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Bankruptcy Law Dilemma: Appraisal of Corporate Value and Its Distribution in Corporate Reorganization Proceedings

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INTRODUCTION

Most failing corporations that are unsuccessful in managing themselves file for Chapter 11 bankruptcy¹ protection to renovate their financial structures after failing to reorganize the business enterprise through restructuring debts individually.² Chapter 11 intends to protect “economically viable” but failing firms from going bankrupt³ and helps to realize the interests of the concerned parties through maintenance and rehabilitation of the business entity.⁴ While the failing company is

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¹ Generally, this applies to corporate reorganization in both the United States and Korea. See 11 U.S.C. §§ 1101–1174 (2007) (referring to U.S. corporate reorganization); Debtor Rehabilitation and Bankruptcy Act of 2006 (Act. No. 7428) (providing regulation for corporate reorganization) (S. Korea) [hereinafter DRBA]. Please note that all references to Korea are references to S. Korea.

² But see Julian R. Franks & Walter N. Torous, *A Comparison of Financial Reorganization in Distressed Exchanges and Chapter 11 Reorganizations*, 35 J. FIN. ECON. 349, 350 (1994) (stating that there is evidence showing that creditors yield more to the shareholders when the corporation intends to reorganize in private since the cost of Chapter 11 is higher compared to corporate reorganization by private agreement).

³ In the United States, Chapter 7 of the Bankruptcy Code regulates liquidation. See 11 U.S.C. §§ 701–766. In Korea, liquidation is regulated through both Part V (Corporation) of the Commercial Act and the DRBA, *supra* note 1.

⁴ See Heidi J. Sorvino, *Financial Services Update*, FINDLAW, Feb. 1, 2000, <http://library.findlaw.com/2000/Feb/1/126287.html> (citing to the Third Circuit Court of Appeals’ explanation that the goals and policies of bankruptcy law, as they pertain to a Chapter 11 reorganization, are “avoidance of the consequences of economic dismemberment

undergoing the corporate reorganization plan, it is specially protected from creditors' "compulsory enforcements" of their legal remedies for a period of time.⁵

Chapter 11 proceedings are a unique characteristic of the U.S. bankruptcy system because they are designed for the entrepreneur to continue business operations while preparing a corporate reorganization plan.⁶ This can provide many advantages for both the entrepreneur and the corporation,⁷ and is based on the belief that consistency in business management must be maintained to protect the corporation from bankruptcy and to normalize the corporation at an early stage.

Once a corporation begins a Chapter 11 proceeding, an "automatic stay"⁸ is imposed, mandating that the corporation's assets be given the appropriate "provisional protections" from any attachments or preliminary injunctions that exist. This also prevents the enforcement of any pre-filing

and liquidation, and the preservation of ongoing values in a manner which does equity and is fair to [the] right and interest of the parties affected.").

⁵ See 11 U.S.C. §§ 1121–1129.

⁶ Korean bankruptcy law has three distinct characteristics. First, regarding the submission of draft reorganization plans, the DRBA states that the court shall, where the value of a corporation, were it to continue its business, is expected to be greater than that of the corporation when it is liquidated, order that the receiver furnish a draft reorganization plan within a fixed period. This plan must include options such as the continuation of business through the continuous existence of the corporation, the merger of the corporation with another corporation, split of the corporation, or the creation of a new corporation or the transfer of business. This should be done on the day on which the first round of the meeting of interested persons is held or immediately thereafter. See DRBA, *supra* note 1, art. 220(1). Second, regarding submission of draft reorganization plans by creditors, the DRBA states that the corporation, the reported reorganization creditors, the security holders, and the shareholders may draw up a draft reorganization plan to furnish to the court within the period described in Article 220(1). See DRBA, *supra* note 1, art. 221(1). Third, there is an option for prior submission of a reorganization plan for any creditor who holds a claim in not less than 50% of the debts of a corporation. Such creditor may lay out a reorganization plan and file such plan with the court up to the day preceding the day on which the first meeting of interested persons is held. See DRBA, *supra* note 1, art. 223(1).

⁷ Peter Brierley & Gertian Vlieghe, *Corporate Workouts, the London Approach and Financial Stability*, FIN. STABILITY REV., Nov. 1999, at 168, 172, available at <http://www.bankofengland.co.uk/publications/fsr/1999/fsr07art7.pdf> ("The U.S. insolvency regime is often quoted as an example of a debtor-oriented regime, because the Chapter 11 procedure effectively allows the debtor to call a moratorium and negotiate restructuring plans, which if approved by a majority of creditors are then binding on all. Both the United Kingdom and Germany are generally regarded as examples of creditor-oriented regimes, because they facilitate the secured creditors' ability to enforce their security.").

⁸ 11 U.S.C. § 362. In the United States, the automatic stay for corporate assets is granted in principle upon filing a Chapter 11 proceeding. However, "under Korean bankruptcy laws, the court decides on a case-by-case basis whether to grant the corporate debtor protection similar to the automatic stay." Mikyung Yun & Kyung S. Lee, *A Primer On Korean Bankruptcy Law*, AM. BANKR. INST. J., June 1999, at 18, 46 (1999).

judgments, halts principal and interest payments on debts, and prevents the creditors with secured claims from exercising their collateral rights.⁹

Lawyers often hear financial, accounting, and economic terms concerning the economic viability of the subject corporation, including terms like “value,” “liquidation value,” “valuation,” and “distribution.”¹⁰ While handling corporate reorganization cases in the bankruptcy department of the Seoul Central District Court of Korea, I was interested in understanding the mutual relationships and concepts of such terms. Regretfully, they are still areas not clearly defined, and court decisions, academic theory, and statutes provide very little guidance. Since the core of the corporate reorganization cases revolve around the corporation’s valuation and distribution, I intend to summarize and discuss this area as I firmly believe these hotly-debated and navigable topics may provide valuable insight.

This article will analyze issues arising in reorganization proceedings with which the bankruptcy court has not yet grappled. If the questions arising in the remainder of this article can be clearly answered, then to a certain extent numerous arguments about Chapter 11 can be settled.

This article will also analyze both Korean and U.S. bankruptcy law and will maintain a comparative approach with a critical perspective. Though Korean bankruptcy law indirectly adopted¹¹ that of the United States in 1962, the actual application and interpretation of Korean bankruptcy law is quite different and I will accurately compare and contrast the two systems.

On April 2, 2007, the Korean and U.S. governments reached a free-trade deal, also known as a free-trade agreement (FTA). Once it obtains

⁹ See DRBA, *supra* note 1, art. 45(1), (3).

¹⁰ See, e.g., Babette Ceccotti & Michael L. Bernstein, *Protecting Employees and Retirees in Business Bankruptcies Act of 2007 (H.R. 3652): Two ABI Members Testify before U.S. House Judiciary Subcommittee*, AM. BANKR. INST. J., July–Aug. 2008, at 10 (“When the bankruptcy laws were comprehensively revised in 1978, Congress designed the business reorganization system to prevent the liquidation of viable businesses—to reserve . . . going concern value for all stakeholders.”); *id.* at 61 (“Chapter 11 of the Bankruptcy Code is intended to enable a financially troubled business to restructure its operations and obligations so that it is able to remain a going concern, and to emerge from bankruptcy as a viable and competitive enterprise.”). In addition, numerous bankruptcy literatures, cases, and media repeatedly referred to those terms. In Korea, for example, DRBA, *supra* note 1, arts. 200(2), 244(1).2, and 298 directly provide those terms.

¹¹ Originally, bankruptcy law in Korea was enacted as a trilogy: (1) the Bankruptcy Act, enacted January 12, 1962 by Act No. 998; (2) the Corporate Reorganization Act enacted December 12, 1962 by Act No. 1214; and (3) the Composition Act enacted January 20, 1962 by Act No. 997. The trilogy was eventually integrated on March 31, 2005 as the DRBA, which became effective on April 1, 2006. See Elinor Kim, *Corporate Insolvency Law & Practice in South Korea in the Aftermath of the Asian Financial Crisis*, 21 CONN. J. INT’L L. 155, 159–61 (2005).

Congress's ratification, which could take a number of years, certain phases of both countries' legal service markets are expected to be extensively opened.¹² Businesses will experience more exposure to internal and external risks and the increased possibility of insolvency resulting from bitter global competition.

This article is organized into four main parts. Part I presents the general doctrine of bankruptcy law theory and considers some notions for dogmatic study. Part II discusses some of the unsettled definitions in bankruptcy law. Part III discusses the valuation methodologies and other related issues. Part IV discusses the distribution of corporate values.

I. CRITICAL APPROACH TO THE BANKRUPTCY REORGANIZATION PROCEEDING

The practice of bankruptcy law and its case management can change with the degree of economic development, trends, and patterns in the industry, as well as social and legal traditions according to the status of the national financial situation.¹³

The United States, which has experienced the most dramatic change in bankruptcy law,¹⁴ uses the basic model in which the insolvent debtors sell the assets, either individually or through a public fiduciary, and then distribute the proceeds from these sold assets to creditors. A bankruptcy reorganization proceeding is not too complex to understand. Rather, it is a simple scheme in which an insolvent debtor distributes assets to its creditors. This distribution may be compulsory or it may be disposed of in bulk if a business enterprise continues to operate.¹⁵

If one understands the bankruptcy reorganization proceeding outlined above, the fundamental principles required in the distribution of corporate value, the method used to calculate these values, the final valuation period, and the subject matter for valuation will all be naturally deduced.

¹² See Kim Tong-hyung, *Law Firms Getting Bigger Like General Hospitals*, KOREA TIMES, Apr. 19, 2007 (on file with author).

¹³ See, e.g., Peter V. Pantaleo & Barry W. Ridings, *Reorganization Value*, 51 BUS. LAW. 419, 426 (1996) (arguing for one valuation method based on the consideration of market and macroeconomic conditions).

¹⁴ See generally Vern Countryman, *A History of American Bankruptcy Law*, 81 COM. L.J. 226–33 (1976); see also Kenneth N. Klee, *Legislative History of the New Bankruptcy Law*, 28 DEPAUL L. REV. 941 (1978–1979); Louis E. Levinthal, *The Early History of Bankruptcy Law*, 5 J. NAT'L ASS'N REF. BANKR. 157 (1930–1931).

¹⁵ One commentator notes that the corporation will continue its business after reorganization and its worth must be determined on a going concern basis. See John H. Frye, III, *The "Fair and Equitable" Doctrine: Are Liquidation Rights a Realistic Standard During Corporate Reorganization?*, 20 CATH. U. L. REV. 396 (1970–1971).

A. Economic Aspects of Bankruptcy Reorganization

Although Professor Thomas H. Jackson compares the bankruptcy reorganization proceeding to a common pool,¹⁶ one may consider a different approach to his theory. For example, a lake consists of a balance between the water flowing in from upstream and the water being discharged downstream. The upstream current, which can be compared to cash inflow, will change according to the rainfall, the size of the drainage area, the possibility of flood, the possibility of water retention by the forest upstream, and the size of the inlet passage. From the perspective of the lake owner, the inflow will increase if he plants trees, maintains the water passage, or increases the size of the lake's drainage area. However, if a reduction in the water inflow is caused by a fundamental change in rainfall patterns rather than the lake owner's external improvements, then the lake owner's improvements could be regarded as an unwise investment.

As it relates to corporate financing, the lake is comparable to a corporation and the water can be compared to cash or income. Depending on the circumstances, the water discharged downstream could increase¹⁷ as the demand for water increases in the bear market; a corporation could then reduce business projects or the number of employees. If there is a consistent reduction in "water" flowing in from upstream, then the corporation will become economically depressed and may even be considered a declining industry. However, if the cause of the reduction in the water inflow is temporary, then the corporation may be considered to be under financial distress and its operation can be restored by either eliminating the cause of the reduction or by reinvesting into the upstream current. Although there may be a balance in the amount of water coming in from upstream and the water being discharged downstream, there may be a delay in the discharge from the lake for any number of reasons.

The lake can be closed down (by liquidation or dissolution or winding) and the remaining water can be transferred to another lake (by merger), or a new lake can be created if the amount of water in the lake decreases or if water temporarily stops being discharged from the lake. Some have argued that the role of the bankruptcy court in reorganization proceedings is limited

¹⁶ Professor Jackson illustrates two problems associated with bankruptcy reorganization: the "common pool" problem and a multiparty game, which he calls the "prisoner's dilemma." See THOMAS H. JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* 10–19 (1986). The common pool theory is a metaphorical representation of aspects of the economic phenomena regarding the bankruptcy reorganization which the failed company relied upon to revive. In this hypothetical metaphor, the utmost results are drawn from competing interest holders such as creditors and shareholders.

¹⁷ This situation would be likened to a corporation under financial distress. Since the amount of water inflow did not decrease, the function of the lake will be restored if the amount of water outflow is properly maintained.

to merely transferring the remaining assets.¹⁸ Therefore, the bankruptcy court is often blamed for failing to quickly make such transfers.¹⁹ However, transferring the remaining water or creating a new lake does not solve the entire problem because the purpose of bankruptcy law does not necessarily require such action by the parties involved.

After calculating the amount of water to be drained, the amount of incoming or evaporating water, and the cost of maintaining the lake, the bankruptcy court takes on a maintenance role and focuses more on how to maintain the lake and preserve the water.²⁰

If it was considered economical for the lake owner and those with the right to receive the water to transfer the water to another lake, there would be no need for the corporate reorganization proceeding. However, if the water were to be transferred to another lake, it would reduce the amount of water inflow during the process. Moreover, there may be no plans for utilizing an empty lake. If the lake's use is not changed but the process of keeping and discharging water is continued, there would be no need to incur the costs of completely transferring the water.

Creditors and debtors may think that deciding not to transfer the water in the lake is economical.²¹ If there is limited water coming in (due to

¹⁸ Robert A. Haugen & Lemma W. Senbet, *Bankruptcy and Agency Costs: Their Significance to the Theory of Optimal Capital Structure*, 23 J. FIN. & QUANTITATIVE ANALYSIS 27 (1988).

¹⁹ The general criticism of the bankruptcy law in Korea is that the process takes too much time. See Lee Jang-yung, *Korea's Reform: Still A Strong Momentum*, KOREA TIMES, June 19, 2001 (on file with author).

²⁰ In his common pool theory, Professor Jackson only mentions how to catch the individual fish in the lake rather than how to raise and manage all the fish. See JACKSON, *supra* note 16, at 11–12.

²¹ Professor Heymann warned that unharmonious efforts of creditors and shareholders to achieve higher priorities in a reorganization company after debt adjustment may generate a capital structure that is very disadvantageous to the company even if each party understands the outcome of discordance. To illustrate this principle, Professor Heymann references a metaphorical story about buffalo hunters, for whom it was clear that the number of buffalo in their hunting ground would eventually decrease if they did not restrict their reckless hunting and discordant behaviors, even though the hunters did not individually wish for or plan such a consequence. Philip B. Heymann, *The Problem of Coordination: Bargaining and Rule*, 86 HARV. L. REV. 797, 815 (1973).

Professor Schelling also warned about the risk of destructive liquidation in corporate reorganization through a similar buffalo metaphor. Under any circumstance, buffalo would be more valuable as live animals than as leather fifteen years later. If a market forms fifteen years later, the hunter who killed fifty buffalo to make leather fifteen years ago would have no profits from his old leather. He could not both demand buffalo and market his property rights to baby buffalo fifteen years later. See Thomas C. Schelling, *On the Ecology of Micromotives*, 25 PUB. INT. 61, 73 (1971).

Based on this logic, the U.S. Bankruptcy Courts have applied the absolute priority rule to forcefully approve of reorganization plans against an “opposing class of interested persons.” Professor Roe states that “cram-down” litigation emerged because of the uncertainties of

difficulty in raising funds in the stock market or obtaining a loan from a financial institution) and the amount of water evaporating is small, then the cost of maintaining the lake is likely low. Accordingly, it is possible, if the creditors agree to the temporary cessation of water outflow, to reorganize where the corporate governance and capital structure are changed and the outflow of water is reduced.

