LIQUIDATION AND ITS EFFECTS ON CONSTRUCTION TRADE CREDITORS IN NEW ZEALAND

THANUJA RAMACHANDRA & JAMES OLAGODE B. ROTINI

Abstract

Purpose

The construction industry suffers from significantly large number of insolvencies than other industries due to its inherent characteristics and these have dire consequences on project participants and the industry at large. Therefore the purpose of this paper is to determine both the causes of liquidation and the distribution of losses to construction parties through an analysis of liquidators' reports on some insolvent construction firms based in New Zealand.

Design/methodology/approach

The study collates primary information from Liquidators' reports for firms operating within three main sub-sectors of the construction industry. The information were then analysed using simple interpretative techniques for the period covering 2005 to 2009. Altogether the data set used for the analyses included 65 construction firms.

Findings

The study finds that the major reasons for construction insolvencies are financial difficulties due to non-payment, poor debt management, drop in property prices; and the liquidation of related companies. Other reasons are discussed within the paper. The study also illustrates that liquidation of construction firms cause payment delays and consequential losses to project stakeholders. The results show that settlements of trade creditors take an average of 18 months and payment is usually not received fully after liquidation proceedings. It is apparent that there is little security for payment losses in construction insolvencies.

Originality/value

Information on reasons for and the consequences of liquidation provide a valuable thought starter for managing payment problems in the construction industry. The study extends knowledge on possible security to payment losses experienced by lower tier project participants when the upper tiers become illiquid.

Keywords: Liquidation; Insolvency; Payment Delays; Payment Losses; Trade Creditors; Construction Industry; New Zealand.

1. Introduction

The term insolvency is referred to as bankruptcy at personal and individual levels while at the corporate level it connotes a broader term covering liquidation, receivership and the administration of firms (Langford et al, 1993). There is ample evidence that insolvency in the construction industry is not new (prevalent since the 1970s) and that its frequency is relatively higher than other industries (Ashworth and Hogg, 2007; Langford et al, 1993; Davis, 1991). Worse still, the construction industry's contribution to insolvency statistics is not proportional to its positive contribution to gross domestic product (Davis, 1991). It could be argued that the direct relationship between the industry and the national economy makes it volatile and vulnerable to several external influences.

The industry is characterised by a higher than usual business risks. Its cascade system of payment from the client to main contractor and main contractor to subcontractor, and so on

down the project chain, especially increases the vulnerability to the financial risk of the lower tier project parties (Latham, 1994). Thus when one party experiences insolvency, a domino or knock-on effect is created down the project chain.

The highly fragmented nature (large number of small firms) of the construction industry exposes small firms to high levels of competition. The operational activities of these smaller firms are dependent on overdraft facilities and trade credits which require a steady flow of income to be able to manage their activities effectively. Studies into reasons for business failures in the construction industry reveal that weaknesses in operational management i.e. capital inadequacies, budgetary and macroeconomic issues are main reasons for failures (Hall, 1992; Arditi et al, 2000). Boyle and Desai (1991) viewed the problem from a broader perspective and submit that failures are due to environmental, administrative and strategic issues. According to Boyle and Desai, the environmental issues are internal and external to organizations, while administrative factors are confined to short-term operational activities such as administrative systems and procedures, and the strategic long term planning of the company. Internal factors are events within management control while externals are beyond the control of management. Hall (1992) on the other hand, believes that undercapitalization, inability to predict capital requirements along with inefficiencies in the capital market are instrumental to failures in small businesses. Referring to the construction industry, Davis (1991) believes that poor financial control and the inability to manage cash leads to cash flow crisis which may eventually lead to liquidation. In a recent study conducted in New Zealand (Chilli Marketing, 2010), bankruptcy and liquidation/receivership are major reasons given for non-payment of contractors by their clients.

Insolvency has many immediate and subsequent effects on individuals, industry and the economy as a whole. However, insolvency is prevalent amongst small businesses than their larger counterparts (Hammond, 2010). Hammond found that 77% of businesses, with less than 20 employees are usually affected. Reports by Slade (2008) and **Gibson (2009)** show that both voluntary and involuntary liquidation happens in New Zealand with varying effects on construction parties. Business distortions and other damages due to insolvency are beyond the obvious and quantifiable cost to business owners, creditors and employees of any company (Mason and Harris, 1979). For example the strategic influence that the construction industry has on any economy, means that failures in the industry affects the national economy.

