

Stress Testing Corporations and Municipalities and Supply Chains

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INTRODUCTION

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

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, with the intent to 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 academic and business literature that both insolvency and bankruptcy are predictable phenomena for the vast majority of cases.² 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 these constituted the risk of market entry. More recently the Harvard Business Review⁹, 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 is acceptable in theory, just don't tell this to a failing 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 types of failures 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 on the line for municipal failures under Chapter 9 of the U.S. Bankruptcy Code irrespective of whether Chapter 9 applies. States do bear a large reputational risk as future borrowing costs may increase.

BACKGROUND

Legal Considerations for Stress Testing Corporate Entities for Insolvency Risk

Insolvency

Bankruptcy is a legal system set up by the U.S. Congress to administer insolvency of individuals or corporations. That should not be mistaken for

business insolvency which is commonly described as the financial distress caused when either or both:

1. An entity's debts exceed the assets it owns ("balance sheet insolvency"); or
2. When the party does not have the cash, or liquidity, to meet its payments as they become due ("cash flow insolvency").

There are other ways outside the bankruptcy system to attempt to resolve insolvency. Although the code offers many advantages to an entity in financial distress, it could be in the best interest of the company to avoid the formal bankruptcy process, and instead attempt to reorganize outside the federal court system.

The bankruptcy process is extremely costly, kicks in too late, and is time consuming and frustrating to debtors and creditors alike, as the process returns very little to creditors that are unsecured or even to those with priority treatment.

The low plan confirmation and low plan completion rates, and the high conversion and high dismissal ratios, indicates that early detection of insolvency risk would be hugely beneficial. The implementation of effective and efficient preventive measures should be emphasized and promoted, if not required, as part of good corporate governance. In other words, corporate stress testing may soon become a mandate for public corporations!

By implementing a program that helps to identify early-on the risk of insolvency, a company may avoid the many uncontrollable pitfalls that could occur with a late bankruptcy Chapter 11 reorganization filing.

Once a business is within a judicial bankruptcy process, it may lose control of the possibility of dismissing the petition even though it was voluntarily filed, and instead face a forced conversion and a liquidation scenario with a possible hostile trustee and disgruntled creditors.

Statistics show that the advantages of a bankruptcy filing include:

1. The automatic stay of most, but not all, litigations and
2. The possibility of removing or discharging some unsecured debt.

Finally the system can be "gamed" in terms of favoring the secured and some other preferred parties to the detriment of the unsecured and even priority creditors, who receive on the average, a very small distributions from the estate assets.

For example, in chapter 7 liquidations, according to the official court data for calendar year 2008, and based on the 63,000 Chapter 7 cases with assets, closed in that period with over \$2.6 billion in receipts, secured creditors received 28.9% of total amounts distributed; priority creditors received 4.4%; unsecured creditors 25%; and debtors and third parties 8% for a total distribution of \$1.785B or 66.2%. At the same time the total fees paid out to the professionals in these asset cases, mostly legal, trustee fees and administrative charges were 33.8% of the total distributions made. (Haverstock and Crewson, 2012)

However, these figures do not consider that in no-asset cases, which are nearly 97% of all Chapter 7 matters, unsecured creditors receive almost no distribution.

The legal considerations notwithstanding, statistics often quoted (Reeves¹) find that today's public companies have a 1:3 chance of disappearing within five years due to a combination of bankruptcies, liquidation, delisting, mergers and acquisitions. That disappearance rate is 6 times larger than it was 40 years ago and calls for a governance model (Reeves²) of planning for multiple time scales in which stress testing is a good start.

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

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