Publications

Winter 9-24-2018

Project Financial Distress: Early Signs and Ways to Overcome

Dimitrios V. Siskos
Embry-Riddle Aeronautical University, siskosd@erau.edu

Follow this and additional works at: https://commons.erau.edu/publication

Part of the Business Administration, Management, and Operations Commons, and the Finance and Financial Management Commons

Scholarly Commons Citation

This Article is brought to you for free and open access by Scholarly Commons. It has been accepted for inclusion in Publications by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.
Project Financial Distress: Early Signs and Ways to Overcome

Dimitrios V. Siskos¹
Adjunct Assistant Professor
Worldwide College of Business, Embry Riddle Aeronautical University

September 7, 2018

Abstract

Financial distress is a hot topic these days in finance and the project’s health is very important for investors as well as management. Investors posit money in those projects which are financially healthy as the risk of default is minimized for them, while management must be able to identify causes of distress which can be controlled by taking different measures (Khurshid, 2013). However, the fact that many projects encounter financial distress requires further investigation. This paper deals with the elements of project financial distress as its major signs and sources as well as it suggests ways to eliminate the consequences. The results provide an effective way to resolve financial distress by restructuring it. Apparently, this option should be preferred as long as it is considered to be more advantageous than liquidation. The report also shows that restructuring can be looked at in four broad categories: managerial, operational, asset, and financial one. The paper describes each category; it determines the right time to use each of them; it explains their benefits and last; it provides guidelines to consult when implementing them.

Keywords: Project, Financial Distress, Project Restructuring, Optimal capital structure, Liquidation.

¹ Dimitrios V. Siskos has almost 15 years of financial experience in the industry sector in Greece and over 10 years of teaching and research experience in Greek, European and US Universities (on-campus and online modalities). He focuses on continuous improvement, loves precise and accurate data and is willing to add value to the organization for which he works. He is the owner and the administrator of the website: http://www.thinkingfinance.info, where you can find stuff from his Research, Projects, and Writings.
Introduction

By the beginning of the 1980s, project finance became a clearly identifiable profitable subsector of the banking world’s revenue streams (Ficht, 2006). Indeed, the use of project finance has grown dramatically over the years from $12.5 billion (bn) in 1991 to 113.4 bn in 20051 (Kleimeier and Versteeg, 2009). As such, the financing of projects has been successfully undertaken worldwide for more than 15 years now. This phenomenon has enjoyed great popularity, initially in the US and Asia before spreading to Europe. Later, countries from all over the world also needed money to finance their projects. For example, the year 2010 witnessed the signing of over 200 project finance schemes worth $130 billion across China, Russia, Brazil and other emerging economies in Africa, Asia, Europe, Latin America (Thompson, 2012). The only period which project finance recorded a reduction was around 2002-2004, when total project finance reduced by approximately 40% (Esty and Sesia, 2005).

Generally, project finance schemes has over the years yielded positive results in constructing long-term infrastructure and industrial projects without necessarily having sufficient funds (Esty, 2004). However, most projects often challenge several types of risks that threaten their creditworthiness. The majority of factors influencing the cash inflows and outflows are not deterministic but rather stochastic, making project financing an extremely risky business (Backhaus and Schulte, 2006). If not managed properly, risks can result in disrupting or halting project operations and lead to legal complications and reputational impacts that contribute to project’s failure. A negative example of such risk is the Eurotunnel2 between France and the United Kingdom, while a positive example is the project-financed Athens airport3.

Considering the sensitivity nature of financial distress to success of projects, the project financial schemes need to mitigate possible risks that may evolve into project problems, including mainly financial and political ones (Pustylnick, 2012). To mitigate financial risks, parties to a project financing should

---

1 As reported by LPC Dealscan. The dollar amounts are nominal and reflect the debt proportion in the financing of the projects.
2 The Channel Tunnel is the longest undersea tunnel in the world.
3 Greece's first major greenfield airport project
establish some sort of backup funding that can be called upon to settle debt that is coming due, effectively buying more time for the project to become self-sustaining. In case of the political ones, firms should be proactive and avoid situations with overt political risk, they should use insurance as a powerful tool and they should diversify risks (Rajwani, 2011). On the other hand, lenders use loan covenants as tools to place some restraint on the danger that a company may become financially distressed (Fight, 2006), providing lenders with an early warning in case of project is beginning to have problems (Rajan and Winton, 1995).

**Literature Review**

The literature focusing on financial distress tends to examine financial restructurings (John, et al., 1992; Gilson, et al., 1990; Wruck, 1990; Brown, et al., 1993, and Asquith, et al., 1994) or management turnover during distress (Gilson, 1989). The recent literature is focused on the case of a possible borrower default, whereas fund providers and sponsoring companies had to make provision for possible mitigation of losses (Mensah, 2013).

