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# ***Failing Concerns: Business Bankruptcy in Canada***

*by John Baldwin, Tara Gray, Joanne Johnson, Jody Proctor,  
Mohammed Rafiquzzaman, David Sabourin*

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# Preface

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Recent studies have demonstrated the extent of dynamic change that the industrial population undergoes as firms grow and decline. The study of the manufacturing sector, *The Dynamics of Industrial Competition*, (Baldwin, 1995) demonstrated not only that competition is constantly leading some firms to grow and others to decline, but also that this process contributes to productivity growth. This dynamic change in the firm population stems from different capabilities in firms. To understand how these capabilities contribute to growth and decline, it is necessary to study firms and relate their performance to differences in strategies and pursued activities.

Experimentation is key to a dynamic market-based economy. New entrepreneurs constantly offer consumers new products—both in terms of the basic good and the level of service that accompanies it. During this process, some firms survive, others grow, and substantial numbers of new firms fail. This study is part of a series that is meant to provide a positive tool for entrepreneurs—that outlines the key hurdles that new or small firms face, the competencies that are associated with survival and growth, and the problems they should avoid if they are to avert bankruptcy.

This study of bankruptcy is the third in a series of studies on small- and medium-sized enterprises conducted by the Micro-Economic Analysis Division of Statistics Canada on the causes of firm dynamics. The first, *Strategies for Success* (Baldwin et al., 1994), provides an overview of the strategies and activities of a group of small- and medium-sized enterprises that were growing during the last half of the 1980s. It focuses on differences between the faster and slower growing firms in the sample and finds that innovation is the key to success, but that general and financial management provide the core capabilities of a firm. The second, *Successful Entrants: Creating the Capacity for Survival and Growth* (Johnson, Baldwin and Hinchley, 1997), examines the operating and financial practices of entrants that survive to their early teen years. It focuses more intensely on the financial structure and practices of small- and medium-sized firms than the first study. It too compares differences between faster and slower growing entrants and also finds that innovation is important for growth and that financial structure varies across firms depending upon the knowledge intensity of the industry in which the firm is located.

Both of these previous studies focus on the distinguishing characteristics of firms that have been more successful in some sense—either in terms of profitability or growth. However, both samples are taken from relatively mature firms that were successful as a whole. *Strategies for Success* focuses on a sample of firms that grew over half a decade. *Successful Entrants* chooses a sample of entrants that were competent enough to survive ten years after entry. As interesting as the findings from these surveys are, they do not focus directly on the characteristics that are associated with failure. It is this question that this survey addresses.

In an operational sense, this was the most difficult survey to carry out. When firms die, it is difficult to find and interview the managers of the failed firms. We overcame this problem by focusing on failed firms that went bankrupt. When a firm makes application for bankruptcy status, it is assigned a bankruptcy trustee. Each bankruptcy trustee meets with the bankrupt firm shortly after the application for bankruptcy is made. These trustees, who are often management experts, interview the bankrupt firms during the normal course of a bankruptcy in order to ascertain the state of both assets and liabilities, the causes of bankruptcy, and the appropriate disposition (including continuation) of the firm. This survey was conducted with the help of the bankruptcy trustees during this process and represents the expert appreciation

of the trustees based on information supplied by representatives (often managers) of the failed company. It therefore represents an expert distillation of information provided by management of the failed firm.

The responses that are reported herein are of interest for two reasons. First, the answers could not have been derived simply from inferences from the earlier surveys on the factors related to growth; for example, that failure arose from a lack of those characteristics that are associated with success. Second, while the answers complement the work present in the other two reports, they provide several new insights. Together the three studies provide an important addition to our knowledge about problems facing firms at different points in their life-cycle.

# Acknowledgements

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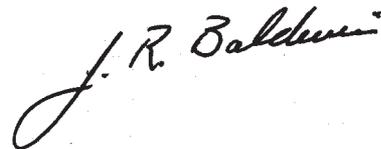
This study was initially conceived by John Baldwin and George Redling, who was the Superintendent of Bankruptcy at Industry Canada at the time. Financial Support was provided by Industry Canada and Statistics Canada. This document, however, was produced by Statistics Canada and does not necessarily reflect the position of Industry Canada.

This publication is the result of a team effort that has benefited from the expertise of a large number of people in the Micro-Economic Analysis Division. The survey was developed with the help of Tara Gray. Invaluable input was also received from Joanne Johnson during the formative stages of the questionnaire design. David Sabourin and Mohammed Rafiqzaman managed the process from the questionnaire design to final receipt of the data. Mohammed Rafiqzaman also provided the tabulations, statistical support, and data verification.

While the Micro-Economic Analysis Division led the team, substantial contributions were provided in the way of methodology by Normand Laniel from Business Survey Methodology. Elaine Wilson from the Small Business and Special Surveys Division supervised the data collection exercise that was done by Operations and Integration Division. Elaine also contributed to questionnaire and sampling design and data editing. Jody Proctor of the Communications Division co-authored the final report with me. Konstantinos Georgaras and Gilles McDougall of Industry Canada contributed to the questionnaire design.

I am also grateful to the Canadian Insolvency Practitioners Association, in particular William Drake, who was instrumental in the implementation of the project and who, along with other members of the association, helped prepare the questionnaire. Other members of the association whose invaluable aid should be mentioned are: Norman H. Kondo, Ted White, Jay Harris and Andrew Dalgleish, who helped design the questionnaire, Rea Godbold, Connie Halstead, Joe Pernica, Robert Harlang, Kunjar Sharma, Blair Davidson, Norman McPhedran, Ronald Boisvert, Marcel Roy, and Sylvain Vincent, who aided in the testing, and finally the numerous members who responded to the survey.

Finally, I wish to thank the entire team that was involved in the editing, design and production of the publication, including: Francine Simoneau, Valerie Thibault and Suzanne David from the Analytical Studies Branch, Louise Laurin from Micro-Economic Analysis Division, Nathalie Turcotte and Annie Lebeau from Communications Division, Rosemarie Andrews and Rachel Penkar from Dissemination Division.



John Baldwin  
Director  
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# Highlights

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- Bankruptcy rates have been increasing in Canada.
- Most bankruptcies occur in smaller and younger firms.
- Firms fail because of unanticipated external shocks and because of internal deficiencies. The relative importance of internal as opposed to external factors varies considerably across firms.
- Almost half of the firms in Canada that go bankrupt do so primarily because of their own deficiencies rather than externally generated problems. They do not develop the basic internal strengths to survive. Overall weakness in management, combined with a lack of market for their product, cause these firms to fail.
- The main reason for failure is inexperienced management. Managers of bankrupt firms do not have the experience, knowledge, or vision to run their businesses. Even as the firms age and management experience increases, knowledge and vision remain critical deficiencies that contribute to failure.
- A second key deficiency occurs in the area of financial management. Some 71% of firms fail because of poor financial planning. Three particular problems that arise in this area are an unbalanced capital structure, an inability to manage working capital, and undercapitalization. Both old and young bankrupt firms suffer this deficiency. This confirms other findings that initial problems in financial structure are difficult to overcome and continue to haunt firms as they age.
- This study suggests that the underlying factor contributing to financial difficulties is management failure rather than external factors associated with imperfect capital markets. Many bankrupt firms face problems in attaining financing in capital markets; but, it is the internal lack of managerial expertise in many of these firms that prevents exploration of different financing options.
- Problems in securing different types of capital are often related. Firms that are unable to obtain capital because of barriers from financial institutions are also unable to raise resources to pursue different financing options.
- The management of new firms face a learning curve. In the early stages of life, internal deficiencies are so prevalent that most bankruptcies occur for these reasons. Management must master the basic internal skills—general and financial knowledge, control, communications, supervision of staff, and market development—or it will fail solely or primarily from the weight of these problems. As a surviving business grows, a new set of problems arise that are associated with the increased complexity of running an older and often larger firm. Managerial issues such as the poor use of outside advisors, lack of emphasis on quality, an unwillingness to delegate responsibilities, departure of key personnel, and personal problems associated with the owner/manager become relatively more important factors contributing to failure as a firm ages.
- Over half of bankrupt firms did develop these strengths, at least to the point that they did not fail primarily due to a lack of them. External events were cited as the primary cause of their downfall. But even here, these firms still suffer from

deficiencies that are partly of their own doing. They did not develop the internal competencies necessary to ride through the external shock, such as an economic downturn or increased competition, that caused bankruptcy. While poor management skills were generally less of a factor in firms that failed for external reasons, managers' deficiencies such as lack of vision, initiative, flexibility, and adaptability were still problems that were associated with bankruptcy. Marketing competencies were also relatively more important in the case of externally generated failures than for internally related failures.

- Management of bankrupt firms might have taken several steps to avert problems. Additional capital in the form of equity is seen to be the key to survival for both those firms with major internal problems and those that failed due to external factors. In addition, seeking the advice of outsiders is regarded as an important step in minimizing deficiencies on the part of management.

# 1. Introduction

---

Bankruptcy costs the Canadian economy billions of dollars each year. In 1993, some 3,700 incorporated businesses failed in Canada, with liabilities totaling 4.1 billion dollars. Much of the money forfeited is owed to Canadian banks, the largest creditor for Canadian businesses. But financial institutions are not alone in their loss. Canadians also feel the costs of bankruptcy through the loss of their jobs. People working at small- and medium-sized firms are especially susceptible. While small businesses have accounted for a disproportionately high share of employment growth over the past decade (Picot, Baldwin, and Dupuy, 1994), they are more prone to failure. Young firms are also more at risk: over half the new firms that fail in the first ten years of life fail within the first two years of operation.

Entry and exit are an important part of the turnover process. Each year large numbers of entrepreneurs start new firms. In most years, entrants that are one year old account for between 15 and 20% of the firm population in the commercial sector. For the majority of these firms, life is short. Most new entrants exit shortly after birth. Less than 1 in 5 new firms survive to their tenth birthday.

These failures involve a cost—both in human and financial terms. But these resources should not be regarded as wasted—any more than resources that are expended on obtaining information in a world of imperfect information are wasted. Failures are an investment that society makes in the dynamic competitive process. New firms provide an important stimulus to the industrial population. A few small entrants grow to become the new dynamos of the industrial system. Others remain relatively small but provide an important source of innovation in the small-firm sector—especially when it comes to quality differentiation. Smaller firms excel in their ability to provide quality and flexibility of service (Baldwin et al., 1994). Small firms are constantly changing their product offerings—with respect to both types of products and the type of services offered. Small firms are adept at ascertaining changing consumer tastes with regards to the amount of services that are bundled with a product, or being flexible with regards to other aspects of the product offering. New small firms that are better able to sense consumer requirements are constantly replacing older firms that are less able to do so (Baldwin, 1995). One manifestation of their success is that small entrants tend to pay higher wages and are more productive than those firms that they force out of the market (Baldwin, 1995 and 1996). It is the process of entry and exit that generates information on which combinations of products and services best satisfy consumer tastes.

This process of experimentation is costly. The numbers of entrepreneurs that try and fail is large. If entry rates are about 20% and only about 20% of entrants survive to their tenth birthday, then over 15% of the annual stock of new firms are failures as the result of this trial and error process. Failure is accompanied by the expenditure of both dollars and time on the part of new entrepreneurs. This is the investment that the market economy makes while experimenting in finding the new and improved goods and services that consumers will pay for. It can also be regarded as an investment in managerial experience, because some entrepreneurs who fail will learn from their experiences and go on to found other new businesses that eventually succeed.

While entrepreneurs who have tried and failed are a key part of the risk-taking economy, there is no need to accept the existing failure-rate as optimal. Economic well-being can be improved by reducing the investment required in producing goods and services. For example, just-in-time delivery systems have reduced the investment that is required in inventory. Computer-aided design systems have reduced the length of the product cycle and the investment required for product development. Similar reductions in investment costs can result from having better prepared entrepreneurs.

New firms differ substantially in terms of their efficiency (Baldwin, 1995). While potential entrepreneurs can to some extent assess their capabilities and their chances of success prior to their actually starting a business, the ultimate test of their potential requires that they gamble on their abilities and create a new firm. It is only after that act of creation that the market will reveal whether their expectations were correct.

Most failures at this stage result from new entrepreneurs making incorrect assessments of their capabilities. Exit is not a random phenomenon. Previous studies have shown that exiting firms tend to differ in a systematic way from those who survive. Baldwin and Rafiqzaman (1995) demonstrate that entrants who do not survive are smaller, pay lower wages, and have lower productivity. Baldwin and Johnson (1997) demonstrate that they also tend to have a different financial structure—with higher debt/asset ratios.

Size, productivity, and financial structure are all manifestations of underlying managerial strategies and competencies. In order to comprehend better the causes of failures, an understanding of the underpinnings of new firms is required. New firms do not succeed or fail

because they pick a certain size or a certain wage rate. Both size and wage rates result from whether the firm offers a product that consumers value. That in turn depends on the capabilities of the entrepreneur in a wide range of different areas: general management, production, human resources, marketing, and finance. It is the purpose of this study to examine which of these deficiencies was particularly important for failures in Canadian industries.

In order to do so, the study presents a detailed analysis of the factors leading to bankruptcy for a subset of Canadian businesses that fail: corporate bankruptcies. While basic statistics on the extent and trends in bankruptcy can paint a picture of the magnitude of bankruptcy, they do not explain why firms go bankrupt. A question of great importance to Canadian businesses, banks, investors, and governments is why, of a set of firms facing similar market conditions, will some survive and others fail? Is it a product of the environment and, therefore, not easily controlled? Or, is it the result of internal failure on the part of management? Are the problems that arise within firms rectifiable? If so, what can these firms do to avoid bankruptcy?

This monograph concentrates both on external factors (those that a firm cannot control, but which it might anticipate) and internal factors (those that a firm can control). Most respondents report that external factors were at least partly responsible for the bankruptcy—economic downturn and competition from other firms, either domestic or international, being cited as the strongest. But even

when external factors are assessed to be important, internal failings are still found to exist.

Understanding the causes of bankruptcy is a prerequisite for both public and private program assistance. For example, if only a small fraction of business failure can be attributed to competition, economic downturn, or other external factors, then a majority of businesses fail due to factors within the control of owners and managers. Even when external events are a factor, internal competencies may contribute to failure arising from external shocks. Research that identifies practices to be avoided by firms is beneficial not only to the formulation of public policy but also to entrepreneurs, investors, credit suppliers, educators, and business consultants. Managers need to develop the capability to anticipate and respond to events outside their immediate control.

The study is organized as follows. In the next section, an overview of the extent of the bankruptcy problem is presented by looking at the number of, location of, and trends in bankruptcies. Subsequently, the explanations that have been given for bankruptcy are investigated. Then the survey results are presented in three parts. In the first stage, a general overview of the problems associated with bankruptcy is provided. Second, the differences between the causes of bankruptcy in younger and older firms are outlined. Finally, the differences between firms that fail primarily under the weight of their own deficiencies and those that fail because of external shocks are described.

## 2. Bankruptcy in Canada

Tough economic times in the 1990s have taken a toll on Canadian businesses. Many failed during the recession that lasted from mid-1991 to early 1992 (Figure 1). A hesitant recovery meant that businesses, particularly new ones, continued to have trouble even after the recession officially ended. As a result, the number of business bankruptcies increased in the early 1990s and has failed to return to pre-recession levels.<sup>1</sup>

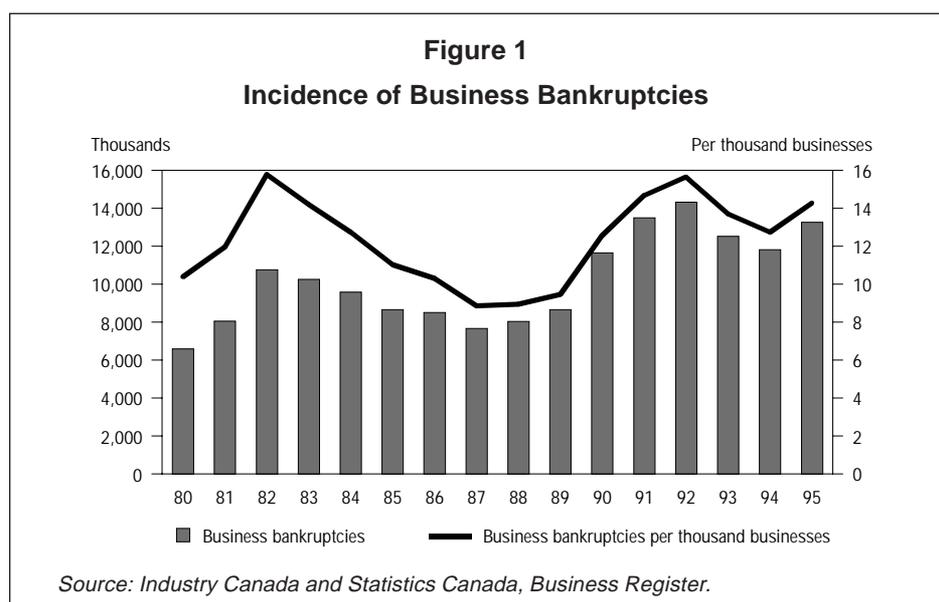
The number of bankruptcies in 1995 was nearly double the number in 1985, while the business population<sup>2</sup> only increased by half. The result has been an increase in the incidence of bankruptcies: from 10 failures per 1,000 businesses in 1980 to 14 failures per 1,000 businesses in 1995. Along with bankruptcies, liabilities have risen over the past 15 years (Figure 2). This represents a growing loss to creditors.

But if the economy hasn't been booming in the 1990s, Canadian merchandise exports certainly have. Since 1990, exports as a proportion of gross domestic product (GDP) have risen from just over 25% to over 40%. As a result, over the same period the export-oriented goods-producing industries, such as the manufacturing and primary industries, have experienced a decline in business bankruptcies of 0.4% and 5.8%, respectively (Figure 3). In 1995, these industries together had only 1,536 bankruptcies. By contrast, those industries more reliant on the sluggish domestic market have not fared

as well. The services sector has been hit particularly hard by the decline in consumer spending. It recorded the highest rise in business bankruptcies in the early 1990s. In particular, firms in finance, insurance, and real estate, as well as other service industries, such as business services and accommodation, food, and beverages, have been at the highest risk of failure. In 1995, firms in these industries represented the largest number of bankruptcies: 4,610 bankruptcies or 34.8% of the total. Firms in the retail and wholesale trade industries were not far behind at 3,737 bankruptcies or 28.2% of the total.

The business climate has varied across the provinces during the last two decades. Since 1981, Ontario has increased its share of the GDP. The Prairies' and Atlantic Canada's share together has remained virtually unchanged. Quebec, on the other hand, has seen a small loss in its share. British Columbia has increased its share since 1987.

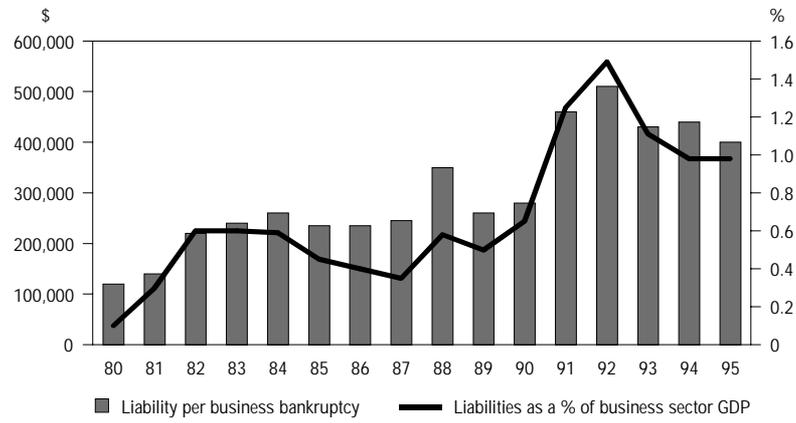
Businesses operating in Quebec have the greatest probability of failure throughout the period (Figure 4). Ontario's rate is below that of Quebec, but fluctuates over time much as does the latter. Alberta and the Atlantic Provinces have seen their relative position worsen dramatically since the recession of the early nineties. Businesses in British Columbia now have the least chance of failing, a probability that has fallen steadily since the early eighties when bankruptcy rates in B.C. were among the highest in Canada.



<sup>1</sup> Business bankruptcies include sole proprietorships, partnerships and limited liability companies.

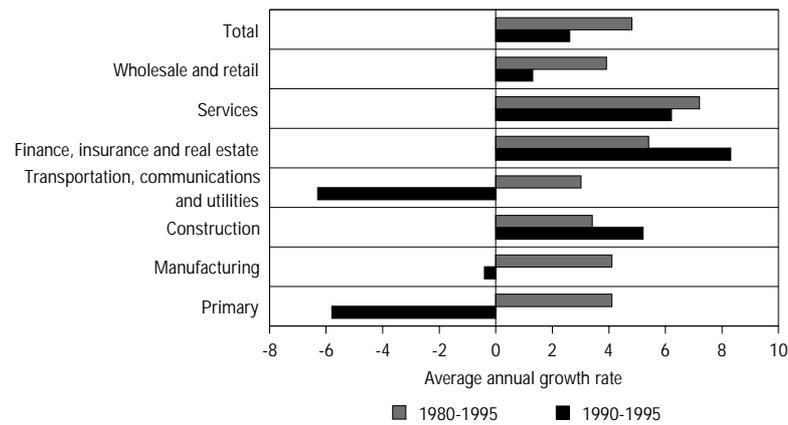
<sup>2</sup> The business population is defined here as the number of businesses with a payroll deduction account, those remitting unemployment insurance, C.P.P. or income tax on behalf of employees, to the federal government.