Construction has strong linkages with many other economic activities and whatever happens to the industry will influence other industries and ultimately the general economy (Ball, 1988; Bon et al., 1999; Pietroforte and Bon, 1995; Bon, 2000; Pietroforte et al., 2000; Rameezdeen and Ramachandra, 2008).

From another perspective, studies show that the contribution of construction to national product and its value added per capita grows with economic development (Pheng and Leong, 1992; Lewis, 2004). Data from Statistics New Zealand (Statistics New Zealand, 2009) reinforces these relationships (see Figure 1). New Zealand's construction value added growth is positively correlated with economic growth while an inverse relationship is found with construction business death rate. This inverse relationship could mean that an increasing construction business death rate could be a contributory factor to the decline in construction value added growth.

Ramachandra and Rotimi (2010) found that for the period 2001 to 2009 in New Zealand, the average birth and death rate was 11.7% and 12.2% respectively. This reveals a net loss of 0.5% of construction businesses on an annual basis, corresponding to about 700 job losses

and \$150 Million loss of national income. The construction industry comprises 50,000 enterprises, providing employment to over 130,000 (Statistics New Zealand, 2010).

Furthermore, the administrative costs associated with bankruptcy and liquidation are a burden to companies as it is noted in the liquidators' reports that the first claim to be settled is the liquidators' fee (as per Companies Act 1993, New Zealand).

The prevalence of insolvencies in the construction industry led to the development of innovative financial protection mechanisms to curb its effects on affected parties. For example, financial protection mechanisms could involve ascertaining the strength of the covenant between contractors and their principals. If these covenants are unsatisfactory, contractors could procure some sort of security in the form of bonds and guarantees or advance payments to escrow accounts (Davies, 2009). The magnitude of the security procured is dependent on a good assessment of the business failure risk by the contractor. Dikmen *et al* (2010) suggested that company (client organisation) specific and external variables along with the knowledge and experience of experts provide the best model to diagnose business failure risks.

Insolvencies have also led to the introduction of security of payment legislation in the construction industry (Kenley, 2003). For example, the Construction Contracts Act (CCA) came into force in New Zealand to remedy problems associated with the liquidation of several high profile construction companies and to ensure regular and timely payment between parties. The high profile companies had become insolvent due to non-payment of submitted invoices by their clients/developers.

In spite of some of the payment-specific solutions outlined above, insolvencies still pervade the construction industry. These could be attributable to the inadequacies of existing solutions or problems associated with the nature of the industry. This paper therefore determines the magnitude of construction liquidation and analyses its effects on some construction parties. The study gives the reasons for liquidation and payment losses to construction parties (creditors) and hopes that this information will provide some understanding of the possible solutions that could be used to protect against losses due to insolvencies within the construction industry.

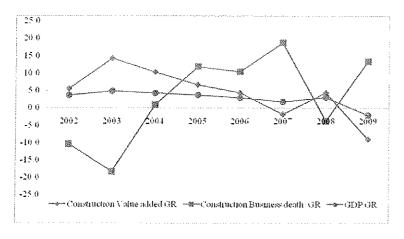


Figure 1: Changes in construction value added, business death, and GDP

2. Research Approach

The study has as its objective the determination of both the causes of liquidation and the distribution of losses to construction parties so that payment problems experienced by construction firms could be better managed. A preliminary review of some liquidators reports had revealed that firms within the construction industry in New Zealand were being liquidated. It was observed that liquidation cut across all subsectors of real estate, property investment, property development, building construction, and other construction services. This was the motivation for the research study to determine its prevalence, causes and effects on affected construction parties.

The primary source of information for the study was obtained from published Liquidators' reports for the period 2005 to 2009, on firms operating within three main sub-sectors of the New Zealand construction industry. Altogether information on 65 Liquidators' reports is analysed, comprising 22 liquidated companies in the property development sub-sector, 27 in general construction, and 16 in construction trade services.

Information extracted from the Liquidator's report were categorised into: reasons for liquidation, the amount owed to creditors based on claims received from the creditors, time taken to complete the liquidation process etc. These data were then analysed using simple interpretive techniques such as thematic analyses, frequency charts etc.

