Reorganization Value: What It Is.....and Isn't

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The importance of reorganization value is that it is perhaps *the* measure that determines whether a debtor will be able to reorganize, and the value of the reorganized debtor that is distributable to holders of interests and claims. Nevertheless, reorganization value is not specifically defined in the Code or in case law, other than by reference to the general principle that a debtor should be valued based on the capitalization of its expected future earnings. Bankruptcy courts must therefore determine the "extent and method of inquiry necessary for a valuation based on earning capacity....dependent on the facts of each case."[1]

Courts determine reorganization value *by reference* to the debtor's enterprise value based on the fair value standard, going concern premise, and present value of expected future cash flows and/or market multiples. Reorganization value is not the equivalent of enterprise value, however, though the terms are sometimes used interchangeably or confused with one another. Nor is it equal to the value of the firm, or to its equity. Only when each component of value is understood (*e.g.*, the cash flows included in a calculation, and how they differ), is it possible to intelligently analyze an investment or negotiate to maintain or enhance an interest or claim in a restructuring.

The Value of a Firm

Conceptually, a firm can be thought of as an assemblage of contracts. In this respect, the contracts a firm has with its owners are embodied in the corporate bylaws and stock certificates issued to its shareholders, who have a residual interest in the firm's assets in that they are entitled to the value of the firm that would remain if all other claims were paid. The value of a firm's assets must therefore be equal to the value of the claims on its assets, with the value of the firm being equal to the value of non-equity claims plus the value of equity.

1 *Consolidated Rock,* 312 U.S. at 527.

This principle is illustrated as follows from an accounting balance sheet perspective:

Assets = Liabilities + Equity

Assets are comprised of operating and non-operating assets, while liabilities combine operating liabilities and long-term interest-bearing debt. Consequently, the accounting balance sheet equation comingles operating liabilities and financing sources on the right side of the balance sheet:

Assets = Operating Liabilities + Debt + Equity

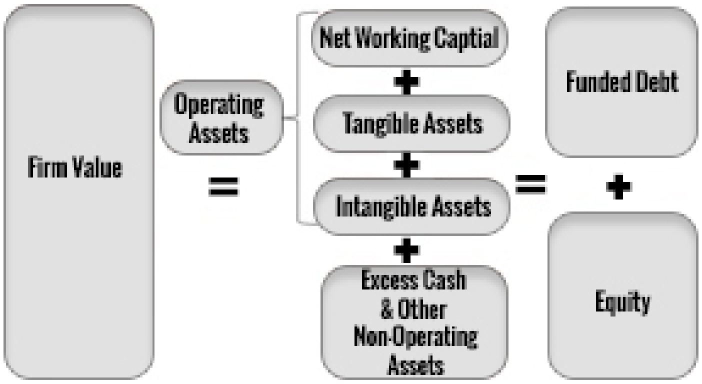
Rearranging the formula by moving operating liabilities to the left side of the equation leads to the measure of invested capital. The left side calculation shows how much capital has been deployed by the firm; the right side calculation shows how much financing has been provided by creditors and investors:

Assets – Operating Liabilities = Debt + Equity = Invested Capital

Exhibit 1 below illustrates these relationships in greater detail. Specifically, the value of the firm is shown to be equal to the value of its operating and non-operating assets, and to the value of its funded debt and equity. Operating assets include net working capital, tangible and intangible assets. Net working capital refers to *non-cash* operating working capital; for example, the net of trade accounts receivable, trade finance receivables, trade accounts payables, finance payables and accrued liabilities. Tangible assets include natural resources and fixed assets such as property, plant and equipment. Intangible assets (those that have value but cannot be seen or touched) include separately identifiable assets such as patents, copyrights, trademarks, brand names and customer contracts, as well as goodwill (that is, the residual that remains after the allocation of the purchase price of an acquisition to the fair values of the assets acquired and liabilities assumed).

