



# Shareholder Risk and Shareholder Reward

**A discussion in the mechanics of closely held company stock pricing**

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## Executive Summary

Large financial companies are being required to do “stress testing” to see how they will perform in various economic situations. For companies with less than 500 employees, there is no requirement to do stress testing, but it may be crucial given the limited availability of capital and the decrease in consumer spending. Most small companies don’t have the cash reserves to weather the storm as do the large publicly-traded ones. Small companies should be asking, “Will we be able to grow the value of our company in this environment,” and “How much capital will we need to sustain the company whether sales go up or down over the next few months?” Ultimately, owners of small companies will ask, “Am I getting compensated well enough for taking this risk?” While stock markets are already indicating that the risks are diminishing, the effect of the recession may just be setting in for the smaller company.

Because of the current condition of the capital markets and projected environment of reduced economic growth over the next 2-3 years<sup>1</sup>, small company shareholders need to examine their companies on a number of key financial areas and determine whether they will be adequately compensated in terms of share price for the risks they are taking and determine what strategic options may be available.

## Introduction

As discussed in the preceding paper “Stress Testing the Closely-Held Company”, recently there has been increased media attention on the “stress testing” of banks and financial companies to determine the health of their capital pool and whether or not they will be able to whether a prolonged financial crisis or other shock to the capital markets. Many individuals will understand the term “stress test” as it relates to a medical check up. In that setting the term really implies the question, “What is the risk of a heart attack?” In stress testing a company, the real question can be boiled down to, “What is the risk of a business heart attack?”

In particular, the business should ask 3 specific questions in conducting a stress test:

- 1) How much economic and financial stress can the company withstand?
- 2) How much can the company afford to grow before it is unhealthy?
- 3) How much does the stress affect the value of the company share price over time?

The measurement and projection of stock price over time is the most efficient way to monitor the stress of companies in difficult capital markets to ensure healthy economic returns to shareholders.

## Understanding private company stock prices

The metrics for determining the stock price of any company are best portrayed in the formula:

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<sup>1</sup> See the recently published white paper entitled, “Stress Testing the Closely-Held Company” at [www.whmca.com](http://www.whmca.com) for background information and data on the current economic climate and the current need for these measurements.

$$\text{Stock Price} = \frac{\text{Financial benefits received by shareholders}}{\text{Risk to shareholders of the future benefits}}$$

The value of a company can grow by either increasing the benefits to the shareholders, or reducing risks to the shareholders. Most small companies focus primarily on increasing the benefit stream. However, a singular focus on increasing financial benefit stream is shown to actually increase the risk to shareholders and can have a negative effect on stock price.

### **What is really the benefit?**

When exploring the idea of benefit stream, there is a decided tendency among many businesses examined in our research to rely on revenue growth as the main driver of the benefit stream. However, the benefit stream that should be measured and managed is *Free Cash Flow*.

Specifically, Free Cash Flow has two components: Free Cash Flow to Firm (FCFF) which represents all cash flow available to providers of both debt and equity capital, and Free Cash Flow to Equity (FCFE) which represents the cash flow available to providers of equity capital (shareholders or partners). These two cash flow measures are outlined in Figure 1.

