

Formal Rehabilitation Procedures and Insolvent Firms: Empirical Evidence on the British Company Voluntary Arrangement Procedure

Gary A. S. Cook
Naresh R. Pandit
David Milman

ABSTRACT. The British Company Voluntary Arrangement (CVA) is a relatively new debtor rehabilitation process intended to help financially troubled companies, particularly SMEs, resolve their difficulties without being forced into liquidation by secured creditors anxious to recover their funds. This paper is based on a survey conducted by Milman and Chittenden for the Association of Chartered Certified Accountants that is the largest and most comprehensive on the subject of British CVAs. It has three principal objectives: (i) to outline the defining characteristics of CVAs; (ii) to analyse the relationships between CVA performance and contextual factors; (iii) to provide policy recommendations based on those findings. Among other things we find that CVA success is most closely associated with sound fundamental prospects for recovery and supportive creditors. Our principal recommendation is that ways should be found of lowering the fixed costs of CVAs to make the procedure feasible for a larger number of small firms.

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Gary A. S. Cook
Business School
Loughborough University
Loughborough LE11 3TU
United Kingdom
E-mail: g.a.s.cook@lboro.ac.uk

Naresh R. Pandit
Manchester Business School
University of Manchester
Booth Street West
Manchester M15 6PB
United Kingdom

David Milman
Faculty of Law
University of Manchester
Manchester M13 9PL
United Kingdom

1. Introduction

One of the principal findings of research in the small firm area is that due to a combination of factors related to their limited size and scope of activity, small firms exhibit a greater propensity to fail than large firms (Keasey and Watson, 1993; Storey, 1994; Timmons, 1994). Linked to this, studies have also found that the financial performance of small firms is *inherently* variable over time (Keasey and Watson, 1991, 1993) and a significant number will experience financial difficulty every now and then. These characteristics of the small firm sector can result in market failure which is caused by information asymmetry along the following lines (Myers and Majluf, 1984): a fundamentally viable firm with good long term prospects experiences temporary financial difficulty. Those “inside” the firm (e.g., the owners) are aware that the current problems are not existence-threatening. However, the creditors contracting with the firm from the “outside” are not so well informed about the specifics of the enterprise and, armed with general knowledge about the likelihood of small firm failure, decide to withdraw their support and retrieve as much of their assets as possible before it is too late. Their actions are self-fulfilling and a viable firm fails (Aghion et al., 1995). This problem of information asymmetry is less acute for larger firms as internal information increases in quantity and quality with firm size (Storey, 1994) and so external stakeholders are more likely to make decisions based on data rather than assumption.

The question that naturally arises in the context of market failure is: what can a third party such as the government do to remedy the market



imperfection? While there are a number of possibilities (Storey et al., 1987), the focus of this paper is on what the government can do legislatively (Gladstone and Lee, 1995).

Legal frameworks for dealing with troubled companies vary from country to country (Fenster, 1993) and in Great Britain four broad options are available:

- (i) *Liquidation* or winding up with the proceeds of realisation distributed to creditors. Winding up can either be done out of court (voluntary liquidation) or by the court (compulsory liquidation). The former regime is more cost effective and can result in better dividends for creditors. The winding up process is both collective and terminal and will result in the final dissolution of the company. Latest figures show that for 1999 in Great Britain there were 14,852 insolvent liquidations of which compulsory liquidations amounted to 5,573 (Insolvency Service, 1999a).
- (ii) Enforcement of collateral by a secured creditor¹ by a process known as *receivership*. Receivership is generally the paramount corporate insolvency regime and its conduct cannot be interfered with by other regimes. This is a characteristic feature of legal systems based upon English law and is not mirrored on the European Continent or in the U.S.A. If the collateral proves adequate to repay the lender, the residual assets and control of the business are returned to the company; more often than not receivership is a prelude to liquidation. In 1999 the total number of receiverships notified to the British authorities was 1,685 (Insolvency Service, 1999a).
- (iii) *Rehabilitation structures outlined in law*. These are new additions to the corporate insolvency menu introduced in 1985–86. There are two variants. Court driven rescue procedures, such as the administration order regime, and out of court settlements, characterised as company voluntary arrangements (CVAs). Apart from the obvious court driven/not court driven distinction, the main differences between these regimes is one of cost, with administration being more expensive. On the other hand, the protection

afforded to the debtor company in cases of administration is greater. In 1999 there were 475 CVAs compared to 443 administration order cases (Insolvency Service, 1999a).

- (iv) *Informal arrangements*. A troubled company does not have to exploit formal legal procedures to resolve its difficulties. Informal arrangements with pressing creditors are always possible and these may range from private understandings between businesses and single creditors to complex arrangements involving large public companies owing millions to a number of banks. By definition, no official statistics are available as to the incidence of such informal arrangements.

The focus of this paper, the CVA, being the least expensive of the two rehabilitation structures, is particularly designed to provide means for the preservation of financially troubled but viable small commercial enterprises and owes its existence to the influential Cork Committee on Insolvency Law Reform (1982). The Cork Committee was charged with a major review of insolvency law and its main recommendations were implemented in the Insolvency Act 1986. One of the major conclusions of the Committee was that English law lacked an appropriate facility for the promotion of individual and corporate rehabilitation in cases of insolvency. This led to provisions for both Individual Voluntary Arrangements, intended to help small businesses and professional debtors where there is a single debtor, and Company Voluntary Arrangements where there is more than one debtor. Although the Committee reported in 1982 and CVAs have been in operation since legislation was introduced in 1985–86, very little detailed research exists on CVAs (Brown, 1996). It is the purpose of this paper to go some way towards addressing this gap in the literature by attempting to answer three principal questions:

- What are the defining characteristics of CVAs?
- What are the relationships between CVA performance and contextual factors?
- In what ways may the procedure be improved, particularly for small firms?

It is hoped that answers to these questions will enlighten company directors considering the CVA

option, those charged with administering the CVA process, and the creditors of small and medium sized enterprises, as well as guiding policy makers. While the precise regime which governs CVAs is peculiar to Great Britain, the results are of wider interest since they bear on the question of whether rehabilitation procedures play a useful role in an insolvency regime.

In the next section an overview of the CVA procedure is provided. Section 3 presents the research methodology, followed by presentation and analysis of the results. The paper ends with conclusions and recommendations for policy.

