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MORE ON THE IMPACT OF BANKRUPTCY REFORM IN CANADA

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More on the Impact of Bankruptcy Reform in Canada*

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Abstract / Résumé

The main objective of the new Bankruptcy Act *(Bill C-22) is to promote the use of financial reorganization in order to increase the chances of survival of businesses that are experiencing financial difficulties and, as a consequence, to save jobs. Data from a sample of 417 commercial bankruptcies and 393 financial reorganizations are used to determine whether or not this represents an improvement over the previous system and whether or not the objective to increase the proportion of reorganizations will be met. Results from the statistical and logit analyses suggest that (i) the new voting requirement will increase the number of accepted proposals by 1.5 percentage points, (ii) the change in Crown priority will raise the success and acceptance rate by 2.32 and 0.79 percent respectively and (iii) the changes relating to stay of proceedings are expected to raise the use of holding proposals and thus reduce the likelihood of acceptance of a proposal by unsecured creditors. Finally, that there are several reasons to believe that encouraging firms that would otherwise have opted for bankruptcy to reorganize will not be an efficiency gain for the Canadian economy.*

L'objectif principal poursuivi par la réforme à la *Loi sur la faillite* (Bill C-22) est de promouvoir la réorganisation au détriment de la faillite pour les entreprises en difficultés financières afin d'accroître leurs chances de survie et ainsi de sauver des emplois. Les résultats des analyses statistique et économétrique d'une banque de données originales comprenant 417 dossiers de faillite commerciale et 393 dossiers de réorganisation commerciale concluent que (i) l'introduction d'un nouveau critère d'acceptation d'une proposition de réorganisation augmentera la probabilité d'acceptation de 1.5 points de pourcentage ; (ii) les changements apportés à la priorité des créances du gouvernement entraîneront une augmentation de la probabilité de succès et d'acceptation d'une proposition de l'ordre de 2.32 et 0.79 pour-cent respectivement ; et (iii) les changements quant au gel des procédures des créanciers pourraient se traduire dans une augmentation de proposition de type « provisoire » ce qui devrait diminuer la probabilité d'acceptation de la part des créanciers. Finalement, tout laisse croire que la promotion de la réorganisation financière entraînera une augmentation des coûts de faillite au Canada.

Key words: bankruptcy, reorganization, bankruptcy law
Mots clés : faillite, réorganisation, loi sur la faillite

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1 Introdcution

In December 1992, a series of amendments to the Canadian *Bankruptcy Act* came into effect. A primary objective of these amendments is to promote the use of financial reorganization in order to increase the chances of survival of businesses that are experiencing financial difficulties and, as a consequence, to save jobs.[1] To achieve this objective, the new Act provides for (i) a softening of the voting requirement necessary for the approval of reorganization; (ii) an extension of the stay of proceedings to secured creditors; and (iii) a change in the preferred status of a portion of the Crown claims.[2] In addition to these changes, the new Act introduces a new time structure for the reorganization procedure and provides greater protection for wage earners.

This paper has two aims. First, it considers the objective of promoting financial reorganization from an efficiency perspective. One can argue that the role of a bankruptcy law should not be to promote financial reorganization per se but rather to act as a screening device to save insolvent but viable firms and to eliminate non-viable firms. In addition, the objective to save jobs is often inconsistent with improving the efficiency of the bankruptcy procedure. Second, it examines certain individual measures introduced by Bill C-22 to determine their impact on the reorganization process. This exercise is used to verify and extend the analysis conducted by Fisher & Martel (1994b). These are first time studies on the topic of bankruptcy and reorganization in Canada and a study which, among other things, confirms the results of the only other study in the area is as important as the first because there is very little basis for comparison.

The paper has the following structure. The next section provides some background and historical information on the bankruptcy and reorganization procedures in Canada and offers a short discussion on the relevance of a reorganization procedure. Section 3 offers a summary description of the sample of firms in bankruptcy and in financial reorganization in Canada while section 4 presents a description of the logit analysis of the reorganization process in Canada. Section 5 tackles the issue of promoting financial reorganization in the context of improving the efficiency of the Canadian bankruptcy system to act as a screening device. Finally, section 6 discusses some of the most important modifications to the *Bankruptcy Act*. Results from the statistical and logit analyses are used to evaluate whether or not these changes will have an impact on the behaviour of unsecured creditors in bankruptcy.

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[1] See Bohémier (1992) and Fisher & Martel (1994b).

[2] See Bohémier (1992) for a detailed discussion of Bill C-22.