3. Research Findings

3.1 Reasons for liquidation of construction companies

Once a firm becomes insolvent it can be placed into liquidation by the shareholders' or through a resolution of its directors. This is called voluntary liquidation while liquidation as a result of the order of a court is termed as involuntary liquidation (Companies Act 1993, 2010). An examination of the 65 Liquidators' report for the period (2005 to 2009) show that 70% of the construction companies went into voluntary liquidation, while the remaining were involuntary liquidations. Table 1 presents information extracted from the reports on the reasons for and the frequency of occurrences for both voluntary and involuntary liquidation. Information on the frequency of occurrences generated, are irrespective of the nature of liquidation (voluntary or involuntary) and the sub-sector of construction business (property developers, general construction and trade services) which the parties belong to.

The result shows that financial losses and liquidation of related companies had the most occurrences as factors contributing to liquidation while cash flow difficulties, downturn in property/construction markets, disputes and dishonesty of directors are moderate level factors. These two groups of factors had the most and moderate occurrences respectively because within the 65 reports analysed they had between 5-9 and 10-14 occurrences. Other one-off reasons such as default in properties purchased, contract failure, cost overruns and lack of supervision and financial control were factors causing liquidation of construction firms respectively. These factors are grouped together for convenience, hence the frequency of the occurrences make the group significant. Comparing voluntarily and involuntarily liquidated firms, the result shows that the reasons for voluntary liquidation are caused by many factors ranging from liquidation of related companies and cash flow difficulties (being the most significant causes of financial losses), to disputes in companies and economic downturns (least significant). Involuntary liquidations on the other hand are mainly due to receivership, liquidation of other companies, dishonest conduct of directors and disputes between directors, shareholders, and debts and financial issues.

Table 1: Summary of reasons for liquidation

			Frequency*		
Reasons	Voluntary	Involuntary	Low	Moderate	High
Cash flow difficulties	***************************************			Х	
Due to reduction in property sales		✓			
Short term growth in company causing capital shortfalls	✓				
Delay in progress payments by developers	✓				
Failure to secure contracts from client	√				
Other – insufficient projected cash flow	✓				
2. Economic downturn	✓		X		
Downturn in property/construction market	✓	✓		X	
4. Financial losses					X
Non-payment on couple of projects	✓				
Drop in house prices	✓	1			
Bad debts and failure to receive funds from debtors	✓				
Loss of occupational safety and health claim	✓				
Loss of insurance coverage	✓				
5. Disputes				Х	
Payment delay due to disputes on contracts	✓				
Disputes on debts, between directors, shareholders, creditors, and council	✓	✓			and the second s
Disputes over financial issues		✓			
6. Receivership and liquidation of companies					Х
Security over assets and undertakings of the company		√			
Company is in receivership	✓	✓			
Liquidation of parent & other companies	✓				
7. Dishonest conduct of directors				X	***************************************
Unavailability of directors to contact		V		<u></u>	
Absence for hearing		✓	······································		************
No response to liquidators		✓			
8. Other reasons	***************************************				X
Default in properties purchased	✓				
Contract failure, cost overruns	✓				
Default of mortgage and debts to IRD	√				
Lack of supervision and financial control	·				
Costing mistakes and design failure	✓				
Lack of knowledge and experience of director	✓				
No assets in the company	✓				
Director's personal health condition	✓	✓			· · · · · · · · · · · · · · · · · · ·

Low = 1-4 occurrences; Moderate = 5-9 occurrences; High = 10-14 occurrences

3.2 Losses to construction parties in the event of liquidation

When companies are liquidated the distribution of realised proceeds goes to secured creditors, preferential creditors, and unsecured creditors in that order. Unsecured creditors are at the most risk because of the absence of any security of payments. However, every creditor would experience some losses, but in different magnitudes. The examination of the liquidator's reports enabled a breakdown of the magnitude of financial losses suffered by trade creditors to the three categories of construction companies covered in the reports.

