectoral and interprovincial analysis of METRs on non-financial industries in Canada. A METR estimate provides a summary measure of the tax distortions of the user cost of capital -- the wedge between the pre-tax and after-tax rates of return rrelative to the pre-tax rate of return. To the extent that a METR estimate is an economically relevant index of tax-induced distortion, METR calculations offer insight into the potential impact of taxation on capital accumulation and economic growth.

In a straightforward comparison of taxes affecting domestic investment across nine countries (the G-7 nations plus Mexico and Hong Kong), Ms. Chen and Mr. MacKenzie find that Canada's METR for manufacturing appears in the international mid-range and at the high end for services. In the U.S.-Canada context, Canada's manufacturing METR is four points higher than in the United States while our rate for services is eleven points higher.

Within Canada, there appears to be substantial intersectoral and interprovincial variation in METRs. The mining, services, and communications sectors are favoured in virtually every province, while oil and gas, construction, and trade tend to face higher rates. Manufacturing endures a relatively high METR in spite of its low statutory rates.

** The cost of capital is the average cost of debt and equity finance obtained from capital markets, adjusted for inflation. The user cost of capital is the cost of capital plus depreciation, financing, risk and tax costs.*

Is There a Shortage of Venture Capital?

It is often said that anybody with a good plan and a good management team can get capital. In the early stages of financing, an entrepreneur can usually obtain funding from friends, relatives, and/or business associates, so the old adage probably holds true. However, as firms grow, the need for larger amounts of capital arises, and relatives and associates may be unable or unwilling to provide the additional financing required. Funding of this type is typically provided by specialized financing groups in the form of equity or mixed financing to young, privately held firms. This type of financing, known as venture capital, is a crucial form of finance for the entrepreneurial sector. It is also a form of high-risk investment.

The relative importance of entrepreneurial firms in Canada has been growing. For example, the rate of new business registrations approximately doubled between 1979 and 1989. The role played by these firms has been magnified by their propensity to innovate and to contribute to technological progress. As well, small and emerging businesses are often touted as the most effective generators of jobs. Despite the observed growth of these firms, however, entrepreneurial activity in Canada may not be as vigorous as it should be. In particular, there are concerns about possible gaps or failures in the flow of finance to businesses in their vulnerable developmental stages.

To be sure, venture-capital funding is not primarily based on altruistic motivations. Investors face uncertain returns and longer-than-usual time horizons, and they make their investments with the expectation of significant returns. Beyond that obvious motive, very little is known about the structure, strategy, and performance of the venture-capital industry in Canada. Addressing this lack of

The venture capital industry appears to be relying on a strategy of a small number of "home runs" that do very well in order to offset the poor batting average of the majority.

information is the first step towards evaluating the efficacy of the flow of seed capital to businesses.

The paper by Amit, Brander, and Zott provides an overview of venture-capital financing in Canada. The authors rely on a comprehensive, micro-level database of Canadian venture-capital investments, using data drawn from both sides of entrepreneurial finance -- recipients and providers of venture capital.

From these data, the authors observe a number of structural characteristics of the Canadian venture-capital industry. One of these is that the geographical pattern of venture-capital activity in Canada does not match that of economic activity. For example, the level of venture capitalism is relatively higher in Quebec than in Ontario. Another finding reported in the paper is that high-technology industries account for a disproportionately large share of venture-capital investments.

The average proportion of venture-capital equity (or ownership) in a venture-capital-funded firm is about 35 per cent. About two thirds of venture-capital investments are in the form of pure equity holdings. Syndication is much less common in Canada than in the United States: the majority of Canadian venture-capital investments are not syndicated, as each round of investment is provided by a single venture capitalist; and, in about half of all cases, fledgling firms get only one round of venture capital.