A firm may also own assets that are not disclosed on its balance sheet or that are not used or essential to the core operations of the company. These types of assets are therefore classified as, and included in, non-operating

Exhibit 1



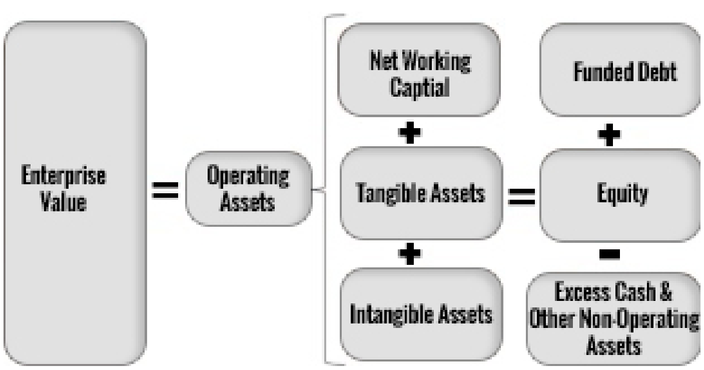
assets (also referred to as excess assets). Examples may include excess cash, marketable securities, loans receivable, unused buildings, unutilized equipment, vacant land and net pension assets.

Turning to the liabilities and capital side of the balance sheet, the claims on the value of the firm's assets include funded debt and equity. Equity is comprised of items such as common stock, preferred stock, options and warrants. Funded debt encompasses interest-bearing loans and financial obligations, such as bank debt, notes, bonds and off-balance sheet debt, which are not due within one year of the balance sheet date. As discussed above, non-interest bearing operating liabilities (typically current liabilities for operating expenses not paid during the period in which the expense was incurred, *i.e.* accounts payable) are not added to funded debt and equity. This is because non-interest bearing liabilities are implicitly netted out in valuing the firm as the financing charge implicit to purchasing a product or service on account is embedded in its cost.

Enterprise Value

Comparing Exhibit 1 above with Exhibit 2 below, it can be seen that as compared to firm value, which is equal to the value of the firm's operating and non-operating assets, and to the value of its funded debt and equity, enterprise value is equal to the value of the firm's operating assets, and to the value of its funded debt and equity less excess cash and other non-operating assets. As such, it is designed to measure the net price that an acquirer would pay to buy out investors and creditors after accessing the target's cash and marketable securities. Where a firm uses all of its assets in operations, the difference between firm value

Exhibit 2

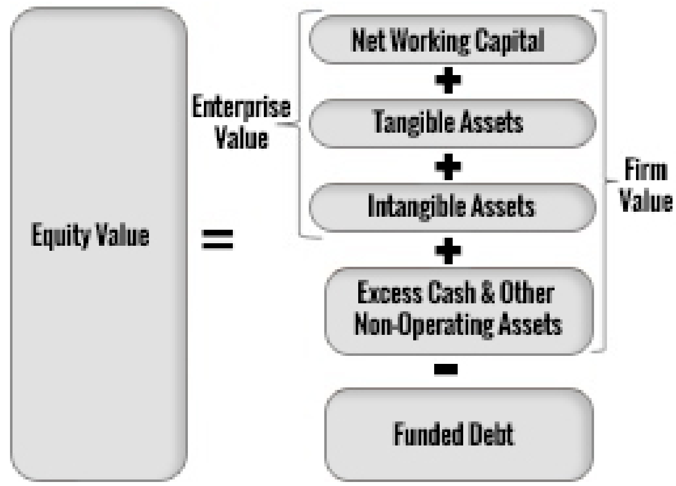


and enterprise value will be equal to the amount of cash *required* to support ongoing operations, if any.

Equity Value

Exhibit 3 below shows the calculation of equity value. Compared to the calculation of firm value shown in Exhibit 1, equity value is equal to the value of the firm, which consists of its operating assets, or enterprise value, plus excess cash and other non-operating assets, minus funded debt. In a reorganization, it is not uncommon for equity value to be negative and for the business to be insolvent from a fair value of assets versus liabilities perspective. At the same time, however, the ability of a *controlling* interest to direct the debtor's operations, its restructuring process, and to realize the surplus value in a successful restructuring is a material benefit having a positive value until such time as the interest is divested of its rights.