2. Some Background on Bankruptcy and Reorganization

Before evaluating whether or not the changes to the *Bankruptcy Act* will meet their objectives, it is worthwhile considering some historical background on the bankruptcy procedures in Canada.[3] The Canadian bankruptcy system offers two alternatives to insolvent firms: bankruptcy and reorganization. Although the origin of the modern bankruptcy law, as we know it today, goes back to 1919, the *Bankruptcy Act* was enacted in 1949. The bankruptcy procedure triggers an automatic stay of proceedings to all unsecured creditors, provides for an orderly liquidation of the assets and a distribution of the proceeds to unsecured creditors following the allocation scheme set out in section 136 of the Act. A major concern with the bankruptcy procedure is that it may result in the dismantlement of viable but insolvent firms. In such cases, the value of the firm's assets may be greater if held together than if sold piecemeal. To minimize this possibility, the *Bankruptcy Act* provides for a reorganization procedure. This procedure also imposes a stay of proceedings to unsecured creditors but the firm continues operating under the protection of the court while negotiating new arrangements with its unsecured creditors for the repayment of their claims. This process allows an exchange of the pre bankruptcy claims for new reduced claims in the reorganized firm.

There exists another means for financial reorganization in Canada. Debtors which have outstanding secured or unsecured bonds (debentures) under a trust deed can file a proposal under the *Companies' Creditors Arrangements Act* (C.C.A.A.).[4] The Act which was enacted in 1933, originally applied to all insolvent companies but an amendment to the Act in 1952 restricted its use to debtors having outstanding secured or unsecured bonds under a trust deed.

Although one can discuss the relevance of a specific bankruptcy procedure, there is a general feeling that the state has an important role to play in the enforcement of private contracts, especially in the area of insolvency.[5] In a first-best world, bankruptcy laws would be irrelevant and individual debt contracts between debtors and creditors would include specific provisions to cover for the possibility of default. However, these contracts can be costly and difficult to implement since, on the one hand, the debtors' assets are likely to vary overtime and, on the other hand, the race for the firms' assets can be costly and lead to an inefficient allocation of resources in the event of default.[6]

If there is a general agreement on the necessity of a legal bankruptcy system, there is certainly unanimity with respect to the incentive problems created by the

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[3] See Bohemier 1992 and Martel 1991

[4] The reader is referred to section 5 for a description of this procedure.

[5] Aghion, Hart and Moore (1992), Bebchuk (1988), Jackson (1986), Roe (1983) and White (1989)

[6] This is usually referred to the *common pool* problem.

simultaneous existence of a bankruptcy and a reorganization procedure.[7] As pointed out by White (1992), this type of legal structure can generate two types of errors: Type I error whereby non-viable firms can avoid bankruptcy and can keep operating under the protection of the court and Type II error whereby viable firms are eliminated. Using Canadian data, Fisher & Martel (1994a) estimated that the overall occurrence of filtering failure is between 14 and 39 percent.[8]

3. Descriptive Statistics on Bankruptcy and Reorganization

An essential element in examining the possible impact of the changes to the *Bankruptcy Act* is the existence of micro-data on firms in bankruptcy and financial reorganization. Prior to this study, there existed only one large scale and representative sample of firms in financial reorganization in Canada. Fisher & Martel (1994c) collected a sample of 338 firms in financial reorganization for the period 1978-1987 in order to examine the behaviour of creditors in reorganization. Their sample originates from five regional offices in Canada; Halifax, Montreal, Toronto, Calgary and Vancouver.

This study uses a new sample of firms, which consists of 417 commercial bankruptcies and 393 commercial reorganization proposals filed during the period 1977-1987 at the Montreal and the Toronto regional offices.[9] Tables 1 to 3 provide descriptive statistics on firms in bankruptcy and financial reorganization.[10]

Table 1 shows that Canadian firms in bankruptcy are typically small firms with an average value of assets and liabilities equal to $74,231 and $232,565 respectively.[11] According to Table 2, nearly 85% of bankrupt firms have a value of assets lower than $100,000 and 98% of the firms have a value of assets lower than $500,000. Less than 1% of all bankruptcy estates have assets larger than $1 million. Ordinary claims represent, on average, 68% of the total liabilities of bankrupt firms. Secured claims follow with an average ratio of 19% while the proportion of preferred claims averages to about 12% of total liabilities. Bankruptcy affects a relatively small number of creditors, the average being 24.

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[7] Aghion, Hart and Moore (1992) Bebchuck (1988), Baird & Jackson (1986), Bradley & Rosenzweig (1992), Fisher & Martel (1994a), Jackson (1986), Martel (1991) and White (1993, 1992).