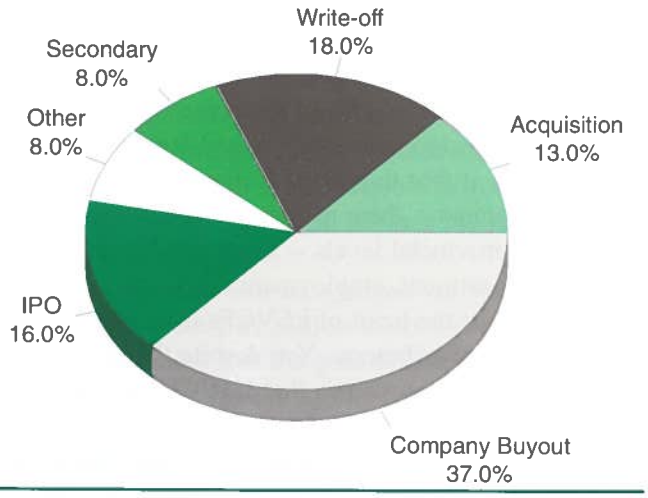
According to the three researchers, most venture-capital investments do not perform particularly well. Rather, most venture-capital investments generate returns that are lower than alternative risk-free investments. This, of course, runs counter to the authors' expectations of "significant" returns. The venture-capital industry appears to be relying on a strategy based on a small number of "hits" or "home runs" (to use baseball parlance) that do very well in order to offset the poor "batting average" of the majority. This general pattern is also seen in the revenue and employment growth data collected by the three researchers.

Finally, the authors observe that in more than 37 per cent of cases, firms sever their ties with venture capital via management or corporate buyouts, with insiders buying out the venture capitalist. A further 13 percent end with third-party acquisitions, and these tend to be successful investments. A substantial share -- 16 per cent -- progress to more permanent capital through initial public offerings (IPOs) of stock. And about 18 per cent of venture-capital-supported investments fail and are written off.

Exit is an important factor in establishing both explicit and implicit contractual relations between the suppliers and the users of venture capital. The paper by Jeffrey MacIntosh focuses on venture-capital exits. Mr. MacIntosh argues that effective exit mechanisms tend to lower the cost of capital for the very simple reason that if suppliers of high-risk venture capital cannot easily dispose of their investment, entrance into the venture-capital market is effectively discouraged. Alternative exit routes include IPOs, private sale, company buy-back, secondary sale of the venture capital, liquidation, and write-off.

Distribution of Venture Capital Exits

(Percentage of Exits)



Effective venture capital exit mechanisms lower the cost of capital to firms.

Mr. MacIntosh contrasts the operational efficiency of the venture-capital market in the United States and Canada. In his view, U.S. venture capitalists are substantially more specialized, with firms that deal exclusively in computer software, biotechnology, or electronics, whereas Canadian firms are more likely to be generalists. This, in turn, has implications for the services provided by venture capitalists -- investment screening, the structuring of deals to establish entrepreneurial incentives, operational monitoring and advice, the search for additional sources of capital, and the timing and means of exit -- all of which, according to Mr. MacIntosh, have a bearing on the long-run commercial viability of the venture. If specialists provide superior service, then a venture-capital market populated by specialists is likely to be more efficient.

Tax influences on the supply of venture capital are substantial, notes Mr. MacIntosh. In Canada, labour-sponsored venture-capital funds (LSVCFs) are tax-driven. The structure of tax incentives for venture capitalism may influence the efficiency with which these funds are used. For example, a pension fund is an institutional source of capital, whereas a LSVCF draws funds from individuals. This difference, Mr. MacIntosh suggests, may explain why only 17 per cent of labour-sponsored funds are invested in risky ventures, giving reason to question whether the tax expenditures are being well spent in this instance.

The paper by François Vaillancourt picks up on this last question: do tax-based LSVCFs represent good tax policy? The conclusion he reaches, based largely on evidence from Quebec, is that they do not. Broadly speaking, LSVCF programs -- there are several such programs at the federal and provincial levels -- share similar objectives regarding investment, employment, and local industrial favouritism. At the heart of LSVCFs is a generous tax concession to contributors. Yet, despite the tax advantages, Mr. Vaillancourt finds that LSVCFs in Quebec have never attracted more than 2.5 per cent of tax filers. Even more remarkable is the fact that, within this relatively small group, the distribution of tax credits is skewed towards higher-income groups.