B. Economic Efficiency of Bankruptcy Law

The bankruptcy reorganization proceeding must be carried out while considering its potential impact on the national economy as well as the debtors' employees and the society in which they live. Moreover, one should consider the proceeding's impact on third parties at the time of the reorganization's plan confirmation along with the cram-down. However, the proceeding should not be executed or terminated based on the principles of societal economic efficiency "publicness"²² or "macroeconomics."²³

A business does not permanently vanish from the economic world at the time of liquidation just because debts are cleared. If, however, the financial health of the debtor's business is declining, all the machines will be sold for scrap and the buildings and land will be either disposed of or sold. However, whether the proceeding is for liquidation, reorganization, or discharging the debt, selling all the machines for scrap is rare for a corporation on the brink of bankruptcy.²⁴ Instead, much to the displeasure of the existing creditors and debtors, the business will often continue under a new owner who takes over the business after a sale and purchases the operating machines at a price close to that of junk. Therefore, there is significance in collective debt handling.

Neither creditors nor debtors would wish to dispose of the machines as junk if any operating profit, however little, could be realized. Even if an

valuation in the court. He also notes that such uncertainty is similar to the court's manipulation of a traffic light that is not clearly visible in order to harmonize the traffic flow. When there is uncertainty regarding the light, drivers cannot avoid accidents and the court must not neglect this problem. See Mark J. Roe, *Bankruptcy and Debt: A New Model for Corporate Reorganization*, 83 COLUM. L. REV. 527, 537-46 (1983).

²² Martin D. Jacobson, *The Secured Creditor's Right to Full Liquidation Value in Corporate Reorganization*, 42 U. CHI. L. REV. 510, 527 (1974-1975) (noting "the bankruptcy reorganization law was not aimed to give public subsidy.").

²³ Macroeconomics deals with and seeks to analyze the determinants of aggregate trends in the economy with particular focus on national income, unemployment, inflation, investment, and international trade. In contrast, microeconomics is primarily focused on the determination of prices and the role of prices in allocating scarce resources. See generally, N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 27-28 (2d ed. 2001).

²⁴ Jonathan Hicks, *Foxes Guarding the Henhouse: The Modern Best Interests of Creditors Test in Chapter 11 Reorganizations*, 5 NEV. L.J. 820, 821 (2005) (noting, however, that "[a] debtor usually prepares an analysis which estimates a liquidation recovery based upon a sort of 'fire-sale' conditions resulting in severely depressed liquidation proceeds.").

operating profit is not being generated, the creditors may be willing to take a partial loss to control the time of sale. They can do this only by making changes in the corporate governance and capital structure to allow for profits in the selling of the business. According to such a model, the bankruptcy court cannot force the debtors to proceed with the bankruptcy reorganization proceeding on the grounds that the liquidation value is high while disregarding the wishes of the creditors and debtors.²⁵

To determine whether a reorganization proceeding is appropriate, one must consider the economic efficiency of each individual corporation and of society as a whole. If it is better for the entire society to sell the individual corporation and to have a new owner control the new business, then a bankruptcy reorganization proceeding is likely inappropriate. However, if it is considered economical for the existing corporation to start anew rather than be sold, then reorganization proceedings should be executed.

Under the latter scenario, workers remain employed and subcontractors continue to supply parts, but only as an incidental effect of the above proceedings.²⁶ Therefore, the initial purpose of a bankruptcy reorganization proceeding does not lie in the “publicness” or economic efficiency of macroeconomics, though both concepts may be similar in nature. However, carrying out the proceeding for the sake of the public and securing the public from the incidental effects of the collective debt proceeding must be distinguished.

C. Discussion of Corporate Reorganization Law in Korea

In the United States, the application of corporate valuation principles depends upon considering at what stage and on what standards the bankruptcy court should evaluate the corporation and how that value is distributed. In this context, existing Korean law, which is in clear incongruity to such principles, is neither good policy nor good law and revision should be considered.²⁷ For example, the regulation that requires a

²⁵ In fact, the government’s role in corporate restructuring should be minimal and such activity should be left to the private sector as much as possible. See E. HAN KIM, GLOBALIZATION OF CAPITAL MARKETS AND THE ASIAN FINANCIAL CRISIS, IN THE REVOLUTION IN CORPORATE FINANCE 461, 468 (Joel M. Stern & Donald H. Chew, Jr. eds., 4th ed. 2003).

²⁶ “Bankruptcy policy [should] take into account the distributional impact of a business failure on parties who are not creditors [e.g., employees] and who have no formal legal rights to the assets of the business.” Elizabeth Warren, *Bankruptcy Policymaking in An Imperfect World*, 92 MICH. L. REV. 336, 354–55 (1993).

²⁷ With regard to termination prior to approval of a reorganization plan, the DRBA provides that where a liquidated company’s value is greater than that of the same company which continues its business as a going concern even after the order to file a draft of a reorganization plan, the court shall, upon a motion from a receiver or *ex officio*, decide on

mandatory declaration of bankruptcy²⁸ upon termination of the reorganization proceeding due to a high liquidation value must be repealed.²⁹ In this case, creditors would prefer a bankruptcy reorganization proceeding where the bankruptcy court considered only the “publicness,”³⁰ while debtors would prefer the bankruptcy reorganization proceeding where the bankruptcy court considered only economic efficiency.³¹ This decision, however, should be made dispassionately.

Korean corporate reorganization law goes further and stipulates that the corporate reorganization proceeding shall be terminated if the liquidation value is higher than the going concern value before the confirmation of the reorganization plan.³² The problem with this approach becomes apparent when one considers the possible alternatives.³³

A thorough investigation of going concern value³⁴ and liquidation value must be continued, and the information should be disclosed to the public as well as to creditors and shareholders. Furthermore, the need for a prompt execution of the bankruptcy reorganization proceeding must be acknowledged. Even if the liquidation value is higher at the time, the going concern value can be adjusted to be higher than the liquidation value.³⁵

the termination of reorganization proceedings before it decides whether to grant authorization of a reorganization plan. *See* DRBA, *supra* note 1, art. 286(2).

²⁸ With regard to the shift to bankruptcy proceedings, the DRBA states that where a definite decision is made to abolish the reorganization proceedings or to disapprove of a reorganization plan for a company prior to the declaration of bankruptcy, the court shall declare a bankruptcy *ex officio*. *See* DRBA, *supra* note 1, art. 6(1).

²⁹ In the United States, it is a general rule that “a court will not confirm a plan of reorganization unless the value of the firm as a continuing enterprise exceeds the liquidation value of its assets.” Elizabeth Jane Schwartz, *Inflation and the Concept of Reorganization Value*, 34 VAND. L. REV. 1727, 1729–30 (1981).

³⁰ Reorganization policy provides that the “[d]istributions under a plan of reorganization must meet not only the cramdown test, but the ‘best interests’ test as well.” Lynn M. Lopucki, *A Team Production Theory of Bankruptcy Reorganization*, 57 VAND. L. REV. 741, 762 (2004).

³¹ *Id.* at 766 (providing rationale of the economic efficiency of the debtor’s side upon the team production theory).

³² The DRBA states that when a liquidated corporation’s value is greater than the value of the same corporation when it continues its business, the court shall, upon an application from a receiver or reported unsecured creditors or secured collateral holders, or *ex officio*, decide on the termination of reorganization proceedings without any order to submit a draft reorganization plan under Article 220(1); provided that the same shall not apply to the case where permission is granted for the compilation of a draft plan focused on liquidation. *See* DRBA, *supra* note 1, art. 285.

³³ It should be noted that “[r]egardless of the particular method employed, any valuation is, at best, only an estimate of value.” David F. Heroy & Adam R. Schaeffer, *Valuation in Bankruptcy*, 877 PLI/COMM 27, 44 (2005).

³⁴ A corporation must be appraised on a going concern basis because the corporation will continue its business after reorganization. *See* Frye, *supra* note 15, at 396.

³⁵ *See* Michael J. Alderson & Brian L. Betker, *Liquidation vs. Continuation: Did*

This can occur as a result of a change in the economic situation or success of the reorganization after reviewing the “liquidation-oriented reorganization plan”³⁶ or reviewing the scheme for the debtors’ “debt-for-equity swap”³⁷ in order to control the time for the disposal of assets by creditors.

It is not the purpose of bankruptcy law to preclude options other than Chapter 7 liquidation for creditors and debtors after declaration of bankruptcy liquidation and termination of the reorganization proceeding.³⁸ Rather, going concern value is just a single factor in considering the possibility of execution and is not itself determinative.

Although the Chapter 11 corporate reorganization proceeding can be executed even if the Chapter 7 bankruptcy liquidation proceeding is in progress, this seems contrary to economic efficiency because such an approach is, in effect, repetitive. While continuing business after the execution of the Chapter 7 bankruptcy liquidation, if the corporation judges the liquidation value to be higher, then a business may apply for a Chapter 11 corporate reorganization proceeding. However, if the liquidation value

Reorganized Firms Do the Right Thing? 1, 4 (Nov. 1995), <http://www.ssrn.com/> (last visited May 5, 2008) (“Given the uncertainty surrounding the efficiency of the business, however, reorganized firms with high liquidation values can and should weigh the merits of continuation more frequently.”).

³⁶ In the United States there is no difference in the requisites for reorganization plan approval between a liquidation-oriented reorganization plan and a general reorganization plan. See John C. Anderson & Peter G. Wright, *Liquidation Plans of Reorganization*, 56 AM. BANKR. L.J. 29 (1982).

³⁷ In the United States, the debt-for-stock exception originated in the common law; and provided a corporation was either insolvent or in bankruptcy and issued stock to its creditors in exchange for their indebtedness, the financially troubled corporations would receive tax benefits. See Michelle Arnopol Cecil, *Reinvigorating Chapter 11: The Case for Reinstating the Stock-for-Debt Exception in Bankruptcy*, 2000 WIS. L. REV. 1001, 1003.

³⁸ The following may prove helpful in understanding this issue:

Insolvency in the equity sense is a generic concept meaning inability to pay debts as they mature. Insolvency in the bankruptcy sense, as defined by the Bankruptcy Act, means that the fair value of all of a debtor’s assets is insufficient to pay all his liabilities. The distinction not only is important from a standpoint of knowing what particular remedies are available to the debtor or creditor under the Bankruptcy Act, but also is significant as a basic starting point in assessing the possibilities of a successful rehabilitation of the debtor. Insolvency in the equity sense implies the possibility of only a temporarily short cash position, an unseasonable loss of income, bad business judgment in a particular transaction, or other temporary financial embarrassment. Insolvency in the bankruptcy sense, on the other hand, implies the more grave circumstances of losses over a substantial period of time or irreparable weakness in the debtor’s capital structure or business.

Paul B. Rodden & James E. Carpenter, *Corporate Insolvency—Liquidation or Rehabilitation*, 36 U. COLO. L. REV. 117, 118 (1964) (internal citations omitted).

is considered to be higher during the reorganization proceeding, then the vicious cycle of going back to the Chapter 7 bankruptcy liquidation proceeding may be repeated.

D. Fundamental Principles in Bankruptcy Reorganization Proceedings

Since there are two concerned parties in the bankruptcy reorganization proceeding (creditors and debtors), the bankruptcy judge should decide which options are economically beneficial from both perspectives. In carrying out the bankruptcy reorganization proceeding, the bankruptcy judge should not base his or her decision about the existence of economic efficiency on a macroeconomic theory.

The purpose of a bankruptcy reorganization proceeding lies not in recovering individual debt, but in handling the debt collectively.³⁹ In handling collective debt, one must decide whether to sell the assets individually or in bulk and how best to distribute the corporate value to concerned parties such as creditors and shareholders.

In order to collectively handle the debt, the amount of debt to be paid must be decided by debtors, creditors, a public fiduciary (receiver), and the trustee, who then determine the assets' earning power and pay the obligation.⁴⁰ The means of restructuring the corporation should be selected based on the evaluated assets, earning power,⁴¹ and the confirmed debt owed to all parties. This corresponds to the theory of utilitarianism in which the greatest happiness will occur for the greatest number.⁴²

The judge in the bankruptcy court, in deciding upon a method of restructuring, should balance the fundamental principles of bankruptcy law with the interests of the concerned parties. A final judgment of corporate value should be made by the bankruptcy court when the desires of the

³⁹ The Seoul High Court held that corporate reorganization of a financially troubled firm is, in essence, a collective debt treatment procedure. See Judgment of Dec. 14, 2006 Na 18022, (Seoul High Ct.) at 14. The collective action bars agreement ex post against certain kinds of ex ante agreements. See Claire Finkelstein, *Financial Distress as a Noncooperative Game: A Proposal for Overcoming Obstacles to Private Workouts*, 102 YALE L.J. 2205, 2213 (1993).

⁴⁰ According to one commentator, "[t]here are two steps in determining a valuation based on earnings. First, the average earnings are computed for a base period; this gives the earning capacity of the company. Second, such earning capacity is multiplied by an appropriate capitalization." William C. Childs, *Control of Transfer of Business Interests*, 1958 U. ILL. L. F. 79, 90. For more specific discussion on that issue, see *id.*

⁴¹ Valuation has been called the "key" to the reorganization and it is to be made by duly considering the earning power of the property as well as all other relevant facts. See Mortimer M. Caplin, *Valuation and Earnings in Railroad Reorganization: A Consideration of the Proposed Amendment to Section 77*, 27 VA. L. REV. 772 (1940-41).

⁴² See Eugene R. Milhizer, *Justification And Excuse: What They Were, What They Are, And What They Ought To Be*, 78 ST. JOHN'S L. REV. 725, 796 n.3 (2004) (quoting John Stuart Mill's definition of the Greatest Happiness Principle).

interested parties have been ascertained by a vote.

Finally, the bankruptcy court should supervise whether a “fresh start” is being properly carried out in accordance with the aforementioned plan for restructuring.⁴³ It is not advisable to let such supervision continue for a long time considering the nature of the judiciary. Ultimately, there should be indirect supervision through advice of the receiver, the management committee,⁴⁴ and creditors.

E. Critical Interpretation for Corporate Reorganization Law

Considering the above model for the bankruptcy reorganization proceeding and its fundamental principles, I think corporate reorganization law in Korea needs to be revised.

Korean law requires that the bankruptcy judge apply corporate reorganization law like a mathematical formula.⁴⁵ In some cases, this mathematical formula is not applicable (e.g. if the difference between the liquidation value and the going concern value is large). Regardless, there will be nothing more agonizing than deciding whether to terminate corporate reorganization proceedings using only comparison data like a mathematical formula when there is not much difference in the amount being compared.⁴⁶ For an extreme example, let us set the going concern value at 99.9 billion Korean Won (KRW), the liquidation value at KRW 100 billion, and the asset value at KRW 120 billion. If the corporate reorganization proceeding had to be abolished due to the difference in KRW of only 0.1 billion without confirming the intention of creditors and debtors about the means of reorganization, parties would be hesitant to consent to such a conclusion.

Corporate reorganization law in Korea appears to be built on the macroeconomic theory that a corporation with a higher liquidation value is more economical when liquidated rather than reorganized, regardless of the creditors’ and debtors’ intents.⁴⁷ However, the life and death of every corporation should not be decided by this macroeconomic theory because of

⁴³ See generally Nicholas L. Georgakopoulos, *New Value, Fresh Start*, 3 STAN. J.L. BUS. & FIN. 125 (1997) [hereinafter Georgakopoulos I].

⁴⁴ The management committee is equal to a U.S. trustee and has a similar function and role.

⁴⁵ See *supra* note 28 and accompanying text.

⁴⁶ See Alderson & Betker, *supra* note 36, at 4 (noting that it is advisable that “[g]iven the uncertainty surrounding the efficiency of the business, however, reorganized firms with high liquidation values can and should weigh the merits of continuation more frequently.”).