[8] Some academics have challenged the idea of having a reorganization procure in the bankruptcy law. See Aghion, Hart & More (1992), Baird & Jackson (1986), Bebchuk (1988), Jackson (1986), Rasmussen (1992). This article does not enter that debate.

[9] The sample is chosen to be representative of the regional distribution of bankruptcies and reorganizations over the years and the regional offices.

[10] The reader is referred to Martel (1994b) for a detailed analysis of the data.

[11] All dollar figures are June 1993 Canadian dollars, deflated by the *GDP* deflator (Cansim series D20556).

The average ratio of liabilities to assets of bankrupt firms is 72.2 (median of 8.1), which indicates that the financial health of these firms is extremely poor. Their precarious financial situation is reflected in the payoff to creditors resulting from the liquidation of the assets. The average payoff on preferred and ordinary claims is equal to 23.2 and 2.5 cents on the dollar respectively and ordinary creditors receive a zero payment in 77% of the cases examined. This confirms the view that bankruptcy imposes substantial losses on creditors, in particular on ordinary creditors.

In comparison, Table 3 shows that firms in reorganization are significantly larger with an average value of assets and liabilities of $2.45 and $2.98 million respectively and an average of 110 creditors. Less than 24% of all firms in reorganization have a value of assets lower than $100,000 and 28% of these firms have assets larger than $1 million. Ordinary, secured and preferred claims represent respectively about 60%, 32% and 6% of total liabilities at the time of reorganization. This suggests that firms in reorganization rely more on secured financing than firms in bankruptcy. Firms in reorganization are financially more healthy with a mean liabilities to assets ratio of 16.0 (with a median of 1.8). Ordinary creditors are offered, on average, 38.1 cents for each dollar of claims. Firms typically reimburse their creditors using cash and deferred payments, with 78% of the payments being made within one year of the court's approval.

Almost 75% of the proposals are accepted by unsecured creditors. The time period between filing and voting on a proposal is relatively short, with an average period of 50 days. Of these accepted proposals, about 70% are successfully completed.[12] Therefore, we estimate that the probability of a firm to succeed in its reorganization attempt is 52.5%.

4. Logit Analysis of Reorganization

The reorganization procedure can be represented as a two-stage game. At stage one, debtors submit a proposal to unsecured creditors for their approval. At stage two, an accepted proposal can either be a success or a failure.[13] A reduced form model is estimated to determine the impact of a number of modifications introduced by Bill C-22 on the outcome of the reorganization process.[14] Given the dichotomous nature of the dependent variables, the incidence equations are estimated using a two-step

[12] A proposal is successful when all the terms of the proposal are met by the debtor before the trustee is discharged.

[13] There is a stage prior to the creditors' vote, that is the firm's choice between bankruptcy and reorganization. It is outside the scope of this study.

[14] See Martel (1994a) for a full analysis of the results.

logit model.[15] First, a success incidence equation is estimated as a linear function of a number of exogenous variables. Second, the estimated parameters of the success equation are used to calculate a predicted probability of success for each proposal in the sample. Finally, an acceptance incidence equation is estimated as a function of another set of independent variables and the predicted probability of success.[16]

Four policy variables are used to capture the effect of Bill C-22: the ratio of Crown claims to total liabilities is used to estimate the impact of Crown priority on the creditors' decision in reorganization[17]; the number of days between filing and voting is used to determine the impact of the changes in the time structure in reorganization; and two dummy variables are used to capture first the presence of a large ordinary creditor and second whether or not the proposal is a holding proposal.[18]

Creditors' decision in reorganization is largely determined by comparing the expected payoff in reorganization to the expected payoff in bankruptcy. The expected payoff in reorganization depends on four variables: (i) the payoff offered by the firm in the reorganization proposal, (ii) the proportion of the total payoff being paid cash, (iii) the length of the period for repayment, and (iv) the proposal's perceived probability of success by unsecured creditors. The expected payoff in bankruptcy is defined as the ratio of assets, net of secured and preferred claims, to total ordinary claims. The number of amendments is used as a proxy for the bargaining process in reorganization and the change in the unemployment rate six months prior to the vote is used to capture the expected state of the business climate. Finally dummy variables are used to control for the region (Montreal vs. Toronto) for the type of business (incorporated vs. unincorporated) and for the industries.

The results are reported in Table 4. Variables have been assigned to the success and the acceptance incidence equations depending on the level at which they are expected to have the largest direct impact. The logit coefficients measure the effect of changes in the explanatory variables on the propensity for creditors to accept a proposal. The effects of the explanatory variables on the probability for creditors to accept a proposal are calculated at the mean of the data and displayed in the "change in probability" column.[19] For dummy variables, the change in probability measures the effects of a discrete changes.