Exhibit 3



Reorganization Value

Reorganization value is the measure of the fair value of the firm that will emerge from bankruptcy as a going concern before liabilities are considered, and equivalently, of what a willing buyer would pay to acquire the firm's assets on emergence. It includes the value of the assets that will be attributed to the reorganized firm, plus that of other assets that may not be so attributed (*i.e.*, excess cash and proceeds from asset divestitures). The reorganization value of a firm is therefore equal to the value of the assets that are, or will be, available to satisfy post-petition claims and allowed interests, as determined in negotiations or litigation between the debtor-in-possession or trustee, creditors and equity interests. In this regard, the determination of reorganization value in a Chapter 11 proceeding differs from that in a capital market process due to the absence of a market for control of the firm's assets, lack of market oversight given management's access to debtor-in-possession financing, infrequent trading of the securities of bankrupt firms and limited coverage by analysts.

Exhibit 4 on the next page depicts the calculation of reorganization value. Comparing Exhibit 4 with the calculation of enterprise value shown in Exhibit 2, it is clear that enterprise value is not the equivalent of reorganization

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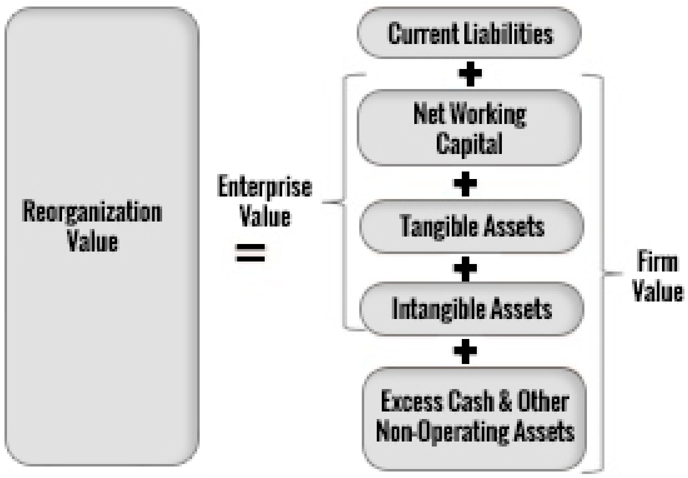
Exhibit 4



value. Further, while enterprise value is a component of reorganization value, its value is necessarily less than reorganization value due to the inclusion in reorganization value of current liabilities (operating), excess cash and other non-operating assets, consistent with the definition that reorganization value is the measure of the fair value of the firm that will emerge from bankruptcy as a going concern before liabilities are considered. In the case of reorganization value, other non-operating assets also includes the cash proceeds from asset divestitures.

Free Cash Flow to the Firm v. Free Cash Flow to Equity

Generally speaking there two types of free cash flows: free cash flow to the firm and free cash flow to equity. Free cash flow to the firm ("FCFF") measures the cash flows distributable to all providers of capital, debt and equity, after all necessary investments, as if the firm were entirely financed with equity, ignoring taxes saved from the interest expense associated with debt. Free cash flow to equity ("FCFE") measures the cash flows distributable to common equity, after all necessary investments, and all payments to and from holders of non-equity securities.

Exhibit 5 below illustrates two of the ways in which FCFF and FCFE are calculated. The calculation of FCFF starts with net operating profit after-tax ("NOPAT"), also referred to as unlevered net income because the taxes deducted are the taxes the firm would pay if it had no interest deductions. To calculate gross cash flow, non-cash expenses or losses (herein, depreciation and amortization expense), are then added back to NOPAT, while non-cash revenues or gains are subtracted. To derive FCFF, capital expenditures and increases in working capital are in turn subtracted, while decreases in working capital are added back.

The calculation of FCFE begins with net income rather than NOPAT. Non-cash expenses and losses are subsequently added back, while increases in working capital and non-cash revenues and gains are subtracted. Next, cash flow from operations is reduced by capital expenditures, debt and preferred dividend payments, and increased by new debt issuances to arrive at FCFE.

From the foregoing it can be observed that the main difference between the calculations of FCFE and FCFF is that FCFE is net of payments to holders of non-equity claims such as preferred stock and debt. As already discussed, this is because common shareholders possess a residual interest in what remains of the value of the firm's assets after all other claims are paid. The choice of cash flow, like that of the value measure, must therefore coincide with the characteristics inherent to the measure of value and subject interest or claim.