Figure 2 summarises the losses experienced by trade creditors of property developers, general construction and construction trade services companies. The amounts owed to creditors vary from below \$50,000 to above \$200,000. A significant percentage (nearly 70%) of property developers owed below \$50,000 while above 50% of general construction companies owed above \$200,000. Creditors to construction trade services companies were mostly owed between \$50,000 and \$100,000. The figure shows that financial losses to creditors of liquidated general construction companies were more significant than those of construction trade services and property developers.

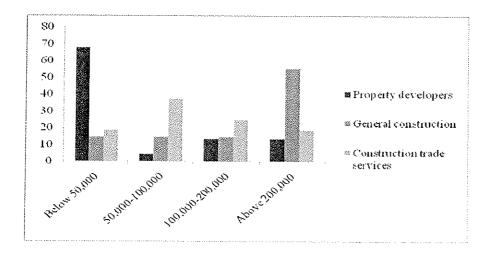


Figure 2: Amount owed to creditors by construction companies

Table 2 on the other hand provides a breakdown in percentage of the amount owed to creditors by the three categories of construction firms covered in the liquidation reports. The table shows that the largest percentage (43%) of debts was owed by property developers. Though this percentage was for debts below \$5,000. This is followed by another equal percentage (14%) of companies causing losses in 3 different categories of \$5,000-10,000, \$100,000-200,000 and above \$200,000.

For companies in the general construction category, the most significant (22%) value of money owed to trade creditors was between \$400,000 and \$800,000. Another significant percentage (45%) of general construction companies owed below \$200,000. Companies in the construction trade services category recorded the highest percentage of debts within the \$50,000 and \$100,000 range, while another 25% owed between \$100,000 and \$200,000.

The debt distribution provided in table 2, shows that the losses experienced by trade creditors to liquidated general construction companies are relatively larger than for other companies. This could be acceptable as in general the magnitude of the work carried out by general

construction companies is larger than construction trade services. On another hand, the comparatively smaller amounts owed by property developers could mean that they make prompt payment to their creditors thus the least effect of their liquidation on other participants down the chain.

Table 2: Distribution of amount owed to creditors - property developers, general construction and construction trade services

Categories	Amount owed (NZ\$)	Amount owed (%)	
Property developers	Below 5,000	43	
	5,000 - 10,000	14	
	10,000 - 50,000	10	
	50,000 - 100,000	5	
	100,000 - 200,000	14	
	Above 200,000	14	
General construction	Below 50,000	15	
	50,000 - 100,000	15	
	100, 000 – 200,000	15	
	200,000 - 400,000	11	
	400,000 - 800,000	22	
	800,000 - 1,600,000	15	
	Above 1,600,000	7	
Construction trade services	Below 50,000	19	
	50,000 - 100,000	37	
	100, 000 – 200,000	25	
	Above 200,000	19	

3.3 Nature of liquidation

The previous section had analysed the amount owed to creditors by construction companies in liquidation. These amounts were based on claims received from creditors as reported in the **Liquidators' reports**. It should be noted that at the end of liquidation proceedings, liquidators determine the amount to be distributed amongst a liquidated company's trade creditors. These creditors therefore have to wait till the completion of liquidation proceedings before they could receive any amount that is due to them. The time taken for the liquidation proceedings together with the magnitude of realised proceeds from the liquidation, determines the status of creditors' monies, as to whether their money is being lost (partly or completely) or delayed.

Detailed examination of information extracted from the Liquidators' reports show that on average liquidation proceedings take 18 months to be completed. The time period for complete proceedings varies from minimum of 2 months to a maximum of 72 months over the 5-year period investigated. Overall, the study found that in most cases, 38% of the companies, the proceedings took between 12 and 24 months to complete. Further examination of the reports shows that the time taken seems to be shorter for property developers, probably because these are smaller companies and the amounts in contention are comparatively lower.

Liquidation proceedings took an average of 11 months to be completed for property developers. Liquidation proceedings took longer for construction trade services and general construction companies, with an average of 19 and 25 months respectively. The larger share of both voluntary and involuntary liquidations falls within this range as shown in figure 3. However overall, the completion time for voluntary liquidations are double that of involuntary liquidations. In a few voluntary liquidation cases, the proceedings were completed within 6 months and above 24 months.