The apparent difference between private venture capitalism and LSVCFs is the latter's supposed focus on employment. Yet, Mr. Vaillancourt's attempts to empirically estimate the employment effects of LSVCFs do not meet with success. He is unable to find any significant relationship between funding and employment. He interprets this as a failure of the policy to meet its objective. He concludes that LSVCFs fail to finance the investment that ought to generate the employment that represents their policy raison d'être.

Capital Market Issues: Odds and Sods

Money makes the world go around . . . This holds just as true for firms as it does for me and you. Throughout their economic life, firms need access to capital. This capital can be of the form of venture capital, as we have seen earlier, or it can be for continuing growth needs. The capital can be raised via debt or via continuing equity needs to fund investments and restructure corporate balance sheets.

One function of equity markets is to provide a vehicle by which firms can raise publicly traded equity and thereby spread market risk among investors. When they operate efficiently, these markets provide investors with liquidity and firms with access to low-cost funding.

A second paper authored by Vijay Jog examines the pricing of new securities when a company first becomes public. These securities are known as initial public offerings, or IPOs. An IPO represents a major financial transaction at a crucial juncture in the life of a firm. It involves an infusion of equity and restructured ownership along with the new discipline of market scrutiny of corporate performance.

A strong IPO market is a necessary financial condition for the industrial shift towards a knowledge-based economy. Debt is a relatively low-cost, accessible form of finance when it is secured by tangible assets such as plant or machinery and equipment. Knowledge-based companies, on the other hand, derive their value from commer-

Initial Public Offerings tend to significantly under-perform against the Toronto Stock Exchange's TSE-300 index.

cial ideas, patents, and intangible prospects. However, traditional creditors -- banks or bondholders, for example -- are less willing to finance such firms because these so-called "soft assets" are difficult to appraise and virtually impossible to salvage. Hence, equity offerings are the financial vehicles of choice for many young and growing firms.

IPOs are new, unproven, and relatively unknown equity issues. As a result, there is a certain amount of uncertainty about the future profitability of the issuing firms. The share price of an IPO typically moves substantially following the release of the issue. Mr. Jog has documented that the trading price of an IPO tends to jump abruptly above the issue price. This phenomenon of underpricing of IPOs has diminished over time, but it has not disappeared.

The after-issue performance of an IPO, as measured by its stock market performance, is also disappointing. IPOs significantly under-perform against the Toronto Stock Exchange's TSE-300 index for at least six years following their listing. Mr. Jog documents an average 40 per cent loss over four years to investors with IPO holdings.

The underpricing of IPOs represents a transfer of wealth from the existing shareholders to the new investors. Their under-performance produces a loss of wealth to both the original shareholders and the investors holding the IPOs. The persistent loss to investors that Mr. Jog chronicles is likely to be a factor inhibiting the flow of equity capital to young firms.

Usha Mittoo examines the extent to which the relatively small market for publicly issued equities is segmented from the much larger U.S. market. Specifically, she investigates the influence on stock market performance of a secondary offering of common equity for firms that are listed on both the TSE and the New York Stock Exchange. If capital markets are fully integrated, then a secondary issue of seasoned equity by a company with equity only traded in Canada should have the same announcement price effect as that observed for a Canadian company that has interlisted equity on both exchanges.

Ms. Mittoo discovers that stock markets react negatively to announcements of seasoned equity issues. Furthermore, larger firms experience a more pronounced negative reaction than do smaller firms. Finally, interlisted firms experience less of a drop in share price than do non-interlisted firms. To the extent that interlisted companies have a smaller negative price impact, they face a lower cost of capital, and equity markets are segmented in some fashion. Thus interlisting appears to be a means for individual firms to overcome the barriers of market segmentation.

In their investigation of the Quebec Stock Savings Plan (QSSP), Jean-Marc Suret and Élise Cormier look at government tax policy and efforts to encourage ownership of equity and lower the cost of equity capital to certain companies. In their view, the Quebec government had two objectives for the QSSP. First, the plan was designed to reduce effectively and constructively the burden of the individual income tax. Second, by offering personal income tax credits for purchases of eligible shares, the QSSP was intended to encourage Quebecers to hold equity securities issued by Quebec industries.