**Figure 2**  
**Business Liabilities**



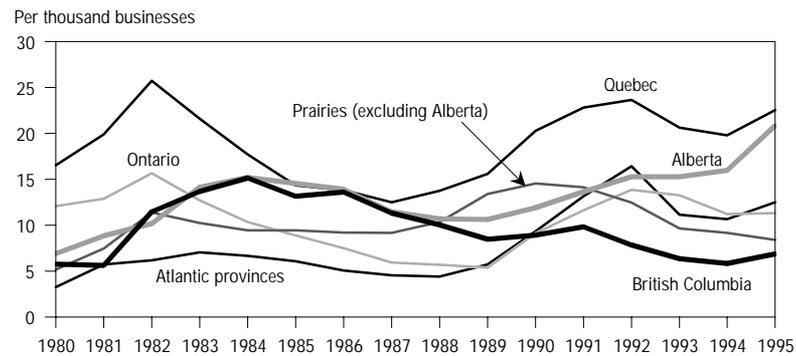
Source: Industry Canada.

**Figure 3**  
**Business Bankruptcies: Growth by Sector**



Source: Industry Canada.

**Figure 4**  
**Regional Incidence of Business Bankruptcy**



Source: Industry Canada and Statistics Canada, Business Register.

## 3. The Survey

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### 3.1 Background

An extensive effort has been devoted to studying the causes of bankruptcy.<sup>3</sup> While shedding considerable light on several of the factors that influence firm failure, many of the studies of business bankruptcy suffer one or more deficiencies.

First, many fail to focus on the underlying causes of failure. They do not distinguish between factors that are causes of bankruptcy and those that are indicators of problems that could lead to bankruptcy (Hall, 1992). Failure to make this distinction makes meaningful analysis of the data difficult. For example, weaknesses in the area of production—a potential cause of bankruptcy—can have various symptoms, such as high costs. But high costs are a manifestation of a more basic flaw, such as inadequate quality control and high defect rates or inappropriate production facilities. This study attempts to focus directly on the causes as opposed to the symptoms of problems in different functional areas of the firm.

Second, many previous studies are concerned with the prediction of failure and base their selection of variables on the enhancement of predictive or discriminatory power, with a rationalization of their implications *ex post facto* (Hall, 1992). In particular, models predicting the probability of bankruptcy based on financial ratios are problematic. They tell us little about the reasons behind bankruptcy, and in fact, have a low success rate at actually predicting bankruptcy (Lussier, 1995; Doukas, 1986).

Third, the results of previous studies are also generally limited by data availability. Because bankrupt firms disappear, it is more difficult to obtain information on a large representative sample of this group than for firms still in existence. As a result, most bankruptcy studies are restricted to publicly traded firms, a group in which large firms predominate (Hall, 1992). Their findings are, therefore, not applicable to the general population of bankrupt firms. Nor do they deal with the small-firm sector, which is responsible for most failures. Further, the information in most previous studies is usually based

on a very small subset of firms, or else is very specific to one particular industry or sector of the economy (Gaskill, Van Auken, and Manning, 1993).

The Survey of the Characteristics of Bankrupt Firms presents a detailed picture of corporate failures in Canada. It is the first survey of its kind, extending across all regions and industries, to present a broad picture of the issues. A large sample size, relative to previous studies, means that generalizations about the population of bankrupt firms may be made from the sample of responses.<sup>4</sup>

In this study, a comparison of the differences between successful firms and failures is not made: data are not collected here on a control group of survivors. However, two other Statistics Canada surveys provide related information on survivors. The first (*Successful Entrants*)<sup>5</sup> investigates the characteristics of new-born firms that survive and emerge from childhood into their early teen years. It offers a useful contrast to the data collected for this study, which pertain mainly to entrants who fail. The second (*Strategies for Success*)<sup>6</sup> examines the strategies and activities of a large group of growing small- and medium-size firms. The survey results are linked to data on firm performance. This allows the distinction to be made between the competencies that are found in more-successful and less-successful small firms.

This study is designed to address three issues: the causes of bankruptcy; the indicators or symptoms of bankruptcy; and those measures that, if taken, might have prevented the bankruptcy from occurring. The survey uses a standard definition of bankruptcy: firms involved in court proceedings that result in losses to creditors. Firms going out of business without a loss to creditors are not considered bankrupts, but discontinued businesses.

The survey was conducted with the cooperation of bankruptcy trustees who responded in detail to the questionnaire on the characteristics of bankrupt firms. A bankruptcy trustee is assigned by law to each case of bankruptcy. The trustees are closely involved with the

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<sup>3</sup> See Lussier (1995) and Hall (1992) for comprehensive reviews of the literature.

<sup>4</sup> While it is generally recognized that small businesses are of particular interest in the discussion of bankruptcy, this survey does not cover the entire small-firm sector since it focuses only on incorporated firms. Despite this, most of the firms in the sample are small.

<sup>5</sup> See Johnson, J., J.R. Baldwin and, C. Hinchley. 1997. *Successful Entrants: Creating the Capacity for Survival and Growth*. Catalogue No. 61-524. Ottawa: Statistics Canada.

<sup>6</sup> See Baldwin, J.R., W. Chandler, C. Le, and T. Papailiadis. 1994. *Strategies for Success: A Profile of Growing Small and Medium-Sized Enterprises (GSMEs) in Canada*. Catalogue No. 61-523R. Ottawa: Statistics Canada.

failing firm and, as part of their required duties, develop detailed knowledge of the situations facing these firms as well as familiarity with their management style.<sup>7</sup> This knowledge is accumulated via direct interviews with the bankrupt firms' managers and principals. Utilizing professional bankruptcy trustees, who are often management experts, meant that meaningful responses from managers of failed firms could be gathered in situations where it is normally difficult to obtain information. It also offered a unique opportunity to use the services of professionals who deal with bankruptcies to distill and evaluate the information provided by bankrupts. While one might expect owners to bias their responses toward factors that could be construed as being beyond their control (for example, environmental, the behaviour of partners, or increases in costs)<sup>8</sup>, this is not as likely to be an issue with the responses from the trustees.<sup>9</sup>

Despite the fact that the survey would not have been possible without the help of the bankruptcy trustees, using these experts has some minor disadvantages. These disadvantages mostly arise from the constraint on the type of questions that could reasonably be asked. Some potentially important data on the personal characteristics of the owner/operator are not developed in this survey. Factors such as entrepreneurial spirit and the motivation for business start-up, which have been cited in the literature as important to understanding the causes of bankruptcy (Keats and Bracker, 1988), can be measured only imprecisely by the trustees and, therefore, were not investigated in this survey.

Since the bankruptcy trustees were key to the success of the survey, the questionnaire was developed in conjunction with a committee struck from members of the Canadian Insolvency Practitioners Association. This committee contributed suggestions on the causes of bankruptcy based on their many years of experience as business advisors and as bankruptcy trustees. Following the development of the questionnaire, detailed field tests were pursued with other members of the Association.

### 3.2 About the Survey

Much is already known about the characteristics of firms that cease operations and the factors that are associated with failure. Smaller and younger firms have a higher probability of failure (Baldwin and Johnson, 1997; Hall, 1992; Dunne, Roberts and Samuelson, 1989;

Phillips and Kirchenhoff, 1989), as do those owned or controlled by a single person or small group of people (Argenti, 1976). Firms with an unskilled workforce, insufficiently educated management, as well as those that do not make effective use of outside expertise have a greater chance of failure (Hall, 1994). Managerial inexperience and inefficiency are consistent themes in the literature explaining business failure (Haswell and Holmes, 1989; Lussier, 1995).

Deficiencies in long-term strategic goals and business plans, typically including plans for finances, human resources, marketing and sales, product development, and technology, emerge frequently as an issue (Robinson and Pearce, 1988; Schrader, Mulford, and Blackburn, 1989), and are often tied to a lack of managerial skills.

The Survey on the Characteristics of Bankrupt Firms draws on several sources of information to develop a questionnaire. It attempts to consolidate and organize the often extensive and unrelated list of factors and variables that have been cited in the literature as possible causes of bankruptcy. It does so by using a taxonomy based on the functional areas that must be mastered by a successful firm (management, financing, human resources, marketing, and production) to organize information on the causes of bankruptcy. While grounded in the bankruptcy literature, this survey also builds on the extensive organizational and entrepreneurial theories of firm failure, making use of both quantitative (such as revenue and number of employees) and qualitative (such as management ability and financial expertise) data. As well, it draws from other studies of the competencies contained in small firms (see *Strategies for Success* and *Successful Entrants*) that examine the factors that contribute to a firm's success. This literature finds that several key controllable competencies must be present, at least to some degree, for firm survival and growth, which in turn suggests that a lack of several of these key capabilities, in combination with environmental and contextual factors, may result in firm failure. It is this hypothesis that this study investigates.

#### 3.2.1 The Questionnaire

The survey questionnaire focuses its attention on four areas: the characteristics of bankrupt firms, the external (uncontrollable) factors that cause failure, the internal (controllable) factors that cause failure, and the onset and prevention of bankruptcy.

<sup>7</sup> Bankruptcy trustees familiarize themselves with the operations of bankrupts because they must be able to ascertain that the cause of failure was not fraud.

<sup>8</sup> Note that this bias may not in fact exist. In fact, one study (Hall, 1992) suggests that owners place greater emphasis on the amount of capital secured and the management of debt than on external shocks when it comes to firm survival.

<sup>9</sup> Bankruptcy trustees, who are often accountants or management experts, may be limited in their views of the causes of bankruptcy, towards financial issues. However, the similarities in the responses received in this survey and the two related surveys that relied directly on managers (*Strategies for Success; Successful Entrants*) suggest this bias is minimal.

Information on the general characteristics of bankrupt firms was sought in order to draw a picture of a typical bankrupt firm in Canada. Since age and size are inversely related to a firm's probability of failure (Baldwin and Johnson, 1997), data on both were collected. Size (number of employees) and revenue data were collected for the year previous to the bankruptcy as well as the firm's final year. Since governance structure—whether a firm is controlled or owned by a single person or a small group of persons—is hypothesized to affect the incentive structure and therefore the success of a business, information was gathered on control and ownership of the firm. Data on industry and geographic location were also collected, as bankruptcy rates may differ depending on where the firm is located and in what industry that firm operates. Finally, the survey provides an overview of the business experience of the senior manager, since the breadth and depth of management skills emerge frequently as crucial factors in the survival of firms.

While information on the characteristics of bankrupt firms is important, it alone does not identify the causes of bankruptcy. In order to do so, respondents were asked to identify the external and internal factors that caused failure. External factors include such things as an economic downturn, unforeseen circumstances (such as natural disaster or adverse publicity), theft or fraud, increased competition, legislation and government regulations, supplier or customer difficulties, and fundamental changes in technology or market conditions beyond the control of the firm.

The contributions of internal causes to bankruptcy are divided into eight areas: general management skills, firm strategies, expansions and buyouts, financial planning, financial management and record keeping, human resources, marketing, and production and operations.

Managerial inexperience and inefficiency are consistent themes in the literature explaining business failure. As a consequence, the questionnaire examines general management skills in detail, particularly deficiencies in knowledge, abilities, attitudes, and actions. It includes such issues as breadth and depth of knowledge and vision, poor supervision of staff, and lack of emphasis on product quality.

The survey examines whether bankruptcy is associated with another possible area of management failure—the lack of planning. Studies have shown that more successful firms have long-term strategic goals and business plans. These typically include plans for financial management, human resources, marketing and merchandising, product development, and technology (*Successful Entrants*). The benefits of a business plan are many. A written business plan will have a positive effect on the firm's ability to obtain financing, as it is evidence

of capability and a long-term commitment to the firm. Likewise, business plans may reassure employees and customers of management's commitment to success, thereby improving employee productivity and customer relations.

Other firm strategies that are investigated include the use of outside advisors, an important factor in firm survival, and the emphasis placed on strategic goals. Too much emphasis on one specific goal, such as market share or growth, can work to the detriment of others, such as stability or profitability.

Expansions and buyouts can also be significant factors in firm failure if they are undertaken prematurely or improperly planned. Rapidly growing firms may fail due to the financial stress of growth; namely, higher costs, greater debt, and smaller profit margins (Boardman, Bartley, and Ratcliff, 1981). Other causes of failure related to expansions and buyouts include inadequate human resources, the inappropriate use of financing, and the acquisition of unprofitable subsidiaries.

Lack of financial planning is frequently cited as a factor contributing to firm failure. Thus, bankruptcy trustees were asked if the firm had a financial plan, and whether it was effectively used; that is, whether results were compared to forecasts and if actions were taken when they differed. The section of the survey dealing with the planning process also considers whether the person responsible for the financial plan was an employee or an external expert, and what the professional qualifications of that person were.

A related factor that is often seen as critical to success is the thoroughness of financial management and record keeping. Deficiencies in these areas lead to improperly kept books, resulting in a loss of control over revenues and costs. Specific causes of deficiencies that were investigated include a lack of an accounting background, weaknesses in cash flow analysis, and an inability to manage working capital. One consequence of poor financial management is the over-extension of credit to clients, which in turn leads to a failure to repay liabilities. A second is an unbalanced capital structure brought about by financing long-term assets with short-term debt or trade credit.

The human resources section of the questionnaire investigates whether bankruptcy was associated with weaknesses in the human resources policies followed by the bankrupt firm. Successful firms are committed to their workforce; they strive to attract and retain quality employees. Firms that are not able to do this, whether it is because they do not offer the going wage rates for skilled workers or because of a lack of skilled workers in their geographic area, are more likely to fail. Since many

bankrupt firms are small and rely on few key personnel, the human resources section examines not only traditional areas, such as training and development issues, but also the extent to which the personal problems of management contributed to bankruptcy.

Human resources strategies provide the human capital of a firm. Production strategies combine the capital and human resources of the firm. Deficiencies in production and operations contribute to bankruptcy by increasing product costs. In this area, the survey investigates whether bankruptcy was the result of such things as high input costs, an inefficient use of equipment, or the use of obsolete technologies.

In the final section, the survey investigates sources of deficiencies in the area of marketing, which directly lead to inadequate sales, as a significant cause of bankruptcy. While firms need to base their operations on sound overall management, develop an appropriate financial structure, and pay attention to their people, companies cannot succeed without products that satisfy customers. Marketing strategies attract customers. Examples of inadequate marketing strategies that were investigated include poor location, inferior products, and poor customer service.

The survey not only investigates the extent to which specific problems within each internal category (management, finance, human resources, production, and marketing) were a prime cause of bankruptcy, it also asks which of these areas ranks as the most important. Was it the foundation on which a firm rests, that is, its management structure? Or, was it a failure in one of its sub-components, such as technology strategy? It then asks whether these internal factors taken as a whole were more or less important than external factors that are outside the control of the firm. In doing so, it examines whether the downfall of the firm originated in events outside the control of the firm. It also asks whether bankruptcy in these circumstances (an external shock) was accompanied by particular internal problems. Did the lack of certain basic skills make the firm more vulnerable to a shock in its external environment?

The questionnaire also focuses on the firm's access to credit and the cost of credit. A topic of perpetual interest is the availability of adequate and affordable financing for businesses, particularly small businesses. The survey questionnaire addresses in a tentative way whether bankrupt firms had problems accessing credit and the origin of these problems. Lending institutions have identified a lack of proper business and financial management skills in potential clients as one cause of insufficient access to financial capital. However, others argue that the problem may just as well be related to institutional policies that inappropriately deny some firms

access to credit. Therefore, the survey asks trustees to evaluate whether access to credit was a particular problem for the bankrupt firm. The survey separates the issue of access to credit into internal factors (such as financial or managerial incompetence) and external factors (such as policies of financial institutions). Data on access to credit was gathered for the period of time prior to the difficulties that led to bankruptcy, thereby removing the obvious and expected tendency of financial markets to withdraw credit from firms heading towards insolvency.

Finally, the survey examines whether the management of a failing firm recognized the symptoms of failure and then whether or not it chose to act on them. It goes further to ask whether there was a course of action, when difficulties became apparent, that might have prevented the bankruptcy and, indeed, whether or not the bankrupt firm should have been saved.

The complete questionnaire is attached as Appendix B.

### **3.2.2 Frame Design and Survey Response**

Although this study is interested in the causes of bankruptcy of Canadian businesses, only a subset of total business bankruptcies was chosen for the survey. The survey focused only on corporate bankruptcy. Between 1992 and 1996, corporate bankruptcies made up only 28% of all business bankruptcies but they accounted for about 65% of total business liabilities arising from bankruptcy. Corporate bankruptcies account for the majority of liabilities of bankrupt firms although they are not numerically as large as the non-corporate population. Between 1992 and 1996, the average corporate bankruptcy had liabilities of \$1.3 million dollars, while the average non-corporate business bankruptcy had liabilities of only \$260,000—a five-fold difference. Corporate bankruptcies provided the frame used for the study because many of the non-corporate bankruptcies involve consumer bankruptcies or are very small businesses—businesses that had not reached the size where many of the issues that were being addressed in this study could be investigated with the survey instrument that was used here.

The sample for the bankruptcy survey was designed to give a picture of bankrupt firms in Canada, namely the causes of bankruptcy and possible preventative measures. The bankruptcy procedure has important implications for both the design of the survey and the design of the sample and frame. The procedure that a bankrupt company must follow is set out in the Bankruptcy and Insolvency Act (BIA). All corporate bankruptcies in Canada are processed by the office of the Superintendent of Bankruptcies. Each corporate bankruptcy that occurs is assigned a trustee upon registering with the office.

The trustee is required to acquaint him/herself with the operations of the firm so as to make the appropriate decisions. The decisions made must then be approved by the bankruptcy court on the disposition of the assets of the bankrupt firm. The disposition may involve liquidation or reorganization under court protection. The trustee conducts an investigation into the causes of bankruptcy and oversees the bankruptcy proceedings. The investigation usually includes several interviews with the owners and/or operators of the bankrupt firm. The trustee then submits a report to the Superintendent, outlining the assets and liabilities of the bankrupt firm and the causes of bankruptcy.

The frame of corporate bankruptcies used for the survey was created from files supplied by Industry Canada. Since the trustees were surveyed about the bankruptcies as they occurred, the frame was built up over time. Once each week during the study period, Industry Canada provided Statistics Canada with a file containing all corporate bankruptcies with file dates from March 1, 1996 on.

The survey was conducted using this information over the six-month period from March 1 to August 31. While there are seasonal variations in bankruptcies, this period is long enough to reduce their effect. The number of bankruptcies per month since 1990 were examined to ascertain that this period was broadly representative of the annual experience of bankruptcy by industry and region.

The sampling strategy had three objectives: to provide representative data from across Canada, to provide adequate representation for different industries, and to reduce the respondent burden on trustees who dealt with many bankruptcies. Of the 1,910 bankruptcies that occurred over the period, 1,085 firms were surveyed. A response rate of 50.7% produced 550 valid responses.<sup>10</sup>

Weights were then applied to make the answers reported herein representative of the population. Population estimates were constructed in a two-stage procedure. In the first stage, estimates for the population of bankrupt firms were derived for Quebec and then for the rest of Canada. In the second stage, the estimates for these two regions were combined to create a national total by weighting each by its share of total corporations. This was done because, during the survey, bankruptcies in Quebec represented a greater share of total Canadian

bankruptcies than was Quebec's share in the total corporate population.<sup>11</sup> Weighting the micro-record to the total bankruptcy population would have produced a picture heavily dominated by Quebec, and the purpose of this survey was to provide a picture of a broad cross-section of Canadian bankruptcies. In the end, the results that this procedure generated were very similar to those which a more straightforward weighting scheme would have produced, since the profile of Quebec bankruptcies was very similar to the profile for bankruptcies in the rest of Canada. The one major difference was that, compared to the rest of Canada, a larger percentage of bankruptcies in Quebec were the result of an external shock due to the disappearance of major customers.

### 3.2.3 Measurement of Contributing Causes

In the bankruptcy survey, a six-point scale was generally used to measure the importance of various contributing causes of bankruptcy. Trustees ranked the extent to which various problems in the functional areas, such as general management, marketing, human resources, and financing, contributed to the firm's bankruptcy. The scale is: 0 (not applicable), 1 (not at all) to 5 (a great deal). The answers to the survey then provide the percentage of firms that fall into each category.

These responses can be summarized in several different ways: with a mean score, with the entire distribution, or with parts of the distribution. The mean score is too parsimonious in that it ignores interesting information on the nature of the distribution; for example, whether the distribution is heavily concentrated around a score of 3 or whether it is distributed more heavily towards one or other of the tails. On the other hand, reporting the entire distribution for each response generates too much information to digest. In this study, a compromise is adopted. The information that is contained in the distribution of responses across these categories is summarized by using the percentage of firms that fall in the upper part of the distribution. This is the sum of the percentage of firms that have scores of 3, 4, and 5. For example, when it is reported that 68% of bankruptcies were affected by their external economic environment, the statement is based on the finding that 68% of responses reported that this contributing factor received a score of 3, 4, or 5. The statistic that is used is commonly called an extreme score and will be referred to as such in subsequent tables. Standard errors for all responses are included in Appendix A.

<sup>10</sup> Non-response rates were about the same across region, industry and size class.

<sup>11</sup> While the Quebec bankruptcy rate has been higher than that for other provinces over much of the last fifteen years, it was particularly high in the sample reference period.