2. An overview of the CVA procedure

A CVA is initiated by the directors of a financially troubled company making a written proposal to creditors (e.g., for a moratorium or an exchange of debt for equity). This proposal must identify a "nominee", who must be qualified to act as an insolvency practitioner,² who will be responsible for both reporting the debtors' proposal to the court and ultimately for overseeing the implementation of the voluntary arrangement, should a CVA be agreed upon. Until the creditors have voted for the proposal, there is no protection for the company or its assets from actions by impatient creditors.

The nominee is responsible for summoning meetings of the company and all its known creditors and a high threshold of support (75 percent) from creditors present and voting is required for approval. An approved voluntary arrangement is binding upon all creditors who had notice of the meeting and were entitled to vote. However, secured creditors (e.g., a bank holding rights of security over the assets of the company) and preferential creditors³ (e.g., the Inland Revenue and Customs and Excise) cannot have an arrangement foisted upon them without their agreement. Once the scheme has been approved, the nominee, who is transformed into the "supervisor", must see that the arrangement is put into effect. In addition the supervisor is empowered to apply to the court for directions in relation to any matter arising under the voluntary arrangement and also to apply to the court for the winding up of the company or for an administration order⁴ to be made in relation to it. The supervisor is not

normally expected to run the business during the CVA, and the debtor is allowed to remain in possession. A CVA is terminated either by satisfaction of debts or by the supervisor initiating an administration or liquidation.

3. Research methodology

The data on which this research is based was gathered via a structured questionnaire directed towards all names appearing on the HMSO list of insolvency practitioners.⁵ In total some 1,700 questionnaires were sent out and 402 replies were received, a response rate of nearly 25 percent. Of these, 207 indicated that they had no experience of CVAs and therefore could not complete the questionnaire. A further 9 were unable to participate in the survey but suggested a follow-up with another insolvency practitioner, and 11 returned questionnaires were unusable (for example, in some cases, the respondent replied with respect to an administration order and not a CVA). Accordingly, our full sample was restricted to returned questionnaires on 175 different CVAs. It was not possible to properly test for non-response bias as most respondents returned questionnaires anonymously. However, of the 175 returns, 53 were accompanied by a covering letter indicating the insolvency practitioner's company. Of these 53, 16 (30 percent) were from large well known practices and the remainder from smaller, often single site companies. Also, the bulk of the 53 were single returns from one company, that is, no one or small group of companies account for the majority of the returned questionnaires. Accordingly, although we cannot be completely sure that our sample is biased towards larger or smaller companies, or towards a single or small group of companies, there is no immediate reason to suppose our results are affected by these types of non-response bias.

At the time of our survey (late 1994 to early 1995) the national cumulative total number of CVAs since their inception in 1986 was 780 (The Insolvency Service, 1999b). Thus, our sample accounts for nearly 23 percent of all cases. This makes this survey the largest on the subject of British CVAs.

We focus on two measures of CVA performance. The first is dividends paid in the first year

of the CVAs operation. These data were available on 98 of the 175 cases. Dividends in this context refer to an amount paid in terms of pence per pound (sterling) of debt. Each CVA has an agreed schedule of dividend payments, typically spread between one and three years depending on the proposed duration of the arrangement. This agreed schedule may or may not be met, however once the proposal specified in the arrangement has been fully complied with, the debt is satisfied, even if the total dividend paid is less than 100p in the pound of the original debt. Once the proposal has been fully complied with the firm emerges from the arrangement and continues trading. Dividends are relevant as a measure of success because even where the firm does not ultimately survive, the level of dividends paid is a central measure of the success of the procedure from the creditor's point of view. The proportions of cases falling into various categories of CVA reported below hardly differ between the sub-set of 98 cases where dividend information is available and the full sample of 175 cases.

As a robustness check, tests were run on the cumulative dividends paid up to the end of the second year of the CVA. This reduced the valid sample to 51 cases and, coupled with the extensive use of non-parametric tests, the reduced number of degrees of freedom lowered significance levels. Nevertheless, with a very few exceptions which will be commented on below, the qualitative results of the analysis using two years of dividends were entirely consistent with the analysis using first year dividends only.

The second measure of CVA performance is the outcome of the CVA at 31 August 2000. If at that time, the firm had emerged from the CVA and was trading normally, free of any insolvency procedure, then the CVA was defined as successful. The average duration of a CVA is 24 months and so we expect that most of the CVAs in our sample would have been concluded by our cut-off date. Data was available on 146 of the 175 cases, although usable responses were available only for a subset of approximately 120 cases.⁶

4. The defining characteristics of CVAs

This section will give an overview of the nature of firms in CVAs. It will focus on the typical size

of firms, the success of the arrangement as rated by the supervisor, the relationship between the extent of debt recovery in the form of the dividend paid to creditors and the supervisor's assessment of the CVA, the distribution of firms using CVAs by industry sector, why the firms ran into difficulty and why they were felt to merit an attempt at rehabilitation.

4.1. *The size of firms in CVAs*

Most companies that are subject to the CVA procedure are small⁷ private limited companies,⁸ although in a few instances CVAs have been used for public limited companies (plc's) or private companies of considerable size. This is particularly noticeable where the CVA has been put in place behind the protective screen of an administration order. Of the companies covered by our survey 11 (6.4 percent) were plc's, with the bulk (93.6 percent) being private limited companies.

In terms of size of company, it is apparent that for very small businesses, with a sales revenue of less than £100,000, even the modestly priced CVA may be too expensive to exploit. The business must be worth saving in terms of the operational cost of the CVA, which can run into several thousand pounds. Only 15 of the companies in our full sample had a turnover of less than £100,000 (see Table I). The corresponding figures for the sub-sample reporting dividends is shown in Table II.