The QSSP has undergone a number of changes, all intended to focus the program's benefits on the companies that supposedly have trouble raising equity. Mr. Suret and Ms. Cormier find that, although the QSSP was designed to lower the cost of capital to Quebec firms and to foster productive investment, only one quarter of the fresh funds supported by the plan went into new investment. A great deal of the funds -- more than one third of the total -- was used to reduce the debt of QSSP-eligible firms. There is also some evidence that dividend payouts increased.

The authors estimate that the Quebec tax system has absorbed approximately $1 billion in tax losses. On this account, they consider that the goal of reducing the personal tax burden was achieved.

The market listings of small and even very small Quebec businesses increased substantially. From the investor's perspective, many QSSP shares had poor gross-of-tax yields, with the exception of three or four firms that

The establishment of junior stock exchange programs would enable SMEs to bring an equity issue to market at less cost.

had extraordinarily good returns, accounting for more than half of all gains. Mr. Suret and Ms. Cormier liken the QSSP-eligible investments to a lottery -- a small chance of large gains counterbalanced by a large chance of loss. The only sure payoff to the investors was the up-front tax credit. Overall, the authors suggest, many firms had no cost-effective plans for investment of the new equity funds, while the investor's financial incentive to contribute funds did not correspond to an enhanced set of investment opportunities for firms.

Michael Robinson investigates whether Canadian equity markets provide effective means for small and medium-sized enterprises (SMEs) to raise equity capital. He reports that the cost of raising equity capital via IPOs is inversely related to the size of the issue. He also finds that the dollar cost of public listing in Canada is generally lower than the cost of listing on an American exchange while the percentage costs of listing are similar.

Mr. Robinson observes that there are differences among equity exchanges in Canada. The cash costs of bringing an equity issue to market are typically higher on the major exchanges -- Toronto, Montreal, and Vancouver -- but substantially less on the Alberta Stock Exchange. According to Mr. Robinson, it should be possible to establish junior stock exchange programs that enable SMEs to raise equity capital through IPOs as well as secondary financings. He suggests that the programs be regionally based and be built upon existing financial infrastructure, and that they require good institutional governance and close surveillance by regulatory authorities in order to build up the reputations of the programs. Efficient and liquid secondary markets are also critical to the success of such programs.

The preponderance of papers in this research volume deals with equity financing. However, debt is also an important source of funds to both large and small firms. Two papers deal with the debt-funding side of the corporate balance sheet. The paper by Jean-Marc Suret and Jean-François L'Her examines the debt/equity choice of companies over time. Mr. Suret and Mr. L'Her find that the phenomenon of rising corporate indebtedness observed in the United States since the 1960s did not occur in Canada: only long-term debt has increased in Canada.

Financing requirements can be met by a variety of sources of funds. The two researchers determine that, on average, cash flow was used to meet more than 60 per cent of the financial requirements of growing firms over the period. Long-term debt was next in importance, covering about 20 per cent of needs, while equity issues accounted for slightly less than 10 per cent of financial requirements. Further analysis leads the authors to suggest that the financing decisions of Canadian firms largely depend on prevailing economic and financial conditions.

They also consider a number of theories in examining the determinants of the observed capital structure in Canada. They find that the main determinants of financing decisions are profitability and growth. Growth creates more demand for debt relative to retained earnings and new equity, while profitability tends to reduce the amount of debt finance. Size is also found to be positively related to debt financing.

Lastly, Alan Riding takes a look at loan guarantee programs, in particular the Small Business Loans Act (SBLA) program. Many governments have established such programs to improve the flow of funding to small businesses. These programs are usually based on the premise that, because of a shortcoming in credit markets, small firms are unable to access adequate levels of debt capital. There is controversy surrounding these programs, and Mr. Riding examines the issues pertaining to the provision of loan guarantees to small firms.

Governments face a predicament with respect to loan guarantee initiatives. On the one hand, access to capital is a significant barrier to SME growth and the attendant economic development. On the other hand, firms that must avail themselves of loan guarantees are subject to rates of default that exceed those of banks' other borrowers.