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[15] See Maddala (1983) and Cannings, Montmarquette & Mahseredjian (1994).

[16] Estimation is performed using Shazam 7.0.

[17] Ratios, rather than absolute values, are used in order to reduce the sensitivity of the estimates to extreme values.

[18] A large ordinary creditor is defined as a individual creditor having a claim in excess of 25% of total ordinary claims.

[19] See Gunderson, Kervin & Reid (1986) for details.

5 More on the Impact of Bill C-22

This section uses the results of the statistical and the empirical analyses to examine the impact of individual measures introduced by Bill C-22.

5.1 Crown claims

According to the *Bankruptcy Act* of 1949, federal and provincial Crown claims were given preferred status and had to be paid in priority to all claims of ordinary creditors. In a reorganization, Crown claims had typically to be paid in full upon ratification of the proposal by the court. Bill C-22 provides for a change in the status of a portion of Crown claims. Under the new Act, all Crown claims, with the exception of claims for source deductions for Income Tax, Unemployment Insurance and Canada Pension Plan contributions, rank as ordinary claims. In bankruptcy, claims for source deductions rank as preferred claims and have priority over the claims of ordinary creditors. In reorganization, a proposal has to provide for the full repayment of claims for source deductions within six months of the plan's approval by the court. The basic idea behind these modifications is to give additional breathing room to firms in financial reorganization.

The impact of the change to the Crown claims' status can be evaluated from two perspectives. First, the modification to the Crown priority has efficiency implications with respect to the functioning of the reorganization process in Canada. Martel (1991) argues that the full repayment of Crown claims upon the approval of the plan hinders the chances of firms to get the approval of unsecured creditors and reduces the likelihood of successful reorganization. Fisher & Martel (1994a,b) provide evidence of this effect by showing that the presence of Crown claims significantly reduces the probability of acceptance of a proposal. The results of the empirical analysis supports these claims and provide new evidence for the negative effect of Crown claims in reorganization. Table 4 shows that a one percent increase in the proportion of Crown claims in total claims reduces the probability of success of a proposal by 0.89 percent. Given that the a one percent change in the perceived probability increases the probability of acceptance by 0.35 percent, a one percent increase in the proportion of Crown claims also reduces the probability of acceptance of a proposal by about 0.31 percent.[20] According to the data, Crown claims represent, on average, 4.5% of total liabilities and source deduction claims represent 41.8% of Crown claims in reorganization. Therefore the ratio of "preferred" Crown claims to total liabilities is expected to decrease to 1.88% following the amendments. As a result, the probability of success and of acceptance of a proposal should increase by 2.32 and 0.79 percent respectively.

[20] Claims for source deductions have similar effects on the reorganization process.

Second, the change to the status of Crown claims is expected to have redistributive effects. The examination of 395 commercial bankruptcy files reveals that the average value of Crown claims which would now rank as ordinary claims is equal to $11,001.[21] Since the average difference in the payoff rate on preferred and ordinary claims is equal to 16.9%, the net costs to the Crown of the change to its preferred status is equal to $1,859 per commercial bankruptcy. Second, the analysis of 377 commercial proposals shows that the average value of Crown claims which would be transferred in the ordinary claims category is equal to $36,478. Given an average difference in payoff rates of 65.4 cents between preferred and ordinary claims, the net costs to the Crown associated with the change in its preferred status is about $23,857 per commercial reorganization. Using 1993 as an example, where a total number of 12,527 commercial bankruptcies and 523 commercial proposals were filed in Canada, the total costs to the government would have been approximately $35.8 million. Although this number may appear to be large, one should remember this change in the preferred status of Crown claims is to the benefits of ordinary creditors. Consequently, this regime is more fair to all creditors and represents a clear improvement over the previous situation.

Finally, this study wants to point out an inconsistency in the Act with respect to the treatment, on the one hand, of the Crown and, on the other hand, of wage claimants. From an efficiency perspective, creditors whose claims are unimpaired in reorganization should have no right to decide upon a firm's life. This is why wage creditors no longer have the right to vote on a proposal unless part of their claims rank as ordinary claims, in which case they vote only with respect to this part of their claims. Ironically, the Crown retains its voting right for source deduction claims when the Act specifies that a proposal cannot be ratified by the court unless it provides for the full repayment of source deduction claims. This type of double standard is not only inefficient but also unfair to all participants who do not have the legislative tools to grant themselves such privileges.