TABLE I
Distribution of CVAs by turnover in the full sample

Turnover (£)	Frequency	Valid percent
Less than 100,000	15	9.3
100,000–199,999	12	7.4
200,000–499,999	29	17.9
500,000–749,999	19	11.7
750,000–1,000,000	10	6.2
1,000,001–3,000,000	45	27.8
Greater than 3,000,000	32	19.8
Total	162	100.0
Missing values	13	
Total	175	

TABLE II
Distribution of CVAs by turnover in sub-sample reporting dividends

Turnover (£)	Frequency	Valid percent
Less than 100,000	8	8.9
100,000–199,999	9	10.0
200,000–499,999	11	12.2
500,000–749,999	12	13.3
750,000–1,000,000	6	6.7
1,000,001–3,000,000	25	27.8
Greater than 3,000,000	19	21.1
Total	90	100.0
Missing values	8	
Total	98	

TABLE III
Outcome of CVAs

Company status at 31 August 2000	Frequency	Valid percent
Dissolved	47	32.2
Dormant	4	2.7
Liquidation	38	26.0
Receivership	18	12.3
Administration order	1	0.7
CVA	6	4.1
Trading	32	21.9
Total	146	100.0
Missing values	29	
Total	175	

4.2. CVA performance

The first performance measure that this paper will focus on is dividends paid. A weakness of our sample is that most CVAs had not been completed at the time of the survey and so the only workable number of observations was for dividends paid in year 1 of the CVA. This is less than ideal, because the full rate of recovery can not be accurately forecast by the dividend paid in year 1. Nevertheless, the measure is informative for a number of reasons. The majority of CVAs (87.3 percent) in the sample were expected to last three years or less and 61.4 percent two years or less. Thus the year 1 dividend constitutes performance over a significant period of the expected life of the CVA. What is more, there is no reason to believe that there is any systematic tendency to load recovery of debts via the dividend to any particular year. Equally, we found no such systematic tendency by various CVA types (e.g., by industry sector, by major cause of difficulty etc.). Accordingly, results showing that certain types of CVA, to be presented in what follows, pay significantly higher dividends in year 1 are unlikely to be biased, although admittedly we do present only a limited snapshot.

A second measure of CVA performance is the long-run survival of the firm using the CVA. The results in terms of the ultimate outcome are shown in Table III. This table reveals that only 21.9 percent of valid cases in our sample had emerged from their CVA and were trading free of any

insolvency procedure as at 31 August 2000, over five years since the time of the survey. In contrast, nearly 60 percent had either been dissolved or were in the process of liquidation. The remaining firms were either in receivership, dormant, or under an administrative order or CVA.

4.3. Distribution of CVAs by sector

With respect to the nature of a company's business, our findings broadly mirror those of the Society of Practitioners of Insolvency⁹ (SPI) in their surveys of insolvencies of all types (SPI 1994, SPI 1995, SPI 1996, SPI 1997). In the first of these surveys (which relates most closely to the time period of our data collection), of 1,900 insolvencies, some 19 percent were construction companies, 13 percent were retailers, 5 percent were transport companies and 24 percent were

TABLE IV
Distribution of CVAs by sector

Industry sector	Frequency	Valid percent
Construction	20	21.1
Manufacturing	34	35.8
Distribution	15	15.8
Services	26	27.4
Total	95	100.0
Missing values	3	
Total	98	

service companies. The only major difference is in respect of manufacturing companies which made up one third of both our full and sub-samples but only 18 percent of the SPI cohort. This difference may be due to problems of categorisation or to the fact that manufacturing companies may be more suited to the CVA procedure.

4.4. Causes of financial difficulty

Table V shows the major cause of financial difficulty as identified by the insolvency practitioner supervising the CVA. Two interesting observations can be made. First, the major cause of financial difficulty is quite varied, although “poor management” is the clear modal category. The relatively high incidence of “general economic conditions” reflects the timing of our survey, with many firms in CVAs having run into difficulty during the British recession of the early 1990s. Secondly, it seems that in the majority of cases the time that a CVA buys could promote the chances of successful recovery. That is, given that “poor management” is the most frequent cause, being cited by over a third of respondents, it seems reasonable to assume that in a significant number of these cases, the moratorium afforded by a CVA could enable the firm to improve its management either by replacement or through management training and development. Similarly, poor “general economic conditions” tend to be temporary and so, once again, the moratorium afforded by a CVA could enable the firm to “weather the storm”. If this line of reasoning is correct, nearly 60 percent

TABLE V
Distribution of CVAs by major cause of financial difficulty

Major cause of financial difficulty	Frequency	Valid percent
Poor management	34	36.2
General economic conditions	22	23.4
Problems with one major contract	14	14.9
Poor trading in one area	13	13.8
A significant bad debt	11	11.7
Total	94	100.0
Missing values	4	
Total	98	

of the firms in our sub-sample could potentially benefit from the extra time for recovery that a CVA can provide. Indeed, during a moratorium it may be possible to address the remaining 3 causes of difficulty by implementing actions such as a refinancing package, a restructuring of assets, a change in the scale and/or scope of operations or a merger.

4.5. Reasons for saving the firm

Another question asked respondents to cite the major reason for saving the firm (see Table VI). In only 11.7 percent of cases was the CVA viewed as simply a superior (lower cost and/or lower risk) method than liquidation to wind up the firm. In 58.5 percent of cases the underlying business was thought to be viable with either one or more profitable areas of operation or only one event causing difficulty. It seems reasonable to assume that both of these reasons could be tackled in the long run and so, once again, we find support for the proposition that the extra time afforded by a CVA may increase the probability of successful recovery.

5. The relationships between CVA performance and context

The second principal question of this study was: what are the relationships between CVA perfor-

TABLE VI
Why firms were considered worth saving

Main reason for saving the firm	Frequency	Valid percent
One or more profitable areas	30	31.9
Apart from one event the business is sound	25	26.6
Temporarily unrealisable value of one major asset	18	19.1
Superior to liquidation	11	11.7
Shareholders willing to invest extra capital	6	6.4
Value of intellectual property	4	4.3
Total	94	100.0
Missing values	4	
Total	98	

mance and contextual factors? Eight hypotheses related to this question were tested.

For the average small company, the costs associated with establishing, negotiating and monitoring a sophisticated recovery process such as a CVA are between £25,000 and £30,000 (Krasner, 1992). Such costs are largely fixed and so are regressive (i.e., relatively higher for the smallest firms) and therefore disproportionately reduce the amounts of money available to stabilise the operations of the smaller firm and to repay its creditors. It follows that smaller firm CVAs are likely to be relatively less successful (although they may still meet the expectations of the parties involved) than CVAs for larger businesses.