⁴⁷ *Id.* (noting that if companies have low liquidation values, on the other hand, the court will find “partial or complete liquidation to be costly” and therefore [even if reorganization proceeds are high the plan will be] unfeasible).

the defectiveness of corporate valuation.⁴⁸

Existing corporate reorganization law in Korea emphasizes economic efficiency while putting the corporate assets and the corporation's earning power first, which I claim is an improper practice because "the earnings estimate in the valuation process is only one of the variables in the valuation formula that will determine whether that goal is achieved"⁴⁹ and "it is a matter of informed judgment rather than certitude."⁵⁰

The debtors or the public fiduciary must first confirm the amount of each debtor's entire debt and then devise a scheme for paying back the debts or reorganizing the corporation.⁵¹ The reorganization scheme should be based on the assets evaluated by debtors, creditors, and earning power.⁵² Fundamental changes to corporate governance and capital structure⁵³ should also be considered. When evaluating secured claims, the relevant question is whether the earning power of the subject matter collateral should be the basis of the valuation.⁵⁴ In other words, after evaluating the future earning power of the corporation as a whole, should this future earning power be divided proportionately according to each individual asset or should the future earning power of each individual asset be evaluated first and then added up to determine whether this individual valuation exceeds the aggregate?

The entire scheme will be presented, detailing the separate asset sale, the bulk sale while continuing the business, and the distribution of future earning power including changes in the status of the concerned parties based on the aforementioned valuations.

Corporate reorganization law in Korea does not go through the process outlined above. Instead, Korean law first compares the going concern value with the liquidation value. Only when the liquidation value is lower than the going concern value will the corporate reorganization proceeding be executed and will review of the amount of debt and the possibility of its

⁴⁸ See *infra* part III C-E.

⁴⁹ See Schwartz, *supra* note 29, at 1733.

⁵⁰ *Id.* at 1734.

⁵¹ DRBA, *supra* note 1, arts.166 & 220(1). Unlike the United States, the debtor in Korea cannot enjoy a 120-day exclusivity period in which to file a plan of reorganization.

⁵² See *supra* notes 40-43 and accompanying text.

⁵³ For appropriate capital structuring, the fundamental issue is simply the choice between debt and equity. Difficult as it may be to determine an optimal structure, one expert suggests some methods: peer group comparison, credit-rating analysis, and cash flow analysis. See TIM KOLLER, MARC GOEDHART & DAVID WESSELS, VALUATION: MEASURING AND MANAGING THE VALUE OF COMPANIES, 476, 483-84 (4th ed. 2005).

⁵⁴ See Childs, *supra* note 40, at 89 (noting that "[t]he value of many businesses depends primarily, if not almost exclusively, on earnings. . . . The less the investment of the company in capital assets, the greater is the importance of the earnings in determining value.").

payment be deferred.⁵⁵ Economic efficiency should be considered when drafting administrative policies and when investments are made by creditors and shareholders. In other words, if economic efficiency is believed to exist due to the generation of operating profit, either the government can support it through policies or the creditors and shareholders can make additional investments.

In this case, the issue in Korea concerning the application of the “New Value Exception”⁵⁶ is whether it is allowable for shareholders to hold their shares instead of investing new capital even if shareholders with seniority do not agree with the reorganization plan and cannot receive full payments.⁵⁷ These policies, however, have nothing to do with the bankruptcy reorganization proceeding. The bankruptcy reorganization proceeding is, in principle, not based on support by the administration or new investment by creditors and shareholders, but instead has a structure where sale (liquidation or bankruptcy) to the third parties is made or sale to concerned parties such as creditors is made.⁵⁸ It is against all reason to emphasize economic efficiency in the bankruptcy reorganization proceeding. Economic efficiency is an item to be seriously considered in such cases as maintaining the policies and new investment.

In the United States, when a corporation is faced with insolvency due to circumstances that arose after an investment was made in an effort toward economic efficiency, the purpose of bankruptcy law lies in dissolving the insolvency. Bankruptcy law does not exist to save a corporation by creating economic efficiency or by liquidating a corporation that lacks economic efficiency.⁵⁹ The principles of economic efficiency are

⁵⁵ Even though the fundamental purpose of business reorganization is to prevent a debtor from going into liquidation, the generally accepted ruling specifies that “a shareholder receives no payment for its stock in liquidation if, at the time of the liquidation, the fair market value of the corporation’s assets, including . . . going concern value, is less than the corporation’s liabilities.” Marjorie A. Rollinson, Margaret M. O’Connor, David M. Benson & Eric E. Oman, “Hybrid” Entities: Practical Application Under The Check-The-Box Regime, 821 PLI/TAX 9, 49 (2008). The only remaining issue, therefore, is whether the cash payments to the unsecured claims can be deferred because secured claims may be subject to cram-down provisions.

⁵⁶ See generally Nicholas L. Georgakopoulos, *New Value, After LaSalle*, 20 BANKR. DEV. J. 1 (2003); see also Georgakopoulos I, *supra* note 43, at 125.

⁵⁷ See Yun & Lee, *supra* note 8, at 46 (noting that the New Value Exception doctrine in *Case v. Los Angeles Lumber Products Co.*, 308 U.S. 106, 121–22 (1939) is an exception to the absolute priority rule. In Korea, there is no statutory provision or court decision on this doctrine so it is a hot issue whether this rule may be applied to the specific case).

⁵⁸ See Alderson & Betker, *supra* note 35, at 4 (noting that “[t]he high debt levels of reorganized firms are appropriate for both controlling overinvestment and, in the event of default, providing the creditors with a means of forcing the firm into immediate liquidation.”).

⁵⁹ Lopucki, *supra* note 30, at 743 (noting that “bankruptcy exists to serve a variety of policies and therefore a variety of interests” and that the noncontractarian argues that

not seriously reviewed at the phase of investment and drafting of policies.⁶⁰ In Korea, it is reversed. Why should everything head in the direction of economic efficiency upon entering the bankruptcy reorganization proceeding?

The principles of economic efficiency, however, should not be neglected in the bankruptcy reorganization proceeding. Since the purpose of a reorganization plan is to reduce debt and fixed costs,⁶¹ the execution of the reorganization plan of a corporation must be verified and a determination must be made as to whether or not the priority of claims is protected for the concerned parties. However, even in these situations, the principles of economic efficiency are merely considerations in the decision but not an absolute standard.

One might argue that the Discounted Cash Flow (DCF) approach,⁶² considered by some to be an absolute principle for deciding economic efficiency, is merely a fraud or an illusion.⁶³ Such a decision must be made within two months of the commencement of the corporate reorganization proceeding.⁶⁴ However, it is unacceptable to allow the fortune of a corporation to vanish in a moment due to such a decision.

Whether to make the judgment of economic efficiency at an early or late phase of the bankruptcy reorganization proceeding is clearly a matter of legislative policy. In Korea, the legislature has determined that economic efficiency should be determined at an early phase and the problems in the DCF approach may be solved through practical management.⁶⁵ However,

bankruptcy does not place economic efficiency first. “[T]he losses should be shared among all interested parties, including creditors and shareholders.”)

⁶⁰ See Alderson & Betker, *supra* note 35, at 5 (“If in spite of being inefficient, reorganization is chosen over liquidation, the ‘success’ of a Chapter 11 plan can only be evaluated by comparing the cash flows from reorganization with the cash flows that would have been available under liquidation.”).

⁶¹ See Frye, *supra* note 15, at 403.

⁶² See *infra* Part III C.1.

⁶³ See Jongkoo Yun, Ki-up-ga-chi-pyeong-ga mit gu-bae-boon-bang-beop-eh-kwan-han-so-go [A Study on the Valuation of the Companies and Distribution of the Values Under In-court Reorganization Procedures] 28–29 (Apr. 11, 2002) (S. Korea) (unpublished comment, on file with the Seoul Central District Court Bankruptcy Law Research Society); see also KOLLER ET AL., *supra* note 53, at 129–30.

⁶⁴ Ironically, in the United States, there is case law that assigned the commencement date as the valuation timing standard. See *In re Farmer*, 257 B.R. 556 (Bankr. D. Mont. 2000). In the United States, the debtor company may request an extension from 120 days to 180 days with a showing that the size of the case is too large and complicated to file within 120 days; see also Howard Karasik, *Extending the Debtor’s Exclusive Right to File a Plan of Reorganization*, 90 COM. L. J. 359–40 (1985).

⁶⁵ One industry commentator expressed the view that the low confidence in the DCF model in the market arena is not an indictment of analytical approach but rather of analytical methods. Further he addressed “[m]ost DCF models fail to meet the standards of economic soundness and transparency.” See Michael J. Mauboussin, *Common Errors in DCF*

the economic situation in Korea is no longer at a developing stage and instead is moving into a maturity stage. With the help of “investment in science and technology” and the government’s “active industrial policy,” the national “economy transitioned from an industrial to a knowledge-based economy.”⁶⁶ When this circumstance exists, the operating profit is said to be only 5.5% of sales.⁶⁷ When the operating profit rate is so high and the going concern value is evaluated by the standard of the “discounted rate”⁶⁸ in use, most corporations will have a high liquidation value.⁶⁹ However, actual liquidation does not frequently take place, which requires interpretation. On the other hand, if the bankruptcy court evaluates the going concern value optimistically, it is sure to be the subject of criticism.

It is thought that there should be a guarantee of the liquidation value at the time of the revision of the current U.S. bankruptcy law.⁷⁰ It is the practice of the Seoul bankruptcy court, if possible, to file the reorganization plan in such a way that the liquidation value is guaranteed.⁷¹ Since the filing of the reorganization plan is required by a decree only against a corporation with a high going concern value, guaranteeing liquidation value is not often difficult.⁷² It can be easily settled by setting the total cash outflow higher than the liquidation value.⁷³

Models—Do You Use Economically Sound and Transparent Models? MAUBOUSSIN ON STRATEGY 2 (2006), <http://www.lmcm.com/pdf/CommonErrors.pdf>.

⁶⁶ See Jeffrey D. Sachs, Stage of Economic Development, Speech at the Chinese Academy of Arts and Sciences (June 19, 2004).

⁶⁷ See Hyosik Lee, *High Wages Erode Corporate Profitability*, KOREA TIMES, Nov. 7, 2007, http://www.koreatimes.co.kr/www/news/biz/biz_view.asp?newsIdx=13315&categoryCode=123; see also *Korean Corporate Profitability Falls in 2006*, KOREA TIMES Dec. 31, 2007, <http://www.koreatimes.co.kr/www/news/include/print.asp?newsIdx=13264>.

⁶⁸ See *infra* Part III D.

⁶⁹ See *infra* Appendix I (noting the operating profit ratio correlate with sales and going concern value variations in the cases of discount rates 15%, 10%, and 5%).

⁷⁰ 11 U.S.C. § 1129(a)(7)(A)(ii) (2006). This clause provides that:

[T]he court shall confirm a plan only if . . . with respect to each impaired class of claims or interests, each holder of a claim or interest of such class will receive or retain under the plan on account of such claim or interest property of a value, as of the effective date of the plan, that is *not less than* the amount that such holder would so receive or retain if the debtor were liquidated under Chapter 7 of this title on such date.

Id. (emphasis added).

⁷¹ For discussion on the guarantee of the liquidation value in the United States, see H.R. Rep. No. 595, 95th Cong., 1st Sess. 412 (1977), *reprinted in* 1978 U.S.C.C.A.N. 6312.

⁷² See Heroy & Schaeffer, *supra* note 33, at 165 (introducing valuation methods of the liquidation value such as orderly liquidation analysis, forced-sale liquidation).

⁷³ In the United States, however, “[s]ome bankruptcy scholars consider the liquidation value of a firm to be equal to the firm’s reorganization value. That is, they

Of course, there are controversies surrounding this approach.⁷⁴ In the United States, the law is more focused on the guarantee of the creditors' priority claims and whether the guarantee exceeds the liquidation value,⁷⁵ but there is no statutory stipulation that the going concern value should be higher than the liquidation value for the confirmation of the reorganization plan.⁷⁶

believe that bankruptcy courts can 'liquidate' businesses by selling them as going concerns in Chapter 11 for their full going concern value." Lopucki, *supra* note 30, at 762.

⁷⁴ See Julian R. Franks & Walter N. Torous, *An Empirical Investigation of U.S. Firms in Reorganization*, 44 J. FIN. 747, 753 & 768 (1989) (arguing the absolute priority rule that must be followed during the corporate reorganization proceeding was not followed by twenty-one out of twenty-seven corporations they had studied, and the shareholders of eighteen corporations received a large sum of distribution that they considered to be a violation of the absolute priority rule as a paradoxical regulation); see also Brian L. Betker, *Management's Incentive, Equity's Bargaining Power, and Deviations from Absolute Priority in Chapter 11 Bankruptcies*, 68 J. BUS. 161 (1995) (stating that the absolute priority rule in Chapter 11 is violated by a large degree when the corporation is likely to revive, the bank has a small stake, the CEO has the most shares, and the corporation can file the reorganization plan by itself); Allan C. Eberhart, Rodney L. Roenfeldt, & William T. Moore, *Security Pricing and Deviations from the Absolute Priority Rule in Bankruptcy Reorganization Proceedings*, 45 J. FIN. 1457 (1990) (stating the reason for the violation of the absolute priority rule is because the enterpriser prepares the corporate reorganization plan, which puts him at an advantage during the negotiation with creditors because creditors lack sufficient information and thus yield their share to the shareholders to avoid the potential cost in delaying negotiation); Allan C. Eberhart & Lemma W. Senbet, *Absolute Priority Rule Violations and Risk Incentives for Financially Distressed Firms*, 45 FIN. MGMT. 1457 (1993) (insisting that the violation of the absolute priority rule has a significant role in easing the problem of proxy between creditors and shareholders by lessening the shareholders' motive for increasing the risk of an insolvent corporation); Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority of Claims*, 27 J. FIN. ECON. 285 (1990) (reporting that violations of the absolute priority rule often occur among creditors with unsecured claims, between the creditors without unsecured claims, and shareholder but the rule is followed by creditors with secured claims).

⁷⁵ 11 U.S.C. §§ 1129(b)(2), (b)(2)(A), (b)(2)(A)(iii) (2006). This clause provides that:

[T]he condition that a plan be fair and equitable with respect to a class includes the . . .

. . . secured claims, the plan provides

. . . .

. . . for the realization by such holders of the indubitable equivalent of such claims.

Id. It is not directly related to the distribution of going concern value. Also it is a different concept from absolute priority rule that applied between creditor and shareholder, among creditors and shareholders. *Id.*

⁷⁶ See DRBA, *supra* note 1, art. 6(1).

Furthermore, if the liquidation value exceeds the going concern value, there can be problems in the feasibility of the reorganization plan.⁷⁷ However, such problems can be settled by using a debt-for-equity swap with creditors. If the creditors have a 100% right over the corporate value through such a swap, the liquidation value is guaranteed and the feasibility of the reorganization plan becomes enhanced as portions of the debts disappear.⁷⁸ There are two methods of debt-for-equity swaps: (i) granting the option of buying the rights of senior creditors to junior creditors⁷⁹ and (ii) allowing the debt-for-equity swaps only to unsecured creditors.⁸⁰ In corporate reorganization in Korea, the conversion right is given to both unsecured reorganization creditors and secured creditors.⁸¹ However, the ratio of claims in a debt-for-equity swap is decided in accordance with a report prepared by the reorganization trustee appointed by the court.⁸²

Government distrust of bankruptcy court reorganization proceedings is evidenced by the statutory restriction on time. The law in Korea, known as the Debtor Rehabilitation and Bankruptcy Act (DRBA), has been in effect since May 2006 and remains effective today without amendment.⁸³ The current economy is not as abnormal as it was during the Asian foreign exchange crisis of 1997 and bankruptcy law in Korea is not a by-product of a government-led policy of rationalization of industry for the purpose of achieving economic efficiency as was the case four decades ago. It will not be easy to make ideal bankruptcy law, but good law can be made if the

⁷⁷ Feasibility requirement on the plan imposed by 11 U.S.C. § 1129(a)(11).

⁷⁸ Of course, in this case, a plan of reorganization may be confirmed only if “[c]onfirmation of the plan is not likely to be followed by the liquidation, or the need for further financial reorganization, of the debtor or any successor to the debtor under the plan . . .” 11 U.S.C. § 1129(a)(11) (2006).

⁷⁹ Cf. Lucian Arye Bebchuk, *A New Approach To Corporate Reorganizations*, 101 HARV. L. REV. 775 (1988) (proposing granting purchasing options to junior creditors and distributing the value of the company among the creditors).