5.2 Wage claims

Under the 1949 *Bankruptcy Act*, the claims for wages, salaries, commissions and compensations, up to a maximum of $500 per worker for services rendered three months prior to the bankruptcy ranked as preferred claims. Travelling salesmen were entitled to an additional $300 in expenses. Any claims exceeding this limit ranked as ordinary claims. The recent amendments to the Act raised the upper limit on preferred wage claims to $2000 for services rendered during the six months preceding the bankruptcy. Travelling salesmen are entitled to an additional $1000 in expenses. In reorganization, a proposal has to provide for the immediate payment of preferred wage

[21] These files contain information on both Crown and source deduction claims.

claims in order to be ratified by the court. As a counterpart, wage creditors are not entitled to vote on the proposal, unless they also rank as ordinary creditors.
According to the data, approximately 10% of the commercial bankruptcies have some positive wage claims. For these cases, the average value of total wage claims is $7,377 and the average value of wage claims per worker is $597. The wage claim per worker exceeds $500 in 46% of the estates. Wage claims are more present in reorganization with about 32% of the files having some positive wage claims. For these files, the average value of total wage claims is $54,527. Approximately 90% of total wage claims rank as preferred claims and 10% rank as ordinary claims. On an individual basis, the average wage claim per worker is $1,396. The wage claim per worker exceeds $500 in about 75% of the estates.

Intuitively, the changes to the treatment of wage claims in reorganization is expected to reduce the likelihood of reorganization. First, increasing the amount of wage claims to be paid up-front is expected to impose an additional burden on debtors. Second, debtors are loosing an allied in their reorganization attempt since wage earners, who no longer have the right to vote on a proposal, are likely to favour reorganization over bankruptcy.[22] However, it is yet impossible to determine empirically the impact of the increased protection of wage earners' claims since the new regime introduces a non-marginal increase in the amount of wage claims at the time of reorganization and there is no way to control for the lost in the wage earners right to vote.

5.3 Holding Proposals

A *holding* proposal is an interim document filed by an insolvent debtor requiring more time for the preparation of a final proposal. Typically, creditors vote in favour of a holding proposal with the expectation of having to vote on an amended proposal which is to come within a short period of time. The rejection of a holding proposal automatically entails bankruptcy.

According to Bohémier (1992), although holding proposals increase uncertainty for unsecured creditors, they are still likely to approve the proposals because their payoff in bankruptcy is typically very low. The author argues that the amendments to the *Bankruptcy Act* with respect to the stay of proceedings confirms the use of holding proposals by debtors. Under the new Act, an insolvent debtor can file a notice of intention to file a proposal, which imposes a stay of proceedings to all creditors, including secured creditors, for a maximum period of 30 days. After the expiration of the 30 days, this period can be extended (in 45-day segments), with the approval of the court, up to a maximum of five months. A greater use of holding proposals can thus be expected under the new legal environment.

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[22] As a counterpart, taking away the right of wage creditors to vote when their claims are unimpaired is an efficiency improvement over the previous regime.

The use of holding proposals has efficiency implications with respect to the functioning of the reorganization process. These proposals introduce additional uncertainty for unsecured creditors and they can be used by non-viable firms to delay the bankruptcy procedure. Based on the data, holding proposals represent almost 24% of the proposals in the sample and they have a lower acceptance rate, 67.7%, than non-holding proposals, 77%.[23] The results of the logit analysis presented in Table 4 confirms the reluctance of creditors towards holding proposals since they have 23% less chances of being accepted than non-holding proposals. This suggests that, ceteris paribus, a wider use of holding proposals will reduce the efficiency of the reorganization process and will impose additional costs on the insolvency system in Canada.

6 Promoting Financial Reorganization

The primary argument used to support of the promotion of financial reorganization is that bankruptcy causes the disruption of the debtors' activities and results in jobs losses in the economy. Therefore, the bankruptcy law should facilitate reorganization in order allow failing firms to continue operating and to save jobs. Historical data shows that the legislator has not been very successful in encouraging reorganization in Canada. For example, for the ten years prior to the new Act, reorganization cases represent, on average, 6.2% of all commercial filings under the *Bankruptcy Act*.[24] However, preliminary data suggests that the recent amendments has modify this trend since reorganization cases represent 16% of all commercial filings in 1993.[25]

In order to evaluate whether or not the promotion of financial reorganization is beneficial the Canadian economy, we have to examine the characteristics of firms that are affected by the new regime. These firms are first, those which choose reorganization over bankruptcy but which have their proposals turned down by unsecured creditors, and second, those which would have opted for bankruptcy over reorganization under the previous regime.[26]

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[23] Taking into account the fact that 6.4% of the holding proposals are not confirmed by the court, mainly because of the non-filing of an amended proposal by the debtor, the acceptance-confirmation rate decreases to 61.3%.