Mr. Riding reports that the long-term mean default rate

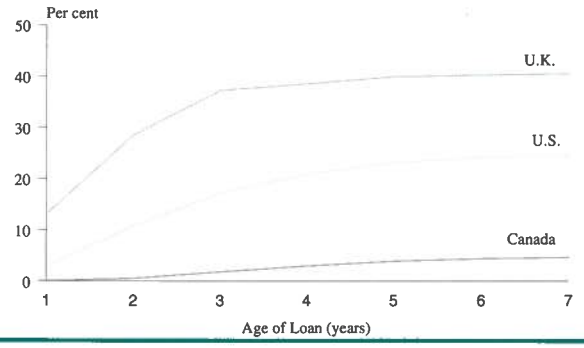
On an international scale, the Small Business Loans Act default rates are extremely low for a loan guarantee program.

on SBLA loans ranges between 4.8 per cent and 6.7 per cent, with an approximate 3.8 per cent loss rate. Very few defaults occur within the first two years, which suggests that lenders have been appropriately screening loan applications for risk. According to Mr. Riding, SBLA default rates are very low by international standards.

High default rates are not, of themselves, negative indications. What is important is the degree to which social welfare benefits exceed the subsidy implicit in the costs of the program. In Canada, with recoveries, the subsidy is equivalent to loan losses -- slightly below 4 per cent. In the United States, the subsidy is estimated at between 11 per cent and 13 per cent; in the United Kingdom, the subsidy exceeds 30 per cent.

Cumulative Default Rates

Canadian, American, and British Loan Guarantee Programs



Mr. Riding concludes that the fact that most of Canada's primary international competitors use loan guarantee programs is a compelling reason to argue that Canada's SMEs also require this form of support. The Canadian SBLA scheme has much to recommend it. Among its attractive features are its low administrative costs and low costs of default.

DISTINGUISHED SPEAKERS SERIES

Jack Mintz Reflects on the Cost of Doing Business

Where businesses locate is often decided upon by one important factor: cost. Of course, some businesses -- in the resource sector or the fish-processing industry, for example -- must be close to their input. Others, such as retail firms, must locate near the customers who purchase their products. However, for many lines of business, ranging from manufacturing to business services, location near the source of inputs or the consumer is not as significant a factor as it once was. Sophisticated information technologies and the internationalization of business activities have transformed the ability of companies to organize affairs over long distances. As a consequence, the cost of doing business in a particular jurisdiction becomes an important determinant for business location.

Naturally enough, the costs of doing business are influenced by government policies. Some policies -- taxes or certain types of regulation, for instance -- add to costs, while other initiatives, such as business subsidies, public infrastructure, and worker benefits, reduce costs. What is the poor corporate accountant or consultant to do in order to take into account the net effects of policies that are pushing costs in opposite directions? How can he determine the lowest cost location among competing jurisdictions?

The typical methodology used throughout the world, says Jack Mintz, the Arthur Andersen Professor of Taxation at the University of Toronto, is to measure the rate of return to capital for a typical project in the industry. This approach, known as project analysis, involves comparing a gross-of-tax internal rate of return (where it is

There is a need for a measure that captures the impacts of taxes and other government policies on the cost of doing business.

assumed that all taxes paid by the firm are equal to zero) with a net-of-tax internal rate of return (where it is assumed that the firm has paid all taxes). The implied effective tax rate is simply the difference in the internal rates of return on capital, gross and net of taxes, as a percentage of the gross-of-taxes internal rate of return. These rates may then be compared for projects in different locations or for different industries.

However, project analysis is not the appropriate methodology for analysing conditions across different jurisdictions, admonishes Dr. Mintz. Two faults mar this approach. First, project analysis assumes that all taxes are shifted onto stockholders in the form of lower returns. But, asks Professor Mintz, who really bears the taxes? There is a large economics literature that suggests some taxes are "passed through": payroll taxes, for example, are often thought of as being borne by employees rather than by stockholders.* Second, evaluations of projects with high internal rates of return exaggerate the corporate taxes paid and thus overestimate the effective tax rate associated with any project.

This, according to Professor Mintz, suggests the need for a measure that captures the impacts of taxes and other government policies on the cost of doing business. The measure must therefore account for all types of factors going into the production of goods and services, and accurately reflect the "costs of doing business."