## 4. Profile of Canadian Bankruptcies

Various models of entry behaviour suggest that small, young firms are most prone to failure. In a world where entry is a gamble and firms start life without fully knowing whether they are more or less efficient than their competitors (Jovanovic, 1982), smaller younger firms are less likely to survive. The empirical evidence, at least in the manufacturing sector, confirms this picture. In general, new firms are smaller and less productive (Baldwin, 1995), and competition culls out the least efficient of these (Baldwin and Rafiqzaman, 1995). This study provides a closer look at a typical bankrupt firm in Canada and confirms this picture.

The study found that bankrupt firms are generally quite young: most of the bankrupt firms were incorporated after 1990. Thus, 63.1% of bankrupt firms failed within the first five years of operation. The majority (30.5%) of the remaining groups of bankrupt firms were less than 15 years old.

Management and industry experience are critical for the learning process. While only 45% of managers had worked more than four years for the bankrupt firm (Table 1), this is partly due to the young age of most bankrupt firms. Managers actually had more experience in the industry. Some 73% had more than four years experience in the industry; some 66% had more than four years experience as a manager.

The fact that young firms are more likely to fail relates partly to the fact that their management lacks experience and ability. Studies have shown that managers in small new firms gain their experience on the job (*Successful Entrants*). As a firm gets older, it might be expected that the proportion of firms failing from mismanagement will be reduced. Analysis of the numbers reveals that the managers of younger firms (less than 5 years old) indeed have less experience than those of older firms (over 5 years old): over half of younger firms had a senior manager who had worked as a manager for less than five years. By comparison, only 6% of the older firms had senior managers with this little experience. Management of older firms also had more experience in the industry: 27% had

worked in the industry for more than 25 years, and over 83% for more than 10. Over 40% of younger firms had managers with less than five years industry experience.

As is predicted by theory and shown by previous studies (Hall, 1992), failure is almost entirely confined to the small-firm sector. Exactly half of bankrupt firms have between one and nine employees at the time of bankruptcy, and 30.5% have no employees. As firms approach bankruptcy, they tend to decline in size. Many firms with employees the year prior to bankruptcy had none at the time of bankruptcy.

Liabilities, a measure of pre-bankruptcy size, increase monotonically by employment class (Table 2). The median liabilities were \$124,000 for firms with no employees at the time of bankruptcy, \$172,000 for firms with 1-9 employees, and \$661,000 for firms with 10 or more employees. Assets were much smaller than liabilities, with an assets/liabilities ratio of 25%, 33%, and 51%, respectively, in the three size classes.

Small firms share certain characteristics that make

them more vulnerable to failure. In particular, they are generally owned by one person or a small group of persons (Argenti, 1976), an ownership structure that can influence the range of capital sources available to a firm. Some 85% of bankrupt firms were owned by a single person or family. This, combined with the fact that these firms are young, meant that they were more likely to rely heavily on a small number of sources of

capital; in particular, retained earnings and personal funds (*Successful Entrants*). Further, firms without "managerial depth" face a much greater risk of failure if personal problems of an unforeseen nature mean that the manager is unable to perform (Hall, 1994).

Firms fail not just because they are small, young, and have inexperienced managers. They make basic mistakes or face uncontrollable events. The remainder of this report focuses on the origin of the causes of bankruptcy. The first section provides an overview of the causes of business failure in Canada. The second section

**Table 1**  
**Distribution of Years of Experience of the Senior Manager by Type of Experience**

Years	Worked for the Bankrupt Firm	Worked in the Industry	Worked as a Manager
	%		
0-4	54.8	27.0	33.7
5-9	21.6	11.3	17.8
10-14	9.9	20.6	18.7
15-19	6.8	17.1	12.6
20-24	4.0	12.9	10.5
25+	2.9	11.2	6.5

describes how the causes of failure differ between young and old firms. Finally, the third section examines whether

internal competencies differ in firms that fail due to external shocks and those that fail due to internal problems.

Employee Size	% of Total Employment	Liabilities		Assets		Assets/Liabilities Ratio <sup>1</sup>
		Mean	Median	Mean	Median	
0	30.5	444,183	123,923	108,876	17,540	0.25
1-9	50.1	389,528	172,107	130,170	37,363	0.33
10+	19.4	1,532,211	661,295	776,249	188,800	0.51

<sup>1</sup> *Assets/Liabilities ratio is calculated as mean assets divided by mean liabilities*

# 5. Why Firms Fail

## 5.1 Overview of the Causes of Bankruptcy

### 5.1.1 External Causes of Bankruptcy

Many firms in Canada go bankrupt because of events that are partially beyond their control (Figure 5). These include such events as economic downturn in the market facing the firm, increases in competition, loss of a major customer as the result of relocation or market change, government regulation, technological change, employee fraud, or labour legislation. The survey results show that for the population as a whole these external events are important. Some 68% have been affected by an economic downturn in their market. In addition, increases in competition and customer difficulties (such as the loss of key customers or volatile demand) are also significant factors.

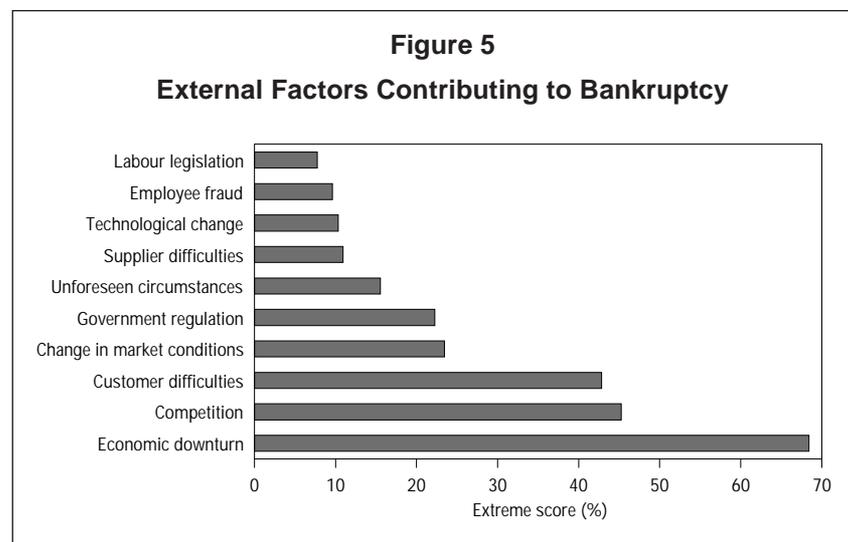
It is noteworthy that when failure is attributed to economic downturn, increases in competition and customer difficulties are also seen to be a problem. Almost two-thirds of firms that failed due to economic downturn in their particular market also had problems due to increased competition and over half due to loss of key customers. Thus, "economic events"(economic downturn in a particular market, increases in competition, and customer difficulties) are related to one another. On the other hand, there is a very limited relationship between these economic events and all other external causes of failure.

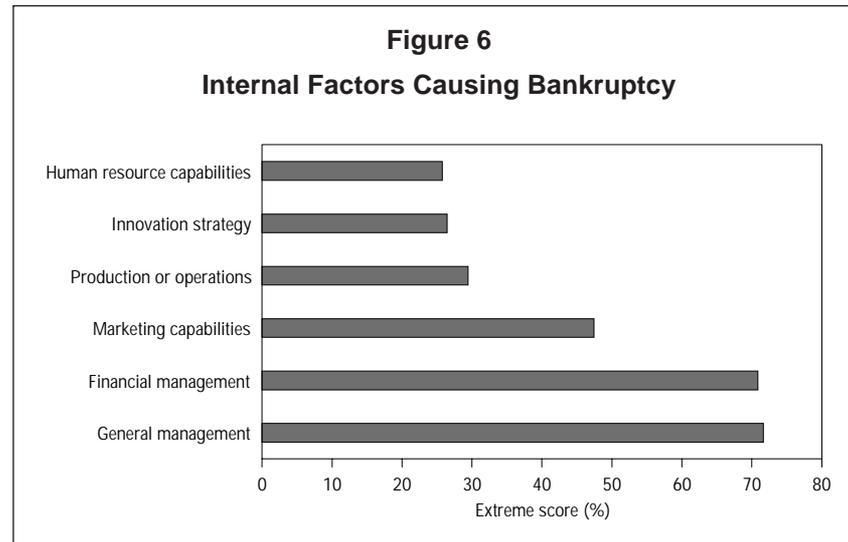
### 5.1.2 Internal Causes of Bankruptcy

While factors beyond a firm's control certainly play a major role in failure, many businesses that go bankrupt also suffer from internal deficiencies. This study finds that while many internal deficiencies are important to some degree, firm failure that occurs as a result of internal problems is primarily rooted in the deficiencies of firm management. Internal causes of bankruptcy include problems associated with general management skills, firm strategies, expansions and buyouts, financial planning, financial management and record keeping, human resources, marketing, and production and operations.

Deficiencies in general and financial management ranked highest: in almost 71% of firms, bankruptcy was attributed to problems in these areas (Figure 6). Managers of bankrupt firms simply lack the necessary knowledge and experience to make their businesses run. In addition, almost half (47%) of firms fail because of poor marketing capabilities.

Weaknesses in human resources, innovation strategy, and production and operations rank well behind problems with management, financial management, and marketing as causes of failure. Firms generally do not fail because they have not developed human resources programs such as training and development; nor do they generally fail because they cannot innovate or because they have inefficient production and operations systems.





Rather they fail because they do not have the necessary management skills. While problems in each of these other areas were found to exist, and will be discussed later, it is in the area of management skills that bankrupt firms face the most problems.

## 5.2 Focus on the Basics

In Canada, firms fail because they simply do not have the basic management skills and characteristics necessary for success. Firms that survive the first years of life successfully develop core competencies—management and financial expertise—as well as market-specific capabilities regarding what to produce, how it is to be produced, and how it will be marketed (*Successful Entrants*). Bankrupt firms, on the other hand, simply do not develop their core capabilities. Managers of these firms lack knowledge and experience and do not know how to financially manage a business. With regard to product-related capabilities, the study finds that bankrupt firms do not establish a market niche, nor do they pay enough heed to location. As a result, they do not develop a customer base to whom they can sell their products. Bankrupt firms simply fail at the basics.

### 5.2.1 The Importance of Management

Strong management skills are found in firms that manage to survive infancy and emerge into their early teen years (*Successful Entrants*). They are also recognized by older small- and medium-sized enterprises as the dominant factor behind their growth (*Strategies for Success*).

This study confirms the importance of strong management to young firms by showing the extent to which deficiencies in management lead to business failure. Businesses overwhelmingly fail because of deficiencies

in management skills: in 71% of firms, deficiencies in both general and financial management are described as the major causes of failure.

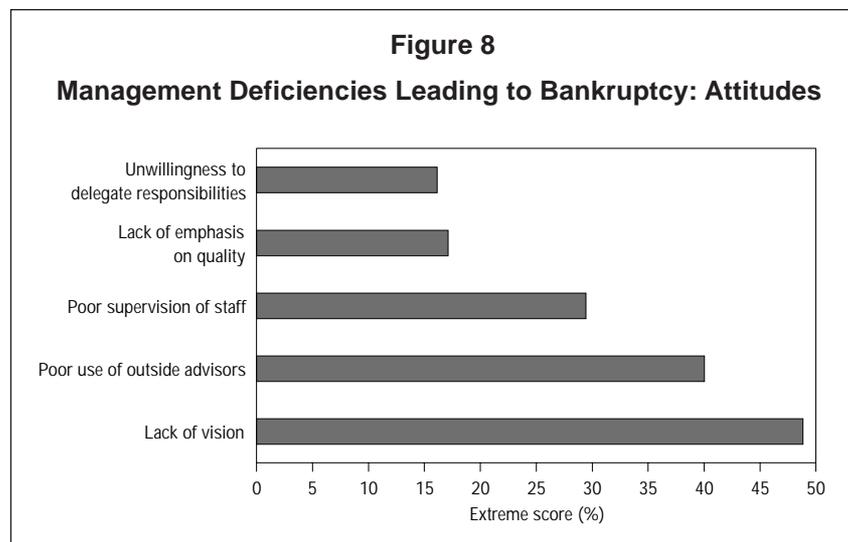
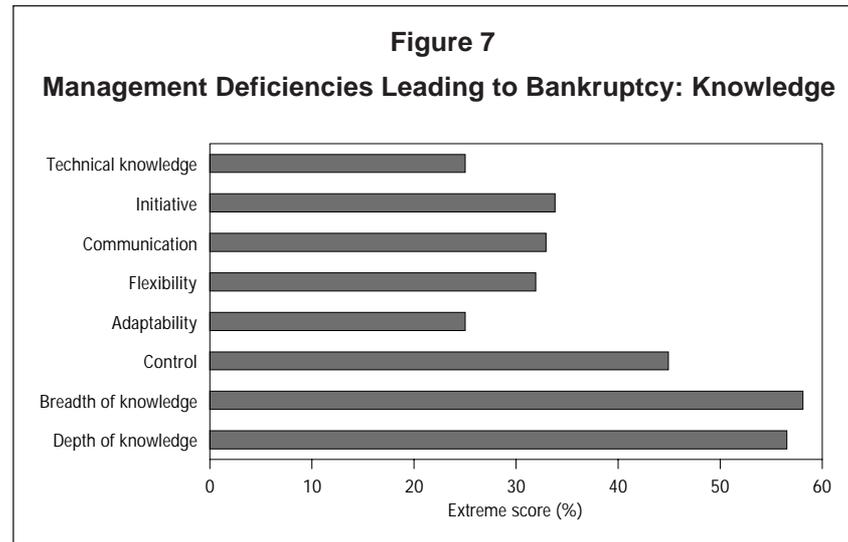
#### 5.2.1.1 General Management Skills

Managerial inexperience and inefficiency are consistent themes in the literature explaining business failure (Haswell and Holmes, 1989; Lussier, 1995). The significance that is placed on management deficiencies as a cause of failure warrants a closer look at the specific areas where these deficiencies are greatest.

Management deficiencies that are seen to contribute to bankruptcy are many: in the area of knowledge, they involve the lack of breadth and depth of knowledge, and technical know-how; in the area of abilities, they involve deficiencies in communication, initiative, and control; in terms of attitudes, management is seen to pay insufficient attention to quality, to lack vision, and to be unwilling to delegate responsibilities; with regard to actions, management is seen to fail when it comes to staff supervision or the use of outside advisors.

#### ***Knowledge skills (breadth, depth of knowledge, and technical know-how)***

Canadian firms go bankrupt primarily because their management lacks both breadth and depth of knowledge: over 56% of bankrupt firms failed largely as a result of these deficiencies (Figure 7). Management of these firms did not have sufficient general knowledge to coordinate activities involving financing, marketing, and operations, nor did it have sufficient specific knowledge within these areas. On average, lack of technical knowledge is not a major failing of the management of bankrupts.



***Abilities (adaptability, flexibility, communication, initiative, and control)***

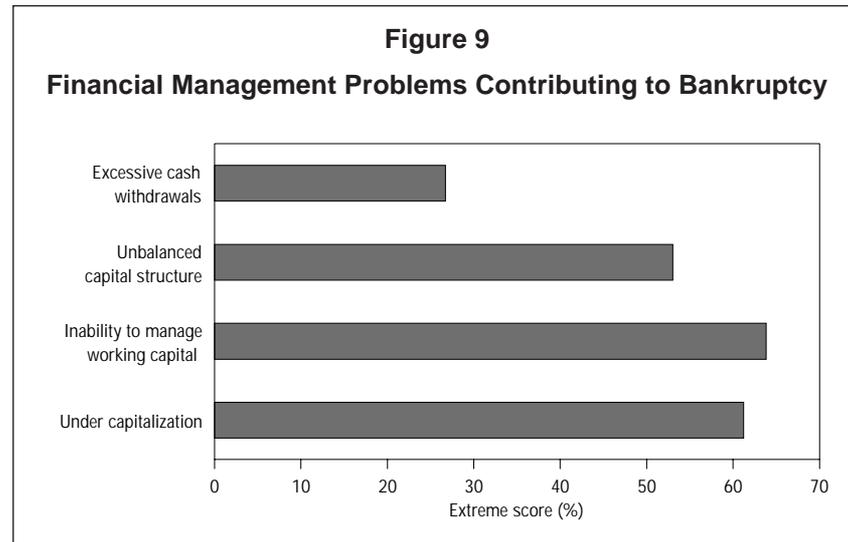
Management's lack of ability generally plays less of a role in failure than lack of knowledge (Figure 7). However, some findings are noteworthy. Lack of control by management is stated by 45% of respondents to have been a major contributor to bankruptcy. This is the result of management inexperience. It becomes an even more important issue for firms with more than 10 employees: control is reported as a causal factor behind bankruptcy in about two-thirds of these firms.

Management's deficiencies in adaptability, flexibility, communication, and initiative were cited as causes of failure in over one-quarter of bankruptcies.

***Attitudes (vision, emphasis on quality, willingness to delegate responsibilities)***

The most critical factor here is lack of vision since half (49%) of firms fail because of this specific deficiency (Figure 8). Lack of vision may be related to experience levels, but also may be related to lack of planning, which is characteristic of bankrupt firms.

Bankrupt firms do not fail because of management's lack of emphasis on quality. While studies of firm success—either measured in terms of growth or survival—show quality as crucial (*Strategies for Success, Successful Entrants*), in only 17% of bankrupt firms is this cited as a cause of failure. While quality is deemed to be crucial for success, a lack of quality is not what is driving firms to bankruptcy.



Likewise, generally a management's unwillingness to delegate responsibilities does not lead these firms to bankruptcy—although it is a greater problem for smaller firms: it is flagged as an important issue for 44% of firms with 1-9 employees but only for 34% of firms with 10 or more employees.

***Actions (supervision of staff, use of outside advisers)***

Firms, whose management lacked sufficient knowledge to operate the business successfully, often failed to acknowledge this deficiency and as a result neglected to call in outside professionals to offset managerial inexperience. Overall, less than one-third of firms failed because of management's inability to supervise staff. However, this figure jumps to 45% for firms with more than ten employees. Staff supervision and lack of control are greater problems as a firm grows larger.

**5.2.1.2 Financial Management Skills**

Planning for the future, steering the present course, and assessing the past performance of a firm are at the core of successful management. Managers of growing firms indicate that they feel business and financial management strategies are critical to their success (*Successful Entrants*). These were also the strategies that small- and medium-sized enterprises felt were behind their success (*Strategies for Success*).

Failed firms also recognize the importance of business and financial management. Almost 71% of bankrupt firms are described as failing because of poor financial management. Three particular problems that arise in this area are an unbalanced capital structure, an inability to manage working capital, and

undercapitalization. A natural question to ask, then, is whether these problems reflect an imperfect capital market or management deficiencies (Hall, 1992). The responses to the survey suggest that most of these problems stem from management failure (Figure 9). About two-thirds of bankrupt firms suffered from management's inability to manage working capital. Over one-quarter had excessive cash withdrawals by the owners. Both of these problems are internal and, as such, reflect managerial failings rather than problems in the capital market.

The issues of an unbalanced capital structure, such as financing long-term assets with short-term debt, and undercapitalization also figure prominently. Indeed, undercapitalization is just as important as the inability to manage working capital. It is more difficult to identify whether these problems stem from management's lack of proper business and financial management skills, or if the problem is related to institutional policies that inappropriately deny some firms access to credit.

To address these questions, the survey investigates whether the problem of financing was external or internal to the firm. Internal problems are those directly associated with a failure of management, and include lack of resources (equity) to pursue different financing options, lack of information about financing options, unwillingness to use alternate sources of funds, unwillingness to give up control of the firm, and unwillingness to take on debt. External problems may be indirectly related to internal failures but they are outside the immediate purview of the firm. The external institutional barriers examined in this survey include barriers created by policies of financial institutions (such as collateral requirements or restrictive terms), the general reluctance to lend on the part of lenders/investors, limited availability of alternate sources

**Table 3**  
**Problems Associated with Access to Credit**

Variable	No Problem	Minor Problem	Major Problem
		%	
<b>External Problems Facing Bankrupt Firms</b>			
Barriers created by financial institutions	57.3	25.5	17.3
General reluctance to lend on the part of lenders/investors	54.4	27.7	17.9
Limited availability of alternate sources of capital	35.9	29.3	34.8
High costs (e.g., high interest rates, high fees)	60.7	30.9	8.3
<b>Internal Problems Facing Bankrupt Firms</b>			
Lack of resources (e.g., equity) to pursue different financial options	36.1	30.1	33.7
Lack of information about financial options	59.2	28.8	12.0
Unwillingness to use alternate sources of funds	70.2	24.0	5.8
Unwillingness to give up control of firm	66.3	20.7	13.0
Unwillingness to take on debt	79.9	14.8	5.2

of capital, and high costs (such as high interest rates or high fees).

The findings of this survey lend support to the argument that external factors can be problematic for some firms, though no one area dominates the others. A limited availability of alternate sources of capital presented a minor problem to 29% of firms and a major problem to 35% of respondents (Table 3). Barriers created by financial institutions presented a major problem to only 17% of bankrupt firms, but were a minor problem to 26%. Bankrupt firms also faced a reluctance on the part of lenders and investors to provide funds: 28% had a minor problem and 18% a major one. High costs of credit were a major problem to only 8% of bankrupt firms but presented a minor problem to another third.