[24] This figure overestimates the true proportion of commercial reorganization since it includes commercial proposals.

[25] For the U.S., White (1984) reports that Chapter 11 cases represent, on average, 21% of the total Chapter 7 and 11 cases filed for the period 1980-1982 and this ratio appears to be increasing over the years.

[26] It is possible that the new regime attracts a number of firms which are reorganizing outside the Bankruptcy Act (workout arrangement). However, this phenomenon is difficult to evaluate given the absence of data.

First, for firms which have their proposals rejected by unsecured creditors, the main modification likely to affect them relates to the softening in the voting requirement. Under the previous regime, to be accepted, a proposal required the affirmative vote of a majority of unsecured creditors voting, representing three-quarters in value of the claims of those unsecured creditors voting. Under the new Act, the value of claims criterion has been lowered to two-thirds in value of the claims. The sample of 393 firms in financial reorganization indicates that 99 of the 393 proposals were rejected by unsecured creditors and that only 6 of these proposals would have been accepted under the new voting rule. Thus, the softening of the voting requirement is expected to increase the acceptance rate by 1.5 percentage points.
One can argue that the presence of a large creditor may hamper the reorganization attempt of a viable firm by using its veto right on the acceptance of a proposal. The data clearly suggests this possibility exists under the current system since the claim of a single ordinary creditor is greater than 25% of total ordinary claims in 43% of the reorganization estates examined. However, the results of the logit analysis reported in Table 4 suggest that the presence of a large ordinary creditor does not have a significant impact on the likelihood of acceptance of a proposal. Therefore, the amendment with respect to the voting requirement is anticipated to have a small impact on the likelihood of acceptance of a proposal.

The second category of firms which are affected by the changes to the Act are those which would have chosen bankruptcy over reorganization prior to the changes but which would now opt for reorganization. It was shown that bankrupt firms are typically small firms with an extremely poor financial situation, the average liabilities to assets ratio being 72.2 (with a median of 8.1). These firms are in the tail of the distribution of financially distressed firms. Thus, there are serious doubts with respect to the objective of encouraging their financial reorganization. After all, these firms voluntarily chose bankruptcy when they could have opted for reorganization. In addition, there are no particular reasons to anticipate that creditors would favour their reorganization attempt or that the firms would be successful in their efforts. Encouraging these firms to reorganize may simply result in an inefficient allocation of resources and deadweight costs to the Canadian economy.

A second efficiency aspect of the reform which has to be examined is the existence of a dual reorganization procedure for large Canadian corporations.[27] (C.C.A.A.). On the other hand, they can also file a reorganization proposal under the *Bankruptcy Act*. Prior to the amendments, the reorganization process was basically the same under both Acts. Except for the treatment of secured creditors, both Acts provided for the same treatment of Crown and wage claims and both had the same

[27] This point was raised by Bohémier (1992), Section III. On the one hand, some debtors can file a proposal under the *Companies' Creditors Arrangements Act*.

voting rule for the acceptance of a proposal.[28] However, since December 1992, the two systems differ on these aspects. Under the C.C.A.A., all Crown claims rank as preferred claims while Bill C-22 gives a preferred status only to claims for source deductions. The same is true for wage claims; the C.C.A.A. allows for a maximum of $500 to rank as preferred claims for a period of three months prior to bankruptcy while Bill C-22 allows for a protection of $2,000 for the six months preceding bankruptcy. In addition, wage earners are entitled to vote on a proposal under the C.C.A.A. but not under Bill C-22. Finally, under the C.C.A.A., to be accepted, a proposal requires the approval of a majority of unsecured creditors representing three-quarters of the claims of those unsecured creditors voting while Bill C-22 only requires that the unsecured creditors supporting the proposal represent two-thirds of the claims of unsecured creditors voting.