- *The cost of doing business can be favourably or adversely affected by government policies.*
- *Project analysis, or the rate of return to capital, is an inappropriate methodology to compare conditions across different jurisdictions.*
- *The net effective tax rate or "cost of doing business" approach levels the field of comparison.*

The advantage of this approach is that by considering the net effects of taxes and other government policies, you are truly measuring the cost of doing business in a particular jurisdiction, argues Dr. Mintz. The cost-of-doing-business approach effectively levels the playing field when comparing different jurisdictions characterized by different government regulations, tax regimes, and expenditure regimes.

The approach is particularly relevant to companies with multinational linkages, says Professor. Mintz, because of the greater degree of substitutability that exists between facilities linked across national boundaries. Labour and capital are generally thought of as complements within a facility, but they are often substitutable across facilities. An accurate assessment of the costs of doing business can permit the exploitation of potential rents on location-specific or firm-specific advantages across the worldwide production line. Thus there is an element of the notion of competitiveness embodied in the cost-of-doing-business measure. Government policy that affects the cost of doing business may also affect the economic well-being of a country through its impact on multinational production.

In summary, Professor Mintz concludes that in the context of global economic integration, public policies can affect the cost of doing business in a given country through their impact on the location decisions of multinational business. Growth, employment, and productivity are potentially affected when a multinational corporation is able to substitute production in one country with production in another. To capture the impact of government policies, it is inappropriate to use analyses based on the return paid to the capital owners of a business since such analyses assume that the impact of all policies fall on capital only. Instead, given that multiple inputs are used in production, a measure based on costs is a far better benchmark for comparisons.

** For a discussion of this issue, see "Do payroll taxes kill jobs?" in Micro, Vol. 4, No. 2.*

Globalization is an issue for both rich and poor countries.

Masood Ahmed Scrutinizes the Trend Towards Globalization in the Third World

"Globalization is more than a matter of looking at trade flows and financial flows, it is really about a transformation of the way in which the international economy functions and the way individual firms and countries interact with each other in the international economy." So says Masood Ahmed, Director of the International Economics Department at the World Bank. In a recent Distinguished Speakers in Economics presentation in which he discussed the impact of globalization on developing countries, Dr. Ahmed argued that globalization is an issue for both rich and poor countries. The ability to adapt to change and move ahead is what determines how some countries do better than others in the new international environment, he says. This is equally true for both developing and developed countries.

The win/win nature of globalization is key to the integration of the developing countries into the world economy. In the aggregate, everybody is better off: developing countries end up growing faster in the globalization process and industrialized countries do better too. However, cautions Mr. Ahmed, it is important to recognize that the process of getting to that win/win situation has very substantial adjustment costs on both sides of the equation. As industrialized countries open up to even greater trade, they receive benefits in the form of higher levels of exports but certain segments of industry and certain parts of the labour force are also affected adversely through increased competition. Accordingly, one of the challenges facing policy makers over the next 15 years will be how to manage the costs of adjustments effectively so that people who are losers can be accommodated, according to Mr. Ahmed.

The forces of globalization and the information revolution are progressing steadily throughout the industrialized world and making inroads in the developing world. Lower costs of communication and transportation, lower trade barriers, and convertible currencies have combined in such a way that the volume of world trade has exploded, growing at a rate of 6 per cent per annum over the past 10 years. This, in turn, has opened up new opportunities abroad for the developing nations. The share of trade in the gross domestic product of the developing countries rose from 30 per cent in 1986 to 43 per cent in 1995, and it is projected to exceed 50 per cent by 2006. The developing countries are, on average, more open than the industrialized countries in terms of the trade-to-gross domestic product ratio.

However, much of the rise in trade ratios is concentrated in Asia and Latin America, whereas in Africa and the Middle East, trade ratios began falling in the early 1980s as commodity prices reached a plateau and then declined, and as foreign aid stabilized in real terms. In fact, the trade ratios of the lagging regions have not recovered since 1986; on the basis of current policies, they are projected to increase only gradually over the next 10 years. And if integration in the world economy is measured by using trade ratios, many countries in Africa and the Middle East are less integrated today than they were 20 years ago.