For a firm with stable leverage, whether or not high, FCFE is preferable for measuring equity value directly rather than backing into it as a residual in the calculation of firm value (Exhibit 1) or of enterprise value (Exhibit 2). As with the practice of multiplying the number of a firm's outstanding shares by the corresponding share price to calculate an equity value, the equity value determined using FCFE should be adjusted to include the value of non-traded shares, stock options and shares from bonds or preferred stock that are convertible into common equity where applicable. Further, in choosing between the FCFE and dividend discount models, FCFE is better for firms that do not pay dividends, or that pay dividends that are significantly higher or lower than FCFE over an extended period of time. However, for firms such as banks and financial service firms where FCFE is difficult to estimate, or for firms that pay dividends and repurchase stock in amounts comparable to FCFE over time, the dividend discount model is a more desirable choice.

As for the FCFF model, like the FCFE model it is best for measuring firm value, enterprise value or reorganization value where that is the objective of the analysis. Notwithstanding, while the model is referred to as the FCFF model, if the cash flows relied on are cash flows that are expected to be generated by the firm's operating assets, the value measure derived will be the value of the firm's operating assets, or its enterprise value (Exhibit 2), and not firm value (Exhibit 1). Going from enterprise value to firm value will consequently require that the value of excess cash and other non-operating assets be added. Conversely, if the cash flows used in the FCFF model reflect the cash flow and income effects of the firm's excess cash and other non-operating assets (*i.e.*, cash, marketable securities, interest income, etc.), the resulting measure will be firm value rather than enterprise value absent elimination of these income effects (as a point of reference, the value of a firm's excess assets is embedded in its firm and equity values). Lastly, where the cash flows used to calculate reorganization value in part are attributable to the operating assets of the reconstituted debtor, the measure of value indicated by the FCFF model will be enterprise value, not firm value or reorganization value. Calculating reorganization value will require adding the values of excess assets, other non-operating assets and current operating liabilities (Exhibit 4).

Exhibit 5

Free Cash Flow to the Firm	Free Cash Flow to Equity
Revenue	Revenue
− Cost of Sales	− Cost of Sales
− Operating Expenses	− Operating Expenses
= Operating Income (EBIT)	= Operating Income (EBIT)
	− Interest Expense
	= Pretax Income
– Taxes on EBIT	− Income Taxes
= Net Operating Profit After Tax	**= Net Income**
+ Depreciation & Amortization	+ Depreciation & Amortization
	+/- Change in Working Capital
+/- Non-Cash Items	+/- Non-Cash Items
= Gross Cash Flow	**= Cash Flow From Operations**
+/- Change in Working Capital	– Capital Expenditures
– Capital Expenditures	+/- Change in Debt Principal
	– Preferred Dividends
= Free Cash Flow to the Firm	**= Free Cash Flow to Equity**

Key Takeaways

Reorganization value is determined *by reference* to the debtor's enterprise value based on the fair value standard. Reorganization value is not equal to enterprise value, however, or to the value of the firm or to its equity. Rather, reorganization value is the measure of the fair value of the firm that will emerge from bankruptcy as a going concern before liabilities are considered. Enterprise value is by comparison equal to the value of the firm's operating assets. So though enterprise value is a component of reorganization value, its value is necessarily less due to the inclusion in reorganization value of current operating liabilities, excess cash and other non-operating assets.

In general, there are two types of free cash flows: free cash flow to the firm, and free cash flow to equity. The main difference is that FCFE is net of payments to holders of non-equity claims given that the interest of common shareholders is equal to the residual of what remains of the value of the firm's assets after all other claims are paid. The choice of cash flow, like that of the value measure, must therefore coincide with the characteristics inherent to the measure of value and subject interest or claim.

The FCFF model is best suited to measuring firm value, enterprise value or reorganization value where that is the objective of the analysis. Where the cash flows used to calculate reorganization value are attributable to the operating assets of the reconstituted debtor, the measure of value indicated by the FCFF model will be enterprise value, not firm value or reorganization value. Calculating reorganization value will therefore require adding the value of excess assets, other non-operating assets and current operating liabilities.

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