A comparison exercise suggests that Bill C-22 is more advantageous to debtors with respect to the provisions relating to the Crown priority and the voting requirement while the C.C.A.A. has an advantage with respect to the provisions relating to the treatment of wage claims. Therefore, the existence of a third avenue for a certain class of debtors is expected to accentuate the incentive problems in bankruptcy and to give rise to strategic behaviour. As pointed out by Bohémier (1992), there is a possibility that some firms may try to use both systems at the same time, which will increase uncertainty on all creditors, render reorganization more complex and more costly and increase the possibility of filtering failures. In this context, there are no reasons to have two legal procedures for court-supervised reorganization.[29]

7 Conclusion

Historically, the legislator has pursued two objectives with the reorganization procedure in the *Bankruptcy Act*. First, it is used to give some breathing space to financially distress firms who attempt to arrive at a new financial arrangement with their creditors. Second, it is used as a means to save jobs. However, these two objectives can often be inconsistent on efficiency grounds. The argument developed in this study is that in its aim to promote financial reorganization, the new bankruptcy regime will attract firms in the tail of the distribution of financially distress firms. For instance, the data shows that the financial situation of firms likely to be attracted by

[28] Large corporations benefited from filing under the C.C.A.A. since it provides for the stay of proceedings of all creditors, including secured creditors and the inclusion of these creditors in a proposal. This advantage of the C.C.A.A. over the *Bankruptcy Act* disappeared with Bill C-22 which provides for a similar treatment of secured creditors.

[29] It is difficult to motivate the existence of the C.A.A.A when there exists a reorganization procedure accessible to all debtors in financial difficulties.

this new system is extremely poor. In addition, the existence of two alternative reorganization procedures is expected to worsen the incentive problems associated with bankruptcy.

With respect to the individual measures introduced by Bill C-22, the study concludes that (i) the change to the voting requirement will increase the proportion of accepted proposals only marginally; (ii) the amendments relative to the protection of wage earners is expected to impose an additional burden on firms in the short run and take away a natural allied in reorganization, which is likely to reduce both the likelihood of acceptance and of success of a proposal; (iii) the change in the status of a portion of the Crown claims will improve the cash flow situation of firms in reorganization and give them additional breathing room which will increase the probability of success and of acceptance of a proposal; and iv) the new time structure may increase the use of holding proposals which have a lower probability of acceptance by unsecured creditors. These results support the claim of Fisher & Martel (1994b) to the effect that the modifications to the *Bankruptcy Act* are likely to have a modest impact on the reorganization procedure in Canada. However, the new bankruptcy system is anticipated to be more costly.

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TABLE 1
Summary Statistics for Firms in Bankruptcy in Canada.[a]

Variables	Mean	Median	Standard deviation	Min	Max
Total assets[b]	74.231	5.202	438.953	0.00	8 229.00
Total liabilities	232.565	87.882	673.606	4.41	9 377.20
Secured claims	72.761	0.000	336.146	0.00	5 883.70
Ordinary claims	130.117	50.134	311.881	0.00	3 256.66
Preferred claims	26.138	3.862	141.491	0.00	2 620.74
Crown claims	20.575	1.830	132.777	0.00	2 620.74
Source deductions claims	8.900	0.352	29.618	0.00	376.89
Total wage claims[c]	7.377	1.264	15.961	0.07	79.40
Total wage claim per worker	0.597	0.611	0.351	0.07	1.59
Total number of creditors	24.432	15.000	45.448	1.00	701.00
Ratios					
Liabilities to assets ratio	72.242	8.086	260.150	0.80	3 042.00
Secured claims / total assets	1.387	0.000	5.783	0.00	77.67
Crown claims / total claims	0.102	0.020	0.187	0.00	1.00
Crown claims / preferred claims	0.553	0.724	0.452	0.00	1.00
Source deductions / crown claims	0.405	0.084	0.450	0.00	1.00
Payoff variables					
Payoff rate to ordinary creditors[d]	2.533	0.000	9.534	0.00	100.00
Payoff rate to preferred creditors	23.182	0.000	37.198	0.00	100.00

TABLE 2
Distribution of Bankruptcy and Reorganization Estates by Assets.

Variables	Distribution by Assets	
	Bankruptcy	Reorganization
≤ 100 000	352	95
$100 000 < ≤ $500 000	56	126
$500 000 < ≤ $1 000 000	4	61
$1 000 000 < ≤ $5 000 000	2	84
$5 000 000 < ≤ $10 000 000	1	15
> $10 000 000	0	12
Total	415	393

[a] The sample size is 417 files.

[b] The total assets, total liabilities, and the *claims* variables are reported in thousands of June 1993 Canadian dollars, deflated by the GDP deflator (Cansim series D20556).

[c] Based on a sample of 41 estates with positive wage claims.

[d] The information on the payoff to ordinary and preferred creditors originate from the trustees' *Final Statement of Receipts and Disbursements.* The variables are reported in percentages.