⁸⁰ See Philippe Aghion, Oliver Hart, & John Moore, *Improving Bankruptcy Procedure*, 72 WASH. U. L. Q. 849, 869 (1994) (proposing issuance of stock or mix of stock and options to unsecured creditors while keeping secured creditors’ claims intact).

⁸¹ In the United States, there is plenty of discussion regarding debt-for-share exchange. See Chad C. Coombs, *Original Issue Discount in Debt-for-Debt and Debt-for-Share Exchanges*, 65 AM. BANKR. L.J. 675 (1991). The U.S. courts have reviewed this subject from the perspective of whether the conversion can be nullified by fraud; see, e.g., *Consove v. Cohen* (In re Roco Corp.), 701 F.2d 978 (1st Cir. 1983); see also *Corporate Jet Aviation, Inc. v. Vantress* (In re Corporate Jet Aviation, Inc.), 57 B.R. 195 (Bankr. N.D. Ga. 1986) (noting that if the claim holder receives shares less than the equal reasonable value of claims, it may be violation of the U.S. Bankruptcy Code § 548(a)(2) and thus it might be fraud and the conversion can be nullified, and that the courts have considered the validity of debt for equity swap based on the value of shares and whether or not the debtor firm can pay the conversion capital).

⁸² See DRBA, *supra* note 1, art. 217.

⁸³ See *supra* note 1 and accompanying text.

principles discussed are considered and the legislative purpose of the DRBA is substantially followed.

As a result of the enactment of the DRBA, the newly-established Korean Supreme Court Civil Trial Rule No. 1063 (*JaeMin* 2006-5) (Rules),⁸⁴ which regulates the procedure of a corporate reorganization case and valuation, should also be considered for revision.⁸⁵ The Rules that are in place were built on a basic model of making installment payments for all debt over a long period of time without exempting the principal of debts occurring prior to the corporate reorganization plan. Thus, future earning power⁸⁶ is an important factor in preparing for the payment of funds. In order to evaluate future earning power, it would be reasonable to evaluate the going concern value by using the future DCF approach.⁸⁷ However, since the existing corporate reorganization plan introduces the exemption of the principal of the debt or the extensive use of debt-for-equity swaps, using the future DCF approach for evaluating the going concern value may not be regarded as the absolute standard.⁸⁸ In the DRBA, it is expressed as the value only when the corporation continues its operation but is not considered value based on earning power.

Thus there should be flexibility in the methodology of valuing a corporation. The current practice of separating the valuation of the corporate value (the filing order of reorganization plan)⁸⁹ and the distribution of the value (the drawing up of the reorganization plan) should be changed. In other words, the structure should be based on the reorganization plan approved in a meeting by the concerned parties and should appropriately reflect the corporate value with the evaluated contents of the plan. A new approach should also provide the chance to see the feasibility of the reorganization plan and whether the distribution is made

⁸⁴ See *infra* notes 150, 220 and accompanying text.

⁸⁵ In the United States, "The Bankruptcy Code does not prescribe any particular method of valuing collateral [or assets or enterprise value], thus according judges considerable leeway on a case by case basis." Harold S. Novikoff & Andrew S. Jacobs, *Valuation Issues in Chapter 11 Cases*, SK092 ALI-ABA 395, 406 (2005) (quoting Congressional hearing).

⁸⁶ Interestingly, the 4th Circuit Court of Appeals states that "all valuations based on estimates of future earnings are bound to be guesses in the sense of reaching into the future." *Bondholders, Inc. v. Seaboard Air Line Railway Co.*, 342 U.S. 921, 924 (1952).

⁸⁷ The Korean court only accepts the DCF approach valuation report under the Rules. On the other hand, in the U.S. Bankruptcy court, the valuation hearings are a battle field of experts who report the debtor corporation's valuation based on various standards. See, e.g., Novikoff & Jacobs, *supra* note 85, at 402.

⁸⁸ The U.S. Financial Accounting Standard Board has offered an alternative methodology for valuation, which it feels better accounts for the uncertainties inherent in projecting future cash flows. See ALFRED M. KING, *VALUATION—WHAT ASSETS ARE REALLY WORTH* 99 (2002).

⁸⁹ See 11 U.S.C. § 1121 (2006).

upon a “fair and equitable doctrine.”⁹⁰

If flexibility is permitted in the way going concern value is calculated, the above practice will be possible under current bankruptcy law. However, under a new practice scheme, the basic corporate value evaluation will be the future DCF approach and will consider “publicness” and economic efficiency as well as the going concern value in a “stock concept.”⁹¹ By distinguishing publicly-held corporations from closely-held corporations and allowing the creditors to make proper use of the debt-for-equity swap mechanism in the case of listed corporations, there would be no impediment to carrying out the reorganization plan even if future earnings prove inadequate or to covering outstanding debt since the creditors can recover their equity in the stock market.

II. DISCUSSION OF CONFUSING DEFINITIONS

Viability of a reorganization plan is often a core issue in a Chapter 11 bankruptcy proceeding. However, the appraisal of value and distribution of its result are creditors’ and equity holders’ main concerns. With regard to enterprise valuation, there are lots of unsettled definitions⁹² that comprise the reorganization plan. This portion of the article addresses some of the confusing definitions.

A. Understanding the Stock and Flow Concept

The primary inquiry might be the standard used in valuing the corporation: the “stock” concept or the “flow” concept. These concepts are distinguished by the balance sheet showing the financial condition of a corporation at a specific point in time in the former⁹³ and the income statement showing a business’s financial output by operations in the latter.⁹⁴ This same logic is applied to the going concern value. One may value a corporation at any point in time by either calculating its assets or by calculating its future cash flow.⁹⁵

There should be no confusion as to the meaning of the going concern value since it generally refers to both of these definitions. To prevent any

⁹⁰ 11 U.S.C. § 1129(b)(2)(B) (2006).

⁹¹ See *infra* Part II A.

⁹² See, e.g., Pantaleo & Ridings, *supra* note 13, at 420.

⁹³ The income statement shows that process at a specific time period and the balance sheet shows operating results at a specific point in time. See PATRICK A. GAUGHAN, MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURINGS 470–72 (3d ed. 2002).

⁹⁴ *Id.* at 465.

⁹⁵ An example of the value of assets at a specific point in time is the cost of asset procurement; an example of the going concern value based on future earning power while having a specific point in time is the standard DCF approach or earning return value (Value of Return on Earning = Average Profit ÷ Capitalization Rate).

confusion, the following classifications are made in distinguishing the value as an assemblage of assets⁹⁶ from the value as a going concern: (i) the corporate value should be considered a continuously operating entity,⁹⁷ i.e., value as a going concern;⁹⁸ (ii) the value should be calculated as an assemblage of assets, meaning the collective value of all the corporate assets not used in connection with generating earnings;⁹⁹ (iii) the value must be treated as an orderly disposition, whose premise is on the voluntary disposition of the corporation and where all the corporate assets are separated and sold individually; and (iv) the value essentially becomes a forced liquidation where the corporate assets, at the liquidation value, are separated and sold individually through forced liquidation.¹⁰⁰

Another question that arises is, in the absence of an actual sale, should the liquidation be considered as taking place at a fixed time over a period of time, along with expenses?

In the United States, it is clear that assets and corporate value are not valued at a fixed point in time.¹⁰¹ The issue in Korea is whether or not corporate reorganization law should adopt a policy of using a fixed point in time as the standard in computing corporate value. Such a question arises as the DRBA sets commencement time for the corporate reorganization proceeding as the standard by which to appraise corporate assets and liabilities value.¹⁰² The list of assets and the balance sheet do not clearly make reference to the standard time for evaluation of the liquidation and going concern values.¹⁰³

⁹⁶ For distinctions between valuation as an assemblage of assets and as a going concern, see Caplin, *supra* note 41, at 774.

⁹⁷ See *supra* note 15 and accompanying text.

⁹⁸ See *In re Taffi*, 96 F.3d 1190, 1192–93 (9th Cir. 1996) (en banc), *cert. denied*, 117 S.Ct. 2478 (1997). This concept is based on the premise that the corporation continues its business and the value of the corporation shall be made as a collection of live assets.

⁹⁹ *Id.* See also Stan Bernstein, Susan H. Seabury & Jack F. Williams, *Squaring Bankruptcy Valuation Practice with Daubert Demands*, 16 AM. BANKR. INST. L. REV. 161, 174 (2008) (noting that if accounting principles are loosely regulated sometimes “a significant portion of the debtor’s value may arise from a consideration of intangible assets not recorded on the debtor’s balance sheet, an asset greatly discounted or simply removed in its entirety where a liquidation measure is employed.”).

¹⁰⁰ See Inho Chung, Hoi-sa-jung-ri-ki-up (beop-jung-kwan-ri-ki-up)-eui ga-chi-pyeong-ga-eh-kwan-han-yeon-gu [An Empirical Study on the Valuation of the Companies under In-Court Reorganization Procedures] 24–30 (2002) (S. Korea) (unpublished Ph.D. dissertation, Kwangwoon University) (on file with author).

¹⁰¹ See Heroy & Schaeffer, *supra* note 34, at 39 (introducing various court decisions in valuation timing).

¹⁰² When an appraiser evaluates corporate assets, there are two elements to be considered: the discount rate and the amount of cash it generates. See *The Valuation Proceedings Under Sections 303(c) and 306 of the Regional Rail Reorganization Act of 1973*, 531 F.Supp. 1191, 1225 (Reg’l Rail Reorg. Ct. 1982).

¹⁰³ In the United States, this issue is also debated. See, e.g., Novikoff & Jacobs,

As the valuation of both liquidation value and going concern value must also be based on the value of assets, the commencement day of the reorganization proceeding shall be the standard time.¹⁰⁴ However, the bankruptcy court must continue to evaluate the liquidation value and the going concern value at each stage of the corporate reorganization proceeding,¹⁰⁵ as well as the order for filing and approval of the reorganization plan.¹⁰⁶ If it is considered imperative to revise items of the valuation made at the commencement of the corporate reorganization proceeding, this will result in the continuation of the fixed policy. However, as the liquidation value and the going concern value keep changing, recalculation of the liquidation value and going concern value may be required. Thus, in actuality, corporate reorganization law in Korea does not reflect a policy of valuation on a fixed date.

B. Characteristics of the Balance Sheet

With regard to the preparation of a balance sheet, Korean bankruptcy law states that every custodian shall prepare the inventory and balance sheet at the time that the rehabilitation proceedings commence.¹⁰⁷

The balance sheet and the income statement are clearly distinguishable on legal grounds as well as from the perspective of the concerned corporation, the preparer, and at the place of exhibition. In corporate reorganization practice, since the balance sheet is not separately indicated, which can lead to mutual conflicts, the legal ground, the concerned corporation, the preparer, and the place of the exhibition for preparation must be clearly recognized and separated at the outset.¹⁰⁸

If that was the case, the balance sheet, which was made for reporting to the court and prepared by the receiver following the confirmation of the reorganization plan, should be in accordance with the financial and managerial accounting rules. After the confirmation of the reorganization

supra note 85, at 404 (citing Braucher, *Getting it for you Wholesale: Making Sense of Bankruptcy Valuation of Collateral after Rash*, 902 Dick. L. Rev. 763, 787-92 (1998), noting that the time lag inherent in a Chapter 11 case between the time the case is filed and the time the plan is proposed gives rise to very different valuation concerns).

¹⁰⁴ Chaim J. Fortgang & Thomas M. Mayer, *Valuation in Bankruptcy*, 32 UCLA L. REV. 1061, 1062 (1985) ("The Bankruptcy Code . . . disregards time in the valuation of liabilities.").

¹⁰⁵ See DRBA, *supra* note 1, arts. 42, 220 & 285.

¹⁰⁶ It is the same in the United States that "[t]he need to attribute value to an asset or a business [also] can arise repeatedly at numerous stages during the course of a Chapter 11 Case." Novikoff & Jacobs, *supra* note 86, at 399.

¹⁰⁷ DRBA, *supra* note 1, art. 91.

¹⁰⁸ See Bernstein, Seabury & Williams, *supra* note 99, at 174 (noting that different considerations may cause "[t]he amount of liabilities reflected on the balance sheet may increase or additional liabilities not recorded on the financial statements may be included.").

plan, should the receiver prepare the balance sheet according to the financial accounting standards or Chapter 11 of bankruptcy law? Of course, the receiver may follow the statute rather than the financial accounting standard because the balance sheet is just prepared for this limited purpose. However, even if the basis for the preparation is different, there is no reasonable legal basis for maintaining the single preparation method during the corporate reorganization proceeding.

Upon commencement of the corporate reorganization proceeding, the balance sheet may not be prepared under corporate law but must use the balance sheet set out in Article 91¹⁰⁹ of the DRBA and be based on the prescribed valuation under Article 90 of the corporate reorganization law.¹¹⁰

When valuing the fixed assets for the operation under corporate reorganization law, the prescribed valuation of fixed assets outlined in Article 31 of the Commercial Act does not apply.¹¹¹ The receiver should prepare the valuation report according to generally accepted accounting principles.¹¹²

The problem is that there are cases where there is no continuity between the balance sheet prepared and submitted to the bankruptcy court by the receiver and the balance sheet prepared by the receiver and submitted to the Stock Exchange (KRX) and the Financial Supervisory Service (FSS).¹¹³

¹⁰⁹ See *supra* note 107 and accompanying text.

¹¹⁰ DRBA, *supra* note 1, arts. 90–91 (providing that the receiver shall, upon inauguration, and without delay, appraise the value of all properties belonging to the corporation. In this case, the corporation shall take part in the appraisal, except in cases where there is a possibility of delay).

¹¹¹ Commercial Act art. 31, Statutes of Korea, Vol. 4 (1997), providing that:

[A]ssets to be entered in an account book shall be valued as follows: 1. The current assets shall be valued on the basis of the acquisition cost, manufacturing cost or current price: Provided, that if the current price is remarkably lower than the acquisition cost or manufacturing cost, the valuation shall be made according to the current price; and 2. The fixed assets shall be valued on the basis of the acquisition cost or manufacturing cost, less a reasonable depreciation, but when any unexpected diminution has occurred, a reasonable reduction shall be made.

¹¹² It varies depending on the subject matter. See ASWATH DAMODARAN, INVESTMENT VALUATION—TOOLS AND TECHNIQUES FOR DETERMINING THE VALUE OF ANY ASSET 28–30 (2d ed. 2002); CARL S. WARREN, JAMES M. REEVE, & PHILIP E. FESS, FINANCIAL & MANAGERIAL ACCOUNTING 366–67 (6th ed. 1999).

¹¹³ See DRBA, *supra* note 1, arts. 91 & 93; Joo-sik-hoe-sa-eui-oeh-boo-gam-sa-eh-kwan-hahn-beob-ryul Je-8314-ho, Je-8-jo [Art. 8 of the Act on External Audit of Stock Companies, Act No. 8314] (Mar. 29, 2007) (amended 2008) (S. Korea); Joo-sik-hoe-sa-eui-oeh-boo-gam-sa-eh-kwan-hahn-beob-ryul-si-haeng-ryung Je-20033-ho, Je-7-jo-eui-2 [Art. 7(2) of the Decree of the Act on External Audit of Stock Companies, Decree No. 20033] (Apr. 27, 2007) (amended 2008) (S. Korea).

This creates a problem since the receiver prepares the balance sheet and submits it to the bankruptcy court, based on the reorganization trustee's valuation at the commencement of the corporate reorganization proceeding. On the other hand, the balance sheet prepared by the receiver and submitted to the KRX and the FSS uses independent audits on a half-yearly or yearly standard.¹¹⁴ Generally courts appoint the reorganization trustee from an accounting firm different from the corporate inspector. The receiver must prepare the balance sheet in accordance with the standard for asset valuation under corporate reorganization law, maintaining continuity and having an independent audit, but must insist on the use of the financial accounting standard as the general practice.

What are the reasons for such a huge discrepancy between the assets on the balance sheet when prepared by the different agencies?