This point is strengthened if one takes account of the previously mentioned information asymmetries between the owners of the firm and its creditors. If the insolvency practitioner is to overcome these asymmetries and provide creditors with an accurate picture of the position of the firm, considerable investigation work will be required prior to the establishment of the CVA, together with careful monitoring of the progress of the firm during the life of the arrangement. A high level of investigation and scrutiny will only be feasible if the scale of the cash-flows is sufficiently large to enable the supervisor to fully recover the costs incurred. This is more likely to be possible where the scale of the business and its assets are relatively large, once again making a satisfactory outcome more likely in the case of relatively large firms.

H1: CVAs among smaller firms are less likely to succeed than CVAs among larger firms.

Although small firm survival, failure, and turnaround rates do vary from one sector to another, given the attention that the theoretical literature places on industry sector (Porter, 1980, 1985), the differences are relatively insignificant. For example, Phillips and Kirchhoff (1989) in their study of small U.S. firms between 1976–1986 found that the survival rate of all firms in their sample was 39.8 percent. When their sample was divided into 9 different industrial sectors, the range varied only from 35.3 percent for firms in the construction sector to 46.9 percent for firms in the manufacturing sector. Similarly, Gallagher and Stewart (1985) in their study of U.K. firms with

between 20–49 employees in 1982 found the lowest dissolution rate to be 3.87 percent for firms in the miscellaneous services sector and the highest rate to be 5.58 percent for firms in the manufacturing sector. Finally, Chowdhury and Lang (1996), in their study of 153 declining small U.S. firms between 1984–87, found that successful turnarounds were unaffected by industry membership.

H2: CVA success will not vary significantly according to industry sector.

In an interesting review of the literature on small firm failure, Berryman (1983) concludes that the managerial and personal characteristics of the owners of small firms are important factors influencing failure rates. Specifically, she reports that studies have found that owner-managers most likely to fail are autocratic and unwilling to take advice from qualified sources (Argenti, 1976), have limited formal education, undertake relatively little reading, and are inflexible to change. Accordingly, we have the basis for a third hypothesis.

H3: An unsatisfactory CVA result is more likely when the major cause of financial difficulty is poor management.

A fourth hypothesis to test centres on the primary purpose of the CVA procedure. The view of the Cork Committee (1982) and of expert commentators such as Storey et al. (1987) was that policy-makers should de-emphasise small firm creation and instead focus on the survival and growth of *existing* firms. In particular, the recommendation was for policy-making to focus on those viable firms which face financial difficulties that they cannot resolve on their own (Gladstone and Lee, 1995). If the CVA procedure has successfully implemented this recommendation, we would expect CVA outcomes to be particularly good when the firm in question is fundamentally viable.

H4: CVA success is more likely when the firm is fundamentally viable.

Among the many interesting propositions forwarded by Beaver (1966) on failure prediction is the one that the larger the amount of secured debt held, the greater the probability of failure.

The proposition is based on a view of the firm as a pool of liquid assets which is increased and decreased by business activity and is related to the fact that secured debt in the form of bank loans and overdrafts is inherently risky, particularly when the firm has highly variable cash flow (a not uncommon problem in the small firm sector).

H5: CVA success is more likely when secured creditors do not exist.

When secured creditors do exist, given their high status within the British insolvency regime, we would expect a greater likelihood of success when they are supportive.

H6: CVA success is more likely when secured creditors are supportive.

Unsecured preferential creditors, who include the Inland Revenue, Customs and Excise (the two main British taxation authorities), also have a powerful position within British insolvency law. Moreover, the taxation authorities have attracted criticism for being too single minded in the pursuit of outstanding revenues rather than being sympathetic towards firms in financial difficulty.

H7: CVA success is more likely when unsecured preferential creditors are supportive.

One of the advantages of the CVA procedure is that it gives stronger rights to less senior creditors, in particular those who do not have security (Aghion et al., 1995). Unsecured creditors should therefore be particularly supportive of CVAs. Given that one of the intended outcomes of the CVA procedure is to improve the financial return to unsecured creditors compared to alternative insolvency procedures we have:

H8: Of secured and unsecured creditors (non preferential and preferential), unsecured creditors will benefit most from CVAs than from alternative insolvency regimes.

6. Results

6.1. CVA performance and firm size

A Kruskal-Wallis one-way ANOVA test showed that firm size, measured by turnover, is signifi-

TABLE VII
Dividends paid in year 1 by size

Turnover (£)	N	Mean rank
Less than 1 m	46	42.41
1–3 m	25	39.28
Greater than 3 m	19	61.16
Total	90	

$\chi^2 (2) = 9.37; p = 0.009.$

cantly related to dividend paid in year 1 at the 1 percent level. The results are shown in Table VII. They show that larger firms are the more successful within CVAs. This finding is a further example of the generally regressive impact on small businesses of administration costs of all types (Chittenden et al., 1998, Sandford et al., 1989) and demonstrates that small firms cannot reap the economies of scale available to large businesses (Storey, 1994).

Another interesting feature of these results is that the lowest ranking firms are those in the £1–3 m turnover bracket. Indeed, further inspection reveals this size category to have the second lowest median dividend paid of all the unaggregated size categories at 8p (the lowest is the £200,000–499,999 group with a median of 0). Also, the smallest size class, less than £100,000, has a median dividend of 12.5p with three classes having higher median dividends and three lower. The next size category, £100,000–199,999 has a median dividend of 20p. Thus, despite the disadvantages which these smaller firms face due to the relatively high fixed costs of the CVA, they are nonetheless able to achieve respectable first year recovery rates. The median dividends showed the same pattern for cumulative dividends up to year two, although the result was not significant. The main driver of the significance of the test result is the median dividend of the largest size category which is 30p. This result was confirmed in a separate Kruskal-Wallis test using the unaggregated turnover categories (significant at 10 percent), with the largest size class having easily the highest mean rank. Thus hypothesis 1 receives qualified support. The largest size class of firms does achieve, on average, the highest first and second year dividends. However, the relationship

TABLE VIII
Outcome by size of business

Turnover (£)		Outcome		
		Failure	Success	Total
Less than 1 m	Count	45.0	12.0	57.0
	<i>Expected count</i>	<i>44.0</i>	<i>13.0</i>	<i>57.0</i>
1–3 m	Count	33.0	6.0	39.0
	<i>Expected count</i>	<i>30.1</i>	<i>8.9</i>	<i>39.0</i>
Greater than 3 m	Count	13.0	9.0	22.0
	<i>Expected count</i>	<i>17.0</i>	<i>5.0</i>	<i>22.0</i>
Total	Count	91.0	27.0	118.0
	<i>Expected count</i>	<i>91.0</i>	<i>27.0</i>	<i>118.0</i>

Pearson χ^2 (2) = 5.402; p = 0.067.

between CVA size and financial performance appears to be U-shaped rather than linear.