TABLE 3
Summary Statistics for Firms in Reorganization in Canada.[e]

Variables	Mean	Median	Standard deviation	Min	Max
Total assets[f]	2 453.309	350.874	19 674.204	0.00	385 765.05
Total liabilities	2 981.584	783.890	15 875.596	22.00	301 750.68
Secured claims	1 610.431	201.254	12 247.279	0.00	237 437.86
Ordinary claims	1 008.831	438.754	2 024.847	11.70	25 659.25
Preferred claims	111.459	23.744	321.962	0.00	4 653.79
Crown claims	76.137	15.094	204.747	0.00	2 424.72
Source Deductions claims	39.164	5.919	134.480	0.00	1 952.88
Total wage claims[g]	54.527	17.053	111.759	0.53	806.69
Total wage claim per worker	1.396	0.750	3.294	0.04	29.21
Total number of creditors	110.100	68.000	141.540	4.00	1 257.00
Ratios					
Liabilities to assets ratio	16.005	1.767	211.130	0.44	4 100.00
Secured claims / total assets[h]	0.781	0.539	3.372	0.00	65.00
Crown claims / total claims	0.045	0.021	0.067	0.00	0.50
Crown claims / preferred claims	0.593	0.694	0.384	0.00	1.00
Source deductions / crown claims	0.418	0.324	0.406	0.00	1.00
Payoff variables					
Expected bankruptcy payoff[i]	37.237	30.332	36.454	0.00	100.00
Reorganization payoff	38.157	30.000	28.143	0.00	124.00
Proportion of payments in cash	7.230	0.000	23.234	0.00	100.00
Proportion of payments by installment	91.141	100.000	25.885	0.00	100.00
Proportion of payments in equity	1.629	0.000	12.378	0.00	100.00
Number of installments	3.050	2.000	4.121	0.00	36.00
Period for repayment (months)	14.011	9.000	16.027	0.00	120.00
% cash payments (< 1 month)	9.742	0.000	27.083	0.00	100.00
% payments within 3 months	50.224	0.000	42.634	0.00	100.00
% payments within 6 months	62.906	0.000	38.899	0.00	100.00
% payments within 12 months	78.364	0.000	31.544	0.00	100.00

[e] The sample size is 393 proposals.

[f] The total assets, total liabilities, and the claims variables are reported in thousands of June 1993 Canadian dollars, deflated by the deflator (Cansim series D20556).

[g] Based on a sample of 125 proposals with positive wage claims.

[h] Excludes a proposal from an incorporated firm with a ratio of 2953.

[i] The bankruptcy payoff, reorganization payoff, and the payments variables are reported in percentages.

TABLE 4
Logit Estimates

Explanatory Variables[j]	Prob. Success		Prob. Acceptance	
	Logit coefficient[k]	Change in probability	Logit coefficient[l]	Change in probability
Policy variables				
Ratio of Crown claims to total claims	-4.5953** (2.3059)	-0.8892		
Large ordinary creditor (dummy)			0.0962 (0.2723)	0.0176
Time between filing and voting (days)			-0.0026 (0.0023)	0.0005
Holding			-1.0185** (0.4010)	-0.2300
Payoff variables				
Expected payoff in liquidation			-0.8681** (0.4105)	-0.1628
Payoff in reorganization			0.6362 (0.5577)	0.1193
Perceived probability of success			1.8925** (0.8753)	0.3548
Prop. of cash payments within 1 month			0.9784** (0.4636)	0.1834
Prop. of payments within 6 months	1.3692** (0.4524)	0.2649		
Number of installments	-0.0733** (0.0365)	-0.0142		
Δ unemployment rate (last 6 months)			-0.3080** (0.1313)	-0.0578
Other variables				
Assets to liabilities ratio	0.8449* (0.4831)	0.1635		
Montreal	-1.0037** (0.4831)	-0.2301		
Corporations	-0.2051 (0.4643)	-0.0416		
Number of amendments			2.1719** (0.3966)	0.4072
Industry				
Metallic minerals & metal products	-0.9037 (0.6889)	-0.2051		
Construction & related activities	-0.4168 (0.4623)	-0.0881		
Communications	1.2893 (1.1046)	0.1731		
Accommodation, restaurants & recreation services	-0.0987 (0.6769)	-0.0195		
Consumer goods and services	0.1402 (0.4071)	0.0262		

[j] Statistical significance is denoted by ** at the .05 level and * at the .10 level where the critical values are 1.96 and 1.65 for a two-tailed test. Standard errors are reported in parentheses.

[k] The sample size is 244 proposals and the success rate is 73.77 percent. The Cragg-Uhler R-Square = 0.227.

[l] The sample size is 384 proposals and the acceptance rate is 75.0 percent. The Cragg-Uhler R-Square = 0.281.