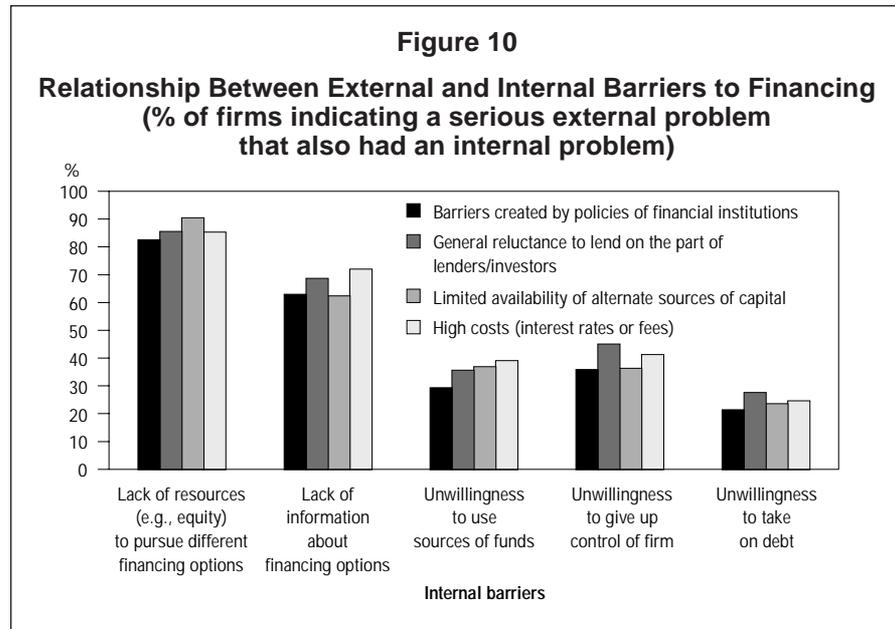
Internal factors were also at the root of many bankruptcies. In particular, one-third of bankrupt firms suffered a lack of resources to pursue different financial options. This was a major problem for smaller firms. Firms, particularly smaller ones, have to develop their internal resources—whether it be retained earnings or share capital—to demonstrate the value of the business and attract investment. Firms that do not do this are limited to fewer capital sources. In addition, some capital problems were due to the attitudes and preferences of owners. One-third of bankrupt firms faced minor or major barriers in their access to capital because the owner was unwilling to give up control of the firm. In addition, financial managers of some firms did not understand their options: in 41%, management lacked information about financial options.

While these various problems faced by bankrupt firms were divided into external and internal causes, it should be noted that the two areas are not independent

of one another. A firm that faces barriers in financial markets may do so because its management is ill-acquainted with alternate sources of funds. External debt finance may be denied a management that is unable to raise sufficient equity capital by persuading equity providers that its prospects are sound.

In order to investigate the relationship between the external barriers to capital and internal problems that are associated with difficulties accessing capital, the percentage of firms that had a major external problem and also suffered from either a major or minor internal problem was calculated (Figure 10). Many of the firms facing external barriers to capital also suffer from a lack of resources to pursue different financing options. Over 82% of firms facing barriers created by the policies of financial institutions lack the resources (equity) to pursue different financing options. An even greater percentage facing the other external problems also lack the resources (equity) to pursue different financing options. Almost as important is the paucity of information about financing options: about 62% of firms facing external barriers do not possess the necessary knowledge to pursue different options. Thus, while external factors do act as a barrier to capital, they are related to a major internal problem.

Some of these connections between external and internal problems may result from imperfect capital markets. If firms cannot raise equity capital because of imperfections therein, then it might be expected that financial institutions, which focus on the adequacy of equity, would be leery of lending as well. However, capital market imperfections cannot be the entire answer. In the case of many external problems, the firm is also diagnosed to suffer from an internal problem that is more closely associated with a management shortcoming, such as lack of information, unwillingness to use some



sources of funds, an unwillingness to give up control, or an unwillingness to take on debt.

### 5.2.1.3 Business and Financial Planning

Good financial management and good business management go hand in hand. Every activity the firm undertakes must be financed: rent must be paid, equipment and material inputs must be purchased, and wages paid (*Successful Entrants*).

It has been postulated that formalized business and financial plans are one element of a firm's success, as they are evidence of a long-term commitment to the firm and, therefore, have a positive effect on the firm's ability to obtain financing. Likewise, formal plans may reassure employees and customers of management's commitment to success, thereby improving employee productivity and customer relations.

However, studies have shown that only about one fifth of young surviving entrants have formalized business or financial plans (*Successful Entrants*). This is about the same proportion as bankrupt firms. Surviving firms, then, do not differ much from bankrupt firms in the extent to which they have business and financial plans.

The size of the firm determines whether it has formalized plans or not. Smaller firms have less of a need to have written business and financial plans as they have fewer employees to whom they communicate plans. Similarly, smaller firms are less likely to use external financing, and thus have less need to communicate these strategies to parties outside the firm (*Successful Entrants*). Since small firms make up the majority of bankruptcies, this explains, at least in part, why planning may not be prevalent among these firms.

Of those bankrupt firms that did have a written business plan, 83% included a financial plan and 74% a marketing/sales plan (Table 4). About one-half (48.6%) included a product development plan, 32% included a human resources plan, and 27% included a technology plan.

**Table 4**  
**The Content of the Business Plan**

Variable	Yes %
Financial plan	83.1
Human resources plan	32.1
Marketing/sales plan	74.1
Product development plan	48.6
Technology plan	27.4

Not only did the same percentage of surviving and bankrupt firms have formalized financial plans but, their content was also pretty much the same. In surviving entrants, 94% of financial plans include a financial budget for the current year, and only marginally fewer include historical data (87%). Financial forecasts were included 56% of the time (*Successful Entrants*). The comparable percentages were only marginally lower in bankrupt firms—89% of bankrupt firms included

included 56% of the time (*Successful Entrants*). The comparable percentages were only marginally lower in bankrupt firms—89% of bankrupt firms included

Variable	Yes
	%
Historical financial data	72.6
Financial data for the current year	88.7
Financial forecasts beyond the current year	58.8

Variable	%
Owner/manager	67.2
Chief financial officer/executive	10.3
Internal accountant	6.4
External accountant or consultant	13.1
Other	3.0

financial data for the current year, 73% included historical financial data, and 59% included financial forecasts (Table 5).

Finally, 81% of surviving firms with a financial plan periodically take stock of where they stand with respect to their goals and follow up by making adjustments to their practices and expectations (*Successful Entrants*). However, less than one-third of bankrupt firms with forecasts in their financial plan actually compare results with forecasts, and only 40% of those take any remedial action when forecasts differ from outcomes. Bankrupt firms, therefore, have the same type of financial plans but they reevaluate them less frequently.

Who writes the financial plan may be as important as what it contains. The owners and managers—generally with little experience—were responsible for the financial plan in 67% of the failed firms (Table 6). About 13% made use of an external accountant or consultant. Only about one in five financial plans was managed by a CA and fewer than one in ten by a CGA or CMA. Over 70% were managed by persons with other qualifications.

A look at surviving firms provides a slightly different picture. While financial plans were reviewed by employees of the firm most frequently (61%), over one-third of these firms had their financial plan reviewed by an independent certified financial advisor (*Successful Entrants*).

Avoiding the use of outside consultants in financial planning meshes with a more general problem: firms that go out of business have managers with only a few years experience, deficiencies in knowledge, and who make infrequent use of outside consultants of any kind. Less

than half regularly consulted lawyers or financial advisors (Table 7). Only 11% conferred with technical/production consultants and less than that with management/market-ing consultants. In conclusion, bankrupt firms lacked the expertise to manage themselves effectively, and they failed to consult outside professionals.

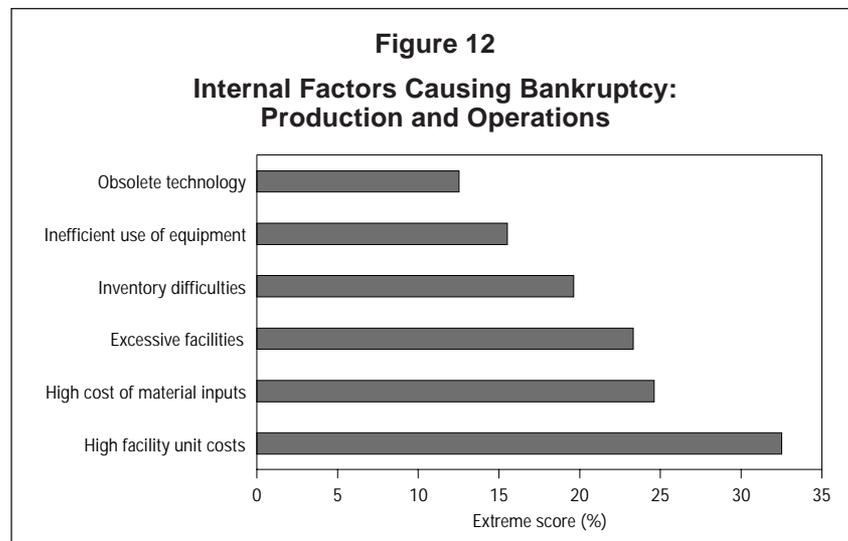
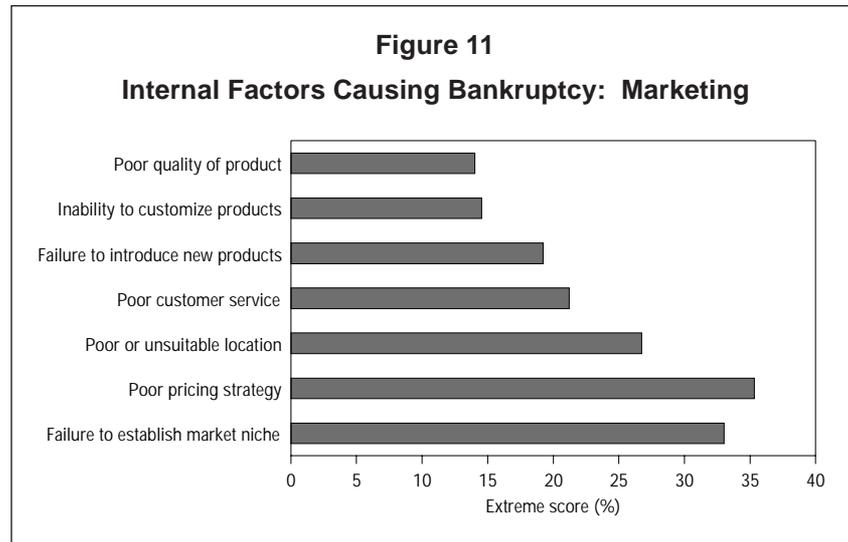
Firm objectives or strategic goals can also affect the likelihood of failure. In particular, too much or too little emphasis on one specific goal can work to the detriment of others. Bankrupt firms, once again, fail here with regards to a key, basic dimension. Almost 54% place too little emphasis on profitability (Table 8). Close behind is the lack of emphasis on stability (44%) and adaptability (42%). Bankrupt firms fail to allow for changes in their environment that require adaptation. Again, these deficiencies contribute to poor management. Managers in bankrupt firms not only lack key knowledge; they also adopt inappropriate goals.

### 5.2.2 Marketing

Successful firms rank marketing strategies as crucial to their success. They rank themselves above their competitors with regards to quality of product, flexibility in responding to customer needs, and user services (*Strategies for Success*). In keeping with the first part of this finding, deficiencies in marketing figure prominently on a list of factors associated with firm failure. For almost half of the firms, bankruptcy is attributed to insufficient marketing skills (Figure 6).

Variable	Yes
	%
Lawyer	44.1
Financial advisors	38.7
Management/marketing consultants	7.5
Technical/production consultants	11.0

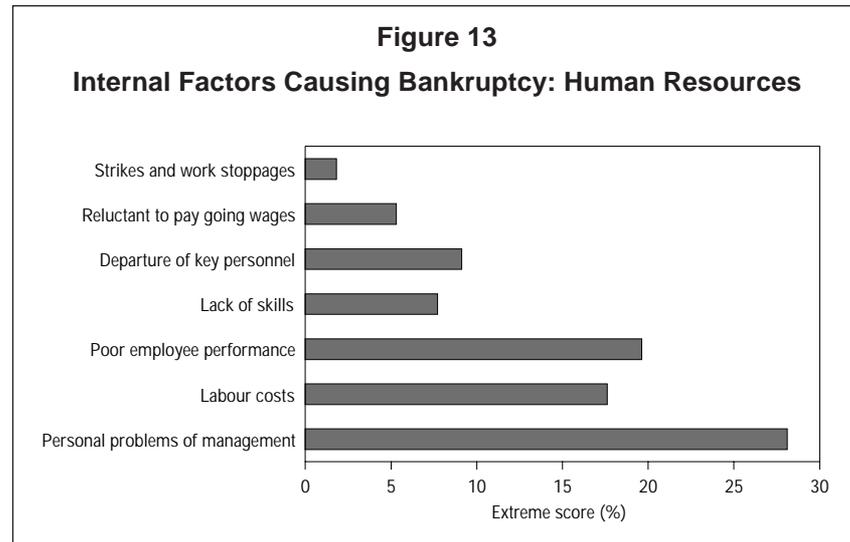
Variable	Too Little	Just Right	Too Much	Does not Apply
	%			
Market share	31.6	32.9	7.6	27.9
Expansion/growth	25.7	23.6	20.4	30.4
Profitability	53.9	24.8	6.6	14.7
Stability	43.7	27.4	3.1	25.8
Adaptability	41.7	25.2	3.3	29.8



Contrary to the finding for successful growing small firms, however, the specific deficiencies in marketing that are associated with bankruptcy do not relate primarily to a lack of emphasis on quality. Only one in five bankruptcies can be traced to poor customer service and just 14% had poor product quality as the cause (Figure 11). For firms that fail, the weakness in marketing is more fundamental: these firms fail to establish a market niche. They simply do not have a market for their product. Over one-third go bankrupt because the firm adopted poor pricing strategies. Over one-quarter of firms fail because the location of the businesses was poor. Once more, bankruptcy is not so much a result of lack of sophistication, but rather a failure to get the basic product strategy correct from the very start.

### 5.2.3 Production and Operations

When it comes to production and operations, surviving entrants attribute their success to such things as high quality supplies, reducing the use of material inputs, reducing production times, and using computer-controlled processes (*Successful Entrants*). Bankrupt firms generally do not fail because of their inability to achieve these sophisticated production goals, but simply because they over-extend themselves with their facilities (Figure 12). About one-third of bankrupt firms failed because the cost of their facility was too high; about one-quarter failed because they had excessive facilities.



### 5.2.4 Human Resources

Previous studies have evaluated the importance of strong human resources to a firm's overall objectives (*Strategies for Success* and *Successful Entrants*). Particular emphasis in surviving firms has been placed on the training and development of employees and the recruitment of skilled employees (*Successful Entrants*). In contrast, human resources problems play a relatively smaller role in bankruptcy. Those that do attribute a role to deficiencies in human resources competencies suggest it is because labour costs are too high and the performance of the employees is poor (Figure 13).

As might be expected for small firms that are run by owner-managers, personal problems of the management stand out as the most important human resources issue. Hall (1992) notes that personal problems are particularly devastating to firms led by "one-man rule". If something happens to the manager, there is no one to step in and take over the management position. Again, this is likely to be particularly problematic for small firms. A lack of depth in management within a small firm may mean that, for instance, the serious illness of the senior manager, will jeopardize its survival to an extent that would never be expected within a large firm (Hall, 1992).

### 5.3 Prevention and Onset

Despite the aforementioned problems, it is natural to ask if firms that fail can or should be saved. The costs of bankruptcy are part of the investment costs society incurs for developing new firms. Bankruptcy is the market's way of eliminating the least efficient and productive firms and reallocating resources to more efficient entrepreneurs. This investment process costs resources—those of owners, workers, and creditors. If something can be done to revive a failing business, the

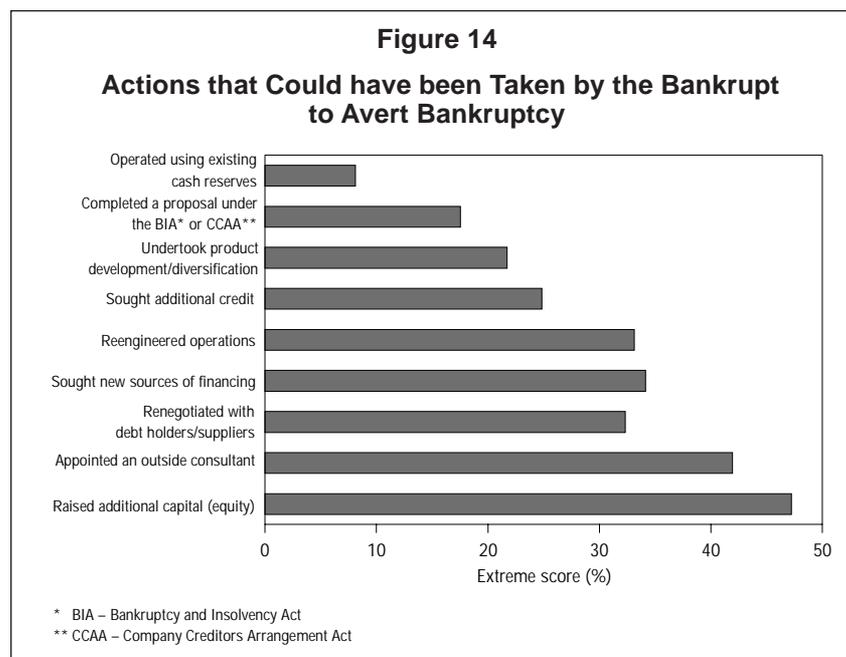
advantages of the investment might be attained without as many of the costs associated with failure. Of course, failure may be beneficial. When there is an obvious mismatch between the skills of an entrepreneur and industry circumstances, it is better to let the resources that are invested in a young firm be reallocated. To investigate these two issues, the bankruptcy trustees were asked whether, in their opinion, the bankrupt firm could or should have been saved.

As it turns out, the causes of bankruptcy involved such fundamental problems that almost 76% of bankrupt firms would not have been capable of surviving even if management had taken corrective actions just when the firm began to fail. In fact, trustees report that 82% of bankrupt firms should not be saved.

What could firms have done previously to avert bankruptcy? Although trustees report that at the time of bankruptcy the majority of these firms should not have been saved, certain preventative actions taken at an earlier date might have put the bankrupt firm in the position where it could and should have been saved. First, raising additional equity is seen to be important; about half of these firms might have been able to avoid bankruptcy had they pursued this option at an earlier stage (Figure 14). This conforms with the observation that many bankruptcies arose because of internal limitations in financing options due to a lack of equity in bankrupt firms. Second, about 42% might have avoided failure had they turned to an outside consultant for help in offsetting managerial deficiencies. Renegotiating with debt holders or suppliers was the suggested solution for about one-third of these firms.

### 5.4 Industry Breakdown

A discussion of the causes of bankruptcy would not be complete without an analysis of industry differences.



An examination as to whether the causes of bankruptcy differ among industries finds that the results discussed in the previous sections are generally robust across industries and, therefore, widely applicable to businesses in Canada.

The top three external causes of bankruptcy were uniformly the top three for all industries (Table 9). Economic downturn was the main external cause of bankruptcy in all industries, although the service industries were slightly less affected. This should be expected as services industries are, in general, less affected by the

business cycle. Increases in competition and customer difficulties are also major external causes. In the construction industry, government regulation plays a major role in bankruptcy.

Internal causes of bankruptcy are also evaluated by industry (Table 10). The three most frequently cited internal deficiencies are general management, financial management, and marketing capabilities in all industries. The manufacturing and business services sectors place greater emphasis on human resources problems than other industries.

**Table 9**  
**Extreme Scores of External Factors Contributing to Bankruptcy: by Industry**

Variable	Manu- facturing	Retail	Whole- sale	Con- struction	Real Estate & Insurance	Accom. & Food	Business Services	Other Services	All Other
	Score (%)								
Economic downturn	68.66	77.78	75.87	75.18	58.47	66.19	58.55	69.04	56.09
Competition	52.52	51.95	39.41	42.79	24.00	46.09	39.06	62.33	32.05
Customer difficulties	54.27	48.53	57.90	38.69	9.89	25.74	40.55	60.20	36.67
Government regulation	13.06	18.39	18.39	36.71	8.63	19.75	9.50	12.95	37.56
Fundamental change in market conditions	27.38	21.29	26.54	15.55	9.66	15.91	19.22	30.39	34.29
Supplier difficulties	15.26	12.05	29.33	21.75	0.00	2.83	6.35	12.59	2.56
Unforeseen circumstances	15.80	14.11	21.79	19.73	15.43	11.54	6.08	16.53	18.82
Fundamental change in technology	19.45	8.07	17.33	13.74	6.44	1.54	7.95	14.58	10.53
Employee fraud/theft Labour or industrial relations legislation	7.39	5.76	6.75	8.56	11.89	10.56	6.19	7.71	18.86
	4.97	3.21	10.52	13.20	0.00	4.62	3.90	9.73	13.89

**Table 10**  
**Extreme Scores of Internal Factors Causing Bankruptcy by Industry**

Variable	Manu- facturing	Retail	Whole- sale	Con- struction	Real Estate & Insurance	Accom. & Food	Business Services	Other Services	All Other
	Score (%)								
General management	75.05	66.42	77.88	81.57	38.49	63.94	75.82	75.89	73.41
Financial management	71.41	64.41	79.67	78.72	37.35	71.19	57.22	83.79	71.74
Marketing capabilities	60.94	51.25	56.33	37.35	13.19	48.89	48.56	47.49	45.59
Production and operations	38.33	20.07	37.45	34.58	3.08	20.53	20.33	49.96	31.97
Innovation strategy	47.34	23.31	25.62	30.33	5.98	21.33	13.65	42.51	21.71
Human resource capabilities	33.02	19.96	25.33	25.92	0.00	24.97	32.83	36.82	24.12



## 6. Learning by Doing

The first section of this study provides an overview of the causes of business failure in Canada that prevail in the general population. Overviews may hide important differences across subsets of the population. Firms are not homogeneous entities. The problems that they face may differ depending on their stage of life. This section describes how the causes of failure differ between young and old firms.