Table VIII shows the relationship between firm size, again measured by turnover, and the outcome of the CVA at 31 August 2000. If the company was trading and free of any insolvency procedure, the CVA was defined as a success. All other outcomes were aggregated under the failure category. Again there is a significant relationship which is consistent with the results regarding dividends. Firms in the less than £1 m and £1–3 m turnover categories have more failures and fewer successes compared to expected and the reverse is true for the firms with turnover in excess of £3 m.

6.2. CVA performance and industry sector

A Kruskal-Wallis one-way ANOVA test was performed to determine whether there was a significant relationship between dividends paid in year 1 and the industry sector in which the firm operated. The results, shown in Table IX, indicate that there is no significant relationship. Indeed the p -value shows that any such relationship is a long way from being significant. There was also no significant relationship between line of activity and the ultimate success or failure of the firm at 31 August 2000, the incidence of success and failure being almost completely independent of line of activity in a standard contingency table test. Thus hypothesis 2 is supported.

6.3. CVA performance and the major cause of financial difficulty

A Kruskal-Wallis one-way ANOVA test revealed that there was no significant relationship between first year dividends paid and the major cause of financial difficulty (results were very similar for dividends paid up to the end of year 2). As can be seen in Table X, the mean ranks are all quite similar. This implies that the chance of a successful CVA is independent of any particular major cause of financial difficulty.

Those firms where the prime cause of difficulty was held to be poor management do not have a particularly low mean rank for dividends paid. To test the hypothesis further, the major cause of financial difficulty was divided into poor management and other factors. A two sample t -test showed that there was no significant difference in means between dividends paid in CVAs where

TABLE IX
Dividends paid in year 1 by sector

Sector	<i>N</i>	Mean rank
Construction	20	50.83
Manufacturing	34	48.51
Distribution	15	52.97
Services	26	42.29
Total	95	

χ^2 (3) = 1.954; p = 0.5821.

TABLE X
Dividends paid in year 1 by major cause of financial difficulty

Major cause of financial difficulty	N	Mean rank
Problems with one major contract	14	42.89
A significant bad debt	11	58.18
Poor trading in one area	13	46.46
General economic conditions	22	46.41
Poor management	34	47.04
Total	94	

$\chi^2(4) = 2.2945$; $p = 0.6818$.

poor management was identified as the major cause of the firm's problems and CVAs where problems were put down to other factors. The mean in the poor management cases was actually higher at 22.2p compared to 21.2p in the other cases. The calculated t was 0.165, $p = 0.87$.

However, firms where the major cause of financial difficulty were ascribed to poor management showed a lower propensity to survive than the group as a whole, as did those where the cause was a significant bad debt (Table XI). Thus, hypothesis 3 is partially supported. A higher than expected incidence of success arose where the cause of difficulty was problems with one major contract or poor trading in one area of the

business. This is consistent with the stated purpose of the CVA procedure which is to rehabilitate businesses which are fundamentally viable, yet suffering temporary and remediable difficulties.

6.4. CVA performance and fundamental viability

If the reason for saving the business was cited as being either "one or more profitable areas of operation", "the shareholders were prepared to invest extra capital" or, "apart from one event the underlying business was sound", we classified the firm as fundamentally viable. On the other hand, if the reason for saving the company was that the CVA procedure was "superior to liquidation" or because of the value of "one unrealisable asset" (including trademarks and copyrights) we classified the company as fundamentally unviable. Table XII indicates that there is a significant difference between median dividends paid in year 1 between viable and unviable companies.

However, in terms of long-run success or failure, there was no significant difference between viable and unviable cases. The reason the company was considered worth saving had no statistically significant relationship with whether or not the firm successfully emerged from its CVA. Thus hypothesis 4 is partially supported.

TABLE XI
Outcome by major cause of financial difficulty

Major cause of financial difficulty		Outcome		
		Failure	Success	Total
Problems with one major contract	Count	9.0	6.0	15.0
	Expected count	11.4	3.6	15.0
A significant bad debt	Count	14.0	1.0	15.0
	Expected count	11.4	3.6	15.0
Poor trading in one area	Count	6.0	7.0	13.0
	Expected count	9.9	3.1	13.0
General economic conditions	Count	23.0	8.0	31.0
	Expected count	23.6	7.4	31.0
Poor management	Count	41.0	7.0	48.0
	Expected count	36.6	11.4	48.0
Total	Count	93.0	29.0	122.0
	Expected count	93.0	29.0	122.0

Pearson $\chi^2(4) = 13.398$; $p = 0.009$.

TABLE XII
Dividends paid in year 1 by fundamental viability

Fundamental viability	<i>N</i>	Mean rank	Sum of ranks
Fundamentally viable	61	51.91	3166.50
Fundamentally unviable	33	39.39	1298.50
Total	94		

Mann-Whitney $U = 737.5$; $z = -2.21$; $p = 0.0273$.

6.5. CVA performance and existence of secured creditors

In the case of secured creditors, the necessary assumptions were met for a two-sample t -test. This revealed that mean dividends where secured creditors were present was 17.9p and where they were not present, 32p. This difference is significant at the 5 percent level. However, the existence of secured creditors had no statistically significant relationship with cumulative dividends paid up to year 2 and also had no statistically significant relationship with whether or not the firm eventually emerged from the CVA procedure free of insolvency. This finding may reflect the contention of Aghion et al. (1995) that secured creditors will prefer safer but less remunerative recovery plans. Thus hypothesis 5 is only partially supported.

6.6. CVA performance and secured creditor support

In order to conduct this analysis it was necessary to combine the categories of neutral and unsupportive into a single not supportive category due to the small number of cases where secured creditors were unsupportive. Table XIII shows that there is a significant difference at the 5 percent level between the median dividend paid between CVAs where secured creditor attitudes were supportive and when they were unsupportive. The median in the supportive case is 13p (mean 21.7p) compared to a median of 0p in the unsupportive case (mean 9.6p). Thus supportive secured creditors are significantly associated with CVAs which pay higher dividends in year 1. This finding holds with respect to cumulative dividends paid up to

TABLE XIII
Dividends paid in year 1 by secured creditor attitude

Secured creditor attitude	<i>N</i>	Mean rank	Sum of ranks
Supportive	50	41.99	2099.50
Not supportive	25	30.02	750.50
Total	75		

Mann-Whitney $U = 425.5$; $z = -2.36$; $p = 0.0184$.

the end of year 2 ($p = 0.014$). Accordingly, hypothesis 6 receives support.