One exemplary statute may provide the answer. In Japan, in a case where the receiver prepares the balance sheet on the day of the confirmation of the reorganization plan as well as the time set by the bankruptcy court, the statute requires that the value under the corporate reorganization law should be regarded as the amount of the acquisition cost.¹¹⁵ If a provision similar to Japan were used, there would be no problem of conflicts or inconsistency.

C. Assets

The following will look at assets as they relate to going concern value and liquidation value under corporate reorganization law.¹¹⁶

The term "asset" under the DBRA is clearly different from the financial accounting standard used in the United States.¹¹⁷ Therefore, the term must be considered in light of the going concern value as a "flow" rather than a "stock" concept.¹¹⁸

¹¹⁴ See Joo-sik-hoe-sa-eui-oeh-boo-gam-sa-eh-kwan-hahn-beob-ryul Je-8314-ho, Je-8-jo [Art. 8 of the Act on External Audit of Stock Companies, Act No. 8314] (Mar. 29, 2007) (amended 2008) (S. Korea); Joo-sik-hoe-sa-eui-oeh-boo-gam-sa-eh-kwan-hahn-beob-ryul-si-haeng-ryung Je-20033-ho, Je-7-jo [Art. 7 of the Decree of the Act on External Audit of Stock Companies, Decree No. 20033] (Apr. 27, 2007) (amended 2008) (S. Korea).

¹¹⁵ See Art. 182 cl. 1. Corporate Reorganization Law, Vol. II, Law No. 154 (Dec. 13, 2002) (Japan).

¹¹⁶ One commentator simply defined "liquidation value as financing of the same asset." According to this definition, liquidation value and cost of reproduction are at opposite ends of the value spectrum. See KING, *supra* note 88, at 12.

¹¹⁷ Bernstein, Seabury & Williams, *supra* note 99, at 174 ("Generally, the expert must determine the value of the debtor's assets and amount of liabilities using a going concern measure unless it is more likely than not that the business is a failed concern, and, thus, a liquidation measure may be more appropriate.")

¹¹⁸ One commentator eloquently argues that "the going concern is again the object of valuation. Because regardless of the method used, whether it is the frank appraisal or the

In valuing a corporation, the next inquiry is the relationship between the concepts of assets and liabilities¹¹⁹ under financial accounting, management accounting, and tax accounting in corporate reorganization law. With the reorganization trustee or valuation experts raising the issue of financial accounting standards, what method should be used to settle conflicts resulting from the discrepancy between assets and liabilities on the balance sheet prepared by either the debtors¹²⁰ or receivers and those of financial accounting and management accounting?¹²¹

According to the Supreme Court of Korea, in evaluating corporate assets under Article 90 of the DRBA, the going concern value is based not on the premise of liquidation and bankruptcy of the corporation (i.e., the liquidation value based on corporate liquidation or disposal) but on the maintenance and restructuring of the corporation (i.e., the premise of continuance of the corporation).¹²² However, profitability of the corporation is affected because the sale value of each individual asset is based upon the going concern value. The valuation method using earning revenue is the standard method.¹²³

infamous judicial sale, a valuation problem is involved.” Caplin, *supra* note 41, at 776.

¹¹⁹ DRBA, *supra* note 1, art. 36 provides that an application for the commencement of reorganization proceedings shall include the following matters: total stocks issued by the corporation, the amount of capital, assets and liabilities, and other matters relating to financial status. Furthermore, DRBA, *supra* note 1, art. 146(3) provides that if the total liabilities of a corporation exceed its total assets at the commencement of reorganization proceedings, the shareholders shall not have any voting rights; provided, however, that this shall not apply where the total liabilities of a corporation at the time of presenting a modified reorganization plan referred to in Art. 282 exceed its total assets. DRBA, *supra* note 1, art. 205(2) also provides that reduction of capital referred to in paragraph (1) shall be determined, taking into account the assets, liabilities, and earning power of a corporation. Finally, DRBA, *supra* note 1, art. 205(3) provides that if the total liabilities of a corporation at the time of commencement of reorganization proceedings exceed its total assets, the reduction of capital shall be determined in such a manner that writes off not less than half of the corporation’s issued stocks.

¹²⁰ One commentator pointed out that “the rigid approach has resulted in laxness in the area of valuation: and has in many instances resulted in severe overvaluation.” Frye, *supra* note 15, at 406.

¹²¹ This issue arises because “the appraiser discretionally applied the methodologies that certain items are sometimes to be omitted in determining value and other considerations are specifically to be taken into account.” Childs, *supra* note 40, at 89.

¹²² Judgment of May 28, 1991, 90 Ma 954 (Supreme Court of Korea) (S. Korea).

¹²³ Earning revenue (Ew) can develop as follows:

$C1, C2, \dots Cn = 1\text{st year}, 2\text{nd year}, \dots n\text{th year net profit.}$

$$Ew = G1/(1+i) + G2/(1+i)^2 + \dots + Gn/(1+i)^n + L/(1+i)^n$$

In case, $G1 = G2 = \dots Gn = G$

But if the valuation method can express an objective value, taking into consideration the continuance of the corporation, it is considered sufficient even if the valuation method follows the ratification value by the cost of new procurement according to its kind and characteristics.¹²⁴

If a corporation were reorganized during what is considered a bubble economy,¹²⁵ how can corporate value be evaluated? Court decisions to approve a valuation discarding reproduction costs and rate-making bases may have been different if the valuation was based on a depressed or inflated earnings period.¹²⁶ In valuing the corporation, the appraised value can be set by integrating the calculations based on the cost of new procurement, the fair market price, and the earning power instead of following a single standard.¹²⁷

Should the abnormal and normal economic situations be differentiated in evaluating the corporate value?¹²⁸ In the case of a corporation in normal operation or a corporation under temporary financial distress, there is not much difference between the going concern values under the stock concept and the flow concept.¹²⁹ However, in Korea, most reorganizing

$$\begin{aligned} Ew &= G/(1+i) + G/(1+i)^2 + \dots + G/(1+i)^n + L/(1+i)^n \\ &= G [(1+i)^n - 1]/(1+i)^n + L/(1+i)^n \end{aligned}$$

Mathematization requires $(1+i)^n + 1$ as the common denominator and $(1+i)^1 + (1+i)^2 + (1+i)^3 + \dots + (1+i)^n$ in the numerator, which makes $(1+i) \{(1+i)^n - 1\} \div \{(1+i) - 1\}$ formula, and the binomial theorem process should be inserted.

Here, i is the capitalization rate, L is the n th year corporate liquidation amount. When n is infinite, Ew equals G/i . This considers the corporation's economic life span in perpetuity. It is an ideological concept that does not coincide with numerical statements.

¹²⁴ Judgment of May 28, 1991, 90 Ma 954 (Supreme Court of Korea) (S. Korea).

¹²⁵ An economic bubble (sometimes referred to as a "market bubble," a "financial bubble," or a "speculative mania") refers to a market condition in which the prices of commodities or asset classes increase to absurd or unsustainable levels (that no longer reflect utility of usage and purchasing power). See INTERNATIONAL MONETARY FUND, WORLD ECONOMIC OUTLOOK: WHEN BUBBLES BURST 2 (Apr. 2003), available at <http://www.imf.org/external/pubs/ft/weo/2003/01/pdf/chapter2.pdf>.

¹²⁶ Caplin, *supra* note 41, at 783 (citing *Atlanta, B. & C.C.R. v. U.S.*, 296 U.S. 33 (1935)).

¹²⁷ See AKIRA MIKAZUKI ET AL., *JŌKAISHAKŌSEIHŌ HA* [CORPORATE REORGANIZATION LAW VOL. 3] 105 (2003) (Japan).

¹²⁸ One commentator argues that "the going concern value of the corporation is determined by capitalizing estimated earnings at a rate appropriate to the economic setting in which the corporation is operating." Frye, *supra* note 15, at 400-01.

¹²⁹ See Judgment of Jan. 23, 2002, 2001 Hoi 13 (Seoul Dist. Court); see also *infra* Appendix II.

corporations have much lower going concern values under the flow concept as compared to the stock concept.¹³⁰

In theory, the definition of an asset under corporate reorganization law could be defined in any of the following ways: (i) it is the same as in the commercial balance sheet; (ii) it is the liquidation value; (iii) it is the liquidation value in bankruptcy and the going concern value in corporate reorganization; (iv) it is the going concern value; (v) it is the market price or the cost of new procurement; (vi) it is the value calculated according to the earning return method; (vii) it is the mutual standard between the liquidation value and the going concern value; or (viii) when the corporation continues its operation, it is by the going concern value and when the corporation ceases the operation, it is by the liquidation value.¹³¹

Accordingly, the possible means of asset evaluation under the DRBA are as follows: (i) the use of a commercial balance sheet; (ii) the use of a special balance sheet (liquidation value theory, going concern value theory, cumulative application theory, or effective value theory); (iii) no use of the balance sheet (earning revenue theory or combination method of the difference between the earning revenue method and the actual value); or (iv) the special balance sheet hybrid method (weighted standard theory, two-step theory, or modified two-step theory).¹³²

¹³⁰ See *infra* Appendix II.

¹³¹ According to the financial accounting literature, “[a]ssets are economic resources that are expected to help generate future cash inflows or prevent future cash outflows.” CHARLES T. HORNGREN, GARY L. SUNDEM & JOHN A. ELLIOTT, *INTRODUCTION TO FINANCIAL ACCOUNTING* 9 (8th ed. 2002). Simply, “[t]he resources owned by a business are called assets.” WARREN ET AL., *supra* note 112, at 11.

¹³² In Korean law, asset valuation exists in only two statutes. Under the title of the Appraisal of Fixed Assets Used for Business, Article 94 of the DRBA provides that:

- (1) Every custodian shall, when he/she prepares the debtor’s asset inventory and balance sheet, prepare them according to accounting practices that are generally recognized as being fair and appropriate.
- (2) The provisions of subparagraph 2 of Article 31 of the Commercial Act shall not apply to the case of paragraph (1).

3 KOREA LEGISLATION RESEARCH INST., *STATUTES OF THE REPUBLIC OF KOREA* (1997). Under the title of the Principles for Valuation of Assets, Article 31 of the Commercial Act (Act No. 8532 Aug. 3, 2007) states that:

Assets to be entered in an account book shall be valued as follows:

1. The current assets shall be valued on the basis of the acquisition cost, manufacturing cost or current price: *Provided*, That if the current price is remarkably lower than the acquisition cost or manufacturing cost, the valuation shall be made according to the current price; and,
2. The fixed assets shall be valued on the basis of the acquisition cost or manufacturing cost, less a reasonable depreciation, but when any unexpected diminution has occurred, a reasonable

In the United States, “[i]n liquidation, which is governed by Chapter 7 of the Bankruptcy Code, the assets of the corporation are sold, either piecemeal or as a going concern.”¹³³ On the contrary, the reorganization regulated by Chapter 11 is an alternative plan to liquidation, and ideologically it is regarded as a sale to such concerned parties as existing creditors and shareholders.¹³⁴ In other words, “the fundamental difference between reorganization and liquidation is that in a reorganization the firm’s assets are sold to the creditors themselves rather than being sold to the third parties.”¹³⁵

D. Liabilities

Is the concept of liabilities the same as that of debts under corporate reorganization law? In calculating the corporate value, should the liabilities be calculated as the present value? If so, how can the present value of liabilities be calculated? What discount rate is appropriate in calculating the present value of the liabilities?¹³⁶

Liability under corporate reorganization law is not the same as under financial accounting standards. Generally, the same may be said with respect to the sum of debts. Liabilities sometimes need to be discounted to the present value and should be evaluated according to a certain standard.¹³⁷ The rationale for using present value here is that cash received on a future distribution date is not equivalent in value to money received today.¹³⁸

In Korea the going concern value in a corporate reorganization proceeding is defined as the value based on the premise that there is no dissolution or liquidation of corporate assets and calls for the DCF approach

reduction shall be made.

4 KOREA LEGISLATION RESEARCH INST., STATUTES OF THE REPUBLIC OF KOREA (1997) (this Article was wholly amended by Act No. 3724, Apr. 10, 1984).

¹³³ Bebhuk, *supra* note 79, at 775.

¹³⁴ It is because “[w]hen the firm is insolvent, ownership shifts to the creditors.” Lopucki, *supra* note 30, at 743.

¹³⁵ “In a prototypical liquidation proceeding, for example, the firm’s assets are sold to third parties for cash or securities. They may be sold piecemeal, in blocks, or as a unit.” JACKSON, *supra* note 16, at 211.

¹³⁶ “Quite often the valuation controversies in the corporate reorganization center on the question of the various rate to be chosen such as discount rate, interest rate, growth rate, rate of return, and others.” Schwartz, *supra* note 29, at 1735–36.

¹³⁷ The U.S. Bankruptcy Code requires that the “value shall be determined in light of the purpose of the valuation and of the proposed disposition or use of such property, and in conjunction with any hearing on such disposition or use or on a plan affecting such creditor’s interest.” 11 U.S.C.A. § 506(a)(1) (West 2005).

¹³⁸ See Pantaleo & Ridings, *supra* note 13, at 427; see also Francis G. Conrad, *Dot.coms in Bankruptcy Valuations under Title 11 or www.snipehunt in the Dark.noreorg/noassets.com*, 9 AM. BANKR. INST. L. REV. 417, 423 (2001).

where the future revenue is discounted to the present value.¹³⁹ The term “flow of revenue” indicated in the Rules should be interpreted as “cash flow from genuine trade” in the case of corporate reorganization because the DCF approach discounts future cash flow to the present value¹⁴⁰ but does not discount the revenue to the present value.

This approach is based on the “principle of the present value,” which states that the value of an asset is the present value of the expected future cash flow of the asset.¹⁴¹ Such a value from the DCF approach only evaluates the value of equity capital from the shareholders’ standpoints and is derived by discounting the future cash flow.¹⁴² In other words, the DCF approach only considers the remaining cash flow after subtracting the expenses and tax on the trade revenue, as well as the principal payment of the debts.

Valuation of corporate reorganization is not a matter of a complicated mathematical formula, but rather a reasonable judgment must be made, based on a proper consideration of all relevant facts.¹⁴³ However, sometimes a formula can give a clear understanding of complex issues.¹⁴⁴ From the entire corporation’s standpoint, this approach takes into account other parties with the right to claim, in addition to equity capital. It discounts the expected future cash flow for the corporation. In other words, it discounts the cash flow as the weighted average cost of capital (WACC)¹⁴⁵ after paying all the expenses and tax from the trade revenue.¹⁴⁶

¹³⁹ Jae-pan-yeah-gyoo je-1219-ho (Jaemin 2006-5) [Korea S. Ct. Civil Trial Rule (No. 1219) (Jaemin 2006-5)], art. 9, cl.2 (S. Korea).

¹⁴⁰ See *Nellson Nutraceutical, Inc. et al.*, 356 B.R. 364, 370 (Bankr. D. Del. 2006).

¹⁴¹ “It is the fundamental premise of valuation and financial investing that the value of today of an asset is the present value of the future cash flows.” KING, *supra* note 88, at 33.

¹⁴² Israel Shaked & Allen Michel, *The Mirant Valuation SAGA: Epic Battle of Experts*, 24-JAN AM. BANKR. INST. J. 40, 41 (2006) (noting “Cash flows in a DCF model are usually discounted at the company’s weighted average cost of capital (WACC). As implied by its name, the WACC is derived as the weighted average of the company’s cost of equity and cost of debt based on the company’s capital structure.”).

¹⁴³ See Caplin, *supra* note 41, at 792.

¹⁴⁴ We can easily obtain the value of equity capital from the formula below.

$$\text{Value of Equity Capital} = \sum_{t=1}^{\infty} [\text{Shareholders' Expected Cash Flow}_t / (1+K_e)^t]$$

¹⁴⁵ See KOLLER ET AL., *supra* note 53, at 111–12.

FORMULA: $WACC = K_e (E / E+D+PS) + K_d (D / E+D+PS) + K_{ps} (PS / E+D+PS)$;
 $WACC = (\text{Cost of Debt} \times (1 - \text{Tax Rate}) \times \text{Debt to Equity Value}) + (\text{Cost of Equity} \times \text{Equity/Equity Value})$.