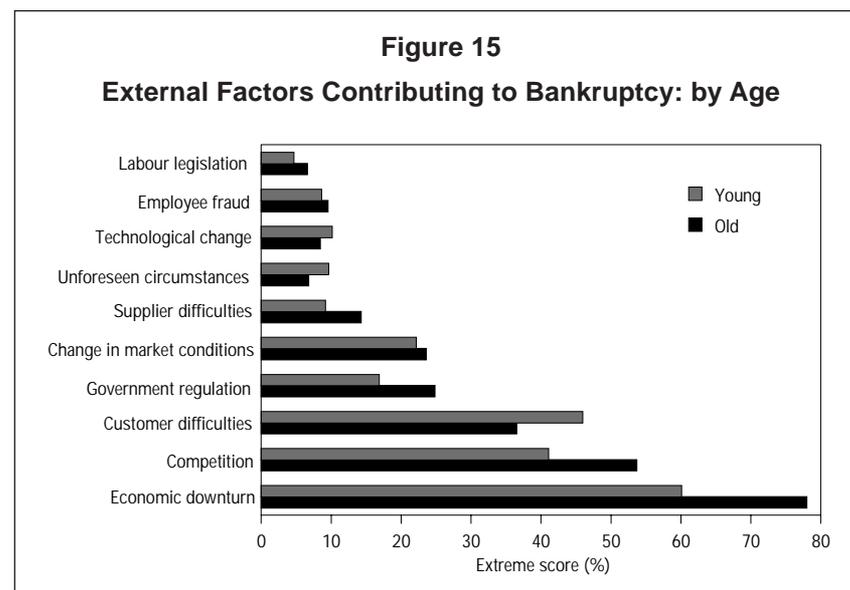
Learning-by-doing characterizes the early years of a firm's life. New firms generally start life with owner-managers who have little experience. Initially, the owner-managers of these firms have to master basic skills. As a business grows, management must tackle a new set of problems that are associated with the increased complexity of running an older and often larger firm. The nature of the different issues faced by firms of different ages provides a useful insight into the problems that firms must solve as they grow older.

In accordance with this view of the progression that firms make as they mature, young firms (those that incorporated in the 1990s) were more likely to report that internal factors played a greater role in the bankruptcy than did external factors (53% versus 47%). Older firms (those incorporated before 1990) report the exact opposite: external causes played a greater role in their demise (54% versus 46%). In the early stages of life, internal deficiencies are so prevalent that most bankruptcies

occur for these reasons. As firms mature, many of these internal competencies improve. At this stage, external shocks begin to play a larger role as the contributing factor to bankruptcy.

While older firms were more likely to fail due to external shocks, both groups of firms were affected by external factors. But the external shocks that contributed to bankruptcy differ by age. Older firms were more likely to fail due to economic downturn and increases in competition than were younger firms (Figure 15). Younger firms, on the other hand, were more affected by customer difficulties—namely, the loss of key customers or volatile demand: 46% failed for this reason compared with only 37% of older firms.

With respect to internal factors, the relative importance of problems in the six major functional areas is the same for young and old firms (Figure 16). General and financial management are the biggest problems, followed by marketing capabilities. Production and operations, innovation strategy, and human resources are all less important, although all are more problematic for younger firms. With the exception of general management, these problems become less important factors as firms age—probably because management gains experience. In particular, human resources issues are more easily dealt with as a firm ages and management gains experience.



## 6.1 General Management

Almost the same proportion of young and old firms fail (72% and 68%, respectively) because of weak general management (Figure 16). But within the area of general management, there are differences in the areas where specific problems arise. The management of younger firms is more likely to lack knowledge (Figure 17). As already discussed, managers of younger firms have less experience, both in a management role and in the industry. As the firm gets older, management gains knowledge and experience. But deficiencies in knowledge remain a major problem and are still responsible for failure in over half of older firms.

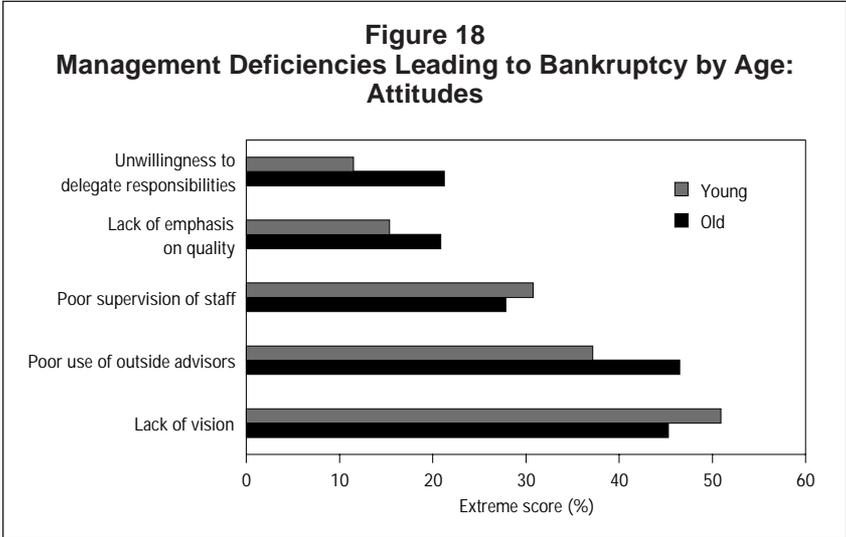
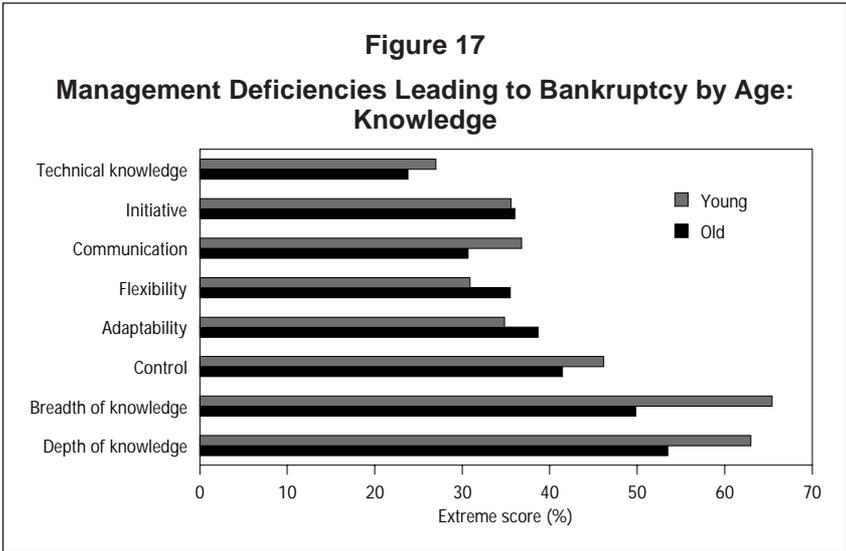
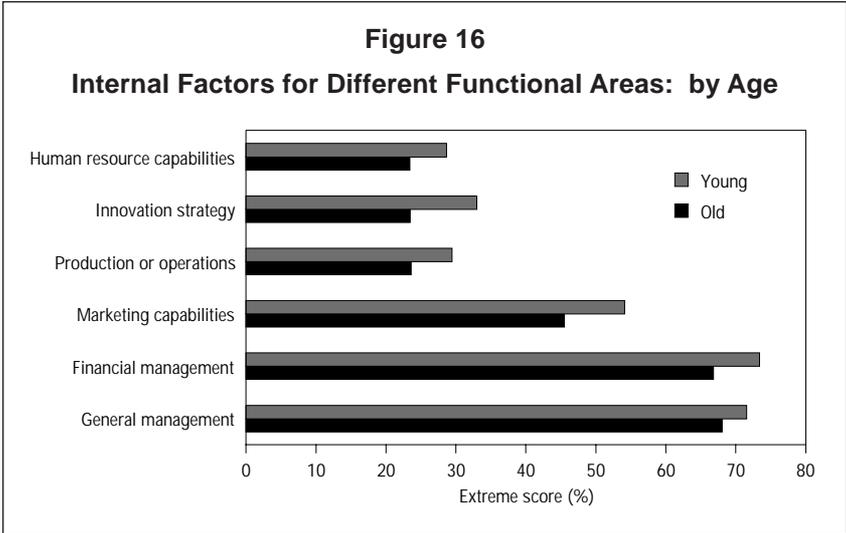
Other areas where improvements occur over time are: lack of vision, control, communications, technical knowledge, and inadequate supervision of staff (Figures 17 and 18). On the other hand, problems with initiative do not become less important as firms age. Finally, some areas become more problematic: poor use of outside advisors, lack of emphasis on quality, unwillingness to delegate responsibilities, and a lack of flexibility or adaptability. Problems in these areas become relatively more important as the business ages for one of two reasons. Either these problems become more critical as the firm gets older, or management fails to improve its capabilities in these areas.

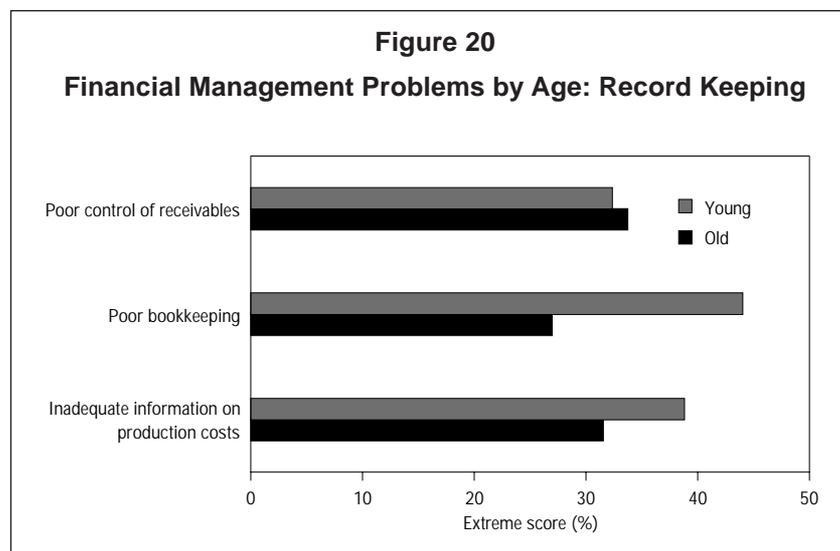
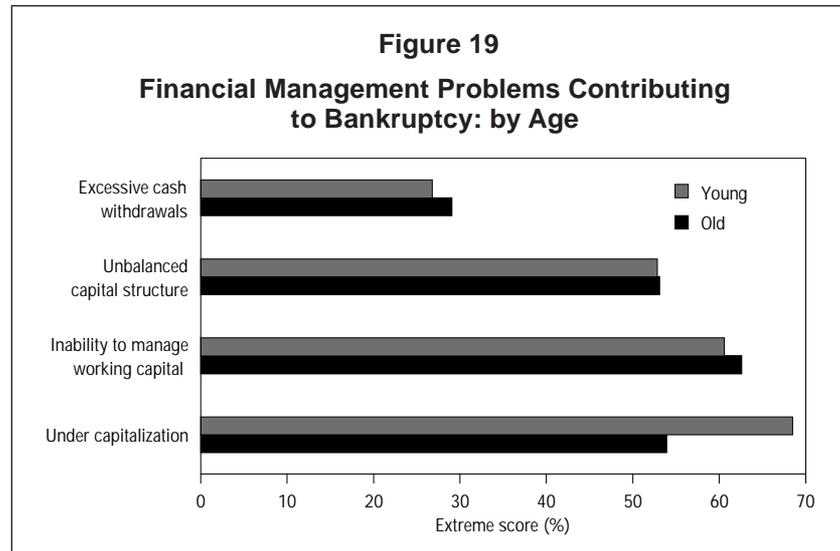
## 6.2 Financial Management

The greatest problems in the area of financial management are the same for both old and young firms: an inability to manage working capital, undercapitalization, and an unbalanced capital structure (Figure 19). In the two areas where financial problems clearly stem from internal deficiencies (inability to manage working capital and excessive cash withdrawals), problems are just as critical in older as in younger firms. For the financial problems that cannot be identified as either resulting just from internal or external barriers (undercapitalization and unbalanced capital structure) we see that older firms have less difficulty with the former than with the latter. The management of older firms still have equally intense problems from a lack of financial management skills and lack of balance in their capital structure, but older firms have gained credibility in the eyes of lenders/investors and have reduced their problems with undercapitalization problems.

Both old and young firms suffer from a limited availability of alternate sources of capital and a lack of resources (equity) to pursue different financing options (Table 11). The former problem is more critical for younger firms. On the other hand, there is very little difference between the percentage of young and old firms lacking resources to pursue different financing options.

Variable	Old			Young		
	No Problem	Minor Problem	Major Problem	No Problem	Minor Problem	Major Problem
<b>External Problems Facing Bankrupt Firms</b>						
Barriers created by financial institutions	57.17	26.72	16.11	57.32	29.07	13.61
General reluctance to lend on the part of lenders/investors	56.38	26.76	16.85	52.43	29.24	18.33
Limited availability of alternate sources of capital	46.15	26.55	27.30	29.91	30.55	39.53
High costs (e.g., high interest rates, high fees)	59.95	32.33	7.72	59.40	34.18	6.42
<b>Internal Problems Facing Bankrupt Firms</b>						
Lack of resources to pursue different financial options	36.22	28.10	35.68	32.66	32.25	35.09
Lack of information about financial options	63.31	29.76	6.92	58.06	30.07	11.87
Unwillingness to use alternate sources of funds	72.01	22.45	5.53	68.85	25.83	5.32
Unwillingness to give up control of firm	56.61	24.05	19.34	66.96	20.91	12.13
Unwillingness to take on debt	82.51	12.71	4.77	78.78	16.56	4.66





Areas of financial management where older firms have fewer problems include bookkeeping and information on production costs (Figure 20). These are skills that can be learned and therefore improve as management gains experience. Thus, age brings some improvement in skills associated with the monitoring process, but little progress in the extent to which unbalanced capital structures are overcome. The latter confirms the finding that initial problems in financial structure are difficult to overcome and continue to haunt firms as they age (Baldwin and Johnson, 1997).

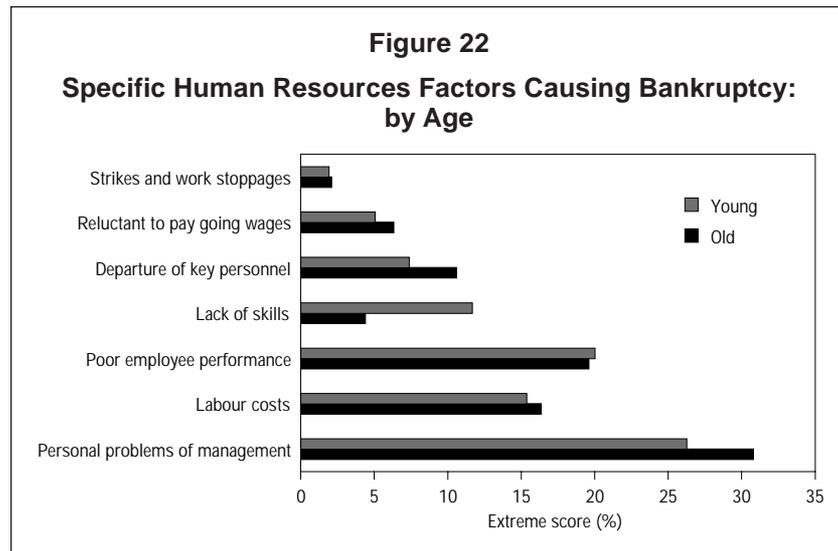
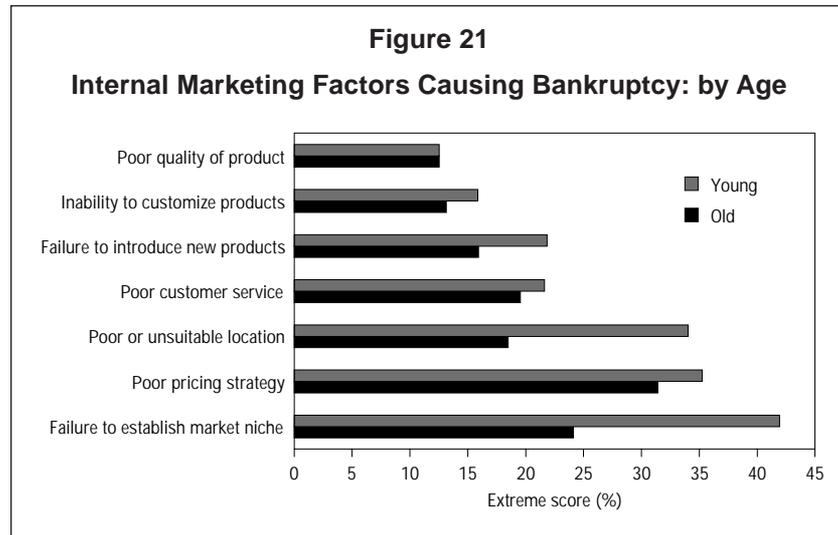
### 6.3 Marketing

After deficiencies in general and financial management, the third most important problem for both young and old firms is the general area of marketing (Figure 16). When it comes to specific marketing deficiencies, the problems that young firms face are fundamental. Young

firms that go bankrupt do not have a product that sells (Figure 21). They fail to establish a market niche or to situate themselves in suitable geographic locations. As firms age, these problems are reduced somewhat, although they often remain critical. Poor pricing strategies are also a problem for both young and old firms; in fact, how businesses price their products becomes relatively more important with time.

### 6.4 Human Resources

While the general functional area of human resources is less of an issue for older than for younger firms (Figure 16), there are two interesting differences in the specific human resources problems faced by those two groups (Figure 22). First, younger firms fail because they lack skilled employees whereas older firms do not experience this problem to the same extent. On the other hand, older firms are more likely to have suffered from



a departure of key personnel. The task facing a new firm then is to find skilled personnel, and as it grows older, to keep those who are critical to its operations. High labour costs and personal problems of management were more of an issue for older firms, though the differences are neither large nor statistically significant.

### 6.5 Production and Operations

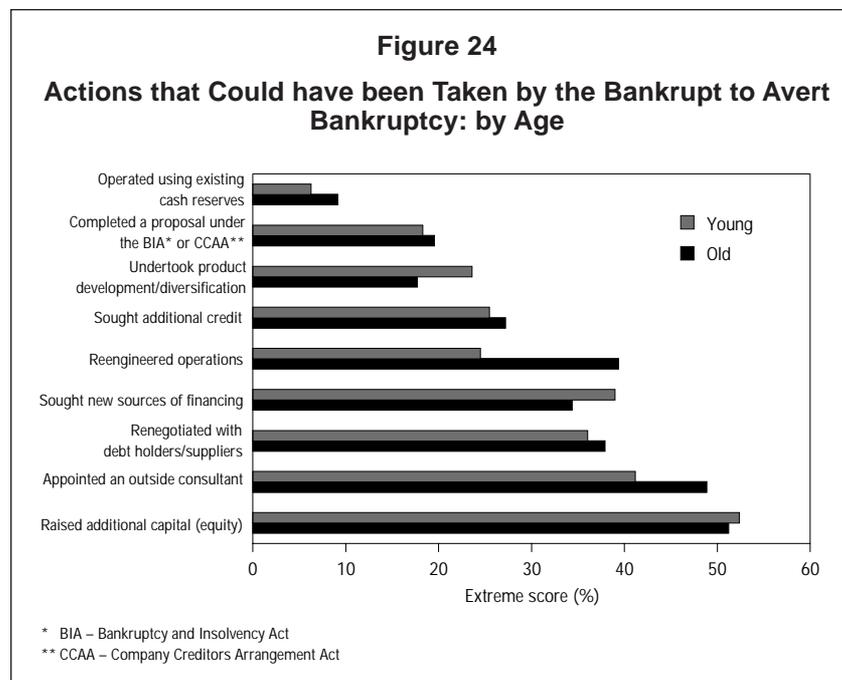
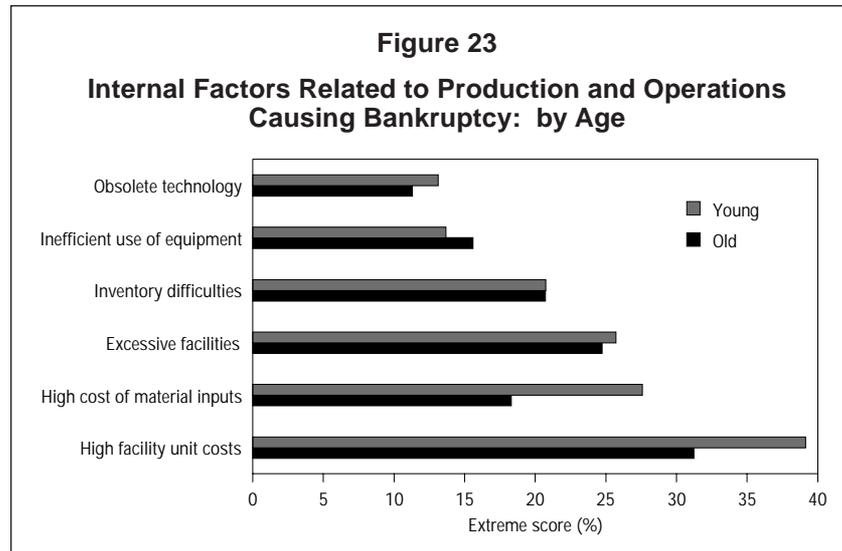
When specific problems associated with the production and operations of bankrupt firms are examined, young firms are seen to be more vulnerable than their older counterparts to high costs, both of material inputs and of facilities (Figure 23). As a firm ages, this becomes less of a problem—either because older firms are able to develop more advantageous supplier relations, because they grow into their facilities, or because these things are simply less critical for older firms. However, keeping abreast of the latest technology becomes more important as firms age.