6.7. The relative support of secured and unsecured preferential creditors

The questionnaire asked insolvency practitioners to assess whether, in their opinion, secured and unsecured preferential creditors had been supportive of the CVA, had been neutral or had been unsupportive. In the full sample of CVAs, a far greater proportion of secured creditors (64.4 percent) were supportive of the CVA than unsecured preferential creditors (30.6 percent). Also, only 2.2 percent of secured creditors were unsupportive, as opposed to being merely neutral, compared to 6.5 percent of unsecured preferential creditors. First year dividends paid were significantly higher when unsecured preferential creditor attitudes were supportive (Mann-Whitney $U = 608.5$, $p = 0.019$). Second year dividends were also higher but not significantly so. Ultimate success or failure was not significantly related to unsecured preferential creditor attitude. Accordingly, hypothesis 7 is partially supported.

6.8. Who benefits from CVAs?

We asked respondents to estimate the extent to which they believed the directors and creditor groups (i.e., secured, unsecured preferential and unsecured non-preferential creditors) had benefited (or been disadvantaged) by the use of the CVA compared to a more traditional insolvency regime. A five point Lickert scale was used, with one representing a very unfavourable outcome and five a very favourable outcome.

In a sign test, unsecured creditors (preferential and non-preferential) were rated as having benefited more than secured in 31 cases and less in 15 cases with 47 ties. This difference was significant at the 5 percent level, indicating that unsecured creditors do better in a CVA compared to secured creditors. This result is consistent with the intended aims of the CVA procedure. Note that it does not mean that secured creditors do badly in CVAs, simply that they do not do as well as unsecured creditors. Indeed, in the full sample, the mean score for secured creditors was 3.76, where 5 corresponds to "compared very favourably". Thus hypothesis 8 is supported.

7. A further analysis of factors influencing ultimate survival or failure of firms in CVAs

The analysis so far has looked at the influence of a variety of factors on CVA performance. Each factor has been looked at in isolation. In order to extend the analysis and look at the effect of each factor controlling for the effects of other factors, a probit analysis was conducted. Here there were two possible outcomes, success where the firm emerged from the CVA free from insolvency and failure where there was any other outcome (both

outcomes were as of 31 August 2000, over five years after the date of the survey). Hence the dependent variable is a dichotomous variable where 1 indicates success and 0 failure. The basis of the model is that success or otherwise depends on some unobservable variable Z which is a function of the independent variables used in the model. There is assumed to be some critical value of Z , Z^* , such that, where $Z \geq Z^*$, the firm will survive and, where $Z < Z^*$ the firm will fail. Z^* , like Z , is unobservable. For each observation the probability of success ($Y = 1$) is simply the probability that $Z^* < Z_i$. In the case of the probit model this is simply the cumulative probability from $-\infty$ to Z_i based on a normal distribution.

The definitions of the independent variables are given in Table XIV and the results in Table XV. Due to missing observations for each of the independent variables, the usable sample, where all information was complete, was 80 cases.

The probit models reported are highly significant and generate a high rate of correct predictions. In interpreting the results, it is the signs of the coefficients that are of greatest interest. The coefficients themselves do bear a relationship to the marginal effect on the probability of success but this is dependent on the density function at each point Z_i .

TABLE XIV
Probit analysis independent variables

Variable	Variable description
MANU	1 if the company is engaged in manufacturing, 0 otherwise
DIST	1 if the company is engaged in distribution, 0 otherwise
SERV	1 if the company is engaged in services, 0 otherwise
AGTURN2	1 if the company falls in the turnover category £1–3 million a year, 0 otherwise
AGTURN3	1 if the company falls in the turnover category > £3 million a year, 0 otherwise
CAUSE	1 if the cause of financial difficulty is poor management, 0 otherwise
SAVING	1 if the reasons for saving the company is because it is fundamentally viable, 0 otherwise
SECEXIST	1 where the company had secured creditors, 0 otherwise
SEC	Amount owed to secured creditors in £s
SECATT	1 where the attitude of secured creditors was supportive, 0 otherwise
CREDBANK	1 if money is owed to banks, 0 otherwise
CREDFI	1 if money is owed to hire purchase type financial institutions, 0 otherwise
CREDOTH	1 if money is owed to any other type of secured creditor (e.g., factoring companies)
PREFCRED	Amount owed to unsecured preferential creditors in £s
PREFATT	1 where the attitude of unsecured preferential creditors was positive, 0 otherwise
IR	1 if money is owed to the Inland Revenue, 0 otherwise
CUSTOMS	1 if money is owed to Her Majesty's Customs and Excise, 0 otherwise
UNSEC	Amount owed to unsecured creditors £s

TABLE XV
Probit analysis results

Variable	Full model		Restricted model	
	Coefficient	<i>t</i> -ratio	Coefficient	<i>t</i> -ratio
MANU	2.781	1.902*	1.999	1.994**
DIST	5.800	2.105**	4.095	2.344**
SERV	0.868	0.856		
AGTURN2	0.014	0.021		
AGTURN3	1.197	0.985	1.350	1.217
CAUSE	-3.618	-2.058**	-2.817	-2.331**
SAVING	0.579	0.565		
SECEXIST	-5.677	-1.909*	-4.270	-2.163**
SEC	0.000001	1.494	0.000001	1.496
SECATT	3.285	2.255**	3.034	2.554**
CREDBANK	1.581	1.031	1.276	1.106
CREDFI	5.365	2.363**	4.349	2.739***
CREDOTH	-2.936	-1.595	-2.447	-1.654*
PREFCRED	0.000008	1.617	0.00001	1.904*
PREFATT	0.707	0.936		
IR	0.302	0.214		
CUSTOMS	-2.167	-1.637	-1.623	-1.689*
UNSEC	-0.0000005	-1.566	-0.0000004	-1.674*
CONSTANT	-1.577	-0.844	-0.711	-0.556
<i>N</i>	80		80	
Log-Likelihood	-18.138		-18.989	
χ^2	51.433		49.731	
% correct predictions	87.5		90	
LR test of restriction (χ^2 (5))			1.702	

What do these results imply for the research hypotheses? With respect to hypothesis 1, there is some evidence of an association between firm size and survival. In the full model the coefficients on both the middle and largest size category (AGTURN2 and AGTURN3) are positive. In the restricted model the coefficient on AGTURN3 is positive and reasonably large but quite a long way from being significant. There is evidence of survival being significantly related to the line of activity the firm operates in. Thus the probit model is not consistent with hypothesis 2. This result may reflect the fact that the default category, construction, is volatile with low entry barriers and low survival rates. The sector is also characterised by easy movement of labour between self-employment and employment. Accordingly, there may be lower psychological barriers to dissolving a company than in the manufacturing and distribution sectors.