See *In re Am. HomePatient, Inc.* 298 B.R. 152, 176 n.21 (Bankr. M.D.Tenn., 2003).

*Med Diversified, Inc.*¹⁴⁷ provides other formulas for valuation. One of the other formulas decreases variables¹⁴⁸ and another increases variables.¹⁴⁹

Article 9(1) of the Korean S. Ct. Civil Trial Rule No. 1291, also known as *Jaemin* 2006-5, cites the two formulas referenced above.¹⁵⁰

¹⁴⁶ It can be represented by the formula below:

$$\text{Corporate Value} = \sum_{t=1}^{\infty} [\text{Expected Cash Flow of the Corporation}_t / (1+\text{WACC})^t]$$

¹⁴⁷ See *In re Med Diversified, Inc.*, 346 B.R. 621 (Bankr. E.D.N.Y. 2006).

¹⁴⁸ FORMULA: in case $K_{ps} = 0$, $\text{WACC} = K_e (E / E+D) + K_{ps}(D / E+D)$; FORMULA: in case $K_{ps} = 0$, $K_d = 0$, $\text{WACC} = K_e (E / E) = K_e$; FORMULA: in case $K_e = 0$, $K_{ps} = 0$, $\text{WACC} = K_d(D / D) = K_d$

¹⁴⁹ FORMULA: $\text{WACC} = K_e (E / E+UD+SD+PS) + K_{ud}(UD / E+UD+SD+PS) + K_{sd}(SD / E+UD+SD+PS) + K_{ps}(PS / E+UD+SD+PS)$. Here, WACC is weighted average cost of capital; E is value of equity capital (shareholder), D is value of debts (creditor), UD is value of unsecured debts, SD is value of secured debts, PS is value of preferred stocks (preferred shareholder), K_{ud} is cost of unsecured debts of others after tax, K_{sd} is cost of secured debts of others after tax, K_e is cost of equity capital for shareholder component ratio of equity capital in the capital raised.) K_d is cost of debt capital after tax = interest rate \times (1 – Corporate tax rate) and is the component ratio of debts in the capital raised.) K_{ps} is cost of preferred stocks (preferred stock dividend \div market value of preferred stock and the cost of preferred shareholders' capital = the amount of dividend per preferred stock \div the market value of the preferred stock; the component ratio of preferred stocks in the capital raised.) E is value of equity capital, D is value of debts (creditors), PS is value of preferred stocks (preferred shareholder), and WACC is represented by the following formula: $\text{WACC} = R_e \times E / V + R_d \times (1 - \text{Corporate Tax rate}) \times D / V$ Here, E/V is proportion of equity and D/V is proportion of debt. See *In re Am. HomePatient, Inc.* 298 B.R. at 176.

¹⁵⁰ This is the present method of appraisal of liquidation value and going concern value.

$$\begin{aligned} \text{Present Value of Future Cash Flows} &= \sum_{t=1}^n [C_t / (1+r)^t + C_{t+1} / (1+r)^n (r-g)] \\ &= [C_1 / (1+r)^1] + [C_2 / (1+r)^2] \dots + [C_n / (1+r)^n] + [C_{n+1} - (1+g) / (1+r)^{n+1}] + \\ & [C_{n+1} - (1+g)^2 / (1+r)^{n+2}] + [C_{n+1} - (1+g)^3 / (1+r)^{n+3}] + [C_{n+1} - (1+g)^\infty / (1+r)^\infty] \end{aligned}$$

If, $C_1 = C_2 = C_3 \dots = C$, and $g = 0$

$$\begin{aligned} & [C / (1+r)^1] + [C / (1+r)^2] + \dots + [C / (1+r)^n] + [C / (1+r)^{n+1}] + [C / (1+r)^{n+2}] + \\ & [C / (1+r)^{n+3}] + \dots + [C / (1+r)^\infty] \\ &= C [(1+r)^\infty - 1] / (1+r)^\infty \cdot r \\ &= C / r \end{aligned}$$

Here, n is the presumed final year; C_t is the cash flow from the activity of the genuine trade operation in the year t , C_{n+1} is the cash flow from activity of the genuine trade operation in the year $n+1$, r is the discount rate, t is the number of years (from the presumed final year), g is the fixed growth rate.

In sum, the present value of the future cash flow is equal to the present value of the future cash flow plus the value of non-business assets.

E. Liquidation

If a corporation is too far gone to be financially reorganized, by statute it must be liquidated. Generally, corporate liquidations are associated with bankruptcy. A company may be liquidated in bankruptcy when all parties concerned recognize that the continuation of the firm in a reorganized form will not enhance its operating profits.¹⁵¹ Liquidation in Korean law can be divided into voluntary liquidation under the Commercial Act (Part V, Corporation) and forced liquidation by a bankruptcy reorganization proceeding under the Bankruptcy Act.¹⁵²

In liquidating a corporation, is the sale of corporate assets allowed only on a piece-by-piece basis through individual sale or is the bulk sale method also permitted?¹⁵³ In calculating the liquidation value, should the realized amount be acknowledged only by public auction? The bankruptcy reorganization proceeding is based on the sale of individual assets by either a liquidator or reorganization trustee, but does not preclude the sale of assets through an auction.¹⁵⁴ There is not much difference between the liquidation value and the going concern value as a stock concept if the emphasis is on either the sale of assets individually or the sale of a continuing business. However, if the emphasis is on the sale of assets through an auction, there can be a drastic difference between the liquidation value and the going concern value as a stock concept. In either case, the rule of the best interest of the creditor should be applied.¹⁵⁵

The liquidation value of a reorganizing corporation refers to the sum of all the values from the separate sale of all the individual assets of the corporation that can be distributed to concerned parties as well as creditors if the corporation is liquidated.¹⁵⁶

The value of the business assets of a corporation is based on the going concern of the business. However, if a corporation loses its economic

¹⁵¹ See GAUGHAN, *supra* note 93, at 437.

¹⁵² CHIYONG LIM, PASANBUBYEONGU [Bankruptcy Law Research] 17, 19 (2d ed. 2006).

¹⁵³ Sec. 365 of the U.S. Bankruptcy Code supersedes U.C.C. Article 6 § 6-102(1)(C) to allow bulk sales to occur within the reorganization process. 11 U.S.C.A. § 365 (West 2005). There is a no similar provision in Korean law.

¹⁵⁴ In the United States, the secured creditors, however, had the option of having the property sold at public auction. See Ralph Adam Fine, *Unjamming the "Cram-Down,"* 52 AM. BANKR. L. J. 335 (1978).

¹⁵⁵ See Heroy & Schaeffer, *supra* note 33, at 45.

¹⁵⁶ So "[c]reditors cannot be forced to receive less in a Chapter 11 reorganization than they would in a Chapter 7 liquidation." Hicks, *supra* note 24, at 821.

viability and confronts bankruptcy, it is necessary to evaluate the value of assets based on the separate sale of all the individual assets to minimize the economic loss.¹⁵⁷ The sale of assets value, then, is different from the voluntary sales value because it is a distressed, reluctant sale. If there was a fair market, the assets subject to liquidation could be sold at the fair market price based on the highest and the best uses. However, because this is a forced sale, it would be difficult to sell the assets at general fair market prices. Therefore, the liquidation value is generally lower than the fair market price (value in use), and when the assets are used for a special purpose, the difference between the value in use¹⁵⁸ and the liquidation value becomes even greater.

Notably, “liquidation value assumes company operations have ceased and assets are sold individually or collectively in-groups.”¹⁵⁹ The comparison between the value in use according to the characteristics of assets and the liquidation value is important to recognize.

For current assets,¹⁶⁰ there is not much difference between the value in use and the liquidation value. Particularly for a cash deposit, where the use is not limited and liquidity is secured, the value in use and the liquidation value are the same. For trade receivables, there is a difference in value because of the time required for collection and its feasibility.¹⁶¹

The liquidation value of the inventory assets varies greatly depending on the type and form of the inventory. In other words, the difference may not vary much for the finished products if they are consumer products with limited uses.¹⁶² However, if the products are production goods, the difference can be large because the purpose or use is limited. For the work in process, there will be almost no liquidity¹⁶³ if plant operation is no longer possible due to the liquidation of the corporation. However, for raw materials, the difference can be reduced depending on the likelihood of transfer to another manufacturing business.¹⁶⁴ For investment assets not affected by insolvency such as bankruptcy, the difference will be a product

¹⁵⁷ See *supra* text accompanying note 137.

¹⁵⁸ KING, *supra* note 88, at 12 (“Appraisers use the term value in use to refer to the replacement cost of an asset, less depreciation from all cases.”). See also *infra* note 199 and accompanying text.

¹⁵⁹ See Conrad, *supra* note 13, at 426.

¹⁶⁰ It can normally be turned into cash within one year.

¹⁶¹ See WARREN ET AL., *supra* note 112, at 279 (“The term receivables includes all money claims against other entities, including people, business firms, and other organizations Notes and accounts receivable that result from sales transactions are sometimes called trade receivables.”).

¹⁶² See KING, *supra* note 88, at 79.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

of the length of collection time.¹⁶⁵

Among tangible fixed assets such as land, buildings, or vehicles that have a wide-use, there is not a liquidation problem. However, for special purpose machines, there may be many restrictions on liquidity.¹⁶⁶ Even if assets have a wide-use, when the asset is large in size, it will require a significant amount of time to dispose of and can be greatly affected if the market is not actively pursued. It is stated in the Korean rules regarding corporate liquidation¹⁶⁷ that the liquidation value of the tangible fixed assets must be calculated by the discounted value of applying the average rate of the contract price in the real estate tender proceeding of the court auction.

For intangible assets¹⁶⁸ and intellectual property, there is a huge difference between the value in use and the liquidation value.¹⁶⁹ Though the difference can vary depending on the degree of use, for the most part the value is not recognized outside the corporation since it is created within the corporation and used solely for business operations of the corporation.¹⁷⁰

As stated above, the liquidation value is evaluated differently depending on the asset's characteristics. The liquidation value made by the reorganization trustee also follows such a standard in the corporate reorganization proceeding in Korea but it neglects the cost involved in liquidation and the cost of time during the collection period.¹⁷¹ The cost of time for the collection period is very significant when comparing the liquidation value to the going concern value. This is due to the fact that the

¹⁶⁵ Bernstein, Seabury & Williams, *supra* note 99, at 171 ("A valuation reflects value at a particular point in time and may change based on the premise and standard of value employed.").

¹⁶⁶ *Id.* at 194.

¹⁶⁷ Jae-pan-yeah-gyoo je-1219-ho (Jaemin 2006-5) [Korea S. Ct. Civil Trial Rule (No. 1219) (Jaemin 2006-5)], art. 9, cl.1 (S. Korea).

¹⁶⁸ *See, e.g.*, Conrad, *supra* note 139, at 427 ("Intangibles can include the following: patents; licenses; copyrights; formulas; trademarks; contract rights; domain name; trade secrets; proprietary technology; customer lists; and software, which are owned or licensed.").

¹⁶⁹ *Id.*:

Cursory reviews of the Chapter 7 petitions of a few dot.coms show little or no traditional inventory. This is not surprising considering the typical nature of the business enterprises being operated by dot.coms. Consequently, it should be anticipated that full service dot.coms will present the usual valuation problems because of their lack of traditional inventory. If they do, they should be valued using traditional inventory valuation methods.

¹⁷⁰ *See supra* text accompanying note 99.

¹⁷¹ *See* Conrad, *supra* note 138, at 426 ("Liquidation assumes an orderly sale over a reasonable time, with proper exposure to the market in order to obtain the highest price for each asset. The valuation should consider the impact of selling costs, costs of holding assets until sale, and other expenses.").

going concern value is calculated by discounting the future cash flow to the present value, whereas the liquidation value is the amount due from all the assets that are sold now, collected in cash.¹⁷² Therefore, if the cash collection is delayed, there is a difference in costs in time in the timing of the collection of claims by the creditors.

F. Contingent Debts

Another question that arises is how contingent claims,¹⁷³ that can be made only if one or more specified outcomes occur, should be treated in the corporate reorganization proceeding. The calculation method for debts under corporate reorganization law is distinguishable from the method under the Financial Accounting Standards. The amount of the debts marked as contingent claims by the financial accounting standards does not fully ripen into an enforceable “right” or “claim” during the corporate reorganization proceeding, and therefore must be determined at a later date.¹⁷⁴ Thus, a question that arises in Korea is whether only reported secured¹⁷⁵ and reported unsecured claims¹⁷⁶ should be recognized as liabilities, or should rights also be recognized on unreported claims. Although there is no specific rule, both should be recognized as liabilities. Because valuation is a financial rather than a legal analysis,¹⁷⁷ those claims must be reflected on the valuation report.

¹⁷² Financial theory explains that the value of the stock of a corporation equals all expected future cash flows generated by the corporation and discounted by an appropriate risk-adjusted rate. See Sudipto Bhattacharya, *Corporate Finance and the Legacy of Miller and Modigliani*, 2-4 J. ECON. PERSPECTIVE 135, 142 (1988).

¹⁷³ One example is financial derivatives contracts. Financial derivatives are also known as contingent claims since their payoffs are “contingent” upon the outcome of an underlying asset variable. See FAS 133 Accounting for Derivative Instruments and Hedging Activities.

¹⁷⁴ Most frequently, the contingent liability arises among note issuer, endorser, and payee. See, e.g., WARREN ET AL., *supra* note 112, at 293–93, 390–91.

¹⁷⁵ Regarding reports on reorganization securities, DRBA, *supra* note 1, article 149(1) provides that any secured creditor who desires to participate in reorganization proceedings shall report to the court his name and address, the details and cause of each secured claims, the object and value of the claims, the amount of his voting right, and, if a person other than the corporation is the debtor, that person’s name and address, and shall submit the evidentiary documents or certified copies or abstracts thereof, within the reporting period prescribed by the court.

¹⁷⁶ Regarding reports on reorganization claims, DRBA, *supra* note 1, article 148(1) provides that any unsecured creditor who desires to participate in reorganization proceedings, shall notify the court of: (i) his name and address; (ii) the details and cause of the claim; (iii) the amount of voting rights; and (iv) where it is a claim with general rights of preference an explanation to that effect, and submit to the court any evidentiary documents or certified copies or abstracts thereof, within the period for report prescribed by the court.

¹⁷⁷ See Conrad, *supra* note 138, at 420.

III. VALUATIONS OF REORGANIZING CORPORATIONS

There are many conflicts of interest among the individual concerned parties and within the class of creditors in the course of a bankruptcy reorganization proceeding. Specifically, when creditors and shareholders are calculating estimated future profit, the shareholders will try to set the estimated profit as high as possible in order to protect the corporation from bankruptcy.¹⁷⁸ At the same time, creditors will try to set the estimated profit as low as possible in order to shorten the time to recover the claims from the early stages of the proceeding.¹⁷⁹ Moreover, creditors can act mutually and stand face to face in exercising “avoidance power”¹⁸⁰ due to gratuitous acts or preferential and fraudulent transfers for *ex post facto* collateral. There is also the possibility of simple payment guarantees to third party creditors and between secured and unsecured creditors since there could be conflicts due to differentiated payment conditions.¹⁸¹ There are many reasons why corporate value must be determined in a reorganization proceeding,¹⁸² but most of all, it is imperative to solve these kinds of disputes.

A. Time and Subjects

Because an enterprise’s value may be volatile during bankruptcy

¹⁷⁸ See Alderson & Betker, *supra* note 35, at 4. Under a different perspective, some researchers present other reasons why shareholders insist that the firm continue:

Once in Chapter 11 reorganization . . . the shareholders may be reluctant to liquidate, for two reasons. First, a 100% liquid asset structure would create strong pressure for a settlement of claims according to the absolute priority rule, which would reduce or eliminate the surplus claim of the stockholders. Second, the costs of immediate liquidation could be very high if the secondary market is thin, either because the assets are highly specialized or because the entire industry is distressed and therefore illiquid. (internal citation omitted).

Id.