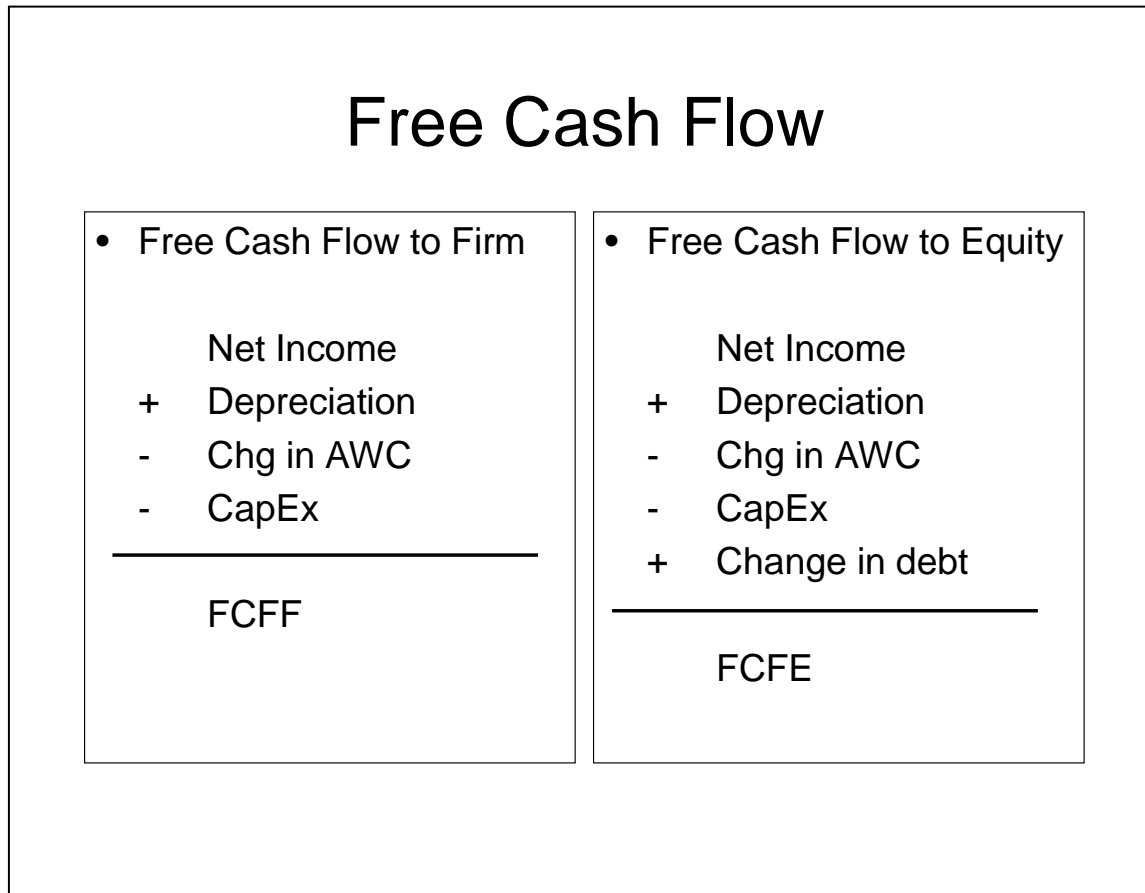


Figure 1

The difference between these two is clearly the change in debt from period to period. The equity shareholder has access to use the debt capital for any purposes and it is thus considered part of the FCFE. Reductions in debt from period to period reduce the amount available to shareholders in FCFE.

Interestingly, research shows that approximately 80% of companies have a negative correlation between cash flow and revenue. In other words, if revenue grows, cash flow declines. While most businesses put a primary focus on revenue growth, they actually put less cash in the shareholder's pocket at the end of the year.

Clearly, this effect of diminishing cash flow associated with growing revenue is a main risk associated with small companies. "Growth gobbles cash," is a rule of thumb that explains this. Companies must look at cash flow demands associated with their projected revenue growth projection or risk the "growing into bankruptcy" scenario.

Many businesses also fail to understand the risks of substituting EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization) for Free Cash Flow. EBITDA does not take into account the fact that changes in certain balance sheet accounts can dramatically affect

the health of the company and the benefit stream. Growing EBITDA can actually be a significant risk to the company that cannot raise capital quickly enough to support it.

Many business owners, and others think of “EBITDA multiples” as a good rule of thumb for valuing companies. However, there are substantial problems associated with multiples in general since these represent prices paid in specific instances of business being sold and cannot be extrapolated to companies that have not sold. In addition, because of the factors discussed here about EBITDA, there are other risks in relying upon them for benchmarking stock price. If multiples lie, then EBITDA multiples lie twice.<sup>2</sup>

The specific items that affect the cash flow available as a company grows are working capital accounts, such as Accounts Receivable and Inventory, and fixed assets, such as Property, Plant and Equipment. As a business grows revenue there typically is a direct correlation between the growth in revenue and the growth in these balance sheet accounts. For most companies, a sale of an item required some upfront investment into inventory and/or equipment (and also personnel). The initial investment into these items is a negative cash flow event for shareholders. In many business too, the sale of the product or service produces an Account Receivable. Most business owners do not think of this as a negative cash flow event, but in fact another party has received the product sold without the business having received any cash. It is not until the Account Receivable is paid that the business actually receives cash and has a positive cash flow for shareholders. As a business grows, it must have more inventories to sell, more equipment and personnel, and will have more sales that are still in receivable mode.

Businesses must examine the projected levels of these accounts based on the level of projected revenue growth. Most business owners have been trained by their bankers and accountants to think of more working capital as a good thing. If a business cannot turn these accounts into cash quickly enough it will create significant distress.

In recessionary periods, businesses have been known to extend more generous credit terms to customers on receivable accounts in order to keep sales moving. In addition, businesses have been squeezed by suppliers for payment on accounts, or perhaps worse, have been offered discounts for purchase of additional inventory that look too attractive to pass up. In these instances, the business is put under additional stress as working capital increases and drains cash available to shareholders at a time when the company needs cash for survival.