Where the major cause of financial difficulty

is ascribed to poor management, there is a lower probability of survival, as shown by the negative coefficient on CAUSE. This relationship is significant at the 5 percent level in both models providing clear support for hypothesis 3. The coefficient on SAVING is positive but far from significance in the full model. Therefore, while the sign of the coefficient is consistent with hypothesis 4, that fundamental viability should increase the probability of survival, the hypothesis receives no support beyond this.

In both the full and restricted models the existence of secured creditors, all else equal, exerts a significantly negative influence on the probability of survival. This provides strong support for hypothesis 5. Where secured creditors have a supportive attitude, this significantly increases the probability of survival therefore providing support for hypothesis 6. The coefficient on PREFATT is positive but far from significance providing only weak evidence for the claim that

supportive unsecured preferential creditors increase the likelihood of survival. In view of this there is qualified support for hypothesis 7. It is somewhat worrying that owing money to Customs and Excise appears to significantly reduce the probability of survival. There are two broad interpretations which could be placed on this finding. The first is that Customs and Excise present an obstacle to the survival of financially distressed companies. Alternatively, owing money to the Customs and Excise may be merely symptomatic of companies which have deeper problems.

The coefficient on CREDBANK is positive although not close to significance and this is not in line with the popular belief that banks make life particularly difficult for troubled small firms. What is interesting is that having other types of financial intermediary among the creditors (CREDFI) significantly increases the probability of survival. Having secured creditors which are neither banks nor hire purchase companies significantly reduces the probability of survival. These results could, of course, merely be statistical artefacts, yet merit further investigation.

The amount owed to secured and unsecured preferential creditors exerted a positive influence on the probability of survival which in both cases lay just outside the 10 percent significance level in the full model, although the amount owed to preferential creditors became significant in the restricted model. A plausible interpretation is that the amount of debt may be correlated with the size of the firm and hence will capture some of the influence of firm size on survival. This relationship does not support the idea that simply owing money to Customs and Excise indicates an unviable business.

8. Conclusions and implications for policy

CVAs are predominantly concentrated among SMEs. Larger companies with greater bargaining power seem to prefer less disruptive and less costly out of court settlements. However, the fixed costs of administration seem to rule out the CVA option for very small firms (turnover less than £100,000 per year). Companies using CVAs come from a wide range of industry sectors, although a disproportionately large number in our sample were based in manufacturing. We also find that the

major causes of financial difficulty leading to a CVA are quite varied although poor management (something of a catch-all category) and poor general economic conditions (reflecting when our survey was undertaken) were the most commonly cited. Since both of these causes can be remedied with time, the breathing space afforded by a CVA seems to be important. In the majority of cases, the reason for attempting to save the company by using a CVA was that the company was fundamentally viable. Only in a small minority of cases was the CVA seen as a drawn-out liquidation process.

A number of hypotheses on the relationship between CVA performance and context were tested. Our results show that CVA performance is related to firm size with the largest firms achieving the best results. However, the relationship appears to be U-shaped rather than linear with very small firms with turnover less than £1m doing better than firms in the £1–3 m bracket. On the whole, sector membership was found to be unrelated to CVA performance however measured. Given that different sectors of the economy are likely to recover at different stages of the economic cycle, the implication here is that the state of the economy is not crucial in determining CVA success in general.

Generally, our results show that the probability of a successful CVA is independent of any major cause of financial difficulty. This finding can be interpreted optimistically as indicating that a good CVA result can be achieved regardless of the cause of decline. Our analysis of major causes of financial difficulty and ultimate survival, however, reveals that a company is less likely to survive in the long-run when the major cause of financial difficulty is poor management.

The evidence also suggests that a successful CVA result is more likely when the firm is considered to be fundamentally viable. The implication for owners of firms in financial trouble is to be realistic: CVAs do offer tangible benefits for firms when there is a positive factor making turnaround feasible, but they are not a panacea for unviable firms.

We find that CVAs pay higher mean dividends when secured creditors are absent and this may reflect the fact that secured debt is inherently risky in the typically variable cash flow context of the

small firm. Firms are also more likely to survive when secured creditors are absent. Counter-intuitively, we find that a greater proportion of secured creditors were supportive of CVAs than unsecured preferential creditors. A number of further hypotheses regarding creditors were tested. In line with intuition, we find that CVA performance is positively correlated with secured creditor support. This is not surprising given the power which secured creditors enjoy within the British insolvency regime. This result can be interpreted in two ways. The CVA may be more successful when secured creditors are supportive or, alternatively, secured creditors may be supportive when the CVA performs well or offers good prospects *a priori*. Some support for the latter interpretation arises from the fact that there is no statistically significant difference between the attitude of secured creditors and whether or not the firm eventually emerged from the CVA free of insolvency. We also find that CVAs pay higher mean dividends when secured creditors are not present. CVAs pay higher median dividends when unsecured preferential creditors are supportive, however the attitude of unsecured preferentials appears unrelated to the chances of survival. One interesting finding which merits further investigation is that having Customs and Excise among its creditors makes it less likely that the firm will survive. Unsecured creditors do emerge from a CVA significantly better off than under a more traditional insolvency regime than do the secured creditors. What could not be tested was the idea that greater risks would be taken in CVAs than in other types of insolvency regime and this must remain an item for future research.

Finally, what are the implications of these findings for policy aimed to help financially troubled firms to successfully rehabilitate? We suggest the following.