**The state of distress and major signs of distress**

There are many causes of project failure and every failed project will have its own set of issues. In addition, the probable failure of projects can occur at various stage of the project life-cycle. However, financial distress is a more predictable concept, as it usually occurs at the construction and operational stages (Vilanova, 2006). A company is considered to be in distress if there is a reasonable likelihood that it may reach a position within the next six months where it will no longer be able to pay its debt as it becomes due and payable. In general, financial distress is characterized by a sharp decline in the firm’s performance and value (Opler and Titman, 1994; Whitaker, 1999). According to Outecheva (2007), financial distress can be grouped into three main categories: a) Event-oriented definitions of financial distress, b) Process-oriented definitions of financial distress and c) Technical definitions of financial distress. Regarding the first concept, financial distress is usually applied analogously to terms such as default, failure, or bankruptcy. Gordon (1971), concerning the second group, highlights financial distress to be as only one state of the process, followed by failure and restructuring, which should be defined in terms of financial structure and security.
valuation. Within the third classification, financial distress is evaluated through identification of indicators used to predict such phenomenon (Duffi and Wang, 2004), analysis of the performance of distressed companies (Andrade and Kaplan, 1998) and finally restructuring plan of them.

The most significant signals about financial distress can be received during the implementation of financial ratios of an organization. Accounting based indicators of financial distress are still very popular among researchers and widely used as selection criteria (Outecheva, 2007). In case of project financing, borrowers and lenders focus mostly on liquidity, debt, and financial covering ratios to predict future financial distress of a project, (Gatti, 2008, p.253), rather on profitability ones. This happens due to the leveraging nature of the projects. The liquidity ratios are used to judge a firm’s ability to meet short term obligations (Fight, 2006); the debt ratios are strongly related to project evaluation as they point on a company's leverage position; and last, the coverage ratios measure the ability of a company to generate cash flow in excess of its financing commitments (Fight, 2006). Apart from the ratios analysis, there are still others, more apparent signals, which represent a good outline of factors of distress to consider at an early stage of the project. According to Usdin and Bloom (2012) some of these categories include:

- The company does not timely pay creditors.
- The company is being sued in collection matters.
- The company has suffered a significant event that will not recur.
- The company’s bank or secured lender has threatened to shut down business operations.
- A union has threatened some type of action against the company.
- A major supplier has threatened to terminate services to the company.
- The company cannot perform its contracts on time or cannot perform at all.
- The liabilities of the company are far greater than its assets.
- The company’s business model is no longer viable
Potential sources of distress

There are various reasons for the project to be in distress which include financial and non-financial factors such as managerial, organizational, and financial reasons (Pustylnick, 2012). Studies have attributed financial distress to a number of factors that include, for example, risks at start-up, credit risks, financial risks (also known as macroeconomic risks), market risks, operational risks, and political risks (Hoffman, 2008, p.58).

During the start-up phase, the banks need to be satisfied that the project will operate at the costs and according to the specifications agreed at the outset (Fight, 2006). This fact results in conflict of interest among the parties in the scheme and as such it is one of the major risks in the start-up phase, resulting also into project’s inability to generate sufficient cash flow, possible cost overruns, completion delays and technical problems (Gatti, 2008).

Financial risks are another important source of distress. These risks usually arise as a result of foreign exchange exposures, interest rates exposures, inflation exposures, liquidity exposures and project pricing exposures (Fight, 2005). For example, Wadhwani (1986) found that out that the increase in interest rates can inversely affect the company solvency, while Pustylnick (2012) mentions the negative NPV as one of the two major types of financial distress.

Political risk, unlike other forms of risks associated with project finance, threatens project’s success through changes in legislation and changes in governance stands. A case in point is the Chinese contracted projects sponsored by the Libyan government. Since the Libyan crisis erupted and upgraded, Chinese constructors have experienced operation discontinuity, camp attacks and robberies, equipment loss and damage, employee injuries, and loss evaluation. Domestic unrest and international sanction led to further social and economic environment deterioration in Libya and forced Chinese contracted projects to take steps to deal with the emergency, such as contingency plan making, operation closure, overseas assets protection, expatriate evacuation, and insurance claims (Zhang and Wei, 2012, p. 42).
Eliminating the distress factors

Every participant in a project finance scheme should consider strategies that are designed to mitigate project risk factors which may develop into financial distress. To mitigate the potential risks associated with the start-up phase, the parties must provide support to the project team to minimize the time required for it to grow into an effective unit (Bourne and Walker, 2003); they must expand the role of the Project Office\(^4\) to include specific project “Start Up” responsibilities; and last, they must ensure that an architect issues the value of work certified before completion (Kreydieh, 1996). Moreover, lenders should evaluate the project’s ability to avoid financial distress by performing a feasibility study to determine whether it is economically feasible or not (Fight, 2006, p.51), as well as a due diligence to determine possible stress factors (Hoffman, 2008, p.59).

However, parties of the project scheme should be able to react even when a project is in the inception stage and seeks financing. According to Pustylnick (2012), in such circumstances its managing body must be able to anticipate potential threats and put a sufficient number of legal covenants in the financial agreement to cover some of the anticipated outcomes. The same research showed that by acting in such manner, the projects can reduce the number of the potential distress conditions and enjoy the financial and operational success.