¹⁷⁹ See generally Lucian Arye Bebchuk & Howard F. Chang, *Bargaining and Division of Value in Corporate Reorganization*, 8 J. L. ECON. & ORG. 253 (1992) (insisting that the reason why the absolute priority rule is not kept is because when there is a possibility of the corporation reviving, the shareholders tend to delay agreeing to the reorganization plan and when the plan is delayed, this results in further financial deterioration and when the proceedings are shifted to Chapter 7, the creditors yield their share to the shareholders out of the fear that the corporate value could further decrease).

¹⁸⁰ 11 U.S.C. § 544(a)–(b) (2005); DRBA, *supra* note 1, arts. 100–112.

¹⁸¹ This would violate the fair and equitable principle. Therefore, the court should make its determination whether a plan of reorganization impaired a class of claims or interest only after hearing evidence. See 11 U.S.C. § 1129(a)(7); DRBA, *supra* note 1, arts. 217–218.

¹⁸² See Heroy & Schaeffer, *supra* note 33, at 34.

reorganization proceedings, timing plays a critical role in the outcome of valuation.¹⁸³ So the question must be asked, should valuation for going concern value and liquidation value be determined at the time of confirmation of the reorganization plan or after? The case law and statutes fail to explain the standard point of time to be used when trying to determine value. After confirmation of the reorganization plan, if the liquidation value exceeds the going concern value while carrying out the plan, should the reorganization proceeding be terminated on account of the execution of the plan being impracticable?

Unlike in the United States,¹⁸⁴ under Korean law the bankruptcy court must evaluate the going concern value and the liquidation value based on the report prepared by the receiver and the reorganization trustee either at the corporate reorganization proceeding commencement day or thereafter.¹⁸⁵ Under these laws, it is, in fact, impossible in terms of time for creditors or debtors to calculate the liquidation value and the going concern value independently. On the contrary, corporate value is determined not at the commencement of the corporate reorganization proceeding but at the approval stage of the reorganization plan. Under this system, either creditors or debtors can independently calculate the liquidation value and going concern value, and the bankruptcy court can use such data to evaluate the final corporate value when approving the corporate reorganization plan.¹⁸⁶

As briefly mentioned earlier, there are four preconditions in determining corporate value: (i) the value of continuing the business operations of the corporation where the corporation is considered a collection of live assets; (ii) the value of the assemblage of the assets on the condition that the business will not continue operation; (iii) the value of the business when the assets are individually separated and sold in an orderly disposition; (iv) the liquidation value of the business and is based on the premise that all the assets of a corporation are individually separated and sold by forced liquidation (this value is generally lower than under voluntary liquidation).¹⁸⁷ Even for the same corporation, the valuation result may differ depending on which valuation premise is used.

Therefore, choosing the premise behind the value is the most important

¹⁸³ See Bernstein, Seabury & Williams, *supra* note 99, at 171 (“A valuation reflects value at a particular point in time and may change based on the premise and standard of value employed.”).

¹⁸⁴ The U.S. Bankruptcy Code does not specify the standard of time in corporate valuation and thus courts vary in the time of valuation. See Heroy & Schaeffer, *supra* note 33, at 39.

¹⁸⁵ See DRBA, *supra* note 1, art. 90.

¹⁸⁶ See Novikoff & Jacobs, *supra* note 85, at 422–27 (evaluating timing of valuation).

¹⁸⁷ See SEOUL CENTRAL DISTRICT COURT, HOI-SA-JUNG-RI-SIL-MOO [THE PRACTICE OF CORPORATE REORGANIZATION CASE] 103–11 (2001) (S. Korea).

procedure in selecting the valuation method. Such a choice of premise of value is generally decided by the transaction circumstances or the purpose of the valuation but it is sometimes predetermined and presented to the valuer.¹⁸⁸

Everything has its individual value as defined by each person.¹⁸⁹ There are several different common terms used to describe value. Some of the most common terms include “fair market value,”¹⁹⁰ “market value,”¹⁹¹

¹⁸⁸ See SHANNON P. PRATT, ROBERT F. REILLY & ROBERT P. SCHWEIHS, *VALUING A BUSINESS: THE ANALYSIS AND APPRAISAL OF CLOSELY HELD COMPANIES* 29 (3d ed. 1996).

¹⁸⁹ Bernard Trujillo, *Patterns in a Complex System: An Empirical Study of Valuation in Business Bankruptcy Cases*, 53 *UCLA L. REV.* 357, 375 (2005). Trujillo states:

A valuer’s valuation is independent when it is not influenced by other valuers’ valuation of the same item. For example, suppose a valuer bids on a painting that she intends for her private use. Her valuation of the painting depends on her personal tastes, her intended use of the painting, and other considerations that are unique to her. If she learned that other valuers placed a different value on the same painting, it might change her bidding strategy but would not change her valuation.

Id. (citation omitted).

¹⁹⁰ “Fair market value” is the price that a seller is willing to accept and a buyer is willing to pay on the open market in an arm’s-length transaction; the point at which supply and demand intersect. See *Black’s Law Dictionary* 1549 (7th ed. 1999). “In defining FMV, each party shall have reasonable knowledge of all relevant facts.” KING, *supra* note 88, at 4 & 32. See also AMERICAN SOCIETY OF APPRAISERS, *BUSINESS VALUATION STANDARDS* 25 (2002), noting that:

Fair Market Value (“FMV”) is the most widely accepted value in valuation and is stated as the transaction price at which both the willing seller and willing buyer will agree to do business without any forced actions and with sufficient knowledge about the service or commodity. Fair Market Value is the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.

See also Conrad, *supra* note 138, at 422 (noting that the terms “willing seller” and “willing buyer” refer to sellers and buyers who are engaged in the business not because of some special motives but because of mutual needs. FMV is the value used widely in real estate appraisal).

¹⁹¹ “Market value” is the current quoted price at which investors buy or sell a share of common stock or a bond at a given time. It can be represented as the market capitalization plus the market value of debt. Sometimes it is referred to as “total market value.” See Stuart C. Gilson, Edith Hotchkiss & Richard S. Ruback, *Valuation of Bankrupt Firms*, 787 *PLI/COMM* 467, 471 (1999), noting that:

“fair value,”¹⁹² “true value,” “investment value,”¹⁹³ “intrinsic value,”¹⁹⁴
“fundamental value,”¹⁹⁵ “insurance value,”¹⁹⁶ “book value,”¹⁹⁷ “use

In the context of securities, market value is often different from “book value” because the market takes into account future growth potential. Most investors who use fundamental analysis to pick stocks look at a company’s market value and then determine whether or not the market value is adequate or if it’s undervalued in comparison to its book value, net assets, or some other measure.

¹⁹² “Fair value” is a legal term applied to certain transactions and it is the value serving as the legal standard when stock owners have different opinions on the value. If the concerned minority parties are forced to receive stocks lower than the appropriate price when the reorganizing corporation is merged or sold, they are given the right to receive the fair value of the stock. In other words, the fair value refers to the appropriate price that serves as the legal standard for mutual interests.

¹⁹³ “Investment value” is the value to a specific investor due to the individual’s investment desire and is distinguished from the FMV which is impersonal and separated. The FMV is not limited to some special buyers or sellers, but it is the value by understanding, discretion, and motive on the hypothetical transaction in the market. *See* CHICAGO APPRAISAL INSTITUTE, *THE APPRAISAL OF REAL ESTATE* 586 (10th ed. 1992). Investment value is different from FMV in terms of future earning power, the degree of understanding the risk, taxation, and the synergism with other variables. “Investment Value” is derived from discounting the economic revenue method but the FMV can be substituted if the market players accept it. However, if investment value exceeds FMV, unless there is an investor with a higher price than the fair market price between the buyer groups, the owner of the commodity will not sell it at the fair market price. Moreover, since the investment value is the balanced fair market price by joint investors and such consensus is derived from the equilibrium between demand and supply, it is not completely separated from FMV.

¹⁹⁴ “Intrinsic value” is the inherent value of a thing, without any special features that might alter its market value. The intrinsic value of a silver coin, for example, is simply the value of the silver within it. *See* BLACK’S LAW DICTIONARY 1549 (7th ed. 1999).

¹⁹⁵ The “fundamental value” is the analytical value determined by the interpretation of analysts but not by the individual characteristics of certain investors.

¹⁹⁶ “Insurable values are measured usually based on the cost of reproduction.” KING, *supra* note 88, at 12.

¹⁹⁷ Generally, “book value” is the value at which an asset carries on a balance sheet. *See* BLACK’S LAW DICTIONARY 177 (7th ed. 1999).

Determination of price by book value appears to have been used more often than any other method. It is simple and certain and reflects, in part at least, annual changes in the value of the shareholder’s equity. It seldom reflects actual value: fixed assets are usually carried at their cost, less depreciation. . . . If book value is used, it should be recognized that it is likely to be lower than actual value.

Childs, *supra* note 40, at 91. However, today more complex methodologies are applied in valuations. For modernized valuation skills and techniques, see KOLLER ET AL., *supra* note 53, at 101–103; PABLO FERNANDEZ, *VALUATION METHODS AND SHAREHOLDER VALUE CREATION* 22 (2002).

value,”¹⁹⁸ “collateral value,”¹⁹⁹ and “ad valorem value.” Value measures are classified as “fair market value,” “investment value,” “intrinsic value,”²⁰⁰ “fundamental value,” or “fair value” according to the purpose of the valuation and the interests of the valuer.²⁰¹ In addition, different valuation methods require unique information and procedures for various assets.²⁰² In light of the varied terminology and valuation schemes, what terminology can be applied appropriately in the valuing process?

There is a striking difference between the United States and Korea in valuing disputes regarding the role of the appraiser. In the United States, to determine the credibility of expert witnesses, courts look to things such as “the appraiser’s education, training, experience, familiarity with the subject of the appraisal, manner of conducting the appraisal, testimony on direct and cross examination, and overall ability to substantiate the basis for the valuation presented.”²⁰³ However, these are all prerequisite requirements in Korea, and the Korean court has adopted a lottery system to appoint appraisers from a group of registered appraisers in bankruptcy court.²⁰⁴

¹⁹⁸ “Use value” is a value established by the utility of an object instead of its sale or exchange value. See BLACK’S LAW DICTIONARY 1550 (7th ed. 1999).

¹⁹⁹ Sometimes “collateral value” refers to “going concern value,” “replacement value,” or “retail value.” See Owen W. Katz, *Valuation of Secured Claims in a Bankruptcy Reorganization: Eating with the Hounds and Running with the Hares*, 100 COM. L.J. 320, 321 (1995). “Collateral value: Estimate of value of borrower’s pledged collateral as determined by appraisal. If marketable securities are pledged, the lender is restricted by Federal Reserve Board regulations on margin lending.” Answers.com, <http://www.answers.com/topic/collateral-value> (last visited Dec. 31, 2007).

²⁰⁰ The “intrinsic value,” calculated by closely analyzing the contents of assets, earning power, and other factors in stock analysis, is regarded as the proper price of the stock. In other words, it refers to the amount that investors acknowledge as genuine or real on the equity security by analyzing the available variables and, when other investors come to the same conclusion, it becomes the FMV. The method for calculating the intrinsic value is to use the DCF approach as a standard. In order to make an investment decision on a stock, the analyst reviews the expected revenue and distribution as well as the capital structure and management competency and deducts the intrinsic value and compares the value with that in the spot market. The purpose of calculating such an intrinsic value for a stock is to preclude the difference between the FMV of the stock and the intrinsic value. If the FMV calculated by the analyst is lower than the intrinsic value, the analyst will recommend buying the stock and if the FMV is higher than the intrinsic value, he will recommend selling the stock. Through such a process, both sellers and buyers of stocks draw mutual consensus in the market and such a deduced price will consistently change accordingly, as the time and circumstances change. See KOLLER ET AL., *supra* note 53, at 85–96, 433–34.

²⁰¹ See PRATT ET AL., *supra* note 188, at 23.

²⁰² See DAMODARAN, *supra* note 112, at 1–6.

²⁰³ See Heroy & Schaeffer, *supra* note 33, at 64. The court considered the same set of factors to evaluate the credibility of an expert witness appraiser in *Am. HomePatient, Inc.*, 298 B.R. at 177–79.

²⁰⁴ See DRBA, *supra* note 1, art. 87(1)–(4).

Thus, there are neither battles in the valuation hearings²⁰⁵ nor issues concerning whether scientific expert testimony is relevant and reliable (and therefore admissible) in Korean courts.²⁰⁶ The court-appointed appraiser only has a duty to report at the creditors' meeting and at court. If the court decides the report is reasonably unreliable, it can, in its discretion, appoint another registered appraiser after subjectively examining the expert.²⁰⁷

B. Valuation of Secured Claims

A threshold issue is whether secured claims should be evaluated based on the assets or the going concern value. One commentator argues:

In the absence of clear statutory instruction and legislative intent, one is forced to look at the alternatives in the context of the Code and to determine which seem to lead to a more reasonable result. Valuation of collateral at "going concern" or "retail" levels for purpose of a reorganization may have the satisfying effect of preventing debtors from potentially eating with hounds and running with hares, but its logic is difficult to reconcile with the interpretation and application of other provisions in the Code. It also appears unfair to the unsecured creditors.²⁰⁸

Generally, the type of security is often of a different quality, bearing different rates of interest.²⁰⁹ In corporate reorganization proceedings in Korea, secured claims have been valued using the going concern value as a stock concept.²¹⁰ As a result, problems could occur with corporate value distribution methods when the going concern value as a stock concept and the going concern value as a flow concept do not coincide.²¹¹ Such problems become more salient at the time of setting the cram-down provision.²¹²

Since the revision in corporate reorganization law in Japan, the value of a secured claim is determined at the time the reorganization commences, on the premise that the corporation will continue its operations. In these

²⁰⁵ See *supra* notes 70, 123–127 and accompanying text.

²⁰⁶ See *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999).

²⁰⁷ See DRBA, *supra* note 1, art. 87(5).

²⁰⁸ Katz, *supra* note 199, at 354.

²⁰⁹ See Caplin, *supra* note 41, at 777.

²¹⁰ Judgment of May 28, 1991, 90 Ma 954 (Supreme Court of Korea).

²¹¹ In the United States, "[t]he choice of the valuation standard can have a significant impact on the size of the secured claim" and can also impact the junior mortgagee's status. Katz, *supra* note 199, at 321. Even though U.S. Bankruptcy Rule 3012 provides courts discretion to determine the value of securities, it does not specify valuation methods. See Fed. R. Bankr. P. 3012.

²¹² Regarding approval in dissenting classes, there are four choices of cram-down in the DRBA. See DRBA, *supra* note 1, art. 244(1).

cases, the going concern value is most often considered a flow concept.²¹³ In this interpretation, there can be criticism that the right of the secured creditors is underestimated.²¹⁴

In Korea, as settled secured claims are not all repaid and the rights on the settled secured claims can be adjusted,²¹⁵ it does not seem necessary to settle the secured claims by the standard of the going concern value by revising the law. However, an issue that still arises is whether the value of the secured claim remains permanent once an evaluation is made. When there is a change in the value of the subject matter of collateral following the reorganization plan upon a change in market situation, is there any ground for reevaluation of the secured claim?

After the secured claims are recognized and once adjustment has been made against such claims, it is the general rule for secured claims to expire by only remaining a priority during the repayment period.²¹⁶ In reality, however, most reorganization plans that have been filed without such changes instead continue to have secured claims. If the secured claims are treated as terminated, there would be no problem of having to reevaluate the subject matter whose value changes afterward.

²¹³ See Matsushita Junichi, *Asset Valuation in the Corporate Reorganization Proceeding-Focusing on the Price of the Subject of the Secured Claims*, No.1212 JURIST 38, (Nov. 15, 2001). *But see* Art. 2(10) & 83(2) of the Japanese Corporate Reorganization Act of 2002.

²¹⁴ According to the supplemental explanation on the draft outline of the revision to the Corporate Reorganization Act, it might be damaging to a secured creditor if the corporate value, under the premise that corporation continues its business, is less than the liquidation value. Furthermore, it is against procedural economy to have a dispute with a secured creditor. Thus, no arguments have arisen advocating the revision of these provisions. See Yun, *supra* note 63, at 15.