Measurements must be made and updated on the levels of correlation between revenue, working capital and fixed assets as a primary function of stress testing.

### **Exploring the risks to shareholders**

The denominator in the stock price equation deals with the risks to shareholders. Quantifying this risk is a key component of stress testing. It is wrong to assume that if benefits grow, that risk diminishes or stays flat.

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<sup>2</sup> See the white paper on multiples entitled, “Demystifying the Price Multiple” available at [www.whmca.com](http://www.whmca.com).

The best definition of risk in this instance is “lack of consistency.” The business that is less consistent is less predictable and thus its risk increases relative to one that is more consistent. Growth can actually hurt consistency, thereby increasing risks.

In stress testing, risk is the most complex factor because the testing is *trying to predict* what *could* happen under multiple scenarios and quantify those scenario elements. The effect on stock price in these scenarios is affected not just by the change in benefits in each scenario, but by the change in risk. Quantifying the element of risk in an objective manner keeps most companies (regardless of size) from conducting an effective stress test.

Whose definition of risk matters? The best source of quantifying the risk is determining what capital providers are charging for use of capital. As a capital provider perceives more risk, then they will charge more accordingly. Debt capital sources will charge higher interest rates. Equity capital sources will charge more as well, but the cost of the equity capital is something that requires more thorough examination.

The shareholder who provides equity has the opportunity to receive two forms of return; income and capital appreciation. One problems faced by small companies is that shareholders can be overly focused on the income aspects of return rather than reinvesting cash flow for the second return component, capital appreciation. In the measurement of the cost of equity, shareholders should perceive less risk when the financial performance of the company is more predictable and more risk when it is less predictable.

Shareholder return = Income Received + Stock Price Appreciation
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### **Predictability Factors**

Our research shows that most owners will focus on consistency of profit margins as the main driver of predictability. Yet, the profit margin function is only one function where consistency must be measured. The other two functions for risk measurement are asset efficiency and blend of capital sources (use of leverage).

Asset efficiency can be thought of as the amount of assets the business has supporting the amount of revenue it produces. Typically, as revenue grows, more assets are required to produce the revenue. The ability to keep this ratio consistent is a main driver of risk and should be measured in stress test applications.

Leverage is best thought of as the amount of non-shareholder capital that is supporting the company. The amount of assets relative to the level of equity should be measured over time. If the company is growing and is increasingly using outside capital to support the growth then there generally an increasing risk. For shareholders, there is a direct correlation between the reinvestment of cash flow and increases in stock price for most small companies. The point at which this correlation breaks down is an indicator of the need to use debt capital for growth and leverage begins to become increasingly effective

until the point where risk perceived by shareholders raises the cost of capital and stock price diminishes. A major component of stress testing is determining the optimal balance between debt and equity capital. The optimal blend will be the one that maximizes share price over time.