The reports indicate that voluntary liquidation proceedings took longer because of investigation into the company's accounts and reports, the realisation of all assets owned by the liquidated company, and collection from trade debtors and others. Out of the 65 companies analysed, 35companies (54%) went through the complete liquidation process and paid out sums of money to their trade creditors. Out of these 35 companies, only one single company paid its creditors fully while another 3 paid on a pro-rata basis. The creditors of the remaining companies were never paid from the liquidation proceedings.

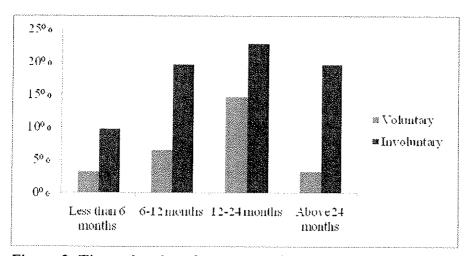


Figure 3: Time taken in voluntary and involuntary liquidation proceedings

4. Discussion

This paper has analysed liquidators' reports to investigate the cause and effects of construction companies' liquidation on their trade creditors. The focus was on the losses to trade creditors in liquidation, though there are losses to other unsecured creditors. A review of the liquidators' reports show that the Department of Inland Revenue and insurance companies account for the remaining unsecured creditors.

On comparison of the losses to trade creditors and other unsecured creditors, the reports show that nearly 75% of total amount owed to unsecured creditors are losses to other unsecured creditors of property developers. Similarly, the amount owed to other unsecured creditors by

companies in the general construction and trade services are nearly 30% and 40% respectively of total amount owed to unsecured creditors. On further scrutiny, the reports show that preferential creditors, whose claims are required to be settled prior to unsecured creditors, did not receive any payment.

The analyses reveal that liquidations are prevalent in the New Zealand construction industry for almost similar reasons suggested by previous researches. In spite of payment protection mechanisms contained in legislation and contractual conditions, trade creditors suffer delays and losses when their upper tier parties go into liquidation. The more significant reasons for liquidation of construction companies can be attributed to financial losses, liquidation of related companies, downturn in the construction market due to general economic situations, cash flow difficulties, and disputes. These reasons seem to cut across both voluntary and involuntary liquidations. Other reasons include: financial losses due to drop in house prices, downturn in construction markets, disputes over financial issues, and receivership and liquidation of related companies are also common to both voluntarily and involuntarily liquidated companies, but dishonest conduct of directors are exclusive to involuntary liquidations.

Losses experienced by trade creditors to liquidated property developers, general construction and construction trade services companies are momentous. The lower and upper limits of payment losses are within the range of 'below \$50,000' and 'above \$200,000'. The effects of general contractors' payment default are comparatively higher than the other two categories of construction companies. This might not be unconnected with the size of the companies within this category. Further, the upper limit of debts owed to trade creditors by general contractors was \$1,600,000. This is significantly higher than \$200,000 for both property developers and construction trade services companies.

The time period taken to finalise proceedings for both voluntarily and involuntarily liquidated companies was an average of 18 months. Only after liquidation proceedings, can available funds be distributed amongst trade creditors. However, this time period has little effect considering that on the final analysis, only few trade creditors' benefit from liquidation proceedings. One can surmise that trade creditors to liquidated construction companies have the least probable opportunity to recover their monies after liquidation proceedings.

5. Conclusion

It is apparent from this investigation that construction companies in liquidation cause both payment delays and losses to lower tier construction parties. There is little security for payment losses in construction insolvencies. There seems to be more required in the management of payment problems within the construction industry in the form of protection/security mechanisms. Especially the lower tier parties in every construction project need to be catered for. Thus this study provides a valuable thought starter for managing payment problems in the construction industry. The authors recommend further investigations into liquidators' and other historical records so that the after-effect of non-payment of trade creditors could be determined. It would also be valuable if a survey of trade creditors involved in liquidation proceedings is conducted, this way both financial and non-financial impacts of the liquidation of upper tiers can be ascertained. Such information could extend the knowledge gained on the current study findings.