### 6.6 Prevention of Bankruptcy

The steps that old and young firms might have taken to deal with the problems in order to prevent bankruptcy are very much the same (Figure 24). Additional capital (equity) is key to both groups of firms. Both groups should have raised additional equity, sought new sources of financing, and undertaken product development/diversification. Older firms, on the other hand, have a greater chance of survival if they reengineer operations or appoint an outside advisor.

### 6.7 Conclusion

The management of new firms face a learning curve. In the early stages of life, so much needs to be learned that most bankruptcies occur because of internal deficiencies. Younger firms' deficiencies in a broad range of areas contribute to their failure. While there is no single



area where an improvement offers a magic solution, there is one where problems are more pervasive than others. It is the lack of breadth and depth of fundamental knowledge about management that is most serious in younger firms. The fact that younger firms experience greater incidences of failure due to undercapitalization is due in part to deficiency in management. These problems range from inadequate record keeping to poor knowledge of financial sources. Young firms also experience relatively more severe human resources problems, particularly in finding skilled employees. Similarly, both production (high costs of inputs and facilities) and marketing (poor pricing, lack of market niche, unsuitable location) competencies are more problematic for younger firms than is the case for more mature firms.

There are certain competencies that older firms develop, since the passage of time confers benefits of experience. On the other hand, there are other areas where older bankrupt firms do not outgrow the problems that are symptomatic of younger firms—where bankrupt firms of all ages share certain core problems. Both groups lack general and financial management competencies. Their management lacks both breadth and depth of knowledge, as well as vision. This leads to a poor financial structure in terms of both overall capitalization, as well as the means by which assets are backed. There are core solutions that are applicable to both: an increase in equity financing and appointing outside consultants.

Nevertheless, more mature firms have developed enough core competencies to allow them to survive several years of operation. Their failings are highlighted when faced with adverse economic conditions. While many of the problems that they face are similar to those found in younger firms, some new problems that are

associated with the increased complexity of running an older and often larger firm arise. These include an unwillingness to delegate responsibilities, a lack of emphasis on quality, poor use of outside advisors, and the loss of key personnel.



## 7. External Shocks and Internal Deficiencies

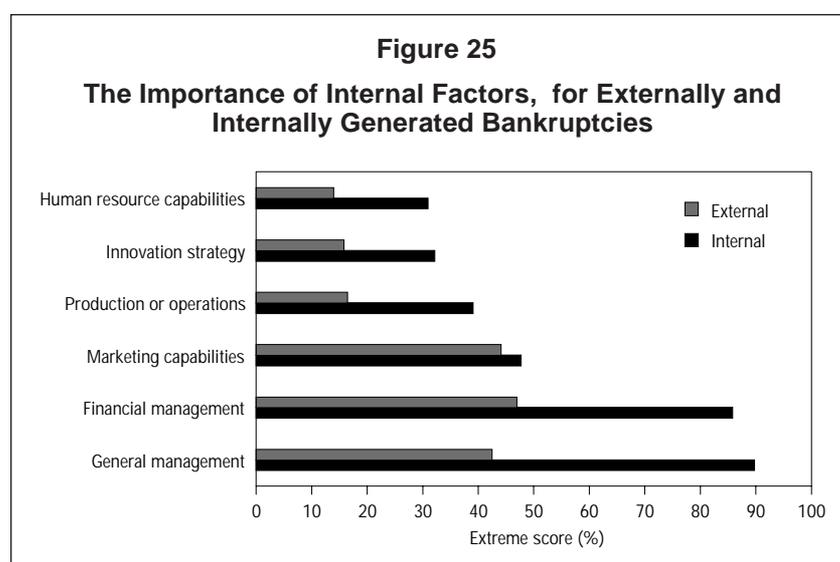
Almost half of bankrupt firms in Canada fail primarily due to problems within the business. An examination of these firms reveals what basic internal strengths need to be developed in order for a firm to survive. However, just over half of firms go bankrupt because they could not survive external shocks, mainly economic downturn and increases in competition. As will be seen, these firms generally mastered more of the basics, but they did not develop all of the necessary internal competencies to survive an external shock. This section provides an overview of the basic internal strengths that, if lacking, will cause a firm to fail when adverse external conditions prevail. As well, it delves into the issue of what internal competencies must be developed to protect a firm against external shocks once the basic strengths are mastered.

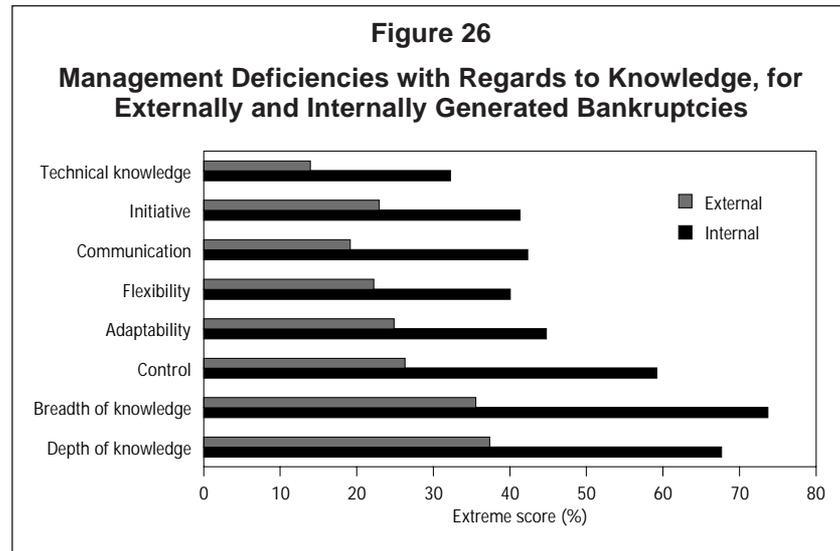
In order to compare the causes of failure, the firms in this study are divided into two groups: those that failed primarily for internal reasons, and those that failed primarily for external reasons. Trustees were asked to assign scores to each of the internal and external factors. The scores jointly sum to 100. When the score was greater than or equal to 51% for external causes, this was classified as failure due to external causes; otherwise, it was classified as an internal failure. Differences in the importance of the general functional areas (management, finance, human resources, etc.) were then examined for the two groups.

Firms that fail for internal reasons do so primarily because of deficiencies in general and financial management (Figure 25), which are cited as the causes of bankruptcy in 90% and in 86% of these firms, respectively. Deficiencies in marketing capabilities also rank high for this group: in almost one-half, failure is attributed to this general area. In contrast, in those that failed primarily for external reasons, failure is attributed less to internal factors in general, even though the most important internal contributing factors are the same. In about half, failure is attributed to deficiencies in general and financial management. Thus, these areas are clearly critical to all firms.

As will be seen, internal deficiencies exist regardless of whether internal or external forces were primarily responsible for the firm's demise. This indicates the overriding importance of rectifying internal deficiencies. Since general management skills are the main problem for both internally and externally generated failures, this is an area where improvements promise benefits in both cases.

Even if general management deficiencies are less frequent in externally generated failures, they still accompany failure in more cases than any other problem (Figure 25). When a firm fails primarily due to external shocks, this is partly due to internal problems.





It is noteworthy that marketing capabilities play a relatively more important role in external failures (Figure 25). While poor marketing capabilities play a far less significant role in failure than deficiencies in management for internally generated failures, they are equally important for externally generated failures. Therefore, while marketing capabilities are less important as basic strengths that firms need to develop in order to survive the early years of life when death rates are so high, they are critical in the face of an external shock—probably because the major external shocks involve a loss of customers.

Deficiencies in production and operations, innovation strategy, and human resource capabilities are less responsible for failure than are problems in management, finance, and marketing. However, firms that fail for internal reasons are more affected by these than firms that fail for external reasons.

### 7.1 General Management

While management failure is the most important factor for both internal and external failure (Figure 25), the areas in which specific deficiencies arise (knowledge, abilities, attitudes, and actions) need not be the same (Figures 26 and 27).

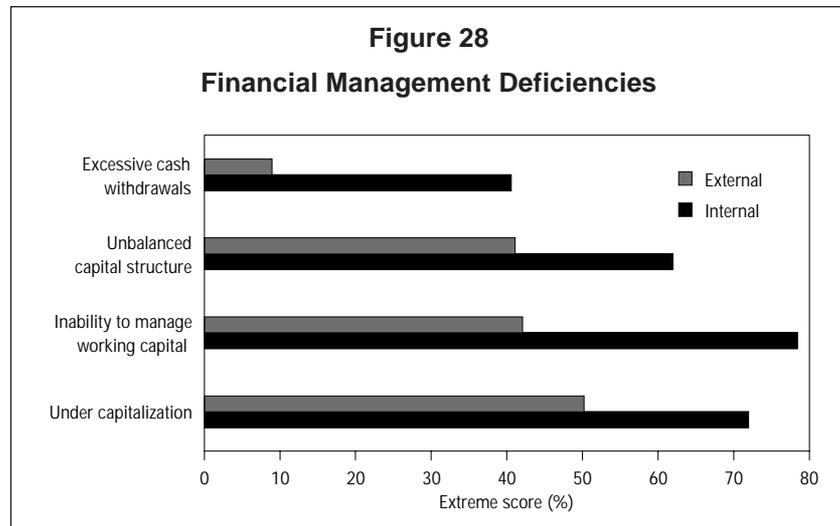
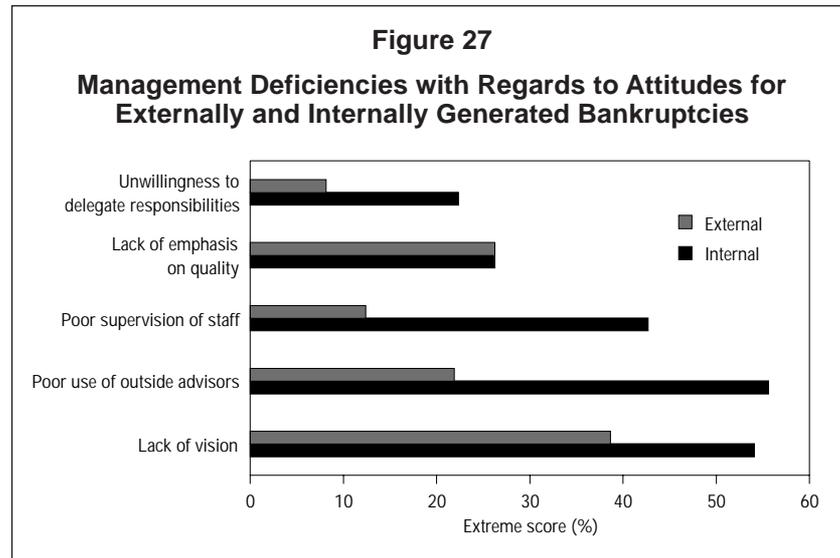
Internal difficulties arose from lack of knowledge, lack of use of outside advisors, and lack of control. In all three cases, these problems are considerably reduced but are still the most important deficiencies for externally generated failures. While nearly 70% of firms that failed for internal reasons did so because of a lack of breadth or depth of knowledge, this is still the case for a little less than 40% of firms that failed primarily because of external shocks. Externally generated failures also experience fewer management problems related to delegation of

responsibility, a lack of emphasis on quality, and the supervision of staff.

In other areas, problems are relatively greater for externally generated failures. Problems in attitudes, such as vision; abilities, such as initiative, communication and flexibility; and technical knowledge all become more important relative to other problems. These are generally the characteristics of management in more sophisticated firms, and are, therefore, relatively more important for that stage of life where failure results from an inability to respond to external events, rather than deficiencies in the basic internal competencies. Therefore, there are clearly a larger body of problems, any of which can bring down a firm once it is at the stage where it is more susceptible to external events. In this sense, life becomes more complex for larger, older firms. There are a wider range of problems that need to be addressed in order to avoid bankruptcy that arises from external shocks.

### 7.2 Financial Management

Overall, specific problems in financial management are substantially diminished for externally versus internally generated failures (Figure 28). Externally generated failures are not as affected by unbalanced capital structures, the inability to manage working capital, and undercapitalization. But each of these problems still remained and, in fact, had about the same relative importance for both internally and externally generated failures—with the possible exception of under-capitalization, which is relatively more important for the latter. Excessive cash withdrawals, while an important problem for internally generated failures, are not very important in the case of externally generated failures. Thus, a strong financial structure is critical for all firms, whether to build up internal competencies or, once these competencies exist, to protect against external shocks.



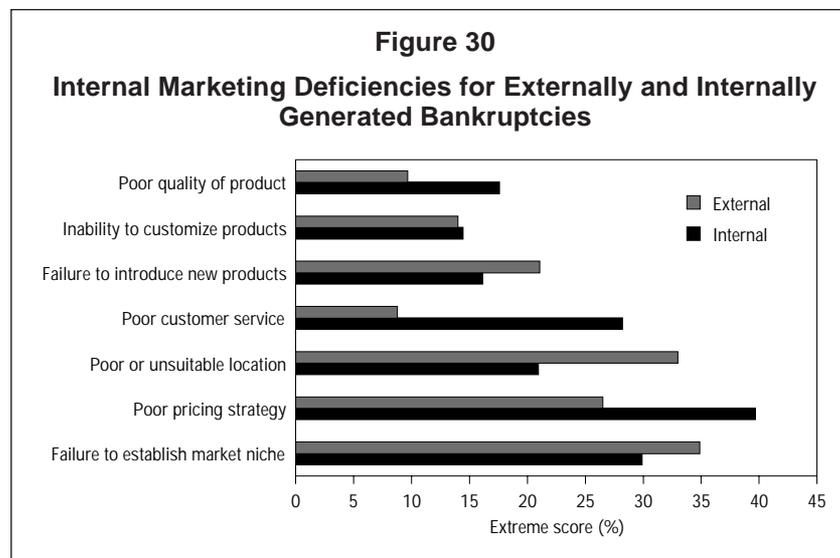
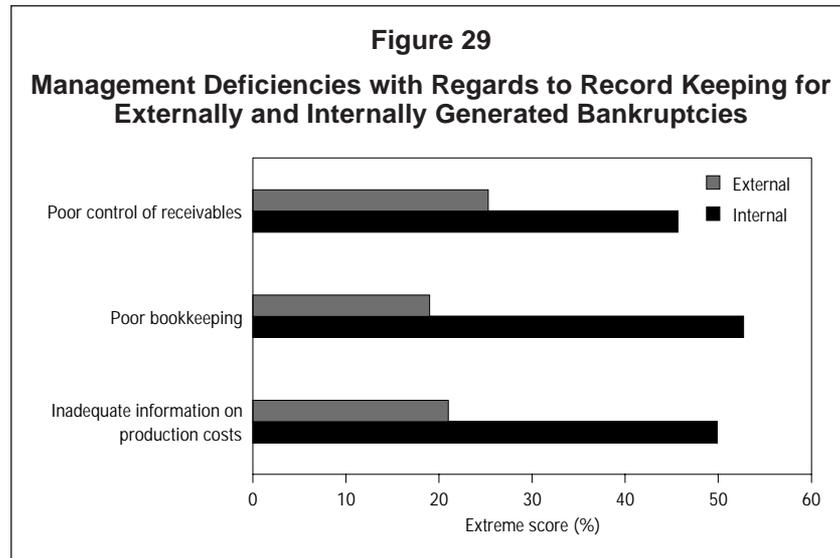
There is, however, a notable difference in management's monitoring abilities between internally and externally generated failures (Figure 29). In particular, very few firms that failed due to external shocks had problems associated with bookkeeping or inadequate information on production costs. In contrast, these were problems for over 50% of internally generated failures. Poor control of receivables becomes relatively more important for externally generated failures. Economic downturns slow down the payment of receivables and leave firms that did not control receivables in a particularly vulnerable position.

### 7.3 Marketing

In terms of general competencies, general marketing problems become relatively more important in externally generated failures (Figure 25). However, in contrast to

the areas of general management and financial management, where the importance of most of the specific problems are relatively similar for both externally and internally generated failures, in marketing there is a substantial shift in the specific areas that are associated with bankruptcy caused by an unfavourable environment (Figure 30).

Poor pricing policy dominates as the most important problem for firms that fail due to internal reasons. Failing to establish a market niche and poor customer service are next. By way of contrast, firms that fail for external reasons have substantially reduced their pricing and customer service problems, though they have not resolved the market niche problem. Concomitant with this issue is one of poor or unsuitable location, which is really just another facet of the lack of a market niche in industries like retail trade.



In summary, solution of the basic pricing problem is necessary to reach the stage in life where external events become a threat. But when they do so, basic problems that have to do with location and nature of the product are the areas in which marketing thrust and expertise are the most critical internal factors that accompany bankruptcy.

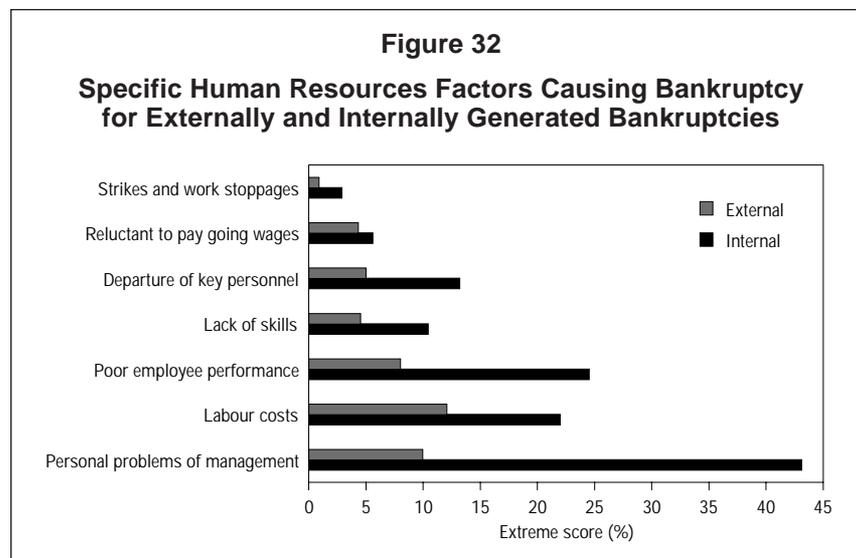
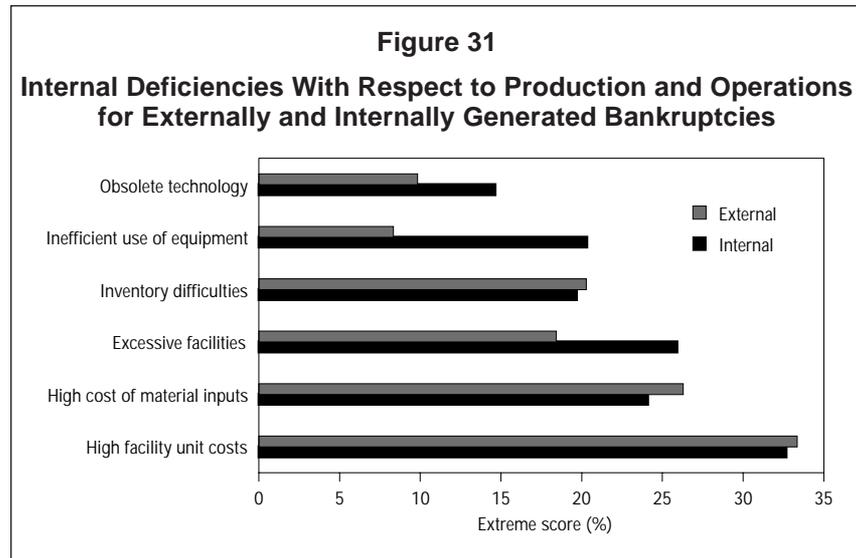
#### 7.4 Production and Operations

When compared to the other functional areas, the general area of production is much less important for externally generated than for internally generated failures (Figure 25). But the difference occurs in only three specific areas: obsolete technology, inefficient use of equipment, and excessive facilities (Figure 31).

Elsewhere (high facility unit costs, high costs of material inputs, and inventory difficulties), the production problems associated with bankruptcy are just as high for external failures as they are for internal failures. Improvements in these areas would have the highest payoff—in the sense that they would benefit the firm irrespective of the source of failure.

#### 7.5 Human Resources

Human resources problems are not very important as a general factor for externally generated failures (Figure 25). This is also the case for most of the specific human resources problems (Figure 32). Firms that fail for external reasons are at the stage where human resources issues are no longer critical.



The specific problems for firms that fail due to internal problems are the personal problems of management, labour costs, and poor employee performance. However, each of these has become relatively unimportant in the case of externally generated bankruptcies. Human resources concerns may be critical to the growth of emerging firms (*Successful Entrants*), but not in the case of externally generated failure.