Rights of secured creditors. Our research provides little evidence to support the view that banks are approaching CVAs in a negative fashion. A more pervasive problem is the force of habit. Banks have done reasonably well out of the receivership option and are naturally reluctant to give it up. The effect of this caution is that CVAs are unlikely to become substantial players in the corporate insolvency game. At the moment there is roughly

only one CVA for every four receiverships.¹⁰ There may well, therefore, be a need for a further stimulus to redress this imbalance. The five day notice mechanism (Insolvency Service, 1995, Chapter 2, paragraph 10) may help in this regard, but it is critical that the banks be won over to this reform. Simply imposing it on them may be counterproductive, may result in a spate of litigation (as in Ireland) and may destroy the sense of co-operation which has begun to be constructed around the CVA procedure and which we detected in our researches. Attitudes are changing and moving in the right direction.¹¹ This inertia could be lost if the rights of secured creditors are diminished as could be the case (Insolvency Service, 1999b) and could lead to the adverse consequence of making bank lending policy more risk averse and may even push up interest rates.

Use of insolvency practitioners. Our research shows poor management to be the most important principal cause of financial difficulty leading to a CVA and also shows long-run survival to be less likely when the major cause of financial difficulty is poor management. On this basis, we would argue against the suggestion that it may be appropriate to dispense with the services of an insolvency practitioner to supervise the CVA in order to reduce operating expenses. The integrity and competence of the proposed supervisor is critical to securing creditor support. The watchful eye of an experienced insolvency practitioner is also important in the large number of cases where managerial faults have led to the firm's difficulties. Finally, if the proposed reforms affecting banks are introduced, there will be a need for greater safeguards to be introduced to prevent dishonest directors abusing the procedure and bringing it into disrepute. The latest proposals of the Insolvency Service (Insolvency Service, 1995, Chapter 2, paragraph 10) recognise this and make appropriate suggestions.

Small businesses. Our research shows that, although small firms (turnover less than £3 m) are the main users of CVAs, they are less likely to benefit from the procedure than larger firms due, most likely, to the generally regressive impact on small firms of fixed administration costs. Accordingly, a general policy issue that has to be

addressed is whether a revised CVA procedure should only be introduced for small businesses. Latest government thinking is unclear but its predecessor appeared to be moving in that selective direction. The arguments here are finally balanced. We have special accounting and other regulatory regimes for small firms, so why not extend that favourable treatment into the corporate rescue area? Corporate rescue procedures in other jurisdictions (with the exception of the U.S.A.) do not contain this discriminatory element. The downside of this limiting proposal is that it complicates the law, produces fine distinctions based upon accounting data, and may deny an enhanced rescue facility to a larger business whose survival may produce greater economic benefits for society. From a political perspective, limiting the scope of proposed reforms to the CVA procedure to small businesses might placate the banking community who stand to lose from any such changes in the law as far as their security rights are concerned. On balance, we feel that a cautious approach might be justified in the present circumstances and would support a restricted availability of the new procedure. However, if these changes are seen to produce economic benefits for society and do not impact too harshly on banks, the option of making a new CVA model generally available should be kept open.

The desirability of promoting debtor rehabilitation has been recognized in many countries over the last fifteen years. Some legal systems, for example South Africa and Australia, have for many years recognized corporate rescue mechanisms, although these operated with varying degrees of success (Milman and Chittenden, 1995). The corporate rescue bandwagon was undoubtedly given major impetus by the revision and perceived success of the Chapter 11 procedure in the U.S.A. Administration and company voluntary arrangements were brought into effect in England, Wales and Scotland in 1986. Singapore introduced a judicial management system similar in many respect to the British administration regime in 1987. Ireland enacted its court examiner scheme in 1990. Canada introduced new debtor rehabilitation mechanisms in 1992. Australia revamped its operations in 1994 by introducing voluntary administration. These rescue mechanisms were not only found in common law juris-

dictions. Parallel developments were occurring on the Continent. A feature of many of these rehabilitation mechanisms is that they fail to address the specific needs of small companies (Milman and Chittenden, 1995). This research indicates that despite this omission small companies can benefit from rehabilitation mechanisms and we have offered some suggestions for the ways in which the British scheme could be made more amenable to small firms. These lessons may have wider applicability than Great Britain alone.

Notes

¹ A secured creditor (typically the debtor's bank) has specific rights over some or all of the debtor's assets in the event of insolvency.

² An insolvency practitioner is a person authorised by one of the chartered accountancy bodies, the Law Societies, the Insolvency Practitioners' Association or the Department of Trade and Industry. An insolvency practitioner is the only person who may act as office holder in an insolvency proceeding.

³ A preferential creditor is defined in Schedule 6 of the Insolvency Act 1986 and has priority when funds are distributed by a liquidator, administrative receiver or trustee in a bankruptcy.

⁴ An administration order is a court order placing a company that is, or is likely to become, insolvent under the control of an administrator, who must be an insolvency practitioner. The purpose of the order is to preserve the company's business and assets to allow a reorganisation or to ensure the most advantageous realisation of its assets while protecting it from action by its creditors (Insolvency Service, 1999c).

⁵ This is a comprehensive list of all officially recognised insolvency practitioners published by Her Majesty's Stationery Office.

⁶ The number of valid cases varies depending on which independent variable is being considered because information was not available in every case on each of the independent variables. Any cases where there was doubt over the accuracy with which the questionnaire had been completed were rejected.

⁷ Broadly in line with s 247 of the Companies Act 1985, where a small firm is defined as one with a turnover below £2.8 m (in conjunction with one other criterion), we define a small firm as one with a turnover of less than £3 m.

⁸ A private limited company does not have publicly traded shares and is incorporated as a separate legal entity (Companies Act, 1985).

⁹ The Society of Practitioners of Insolvency was founded in 1990. It includes 90 percent of all Great Britain's licensed insolvency practitioners as full members. Other professionals who do not hold licences, including bankers, valuers and surveyors are subscriber members of the Society. The Society is concerned with training, standards and research related to insolvency.

¹⁰ In Australia, voluntary administrations (a procedure similar to the CVA) now account for more than 25 percent of all corporate insolvencies whereas the comparable figure in Great Britain is less than 3 percent.

¹¹ In the wake of the second consultation paper the former British government announced in November 1995 its intention to legislate in this area. The new insolvency law was promised as soon as the U.K. Labour Party came into power in 1997 but was deferred twice.

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