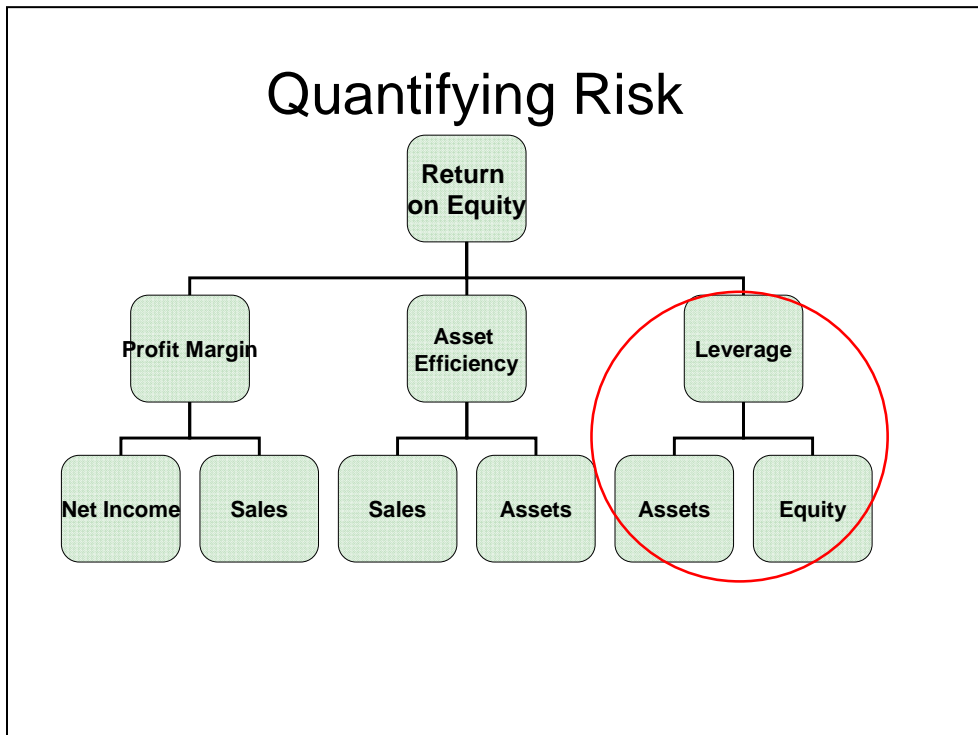


Figure 2

The concept mentioned earlier that revenue growth typically has a negative correlation with cash flow growth underscores the reason for optimizing capital structure. The reason this negative correlation works is that as a company grows, it has an increased need for capital to fund the growth. The reason shareholders continue to tolerate the negative correlation effect is that they are compensated by increasing stock price over time if the company is properly capitalized for growth. The necessary capital can come from one of the two sources; debt or shareholder reinvestment. When shareholders decide to take income rather than reinvest, they must stress test to ensure that they will benefit from the decision as capital appreciation in the stock price occurs.

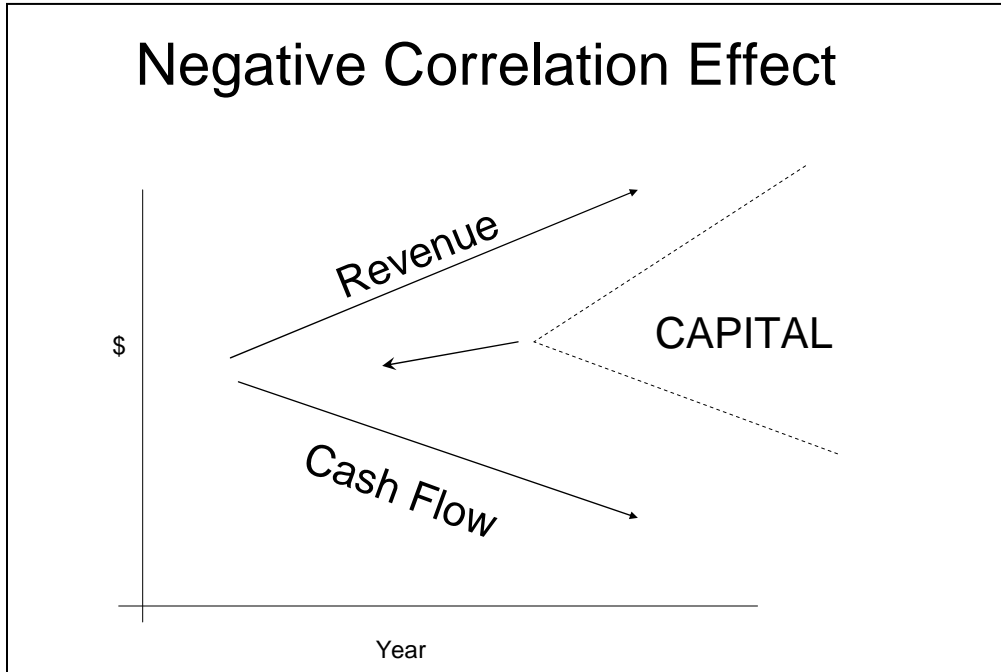


Figure 3

The risk component of the stock price calculation is mainly a factor of capital structure. More than any of the other two factors, leverage most directly affects risk, and therefore stock price. Both of the inputs; benefit stream and risks, have the use of debt capital as a main driver of their calculation.

### Conclusion

Stress testing is most effective when it anticipates various scenarios related to access to capital in conjunction with the various growth scenarios.<sup>3</sup> If there is no access to capital, there is no growth in stock price and shareholder return does not offset the shareholder risks.

In the current environment, capital markets are unlikely to provide cheap and readily available capital. Businesses must monitor stock price in order to accurately determine the return and risk of owning shares in the enterprise.

### Why Stress Test?

- 1) Track business value and risk.
- 2) Indicate how well a company is positioned to withstand capital market risks.
- 3) Understand what level of sales growth is healthy.
- 4) Will the company meet the shareholder exit objectives.

<sup>3</sup> "Stress Testing the Closely-Held Company" also discusses the strategic implications of stress testing results in the current environment.

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