In order to keep financial risks under control, it is often helpful to establish some sort of backup funding that can be called upon to settle debt that is coming due, effectively buying more time for the project to become self-sustaining. On the other hand, all companies need to be considering political risk very carefully. Particularly, firms should consider the following to better manage political risks (Rajwani, 2011):

1. Understand insurance as a powerful way to mitigate political risk (World Bank\(^5\), OPIC\(^6\), etc.)

---

\(^4\) The Project Management Office (PMO) is the department that defines the processes related to project management within an organization.

\(^5\) The World Bank is comprised of a group of development institutions that provide loans and grants to developing countries with the stated goal of alleviating poverty by creating the conditions for sustained development.
2. Be proactive and avoid situations with overt political risk.
3. Deal with risks on an ongoing basis.
4. Diversify political risks.
5. Understand macro and a micro political risk environment.

**Restructuring a project in Financial Distress**

Projects are implemented in competitive markets, and in the face of intense pressure, some succeed while others fail. The insolvency law offers two ways to resolve financial distress: restructuring and liquidation. Restructuring creates a plan to reorganize the project and, more importantly, its debts and eventually restore its financial health. According to Brown et al. (2004), it is eminent to note that project restructuring can be conducted at the construction stage and operational stage. Liquidation is a more extreme solution where the project stops operating, its assets are sold, and the proceeds are used to pay creditors. In any of these instances, the decision to restructure or liquidate in the event of default will depend on the position of the stakeholders (Finnerty, 2007; Altman, 2002).

Considering the choice to restructure, it is very difficult for the lenders to recover their debt in the event of liquidation and hence, the final resort is to reorganize the operations of the project (Brown et. al, 2004). Evidence from the Eurotunnel project shows that the lenders’ position was far worse off in liquidation than restructuring considering the volume of debts committed to the project at the time of distressed (Vilanova, 2006). Generally, restructuring can take many forms, such as managerial, operational, asset, and financial (Sudarsanam and Lai, 2001).

*Managerial restructuring*

Managerial restructuring often provide opportunities to improve work flow and the content of jobs and for changes in roles and responsibilities which may significantly transform project’s vision and focus and bring about positive change in performance. On the other hand, restructuring may also impact on the stability

---

6 OPIC mobilizes private capital to help solve critical development challenges and in doing so, advances U.S. foreign policy.
of staff-management relations and create concerns among employees affected by the change or restructuring. Summarizing, changes in management often brings confidence to investors, bankers, and creditors that poor performance will be dealt with (Sudarsanam & Lai, 2001).

**Operational restructuring**

Operational restructuring involves reducing costs, generating revenue, and reducing operating assets in order to improve efficiency and profit margins (Tebogo, 2011). However, recent research that examines the reaction of analysts to restructuring announcements suggests that analysts do not expect operational restructurings to be effective in improving long-term operating performance (Holder-Webb et al., 2005). Specifically, the research reported that such restructurings at best have no effect on firm operating performance in the years subsequent to the restructuring.

**Asset restructuring**

Asset restructuring usually leads to cost reduction and enhances a project’s competitive advantage through increased economy of scale by expanding output (Sudarsanam & Lai, 2001). For instance, investing in a modern software solution reduces complexity, minimizes cost, and improves operational efficiency.

**Financial restructuring**

Financial restructuring relates to improvements in the capital structure of the firm. For instance, project’s debt could be added to lower the corporation's overall cost of capital. Moreover, it involves restructuring of their debt-to-equity structures, in line with their cash-flow needs to promote efficiency, support growth, and maximize the value to shareholders, creditors and other stakeholders.

Generally, the most critical stage in restructuring financially distressed project is the ability to project realistic cash flows and decide on the optimal capital mix (Mensah, 2013). The two main forms of financial distress, as located by Pustylnick (2012), were the NPV and negative cash flow. The same research showed that negative cash flows and negative NPV’s can be rectified by the additional influx of cash flows at the construction and operational phases of the restructuring.
Conclusions

Financial distress is a hot topic these days in finance and the project’s health is very important for investors as well as management. Investors posit money in those projects which are financially healthy as risk of default is minimized for them, while management must be able to identify causes of distress which can be controlled by taking different measures (Khurshid, 2013). However, the fact that many projects encounter financial distress requires further investigation. As such, almost everyone in the business world wants to determine causes of distress and prevent it from happening. The substantial proportion of debts, the mismanagement, problems with contractors and suppliers and so on, may lead projects into financial distress and therefore the project's capital structure should be reconsidered with the aim of enhancing the project's project to mitigate financial distress (Pustylnick, 2012; Tebogo, 2011). Covenants in financial agreement can resolve a number of mentioned problems, as they anticipate many of such problems based on the experience of lenders and borrowers alike (Pustylnick, 2012).

This paper deals with the elements of project financial distress as its major signs and sources as well as it suggests ways to eliminate the consequences. The results provide an effective way to resolve financial distress by restructuring it. Apparently, this option should be preferred as long as it is considered to be more advantageous than liquidation. The report also shows that restructuring can be looked at in four broad categories: managerial, operational, asset, and financial one. The paper describes each category; it determines the right time to use each of them; it explains their benefits and last; it provides guidelines to consult when implement them.
References


Tebogo, B. (2011), Distressed Projects and Restructuring. Available at SSRN: