### Stress Testing for Insolvency

### Frank Wolf

H. Wayne Huizenga School of Business and Entrepreneurship, Nova Southeastern, USA

### Hon. Gerardo Carlo

Carlo & Lozada LLC, San Juan, PR, USA

### William M. Peters

R.J. Peters Associates, Burlington, Vermont, USA

### INTRODUCTION

Assuring the likelihood of survival is the fundamental reason for stress testing banks in Europe and the United States under mandates called Basel I, II and III. Similarly stress testing corporations, not-for-profit organizations, and municipalities, has become a necessary exercise to prevent insolvency in times of economic uncertainty.

The concept of stress testing is not entirely new. For example, computer software gets routinely stress tested in order to assure it can survive volume fluctuations, data storage requirements and hacking attempts. In the field of engineering, stress testing materials under conditions of extreme heat, cold, or loads has been around for ages. In the banking sector of our economy stress testing means having sufficient capital to meet current obligations and even prevent runs on your neighborhood ATM. So the logical extension of this reasonable practice is to stress test mid-sized or large firms, non-profits and municipalities with respect to solvency, which may help preserve public services, commercial products, peoples' jobs, invested capital, supplier and customer relationships and quite possibly preserve whole communities!

It is very well established in the academicand business literature that both insolvency and bankruptcy are predictable phenomena for the vast majority of cases, (Altman, 1968). However, testing for those conditions is *not yet* customary for businesses and municipalities. During the 1960s managers presumed that a certain percentage of business failures were to be expected and that this constitutes the risk of market entry. More recently the Harvard Business Review (Harvard, 2011) dedicating an entire issue to business failure, postulating that not succeeding constitutes a learning experience which one should embrace and not be ashamed of. The clear message is this: learn from your failure and then try again, only do better next time! That's fine and dandy in theory, just don't tell this to an entrepreneur with a great idea who has just mortgaged his house and put his entire future at risk! Failure is not a good thing and many are both predictable and most importantly preventable. The fiduciary responsibility for preventing business insolvency rests primarily with directors and corporate officers, individually and collectively. States are more or less on the line in case of municipal failures under Chapter 9 of the US bankruptcy code irrespective of whether Chapter 9 applies. States do bear a large reputation risk under any condition that may affect all other business relationships.

### **DEFINITIONS**

In the common use of the English language, *insolvency* and *bankruptcy* are sometimes used interchangeably, but they are not the same. Insolvency, is defined as the financial state of a person or company or municipality unable to meet its obligations when due. Oftentimes liabilities exceed current

DOI: 10.4018/978-1-4666-5202-6.ch209

assets in those situations. Insolvency is a leading indicator for bankruptcy which in turn is defined as a successful legal procedure and declaration, seeking protection from creditors. All bankrupt debtors are in fact insolvent. (bankrupt24.co.za, 2012). In the context of this paper, stress testing includes all applicable techniques for attempting to measure extreme shock to a financial portfolio under severe but plausible conditions. The word 'portfolio' includes corporations and municipalities. (Jones, Hilbers, & Slack, 2004). A scenario is a plausible future state an enterprise or town may find itself in, and is usually quite different from what is expected under normal times.

### LEGAL CONSIDERATIONS FOR STRESS TESTING CORPORATIONS AND MUNICIPALITIES

### **Corporations**

The U.S. Bankruptcy Code provides corporations with various reorganization options that must be considered in today's complicated business environment. These options may include corporate reorganization, recapitalization or sale of substantially all or some assets, and possibly liquidation of an entire business. However, it also entails hidden pitfalls that may outweigh its benefits.

Whether one chooses a straight Chapter 7 liquidation process, or a reorganization under Chapters 11 or 13, private businesses that approach the nebulous zone of insolvency, or that are at risk of falling into such an area, must consider the various scenarios available to avoid getting caught in what could be a precarious bankruptcy judicial process.

Also, prepackaged reorganizations, or out of court debtor-creditor arrangements that avoid the time and cost of the judicial code administration, must be understood and considered.

The complexity arising from the many options the Code provides to individuals, corporations and partnerships facing business failure possibilities is enormous, and requires a great deal of expertise and time to sort out. Not only is research and planning involved in the pre-bankruptcy stage, but also complying with the filing requirements and the regulatory provisions involved in a case under the joint judicial-administrative procedures of Chapter 11. The task is daunting, even for a firm that can afford the time and expense involved in the advanced planning and compliance effort that is required. (UCLA-Lopucki, 2012)

Although 'success' in terms of a Chapter 11 bankruptcy case is difficult to define, it has been measured by the time taken to complete a case, to get the plan of reorganization confirmed, whether the company eventually emerges as a stand-alone company, or if the debtor had to re-file in a short period of time.

These measurements will vary according to the type of bankruptcy and chapter selected to be filed. Also, many so called 'reorganizations' actually constitute a business liquidation and involve a sale of most or substantially all the assets of the company under the Chapter 11 judicial reorganization umbrella.

Such measurements do not indicate the degree of failure or success of a case that has been converted to Chapter 7 liquidation or dismissed by the court for cause, and whose assets, employees and clients get reintroduced somehow into the economy and become productive parts outside the judicial bankruptcy system.

The federal bankruptcy courts in this nation received during the 12 months period ending in March 2012 a total of 1,367, 006 new filings, of which only 46,393 constituted business filings for which corporate stress testing may have been beneficial. That is, cases in which the debtor is a corporation, partnership, or if the debt is primarily related to a business of some kind belonging to this category. This in contrast to consumerindividual cases (non-business) in which debt was incurred primarily for personal family or household purposes. (Administrative Offices of the US Courts, 2012).

# 8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/stress-testing-for-insolvency/107417

### Related Content

## A Method for Scalable Real-Time Network Performance Baselining, Anomaly Detection, and Forecasting

Robert Strahan (2012). *International Journal of Business Intelligence Research (pp. 13-33).* www.irma-international.org/article/method-scalable-real-time-network/65536

### Business Intelligence in Higher Education: An Ontological Approach

Constanta-Nicoleta Bodea (2012). Business Intelligence and Agile Methodologies for Knowledge-Based Organizations: Cross-Disciplinary Applications (pp. 285-312).

www.irma-international.org/chapter/business-intelligence-higher-education/58576

### Innovative Approaches for Efficiently Warehousing Complex Data from the Web

Fadila Bentayeb, Nora Maïz, Hadj Mahboubi, Cécile Favre, Sabine Loudcher, Nouria Harbi, Omar Boussaïdand Jérôme Darmont (2012). *Business Intelligence Applications and the Web: Models, Systems and Technologies (pp. 26-52).* 

www.irma-international.org/chapter/innovative-approaches-efficiently-warehousing-complex/58410

## Perceptions of Business Intelligence Professionals about Factors Related to Business Intelligence input in Decision Making

Carol P. Huie (2016). International Journal of Business Analytics (pp. 1-24).

www.irma-international.org/article/perceptions-of-business-intelligence-professionals-about-factors-related-to-business-intelligence-input-in-decision-making/160435

### Best Practices for Culturally Sensitive Data Visualizations

Michael Gendron, Christopher Hutwelkerand Krzysztof Kisz (2016). *International Journal of Business Intelligence Research (pp. 1-19).* 

www.irma-international.org/article/best-practices-for-culturally-sensitive-data-visualizations/172035