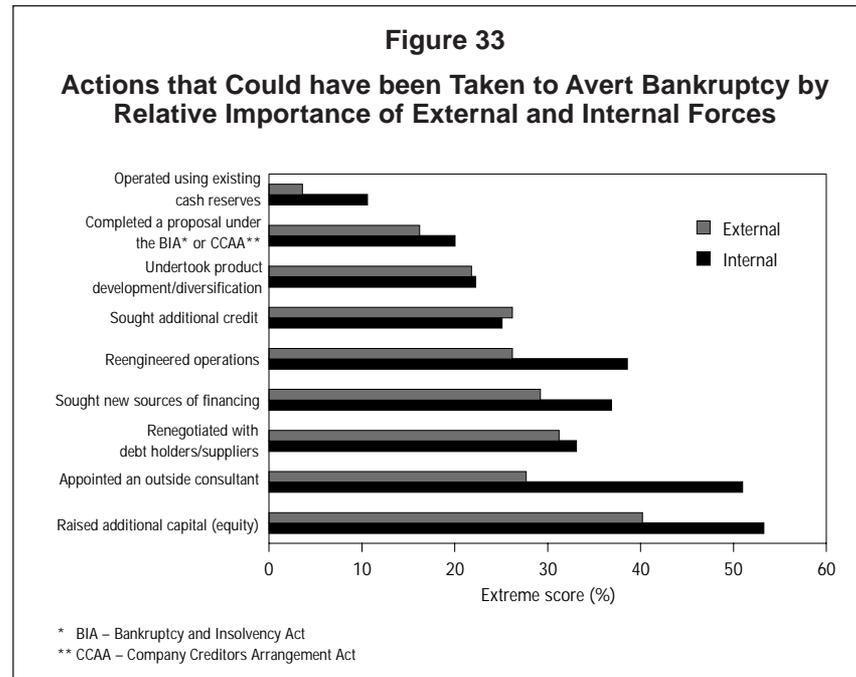
### 7.6 Prevention of Bankruptcy

In terms of the prevention of bankruptcy, for firms that failed because of internal factors, about one-half might have saved themselves had they raised additional equity or appointed an outside consultant (Figure 33). Almost 39% should have reengineered operations. In general, there were fewer preventative actions that could

have been taken by firms that failed for external reasons; it was, after all, an external shock that primarily caused failure. However, since external failures are accompanied by internal problems, there were some areas where they might have taken actions to prevent bankruptcy. Salvation here was also most likely had they raised additional equity or renegotiated with debt-holders/suppliers. It is noteworthy that appointing an outside consultant was less likely to save a firm that eventually fails due to an external shock, while it is crucial for internally generated failures.

### 7.7 Summary

Almost half of the corporations in Canada that go bankrupt do so because they did not develop the basic internal strengths to survive. Overall weakness in



management, combined with a failure to establish a market for their product, cause these firms to fail. However, over half of bankrupt firms did develop these strengths, at least to the point that the firm did not fail only because they lacked these skills. Nevertheless, these firms did not develop their internal competencies to the point necessary to ride through an external shock, such as an economic downturn in their particular market or an increase in competition. While poor management skills were generally less of a factor in firms that failed for external reasons, managerial deficiencies in terms of lack

of vision, initiative, flexibility, and adaptability contributed to externally generated failure arising from external shocks. In addition, a strong financial structure is critical for all firms, whether to build internal competencies or, once these competencies exist, to protect against external shocks. Likewise, competencies in marketing are critical to protect firms against external shocks. Solving problems in all of these areas is critical to avoiding bankruptcy—even in the case where external factors played a major role in the bankruptcy.

## 8. Conclusion

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Bankruptcy is the market's way of eliminating inefficient and unproductive firms. However, it is not without its costs. Owners and managers lose the time and money invested in the business; creditors and investors often do not receive a complete pay-back for their financial support of the business; and employees lose their jobs and back wages.

This study provides a comprehensive overview of the causes of bankruptcy in Canada. Basic statistics draw a picture of a typical bankrupt firm. While the rates of bankruptcy differ across the country and by industry, the causes of bankruptcy are quite similar.

Small, young firms are most at risk, primarily because their management has not yet built up the experience and knowledge necessary to run a business. About half of young firms that go bankrupt do so primarily due to factors beyond their control, namely economic downturn and increases in competition, while the other half fail primarily due to basic internal weaknesses. Even in the case of bankruptcies that originate in external events, internal weaknesses are important factors contributing to failure.

Bankrupt firms in Canada lack the basic competencies to survive. It is not deficiencies in sophisticated management techniques that cause bankruptcies; it is a lack of ability to master the basics. Managerial inexperience and inefficiency are consistent themes in the literature explaining bankruptcy. This study confirms that, for bankrupts as a whole, the most fundamental internal problems relate to poor overall management skills. In particular, these include management's lack of knowledge, lack of vision, and poor use of outside advisors. With the exception of vision, all of these improve as the firm ages, although deficiencies in these areas still are important contributors to failure in older firms.

Firms that go bankrupt in Canada also lack the basics in marketing capabilities. Marketing strategies attract clients and a firm cannot succeed without customers. The problems that bankrupt firms face in this area are substantial—they fail to establish a market niche and often fail to locate in a suitable location.

As is supported in the literature, imperfect capital structures, whether due to institutional constraints or managerial inexperience, were also a major factor

contributing to failure for both young and old firms. While skills associated with the monitoring of finances (book-keeping and control of receivables) improve noticeably for firms as they age, imperfect capital structures remain a problem. It is sometimes suggested that Canada's financial sector may not do enough for small young firms to help them get started. This study finds that often institutional barriers to capital do present a major problem to these firms. However, these barriers are almost always associated with internal management deficiencies. In particular, a large percentage of firms that face an external capital constraint also lack the knowledge to pursue different financing options. Moreover, imperfections in capital markets feed on themselves. An inability to raise equity capital is associated with deficiencies of funds received from financial institutions.

Some firms fail simply because they could not build the basic internal competencies to survive. These are the businesses that fail due to factors within the control of owners or managers. The basic internal competencies that are most frequently lacking here are strong general and financial management skills.

Others develop some of these competencies but still fail due to an external shock. And even those that fail primarily for external reasons have the potential to develop internal competencies that may help strengthen the firm against bankruptcy. Internal deficiencies still figure prominently in the demise of firms that fail due to external shocks.

What would have helped these firms? Basically, this study finds that an ounce of prevention is worth a pound of cure. Developing adequate equity and making greater use of outside expertise is seen as the route most of these firms could have used to reduce their chances of bankruptcy. The world in which these firms operate is imperfect because of the existence of asymmetric information. Investors and creditors have a difficult time evaluating new firms. They look for basic internal competencies. One way to evaluate the financial side of the firm is to look at the extent to which others value the firm; in particular, how willing are others to invest in that firm. Hence the importance of equity to the survival of firms becomes self-evident. Managers must also be trained in both general management and financial management skills so that they can demonstrate the worth of that firm by attracting investors.



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# ***Appendix A – Extreme Scores and Standard Error of Estimates***

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This appendix provides extreme scores and standard errors for the figures in the text.

**Table A.1**  
**Extreme Scores and Standard Errors for Figure 5**  
**External Factors Contributing to Bankruptcy**

Variable	Score (%)	Standard Error
Economic downturn	68.4	2.3
Competition	45.2	2.1
Customer difficulties	42.8	2.1
Fundamental change in market conditions	23.4	1.9
Government regulation	22.2	1.7
Unforeseen circumstances	15.5	1.7
Supplier difficulties	10.9	1.0
Fundamental change in technology	10.3	1.4
Employee fraud/theft	9.6	1.3
Labour or industrial relations legislation	7.7	1.3

**Table A.2**  
**Extreme Scores and Standard Errors for Figure 6**  
**Internal Factors Causing Bankruptcy**

Variable	Score (%)	Standard Error
General management	71.6	2.0
Financial management	70.8	2.0
Marketing capabilities	47.4	2.4
Production and operations	29.4	1.7
Innovation strategy	26.4	2.0
Human resource capabilities	25.7	2.2

**Table A.3**  
**Extreme Scores and Standard Errors for Figure 7**  
**Management Deficiencies Leading to Bankruptcy: Knowledge**

Variable	Score (%)	Standard Error
Breadth of knowledge	58.1	2.3
Depth of knowledge	56.5	2.4
Control	44.9	2.1
Initiative	33.8	2.3
Communication	32.9	2.1
Flexibility	31.9	2.2
Adaptability	25.0	2.2
Technical knowledge	25.0	2.0

**Table A.4**  
**Extreme Scores and Standard Errors for Figure 8**  
**Management Deficiencies Leading to Bankruptcy: Attitudes**

Variable	Score (%)	Standard Error
Lack of vision	48.8	2.2
Poor use of outside advisors	40.0	2.2
Poor supervision of staff	29.4	2.1
Lack of emphasis on quality	17.1	1.7
Unwillingness to delegate responsibilities	16.1	1.7

**Table A.5**  
**Extreme Scores and Standard Errors for Figure 9**  
**Financial Management Problems Contributing to Bankruptcy**

Variable	Score (%)	Standard Error
Under capitalization	61.2	2.3
Inability to manage working capital	63.8	2.1
Unbalanced capital structure	53.0	2.2
Excessive cash withdrawals	26.7	2.1

**Table A.6**  
**Extreme Scores and Standard Errors for Figure 11**  
**Internal Factors Causing Bankruptcy: Marketing**

Variable	Score (%)	Standard Error
Failure to establish market niche	33.0	2.0
Poor pricing strategy	35.3	2.0
Poor or unsuitable location	26.7	2.0
Poor customer service	21.2	1.9
Failure to introduce new products	19.2	1.9
Inability to customize products	14.5	1.8
Poor quality of product	14.0	1.6

**Table A.7**  
**Extreme Scores and Standard Errors for Figure 12**  
**Internal Factors Causing Bankruptcy: Production and Operations**

Variable	Score (%)	Standard Error
High facility unit costs	32.5	2.1
High cost of material inputs	24.6	1.8
Excessive facilities	23.3	1.9
Inventory difficulties	19.6	1.5
Inefficient use of equipment	15.5	1.5
Obsolete technology	12.5	1.3

**Table A.8**  
**Extreme Scores and Standard Errors for Figure 13**  
**Internal Factors Causing Bankruptcy: Human Resources**

Variable	Score (%)	Standard Error
Personal problems of management	28.1	2.2
Labour costs	17.6	1.8
Poor employee performance	19.6	1.9
Lack of skills	7.7	1.1
Departure of key personnel	9.1	1.2
Reluctant to pay going wages	5.3	0.9
Strikes and work stoppages	1.8	0.5

**Table A.9**  
**Extreme Scores and Standard Errors for Figure 14**  
**Actions that Could have been Taken by the Bankrupt to Avert Bankruptcy**

Variable	Score (%)	Standard Error
Raised additional capital (equity)	47.2	2.1
Appointed an outside consultant	41.9	2.1
Renegotiated with debt holders/suppliers	32.3	1.9
Sought new sources of financing	34.1	2.0
Reengineered operations	33.1	2.1
Sought additional credit	24.8	1.8
Undertook product development/diversification	21.7	1.9
Completed a proposal under the BIA or CCAA	17.5	1.5
Operated using existing cash reserves	8.1	1.1

**Table A.10**  
**Standard Errors for Table 9**  
**Extreme Scores of External Factors Contributing to Bankruptcy: by Industry**

Variable	Manu- facturing	Retail	Whole- sale	Con- struction	Real Estate & Insurance	Accom. & Food	Business Services	Other Services	All Other
	Standard Error								
Economic downturn	7.0	4.4	5.1	4.9	11.6	6.6	11.4	8.4	6.2
Competition	7.1	4.8	4.0	5.7	7.3	6.8	4.5	8.4	5.2
Customer difficulties	6.4	4.0	5.4	5.5	4.6	6.1	11.5	4.2	6.0
Government regulation	2.8	3.5	4.1	5.8	2.9	4.7	3.2	3.3	5.5
Fundamental change in market conditions	5.8	3.6	6.1	4.1	3.9	4.6	4.1	9.6	5.5
Supplier difficulties	3.0	1.6	5.5	5.3	0.0	1.4	2.9	3.7	1.9
Unforeseen circumstances	3.7	3.4	5.1	5.0	6.8	2.3	3.1	8.1	5.0
Fundamental change in technology	5.5	2.5	4.8	4.0	3.5	1.1	3.0	8.1	3.7
Employee fraud/theft	4.8	1.2	1.8	3.1	10.3	4.1	3.1	2.7	5.0
Labour or industrial relations legislation	1.9	0.8	4.4	3.9	0.0	1.8	2.4	7.7	4.4

**Table A.11**  
**Standard Errors for Table 10**  
**Extreme Scores of Internal Factors Causing Bankruptcy: by Industry**

Variable	Manu- facturing	Retail	Whole- sale	Con- struction	Real Estate & Insurance	Accom. & Food	Business Services	Other Services	All Other
	Standard Error								
General management	5.6	4.6	5.9	4.3	11.5	5.9	11.1	3.8	5.3
Financial management	3.4	4.6	6.0	4.8	10.2	5.7	11.1	3.2	5.6
Marketing capabilities	4.6	4.4	6.7	6.0	4.8	6.6	11.9	8.6	6.3
Production and operations	7.0	3.1	5.9	5.6	2.6	4.7	4.2	3.4	5.5
Innovation strategy	6.0	4.1	3.9	5.8	3.3	5.6	4.0	8.5	5.0
Human resource capabilities	6.8	4.0	5.3	5.6	0.0	5.7	11.5	9.5	5.0

**Table A.12**  
**Extreme Scores and Standard Errors for Figure 15**  
**External Factors Contributing to Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Economic downturn	77.95	3.6	60.07	3.6
Competition	53.65	4.0	41.04	3.6
Customer difficulties	36.50	3.8	45.93	3.5
Government regulation	24.81	3.3	16.85	2.4
Fundamental change in market conditions	23.55	3.2	22.12	3.0
Supplier difficulties	14.26	2.3	9.14	1.5
Unforeseen circumstances	6.76	2.4	9.62	2.3
Fundamental change in technology	8.42	1.4	10.09	2.5
Employee fraud/theft	9.52	2.5	8.60	1.6
Labour or industrial relations legislation	6.54	1.9	4.62	1.2

**Table A.13**  
**Extreme Scores and Standard Errors for Figure 16**  
**Internal Factors for Different Functional Areas: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
General management	68.01	3.9	71.50	3.2
Financial management	66.75	4.0	73.35	3.0
Marketing capabilities	45.44	4.0	54.04	3.4
Production and operations	23.54	2.7	29.37	3.2
Innovation strategy	23.40	3.4	32.93	3.4
Human resource capabilities	23.36	4.0	28.59	3.4

**Table A.14**  
**Extreme Scores and Standard Errors for Figure 17**  
**Management Deficiencies Leading to Bankruptcy by Age: Knowledge**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Depth of knowledge	53.44	4.0	62.96	3.5
Breadth of knowledge	49.83	4.0	65.38	3.2
Control	41.41	3.9	46.12	3.5
Adaptability	38.64	3.8	34.79	3.5
Flexibility	35.47	3.9	30.87	3.2
Communication	30.62	3.4	36.74	3.4
Initiative	35.96	3.9	35.54	3.6
Technical knowledge	23.74	3.3	26.94	3.0

**Table A.15**  
**Extreme Scores and Standard Errors for Figure 18**  
**Management Deficiencies Leading to Bankruptcy by Age: Attitudes**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Lack of vision	45.25	3.8	50.87	3.6
Poor use of outside advisors	46.45	3.8	37.12	3.5
Poor supervision of staff	27.79	3.4	30.73	3.4
Lack of emphasis on quality	20.81	3.1	15.33	2.3
Unwillingness to delegate responsibilities	21.20	3.4	11.45	2.4

**Table A.16**  
**Extreme Scores and Standard Errors for Figure 19**  
**Financial Management Problems Contributing to Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Under capitalization	53.88	4.2	68.44	3.3
Inability to manage working capital	62.58	4.0	60.53	3.4
Unbalanced capital structure	53.06	3.9	52.79	3.5
Excessive cash withdrawals	29.04	3.7	26.75	3.2

**Table A.17**  
**Extreme Scores and Standard Errors for Figure 20**  
**Financial Management Problems by Age: Record Keeping**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Inadequate information on production costs	31.54	3.4	38.80	3.3
Poor bookkeeping	26.94	3.2	44.03	3.5
Poor control of receivables	33.74	3.4	32.35	3.2

**Table A.18**  
**Extreme Scores and Standard Errors for Figure 21**  
**Internal Marketing Factors Causing Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Failure to establish market niche	24.09	3.1	41.90	3.5
Poor pricing strategy	31.39	3.5	35.24	3.4
Poor or unsuitable location	18.45	2.6	33.99	3.5
Poor customer service	19.51	2.7	21.60	2.9
Failure to introduce new products	15.90	2.9	21.83	3.3
Inability to customize products	13.12	2.7	15.85	2.7
Poor quality of product	12.50	2.5	12.50	2.1

**Table A.19**  
**Extreme Scores and Standard Errors for Figure 22**  
**Specific Human Resources Factors Causing Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Personal problems of management	30.79	4.1	26.24	3.0
Labour costs	16.34	2.5	15.36	2.6
Poor employee performance	19.59	2.9	20.00	2.7
Lack of skills	4.37	1.3	11.65	2.1
Departure of key personnel	10.57	1.9	7.35	1.7
Reluctant to pay going wages	6.31	1.8	5.04	1.4
Strikes and work stoppages	2.08	0.8	1.90	0.8

**Table A.20**  
**Extreme Scores and Standard Errors for Figure 23**  
**Internal Factors Related to Production and Operations Causing Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
High facility unit costs	31.22	3.5	39.13	3.5
High cost of material inputs	18.28	3.0	27.56	3.0
Excessive facilities	24.72	3.3	25.70	3.1
Inventory difficulties	20.69	2.9	20.72	2.6
Inefficient use of equipment	15.58	2.4	13.66	2.4
Obsolete technology	11.28	2.0	13.10	2.2

**Table A.21**  
**Extreme Scores and Standard Errors for Figure 24**  
**Actions that Could have been Taken by the Bankrupt to Avert Bankruptcy: by Age**

Variable	Old		Young	
	Score (%)	Standard Error	Score (%)	Standard Error
Raised additional capital (equity)	51.18	4.1	52.32	3.5
Appointed an outside consultant	48.83	4.0	41.15	3.4
Renegotiated with debt holders/suppliers	37.88	3.8	36.00	3.3
Sought new sources of financing	34.35	3.7	38.94	3.2
Reengineered operations	39.33	3.9	24.45	2.6
Sought additional credit	27.17	3.5	25.43	2.8
Undertook product development/diversification	17.66	2.9	23.56	3.1
Completed a proposal under the BIA or CCAA	19.52	3.1	18.26	2.3
Operated using existing cash reserves	9.10	2.1	6.24	1.3

**Table A.22**  
**Extreme Scores and Standard Errors for Figure 25**  
**The Importance of Internal Factors, for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
General management	89.71	1.7	42.43	3.4
Financial management	85.77	1.9	46.88	3.5
Marketing capabilities	47.67	3.5	44.06	3.6
Production and operations	39.04	2.8	16.39	2.7
Innovation strategy	32.12	3.5	15.76	2.7
Human resource capabilities	30.91	3.3	13.88	2.6

**Table A.23**  
**Extreme Scores and Standard Errors for Figure 26**  
**Management Deficiencies with Regards to Knowledge for**  
**Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Depth of knowledge	67.60	3.5	37.34	3.4
Breadth of knowledge	73.68	3.2	35.50	3.2
Control	59.16	2.6	26.28	3.0
Adaptability	44.71	3.7	24.85	3.0
Flexibility	40.01	3.6	22.17	3.2
Communication	42.30	3.5	19.11	2.6
Initiative	41.28	3.6	22.88	3.0
Technical knowledge	32.20	3.6	13.89	2.3

**Table A.24****Extreme Scores and Standard Errors for Figure 27  
Management Deficiencies with Regards to Attitudes for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Lack of vision	54.06	2.9	38.60	3.7
Poor use of outside advisors	55.57	3.6	21.84	3.1
Poor supervision of staff	42.66	3.6	12.36	2.4
Lack of emphasis on quality	26.21	3.1	26.21	1.7
Unwillingness to delegate responsibilities	22.29	3.1	8.09	1.8

**Table A.25****Extreme Scores and Standard Errors for Figure 28  
Financial Management Deficiencies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Under capitalization	71.90	3.4	50.18	3.6
Inability to manage working capital	78.39	2.5	42.03	3.6
Unbalanced capital structure	61.90	3.5	41.07	3.5
Excessive cash withdrawals	40.54	3.7	8.91	1.9

**Table A.26****Extreme Scores and Standard Errors for Figure 29  
Management Deficiencies with Regards to Record Keeping  
for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Inadequate information on production costs	49.84	3.5	20.98	2.8
Poor bookkeeping	52.67	3.6	18.96	2.7
Poor control of receivables	45.63	3.4	25.25	2.8

**Table A.27****Extreme Scores and Standard Errors for Figure 30  
Internal Marketing Deficiencies for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Failure to establish market niche	29.87	2.5	34.85	3.4
Poor pricing strategy	39.66	3.4	26.48	3.1
Poor or unsuitable location	20.93	2.9	32.96	3.4
Poor customer service	28.19	3.3	8.75	1.9
Failure to introduce new products	16.13	2.7	21.03	3.1
Inability to customize products	14.41	2.8	13.99	2.5
Poor quality of product	17.56	2.9	9.63	2.0

**Table A.28**  
**Extreme Scores and Standard Errors for Figure 31**  
**Internal Deficiencies With Respect to Production and Operations**  
**for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
High facility unit costs	32.67	2.9	33.34	3.4
High cost of material inputs	24.10	2.9	26.27	3.2
Excessive facilities	25.92	3.4	18.42	2.4
Inventory difficulties	19.68	2.2	20.26	2.9
Inefficient use of equipment	20.33	2.8	8.32	1.6
Obsolete technology	14.65	1.8	9.81	2.0

**Table A.29**  
**Extreme Scores and Standard Errors for Figure 32**  
**Specific Human Resources Factors Causing Bankruptcy**  
**for Externally and Internally Generated Bankruptcies**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Personal problems of management	43.11	3.5	9.95	1.6
Labour costs	21.98	3.1	12.05	2.4
Poor employee performance	24.51	2.7	8.00	1.6
Lack of skills	10.41	1.8	4.50	1.1
Departure of key personnel	13.19	2.2	4.99	1.2
Reluctant to pay going wages	5.57	1.3	4.30	1.2
Strikes and work stoppages	2.86	0.9	0.87	0.4

**Table A.30**  
**Extreme Scores and Standard Errors for Figure 33**  
**Actions that Could have been Taken to Avert Bankruptcy**  
**by Relative Importance of External and Internal Forces**

Variable	Internal		External	
	Score (%)	Standard Error	Score (%)	Standard Error
Raised additional capital (equity)	53.23	3.1	40.15	3.4
Appointed an outside consultant	50.95	3.1	27.65	3.0
Renegotiated with debt holders/suppliers	33.07	2.8	31.19	3.1
Sought new sources of financing	36.82	2.9	29.17	3.4
Reengineered operations	38.55	3.4	26.15	3.5
Sought additional credit	25.04	2.7	26.15	3.0
Undertook product development/diversification	22.21	3.1	21.76	3.0
Completed a proposal under the BIA or CCAA	19.98	2.2	16.17	2.3
Operated using existing cash reserves	10.56	1.9	3.58	1.4



# Appendix B – Survey on the Characteristics of Bankrupt Firms



Statistics Canada

## Survey on the Characteristics of Bankrupt Firms

For office use only 1

In all correspondence concerning this questionnaire, please quote the eight digit reference number listed below

\_\_\_\_\_

Confidential when completed.