With the decline in barriers to trade has come a liberalization of regulations governing foreign direct investment (FDI). The FDI story is very similar to the trade story: in the aggregate, private capital inflows have exploded, growing fivefold in five years. Over the same period, official flows of capital into the developing countries have remained about the same. Official flows are capital inflows from various non-private organizations, such as the World Bank, the International Monetary Fund, and the Canadian International Development Agency. Five years ago, official sources and private capital were roughly of the same magnitude; now, 20 per cent of capital inflows are from official sources and the other 80 per cent comes from private capital.

The internationalization of business activities will likely be a key driver of development in the next century, because they are a very powerful vehicle for the transfer of knowledge to developing countries.

However, as with trade, there is considerable diversity across the developing countries. Roughly 80 per cent of total capital inflows go to only 12 countries, while between 60 and 70 countries receive virtually no private capital.

The internationalization of business activities will likely be a key driver of development in the next century, because they are a very powerful vehicle for the transfer of knowledge to developing countries, says Dr. Ahmed. Driven by unprecedented competitive pressures and the quest for untapped markets, multinational enterprises (MNEs) are forming alliances with local firms in ways that are different from the traditional means of doing FDI. Previously, the MNE would have created a local subsidiary in the developing country primarily to meet local demand, or it would have invested in a developing country essentially for resource access.

- *The ability to adapt to change and move ahead is what sets apart how some countries do better than others.*
- *If integration in the world economy is measured using trade ratios, then Asia and Latin America have become more integrated and many countries in Africa and the Middle East are less integrated today than twenty years ago.*
- *There is considerable diversity across the developing countries with respect to capital inflows.*
- *MNEs are forming alliance with local firms in developing countries in ways that are different from the past: bringing benefits of process and product technology, know-how, brand, and scale in exchange for low labour costs, local distribution and local knowledge.*

Nowadays, one is more likely to see evidence of integrated global production networks whereby the MNE brings process and product technology and management know-how, together with its brand, a global distribution network, and, often, scale economies. Local firms bring a combination of low labour costs, local distribution, and local knowledge. The benefits of this form of FDI derive as much from the non-financial flows as they do from the extra finance. The gains are seen in terms of technology and of the impacts on the management of local firms. More important is the impact on exports as a percentage of sales. MNEs are moving into sectors where they can have an immediate impact on exports because they bring with them the brand, market access, and distribution channels. Thus the process of globalization and the integration of the developing countries into the world economy are part and parcel of the same tract, notes Mr. Ahmed.

And what is driving this process of globalization? According to Dr. Ahmed, two main forces are at work. First, costs have declined: real communications and transportation costs have fallen dramatically over the late 1980s and into the 1990s. Second, there has been a significant change in policies towards international trade and investment. For example, developing economies are undertaking tariff cuts and eliminating quotas. They have relaxed rules and restrictions on FDI. And the vast majority of them now have currencies that are convertible for current account transactions, whereas in 1960 only a small minority of countries had convertible currencies. In essence, the developing countries have "bought into" the basic principles of the market economy. They have begun to pursue sound macroeconomic policies and developed an outward orientation linking them to the world economy. As a result, they are much more attractive to foreign investors and to people who want to trade with them.

Sound macroeconomic policies seem to be rather important, say Dr. Ahmed. Over the 1990s, of some 94 developing economies investigated, 49 did not attract very substantial FDI. (The cutoff was measured as less than 1 per cent of gross domestic product.) Of this group of 49, 12 were at war; a further 28 were macroeconomically unstable, with

Declines in costs and changes in policies toward international trade and foreign investment are driving the process of globalization.

inflation rates exceeding 50 per cent a year; and five others were experiencing negative growth and falling incomes.

Finally, Dr. Ahmed called attention to the relationship between the speed of integration in the world economy and the rate of growth in per capita incomes. While the outlook is good for everyone, in the sense that everyone is expected to be doing better over the next 10 years than over the past 10 years, the income gap between developing and industrial countries will widen. Those developing countries most integrated into the world economy will experience the smallest increase in their income gap.