References

- 1. Arditi, D., Koksal, A., and Kale, S. (2000), Business failures in the construction industry. *Engineering Construction and Architectural Management*, 7(2), 120-132.
- 2. Ashworth, A., and Hogg, K. (2007), *Willis's practice and procedure for the quantity surveyor*. 9600 Garasington Road Oxford OX4 2DQ UK: Blackwell Publishing Ltd.
- 3. Ball, M. (1988), Rebuilding construction: Economic change and the British construction industry, Routledge, London.
- 4. Bon, R. Birgonul, T. and Ozdogan, I. (1999), An input output analysis of the Turkish construction sector, 1973-1990: a note, *Construction Management and Economics*, 17, 543-551.
- 5. Bon, R., (ed.) (2000), Economic structure and maturity: collected papers in input-output modelling and applications, Ashgate, Aldershot, England.
- 6. Boyle, R. D., and Desai, H. B. (1991), Turnaround strategies for small firms. *Journal of Small Business Management*, 29, 33-42.
- 7. Chilli Marketing. (2010), *Quantitative research report into non-payment issues*. Auckland: BRANZ. Retrieved from http://www.branz.co.nz/ems show download.php?id=da955546e8a973ab0921f3ad3f2f6 23446de4fde.
- 8. Companies Act 1993 No 105 (as at 7 July 2010), Public Act New Zealand Schedule 7-Preferential Claims.
- 9. Davies, J. (2009), Protect yourself from insolvency in the construction industry. Retrieved 24 January 2010, from http://www.bsdlive.co.uk
- 10. Davis, R. (1991), Construction Insolvency. London: Chancery Law Publishing Ltd.
- 11. Dikmen, I., Birgonul, M. T., Ozorhon, B., and Sapci, N. E. (2010), Using analytic network process to assess business failure risks of construction firms. *Engineering Construction and Architectural Management*, 17(4), 369-386.

12.

- 13. Gibson, A. (2009, June 24), Nothing for Tribro creditors. The New Zealand Herald.
- 14. Hall, G. (1992), Reasons for insolvency amongst small firms A review and fresh evidence. *Small Business Economics*, 4, 237-250.
- 15. Hammond, M. (2010, 23 December), *Insolvencies rife in construction, retail and services sectors* [Web log message]. Retrieved from http://www.smartcompany.com.au
- 16. Kenley, R. (2003), Financing construction cash flows and cash farming. New Fetter Lane, London: Spon Press.
- 17. Langford, D., Iyagba, R., and Komba, D. M. (1993), Prediction of insolvency in construction companies. *Construction Management and Economics*, 11, 317-325.
- 18. Latham, M. (1994), Constructing the team: final report of the government/industry review of procurement and contractual arrangements in the UK construction industry: HMSO: London.
- 19. Lewis, T.M. (2004), The construction industry in the economy of Trinidad and Tobago, *Construction Management and Economics*, 22, 541-549.
- 20. Mason, R. J., and Harris, F. C. (1979), Predicting company failure in the construction industry. *Proceedings Institute of Civil Engineers*, 66, 301-307.
- 21. Pheng, L.S. and Leong, C.H.Y. (1992), A revisit to Turin's paradigm. Construction and development in the 1970s and 1980s, *Habitat international*, 16 (3), 103-117.
- 22. Pietroforte, R. and Bon, R. (1995), An input-output analysis of the Italian construction sector, 1959-1988. *Construction Management and Economics*, 13(3), 253-62.
- 23. Pietroforte, R., Bon, R. and Gregori, T. (2000), Regional development and construction in Italy: an input output analysis, 1959-1992, in Bon, B. (ed.), *Economic structure and*

- maturity: Collected papers in input-output modelling and applications, Ashgate, Aldershot.
- 24. Ramachandra, T., and Rotimi, J. O. B. (2010, 3-5 December), Construction liquidation and payment losses: A review of New Zealand construction industry. Paper presented at the 2010 International Conference on Construction and Real Estate Management Brisbane Australia.
- 25. Rameezdeen, R. and Ramachandra, T. (2008), Construction linkages in a developing economy: the case of Sri Lanka, *Construction Management and Economics*, 26 (5) 499-506.
- 26. Slade, M. (2008), Winsun developer declared bankrupt. The New Zealand Herald.

V

- 27. Statistics New Zealand. (2009), Statistical overview of the construction industry from 2000-2008. Wellington.
- 28. Statistics New Zealand. (2010), New Zealand Business Demography Statistics. Retrieved 12 April 2010, from http://www.stats.govt.nz