Collected under authority of Statistics Act, Revised Statutes of Canada, 1985, Chapter S19.

Français au verso

IF THE LEGAL CORPORATE NAME OF THE BANKRUPT FIRM IS DIFFERENT FROM THE NAME ABOVE, PLEASE PROVIDE THE LEGAL NAME OF THE BANKRUPT FIRM.

Legal name of bankrupt firm:

280

### The purpose of this survey

Statistics Canada, with the assistance of the Canadian Insolvency Practitioners Association, is conducting a survey of bankrupt firms, on behalf of Industry Canada. The survey is to be completed by bankruptcy trustees. As the first of its kind in Canada, this survey will collect new information about the general characteristics of bankrupt firms, the internal and external factors that contributed to their failure, the relative importance of these factors, and information about the actions that could have been taken by the bankrupt to avert bankruptcy.

The survey findings will be used to develop a profile of bankrupt firms. This survey offers a unique opportunity to collect the expert opinion of the professionals who deal with bankruptcies. The findings will be of interest to you and a wider community. They will provide both a better understanding of the main factors that contribute to bankruptcy as well as an understanding of the courses of action that firms will find useful in their efforts to prevent bankruptcy.

### Your participation is important

Participation in this survey is voluntary. However, your cooperation is essential to ensure that the information collected is accurate.

### The data you report are confidential

Statistics Canada is prohibited by law from publishing or releasing any statistics that reveal information obtained from this survey relating to any identifiable business. The data reported on the questionnaire will be treated in strict confidence, used for statistical purposes and released in aggregate form only.

**Please complete and return this questionnaire as soon as possible.**

**If you require assistance in the completion of the questionnaire or have any questions regarding the survey, please contact :**

Operations and Integration Division  
Statistics Canada  
Second Floor, Jean Talon Building  
Ottawa, Ontario  
K1A 0T6

Phone: 1-800-916-9316  
Fax: (613) 951-4566

5-4401-6720: 1996-01-17

STC/SBS-524-75061

This questionnaire should be completed for the *bankrupt firm* listed on the front cover. For the purposes of this survey, a product should be interpreted to mean a good or service.

Section A collects background information about the bankrupt.

### A. Overview of the Bankrupt

**A1** Including both full-time and part-time employees, how many people were employed by the bankrupt ...

• Include contract workers.

... at the time of bankruptcy?	<sup>2</sup> <input type="radio"/> 0	<sup>5</sup> <input type="radio"/> 25-49	<sup>8</sup> <input type="radio"/> 200+
	<sup>3</sup> <input type="radio"/> 1-9	<sup>6</sup> <input type="radio"/> 50-99	
	<sup>4</sup> <input type="radio"/> 10-24	<sup>7</sup> <input type="radio"/> 100-199	
... one year prior to bankruptcy?	<sup>9</sup> <input type="radio"/> 0	<sup>12</sup> <input type="radio"/> 25-49	<sup>15</sup> <input type="radio"/> 200+
	<sup>10</sup> <input type="radio"/> 1-9	<sup>13</sup> <input type="radio"/> 50-99	
	<sup>11</sup> <input type="radio"/> 10-24	<sup>14</sup> <input type="radio"/> 100-199	

**A2** What was the bankrupt's annual gross revenue for each of its last two years of operation?

Final year: <sup>16</sup> \$  .00

---

Previous year: <sup>17</sup> \$  .00

**A3** In which industry was the principal activity of the bankrupt located?

**Check (  ) one only**

<sup>18</sup>  Agriculture and Natural Resources

<sup>19</sup>  Manufacturing

<sup>20</sup>  Retail

<sup>21</sup>  Wholesale

<sup>22</sup>  Construction

<sup>23</sup>  Real Estate and Insurance

<sup>24</sup>  Accommodation, Food and Beverage Services

<sup>25</sup>  Other (specify):

<sup>26</sup>

**A4** Was there a change in the bankrupt's primary product during the last five years of operation?

<sup>27</sup>  1 Yes  2 No

**A5** In what year was the bankrupt incorporated?

Year <sup>28</sup>  1  9

**A6** Was more than 50% of the bankrupt owned or controlled by a single person or family?

<sup>29</sup>  1 Yes  2 No **Go to A8**

**A7** Was the bankrupt a first generation family business (i.e., still controlled by the founder)?

<sup>30</sup>  1 Yes  2 No

**A8** Did a stakeholder conflict contribute to the bankruptcy?

<sup>31</sup>  1 Yes  2 No

**A9** Did succession problems contribute to the bankruptcy?

<sup>32</sup>  1 Yes  2 No

**A10** In the year prior to insolvency, what percentage of the bankrupt's employees were located in the following areas?

	Percent
Atlantic Canada	<sup>33</sup> <input type="text"/> %
Quebec	<sup>34</sup> <input type="text"/> %
Ontario	<sup>35</sup> <input type="text"/> %
Prairies	<sup>36</sup> <input type="text"/> %
B.C., Yukon and N.W.T.	<sup>37</sup> <input type="text"/> %
United States	<sup>38</sup> <input type="text"/> %
Other foreign	<sup>39</sup> <input type="text"/> %
<b>TOTAL</b>	<b>1 0 0</b> %

**A11** Was the bankrupt heavily dependent on a few customers?

<sup>40</sup>  1 Yes  2 No

**A12** For the purpose of this question, a senior manager is the person responsible for the day-to-day operations and management of the bankrupt.

- In the case of joint partners, please answer for the most experienced partner.
- If a crisis team has been appointed, please answer for the previous manager.

	Number of Years
<b>With regard to the senior manager:</b>	
How many years has this person worked for the bankrupt?	<sup>41</sup> <input type="text"/>
How many years has this person worked in the industry?	<sup>42</sup> <input type="text"/>
How many years has this person worked as a manager?	<sup>43</sup> <input type="text"/>

Sections B and C investigate the extent to which **external factors** (Section B) and **internal factors** (Section C) contributed to the demise of the bankrupt.

### B. Causes of Insolvency External Factors

B1 To what extent did the following external factors contribute to bankruptcy?

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
<b>Economic Downturn</b> (such as a recession)	44	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45 <input type="radio"/>
<b>Unforeseen Circumstances</b> (such as natural disaster, adverse publicity)	46	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47 <input type="radio"/>
<b>Employee Fraud/Theft</b>	48	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49 <input type="radio"/>
<b>Competition</b> (such as increased foreign or domestic competition, e.g., NAFTA)	50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	51 <input type="radio"/>
<b>Labour or Industrial Relations Legislation</b>	52	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	53 <input type="radio"/>
<b>Supplier Difficulties</b> (such as a loss of key suppliers)	54	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	55 <input type="radio"/>
<b>Customer Difficulties</b> (such as a loss of key customers, volatile demand)	56	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	57 <input type="radio"/>
<b>Government Regulations</b> (such as statutory requirements, source deductions)	58	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59 <input type="radio"/>
<b>Fundamental Change in Technology within the Industry</b>	60	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	61 <input type="radio"/>
<b>Fundamental Change in Market Conditions within the Industry</b> (such as product obsolescence)	62	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	63 <input type="radio"/>
<b>Other (specify):</b>	64	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	65 <input type="radio"/>
66 <input style="width: 100%;" type="text"/>						

### C. Causes of Insolvency Internal Factors

#### General Management Skills

C1 To what extent was bankruptcy caused by management deficiencies in ...

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
... breadth of knowledge? (across financing, marketing, operations, etc.)	67	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	68 <input type="radio"/>
... depth of knowledge? (within financing, marketing, operations, etc.)	69	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	70 <input type="radio"/>
... technical knowledge?	71	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	72 <input type="radio"/>
... adaptability?	73	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	74 <input type="radio"/>
... control?	75	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	76 <input type="radio"/>
... communication?	77	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	78 <input type="radio"/>
... initiative?	79	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	80 <input type="radio"/>
... flexibility (in decision-making)?	81	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	82 <input type="radio"/>
... other? (specify):	83	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	84 <input type="radio"/>
85 <input style="width: 100%;" type="text"/>						

C2 To what extent was bankruptcy due to management's ...

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
... lack of vision?	86	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	87 <input type="radio"/>
... unwillingness to delegate responsibilities?	88	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	89 <input type="radio"/>
... lack of emphasis on quality?	90	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	91 <input type="radio"/>
... poor use of outside advisors?	92	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	93 <input type="radio"/>
... poor supervision of staff?	94	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	95 <input type="radio"/>

**C. Causes of Insolvency - Internal Factors (Continued)**

**Firm Strategies**

**C3** Did the bankrupt have specific written **strategic** goals and objectives?  
<sup>96</sup>  1 Yes  2 No

**C4** Did the bankrupt have a business plan?  
<sup>97</sup>  1 Yes  2 No — **Go to C7**

**C5** Were the bankrupt's goals and objectives coherent with its business plan?  
<sup>98</sup>  1 Yes  2 No

**C6** Did the bankrupt's business plan include a ...

... financial plan?	<sup>99</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... human resources plan?	<sup>100</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... marketing/merchandise sales plan?	<sup>101</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... product development plan?	<sup>102</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... technology plan?	<sup>103</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No

**C7** Did the bankrupt regularly consult the following outside advisors?

Lawyers	<sup>104</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
Financial advisors	<sup>105</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
Management/marketing consultants	<sup>106</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
Technical/production consultants	<sup>107</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
Other consultants (specify):	<sup>108</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
<sup>109</sup> <input type="text"/>	

**C8** How much emphasis was placed on ...

	<b>Too little</b>	<b>Just right</b>	<b>Too much</b>	<b>Does not apply</b>		
	1	2	3	4	5	
... market share?	<sup>110</sup> <input type="radio"/>	<sup>111</sup> <input type="radio"/>				
... expansion/growth?	<sup>112</sup> <input type="radio"/>	<sup>113</sup> <input type="radio"/>				
... profitability?	<sup>114</sup> <input type="radio"/>	<sup>115</sup> <input type="radio"/>				
... stability?	<sup>116</sup> <input type="radio"/>	<sup>117</sup> <input type="radio"/>				
... adaptability?	<sup>118</sup> <input type="radio"/>	<sup>119</sup> <input type="radio"/>				
... other? (specify):	<sup>120</sup> <input type="radio"/>	<sup>121</sup> <input type="radio"/>				
<sup>122</sup> <input type="text"/>						

**Expansion/Buyouts**

**C9** Was bankruptcy caused by problems arising from a leveraged or management buyout?  
<sup>123</sup>  1 Yes  2 No

**C10** Was bankruptcy caused by problems due to over-expansion, diversification, and/or premature growth?  
<sup>124</sup>  1 Yes  2 No — **Go to C13**

**C11** Did the expansion/growth problem arise from ...

... inappropriate use of short term financing?	<sup>125</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... inadequate resources to support expanded operations?	<sup>126</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... inadequate management skills?	<sup>127</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No

**C12** Was the expansion/growth problem associated with ...

... the acquisition of an unprofitable subsidiary?	<sup>128</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... poor market conditions?	<sup>129</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No

**Financial Planning**

**If the bankrupt did not have a financial plan — **Go to C18****

**C13** Did the bankrupt's financial plan include ...

... historical financial data?	<sup>130</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... financial data for the current year?	<sup>131</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No
... financial forecasts beyond the current year?	<sup>132</sup> <input type="radio"/> 1 Yes <input type="radio"/> 2 No

**C14** Were actual results compared to forecasts?  
<sup>133</sup>  1 Yes  2 No — **Go to C16**

**C15** Was remedial action taken when actual results deviated from forecasts?  
<sup>134</sup>  1 Yes  2 No

## C. Causes of Insolvency - Internal Factors (Continued)

### Financial Planning (Continued)

**C16** Who was responsible for the financial plan?

**Check (  ) one only**

- 135  Owner/manager
- 136  Chief financial officer/executive
- 137  Internal accountant
- 138  External accountant or consultant
- 139  Other (specify):
- 140

**C17** What are the professional qualifications of this person?

**Check (  ) one only**

- 141  CA      142  CGA      143  CMA
- 144  Other (specify):
- 145

### Financial Management and Record Keeping

**C18** Did poor financial management contribute to business failure?

- 146  1 Yes       2 No

**C19** Was a proper set of books maintained?

- 147  1 Yes       2 No **Go to C21**

**C20** Were these books up-to-date?

- 148  1 Yes       2 No

**C21** Were statutory returns filed on a regular basis?

- 149  1 Yes       2 No

**C22** To what extent did the following problems in financial management contribute to insolvency?

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
Unbalanced capital structure (e.g., excessive reliance on short term debt)	150	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	151 <input type="radio"/>
Inability to manage working capital	152	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	153 <input type="radio"/>
Excessive cash withdrawals by owners	154	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	155 <input type="radio"/>
Under-capitalization	156	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	157 <input type="radio"/>

### Financial Management and Record Keeping (Continued)

**C23** To what extent was bankruptcy due to the following deficiencies in management's record keeping abilities?

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
Poor bookkeeping	158	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	159 <input type="radio"/>
Poor control (collection) of receivables	160	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	161 <input type="radio"/>
Inadequate information on production costs	162	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	163 <input type="radio"/>

### Human Resources

**C24** To what extent was this bankruptcy caused by ...

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
... labour costs exceeding those of competitors?	164	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	165 <input type="radio"/>
... reluctance to pay going wage rates for required skill levels?	166	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	167 <input type="radio"/>
... lack of skills in immediate geographic area?	168	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	169 <input type="radio"/>
... departure of experienced/key personnel?	170	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	171 <input type="radio"/>
... poor employee performance?	172	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	173 <input type="radio"/>
... strikes and work stoppages?	174	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	175 <input type="radio"/>
... personal problems on the part of key management?	176	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	177 <input type="radio"/>
... other? (specify):	178	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	179 <input type="radio"/>
180	<input style="width: 150px; height: 15px;" type="text"/>					

### C. Causes of Insolvency Internal Factors (Continued)

#### Marketing

C25 To what extent was bankruptcy caused by ...

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
... poor customer service?	181	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	182 <input type="radio"/>
... poor pricing strategy (over- or under- pricing)?	183	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	184 <input type="radio"/>
... inability to customize products?	185	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	186 <input type="radio"/>
... poor or unsuitable location?	187	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	188 <input type="radio"/>
... failure to introduce new products?	189	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	190 <input type="radio"/>
... inferior or poor quality of product?	191	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	192 <input type="radio"/>
... failure to establish a market niche?	193	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	194 <input type="radio"/>
... other? (specify):	195	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	196 <input type="radio"/>
197	<input type="text"/>					

#### Production and Operations

C26 To what extent was bankruptcy caused by ...

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
... high cost of materials inputs?	198	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	199 <input type="radio"/>
... high facility unit costs (purchase price or rental rate)?	200	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	201 <input type="radio"/>
... obsolete technology (production methods/equipment)?	202	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	203 <input type="radio"/>
... excessive facilities (plant or space)?	204	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	205 <input type="radio"/>
... inefficient use of equipment?	206	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	207 <input type="radio"/>
... inventory difficulties (storage costs, unsold capacity)?	208	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	209 <input type="radio"/>
... other? (specify):	210	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	211 <input type="radio"/>
212	<input type="text"/>					

### D. Relative Importance of Internal Factors

We would like you to evaluate, as best you can, the relative importance of the following internal factors for this particular bankrupt.

D1 To what extent was bankruptcy caused by each of the following internal factors?

	Not at all ▼ 1	2	3	4	A great deal ▼ 5	Does not apply
General Management	213	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	214 <input type="radio"/>
Innovation Strategy	215	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	216 <input type="radio"/>
Human Resource Capabilities	217	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	218 <input type="radio"/>
Financial Management	219	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	220 <input type="radio"/>
Marketing Capabilities	221	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	222 <input type="radio"/>
Production or Operations	223	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	224 <input type="radio"/>

### E. Relative Importance of Internal as Opposed to External Factors

E1 We would like you to evaluate, as best you can, the relative importance of internal as opposed to external factors for this particular bankruptcy. Allocate between 0 and 100 points for each factor such that the total equals 100.

	Points
Internal Factors	225 <input type="text"/>
External Factors	226 <input type="text"/>
<b>TOTAL</b>	<b>100</b>

We would like your professional opinion as to the barriers the bankrupt faced *prior to the difficulties* that led to its bankruptcy (Section F), and as to the likelihood that the bankrupt's management might have prevented bankruptcy *prior to your becoming involved with it* (Section G).

### F. Access to Credit and Cost of Credit

F1 Was the bankrupt ever profitable?

<sup>227</sup>  1 Yes  2 No **Go to F3**

F2 When was the bankrupt's last profitable year?

Year <sup>228</sup>

F3 What was the distribution of the sources of the bankrupt's debt, equity, and other types of financing at the fiscal year end *prior to its insolvency*?

	Percent	
Owners/managers	<sup>229</sup> <input type="text" value=""/> %	
Trade credit	<sup>230</sup> <input type="text" value=""/> %	
Financial institutions	<sup>231</sup> <input type="text" value=""/> %	
Government	<sup>232</sup> <input type="text" value=""/> %	
Other (specify):	<sup>233</sup> <input type="text" value=""/> %	
<sup>234</sup> <input type="text" value=""/>		
<b>TOTAL</b>	<b>100</b> %	

F4 Could the bankrupt raise capital when needed in the year *prior to its demise*?

<sup>235</sup>  1 Yes  2 No

F5 In your professional opinion, did any of the following factors present a problem *prior to the difficulties* that led to the bankrupt's demise?

	No problem 1	Minor problem 2	Major problem 3
<b>External Problems Facing Bankrupt</b>			
Barriers created by policies of financial institutions (e.g., collateral requirements, restrictive terms)	<sup>236</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General reluctance to lend on the part of lenders/investors	<sup>237</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limited availability of alternate sources of capital	<sup>238</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High costs (e.g., high interest rates, high fees)	<sup>239</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Internal Problems Facing Bankrupt</b>			
Lack of resources (e.g., equity) to pursue different financing options	<sup>240</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of information about financing options	<sup>241</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unwillingness to use alternate sources of funds	<sup>242</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unwillingness to give up control of firm	<sup>243</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unwillingness to take on debt	<sup>244</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other difficulties (specify):	<sup>245</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<sup>246</sup> <input type="text" value=""/>			

### G. Bankruptcy Onset

G1 When did the symptoms of bankruptcy first become apparent to management?

Year <sup>247</sup>     Month <sup>248</sup>

G2 When did the bankrupt's management act on these symptoms?

Year <sup>249</sup>     Month <sup>250</sup>

G3 Would the bankrupt have been capable of surviving had it taken appropriate action when these difficulties first became apparent?

<sup>251</sup>  1 Yes  2 No

G4 Should the bankrupt have been saved?

<sup>252</sup>  1 Yes  2 No

G5 In your professional opinion, which of the following actions would have been an effective means of averting bankruptcy, if they had been pursued at an earlier date?

	completely ineffective 1	somewhat effective 2 3 4 5	very effective 5	Does not apply
Appointed an outside consultant	<sup>253</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raised additional capital (equity)	<sup>255</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sought additional credit	<sup>257</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renegotiated with debtholders/suppliers	<sup>259</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sought new sources of financing (e.g., friends)	<sup>261</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operated using existing cash reserves	<sup>263</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reengineered operations	<sup>265</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undertook product development or product line diversification	<sup>267</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Completed a proposal under the "Bankruptcy and Insolvency Act" or the "Company Creditors Arrangement Act"	<sup>269</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (specify):	<sup>271</sup> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<sup>273</sup> <input type="text" value=""/>				