²¹⁵ Korean law has not adopted the absolute priority rule. The scope of the modification is only restricted by the fair and equitable treatment doctrine. See Rollinson et. al., *supra* note 55 and accompanying text.

²¹⁶ Yair Listokin, *Paying for Performance in Bankruptcy: Why CEOs Should Be Compensated with Debt*, 155 U. PA. L. REV. 777, 824 (2007).

In a reorganization, creditors receive claims against the reorganized company in exchange for their original claims against the firm. The plan of reorganization divides all the creditors into different classes, with all the members of a particular class holding substantially similar claims against the bankrupt firm. Further, the plan determines the structure of the new claims received by each class in exchange for the original claims. The new claims against the firm received by a class might not be the same type of claims as the original claims held by the class.

Id.

C. Methodologies

Generally, corporations can be valued in many different ways and “the reorganization valuation process necessarily relies on informed but inexact predictions and estimations.”²¹⁷ Thus, one commentator argues that “the valuation of the corporation often is not realistic, with the result that the securities issued by the reorganized corporation fail to live up to the values assigned to them.”²¹⁸

In the United States, the three generally accepted approaches for valuation of the debtor corporation and its assets are the: (i) Market Comparison Approach; (ii) Comparable Transaction Approach; and (iii) Discounted Cash Flow (DCF) Approach.²¹⁹

On the other hand, in Korea, the basic valuation methods are classified into three different approaches: (i) DCF Approach (under the flow concept); (ii) Relative Valuation Method (under the stock concept); and (iii) Conditional Claims Valuation Method.²²⁰

²¹⁷ See Schwartz, *supra* note 29, at 1731.

²¹⁸ See Frye, *supra* note 15, at 397.

²¹⁹ See *Am. HomePatient, Inc.*, 298 B.R. at 174; see also *Oneida Ltd., et al.*, 351 B.R. 79, 88 (Bankr. S.D.N.Y., 2006). In *In re Mirant Corp.*, 334 B.R. 800, 815 (Bankr. N.D.Tex. 2005), the court accepted four methods of valuation for an energy merchant and summarized them as follows:

First, one may determine a value by multiplying Mirant Group’s free cash flow by a factor based on comparable companies (the “Comparable Method”). Second, one may discount Mirant Group’s projected cash flows to a present value (the “DCF Method”). Third, one might arrive at a value based upon transactions involving comparable assets (the “Transactions Method”). Finally, one may value an energy merchant based upon a calculation of a value per megawatt of capacity (the “Capacity Method”).

See also Trujillo, *supra* note 189, at 383 (reporting valuation model based on empirical survey).

²²⁰ Regarding liquidation value and the going concern value, *Jae-pan-yeah-gyoo je-1219-ho* (Jaemin 2006-5) [Korea S. Ct. Civil Trial Rule (No. 1219) (Jaemin 2006-5)], art. 9 (S. Korea) states that:

The valuation methods for the going concern value are the corporate value method by the standard of the amount of net corporate assets, the cash flow method that discounts the future cash flow of the corporation to the present value and the relative valuation method in which the stock prices of the similar listed corporations set the standard to which the size of the net assets and that of net profit are compared to estimate the corporate value.

For a corporation that applies for the decision on the commencement day of the corporate reorganization proceeding, the liquidation value is estimated by the standard of the net assets and the application of the relative valuation method or

The DCF Approach takes the present value of the expected future cash flow from the value of the assets.²²¹ The Relative Valuation Method estimates the value of assets by analyzing the value of the assets compared by the common variables of net profit, cash flow, book value,²²² and sales. The Conditional Claims Valuation Method estimates the value of assets having similar characteristics of options by using the option price valuation model.²²³

1. The DCF Approach

Corporate value can be represented by $V = \Sigma PV$ (Cash flow), (PV = present value).²²⁴ The required information for the valuation of corporate value by the DCF approach includes the following: the size of cash flow, the durability of cash flow, and the size of the cost of capital.²²⁵

the corporate asset value method is considered inappropriate as it is difficult to apply the proper level of the stock price depending on the degree of default.

²²¹ See Robert J. Rhee, *The Effect of Risk on Legal Valuation*, 78 U. COLO. L. REV. 193, 203 (2007).

²²² See Childs, *supra* note 40, at 92 (“Book value may prove useful as the indicator of changes during the periods between more formal revaluations, if desirable.”). *But see* Conrad, *supra* note 138, at 421 (“Book value is generally not a reliable methodology in bankruptcy. It is a quick and dirty method to capture a quick snapshot of the business, but generally is not helpful in determining the worth of a business or potential recoveries for creditors.”).

²²³ See KOLLER ET. AL., *supra* note 53, at 15.

²²⁴ The concrete formula is as follows:

$$\Sigma[(\text{future value})/((1+i)^n)]$$

²²⁵ The cost of capital is used by shareholders to see if the corporation is delivering a sufficient return, bearing in mind the risks of the business. It is the compensation that corporations must provide investors in return for the use of their capital. When analyzing the value of a stock, the relevant discount rate is not the interest rate, *i*, but the particular corporation’s cost of capital, *r*.

DCF is comprised of three components; however, when used to value the reorganizational value of an entity it has four components. The four components are:

- (1) The present value of cash flows from operations or the asset during the period in which cash flows are forecasted.
- (2) The terminal or residual value remaining at the end of the forecast period.
- (3) The appropriate discount rate.

In *Exide Technologies*,²²⁶ the court stated:

The discounted cash flow (“DCF”) analysis has been described as a “forward-looking” method that “measure[s] value by forecasting a firms’ [sic] ability to generate cash.” DCF is calculated by adding together (i) the present value of the company’s projected distributable cash flows (i.e., cash flows available to all investors) during the forecast period, and (ii) the present value of the company’s terminal value (i.e., value of the firm at the end of the forecast period).²²⁷

Also, in *Cellular Information Systems, Inc.*,²²⁸ the court describes:

A DCF analysis, in general terms, depends on the following three criteria:

- (1) The size of the expected future cash streams to be generated by the business;
- (2) The discount rate employed in determining the present value of these income streams;
- (3) The terminal multiplier used to capture any residual value remaining in the business at the end of the projection period.²²⁹

The general procedure for corporate valuation in Korea is to forecast the above information. This may be conceptualized as follows: first, the economic life of the corporation is forecasted; second, the size of each year’s cash flow during the corporation’s economic life is estimated; third, the cost of capital is estimated for use as the discount rate for discounting the present value; fourth, the cash flows generated during the economic life of the corporation are discounted as the cost of capital and the total sum is used to evaluate corporate value.²³⁰

According to the DCF approach, (i) the value of assets decreases as the discount rate increases, (ii) the value of assets is an increasing function relative to cash flow, (iii) the value of assets is an increasing function

(4) The present or current value of assets that will or will not be used or available in the future operations of the debtor post-bankruptcy.

Conrad, *supra* note 138, at 423–24.

²²⁶ 303 B.R. 48 (Bankr. D. Del. 2003).

²²⁷ *Id.* at 63 (internal citation omitted).

²²⁸ 171 B.R. 926 (Bankr. S.D.N.Y., 1994).

²²⁹ *Id.* at 930.

²³⁰ See HYOSEOK KANG, WONHEUM LEE & JANGYEON CHO, KI-UP-GA-CHI-PYEONG-GA-RON [VALUATION OF A CORPORATION] 106 (3d ed. 2000) (S. Korea).

relative to the life of the assets, (iv) the value of assets generally decreases as uncertainty increases, and (v) the present value is used to convert the value of assets into a restricted time value.²³¹

One commentator argues that “valuation is a mixed question of law and fact”²³² rather than an exact science. If so, when estimating future cash flow, should the valuation be made on the assumption that the corporation is in normal operation or in bankruptcy? In other words, when evaluating, is the debt amount a zero-basis or is the corporation in a state of insolvency? Should the cash flow statement be prepared on the premise that the reorganizing corporation bears no financial responsibility? What kinds of problems does the DCF approach entail in evaluating corporate value?

The DCF approach has numerous weaknesses.²³³ Corporations that are financially distressed generally have a negative net profit and cash flow, and with the expectation of future losses and a great likelihood of insolvency, it is difficult to evaluate future cash flow.²³⁴ Therefore, the DCF approach is not appropriate for estimating value of a corporation prone to bankruptcy because of the assumption that the corporation provides a positive cash flow to investors and continues its operation indefinitely. Because the present value of the cash flow is derived from the positive future cash flow in the near future, it is difficult to apply the DCF approach to an insolvent corporation whose expected cash flow for the next several

²³¹ Those characteristics can be inferred from the issues with identifying assets, timing, and specific cash flow projections of the firms. See Marc M. Levey, *Buy In and Buy Out Requirements Present Unusual Difficult Issues for Cost Sharing Agreements*, 788 PLI/TAX 151, 168 (2007); Marc Weingarten, *Is It Worth It? The Value of Delaware Appraisal Rights to the Activist Investor*, 1621 PLI/CORP 363, 373 (2007) (noting “[t]he courts have employed comparable company and transaction analyses, earnings and asset value tests, and market benchmarks.”); *id.* (noting “[t]he DCF model relies on cash flow projections, terminal value and a specified discount rate.”); see also Jonathan M. Barnett, *Certification Drag: The Opinion Puzzle and Other Transactional Curiosities*, 33 J. CORP. L. 95, 141 n.172 (2007).

Note that even the DCF analysis requires subjective judgment as to several potentially determinant variables, including the discount rate (the rate at which expected cash flows are discounted back to the present, taking into account investment risk, opportunity cost of capital, and expected returns, so that the higher the discount rate chosen, the lower the resulting valuation, and vice versa); adjustments to “EBITDA” (earnings before interest, taxes, depreciation, and amortization); the EBITDA growth rates used to determine projected cash flows; and the terminal value.

Id.

²³² Novikoff & Jacobs, *supra* note 85, at 406.

²³³ See KING, *supra* note 88, at 99.

²³⁴ *Id.*

years is negative.²³⁵

Since the net profit and cash flow of a cyclical business tend to follow the economic situation, the economic slump, the recovery time, and the uncertain economic situation should be forecasted in order to apply the DCF approach.²³⁶ Ordinary income and the cash flow of the cyclical business are certain to become stagnant during an economic slump. In addition, the other indices such as the debt ratio and the rate of return on the total assets will be affected.²³⁷ Thus, speculation and uncertainty illustrate the difficulty in applying the DCF approach.

What is the basis for regarding the going concern value of the non-business operation assets the same as the liquidation value? One primary reason is that non-operating assets are generally considered cash.²³⁸ Furthermore, since the DCF approach reflects the values of all the assets generating cash flow and does not reflect non-active assets, which do not generate cash flow, a separate valuation must be made for these assets.²³⁹

Where a corporation has patent rights or options on products that do not generate cash flow, estimating the future cash value may be impossible because the corporation does not have past data, such as net profits or cash flow growth rates.

During the reorganization procedure, the corporation is disposing of some of its assets and acquiring other assets, which changes the capital structure or the dividend policy. Since the reorganization of a corporation changes the structure of assets and capital, it is difficult to use historical data on the growth rate of net profits or cash flow.²⁴⁰ However, even if there are significant changes in investment or financial policies, corporate values can still be accurately estimated if the effects of the changes are

²³⁵ Novikoff & Jacobs, *supra* note 85, at 412.

Note that bankrupt companies present special problems, particularly regarding the reliability of their projections. Debtors emerging from bankruptcy are generally troubled companies, and their historical information is often not as reliable an indicator of future performance as non-reorganizing companies. Thus, the execution risk associated with debtors' business plans may be unusually high.

Id.

²³⁶ See KOLLER ET AL., *supra* note 53, at 638–39.

²³⁷ According to one commentator, “a significant increase in the required rate of return attributed to inflationary expectations is generally accompanied by a proportional increase in the firm’s nominal income expectancy.” Schwartz, *supra* note 29, at 1738.

²³⁸ See Shaked & Michel, *supra* note 142, at 42.

²³⁹ “Non-operating assets can be segmented into two groups, marketable securities and illiquid investments.” KOLLER ET AL., *supra* note 53, at 112.

²⁴⁰ EUGENE F. BRIGHAM & JOEL F. HOUSTON, FUNDAMENTALS OF FINANCIAL MANAGEMENT 464 (9th ed. 2001).

reflected in the DCF approach and the risk of new operation and financing is reflected in the discount rate.²⁴¹

When the DCF approach is used to estimate the value of the corporation subject to acquisition, one must consider whether the merger will bring about synergy, and if so, whether the effect can be estimated accurately considering that changes in management will affect the cash flow and risk.

The biggest problem in valuing a private firm using the DCF approach is the comparative difficulty in estimating the risk to be used in determining the discount rate.²⁴² In most risk-return models, the risk is derived from the past price changes of the assets.²⁴³ In calculating the discount rate after the addition of the added risk premium rate,²⁴⁴ another issue that arises is whether a restriction can be imposed on the growth rate in calculating future sales, or whether the risk premium rate should not be considered in calculating the discount rate²⁴⁵ since the calculation of the sales was made on the premise that the corporation is in insolvency. Should the growth rate be lower and the risk premium rate higher in the evaluation? The answer varies depending on the expert.²⁴⁶

2. Estimation of Cash Flow

Is there any method for evaluating the going concern value of a corporation other than the discounted cash flow (DCF) approach?

The cash flow that is considered in calculating the going concern value of a corporation is free cash flows (FCF) to the firm.²⁴⁷ The FCF is determined by converting non-capital expenses such as income tax,

²⁴¹ Bernstein, Seabury & Williams, *supra* note 99, at 193 n.107 (arguing discount rate related issues such as time-period and historical data).

²⁴² *Id.* at 192 (“[B]ecause the risk level of common stock investments varies considerably, expected returns will also vary.”).

²⁴³ DAMODARAN, *supra* note 112, at 20–23.

²⁴⁴ Generally, “[a]s the risk increases, all other things being equal, the required rate of return also increases, and, conversely, the present worth of the firm’s securities declines.” Schwartz, *supra* note 29, at 1735.

²⁴⁵ One commentator reported that in *Doca v. Marina Mercante Nicaraguense, S.A.*, 634 F.2d 30 (2d Cir. 1980) and *Duplan Corp.*, 9 B.R. 921 (S.D.N.Y. 1980), both courts had expected inflation premiums in consideration of income expectancy that has already been subtracted in valuation, and argued that “the court gave redundant consideration to purely nominal projected growth, and thereby tended to overstate the present values.” Schwartz, *supra* note 29, at 1746. However, in *King Resources*, taking into account the present prime rate, the history of the company, risk and depletion, the court added an additional discount rate to reach the appropriate rate. See 651 F.2d 1326, 1336 n.7 (10th Cir. 1980).

²⁴⁶ Shaked & Michel, *supra* note 142, at 42 (presenting the case experts’ valuation in *In re Mirant Corp.*, et al.).

²⁴⁷ See Fernandez, *supra* note 197, at 40, 171 & 600.

depreciation, capital expenditure, and additional working capital²⁴⁸ to earning before income tax (EBIT).²⁴⁹ To calculate FCF, a beeline must be made for the corporation's balance sheet and cash flow statement.²⁵⁰

FCF is meant to measure the amount of money currently being spent,²⁵¹ not transactions that previously occurred. FCF is the cash flow before interest repayment and after tax and principal on the debts, since it is the cash flow belonging to equity holders, as well as all the parties who have a right to claims.²⁵² Essentially, "[t]he FCF is the operating cash flow that is generated by operation, without taking into account borrowing, after tax."²⁵³ Therefore, it is not affected by the size of the corporation's debts. However, the present value changes along with the WACC according to the ratio of debt retention.²⁵⁴ Without a regulatory standard for determining FCF, investors often disagree on exactly which items should and should not be treated as capital expenditures.²⁵⁵

The expected rising rate of prices affects the corporate value by changing the nominal cash flow and the nominal discount rate.²⁵⁶ A solution using actual cash flow and the actual discount rate can be obtained using the following formula: Actual cash flow = Nominal cash flow / (1 + E [I]); Actual discount Rate = (1 + Nominal discount rate) / (1 + E [I]) - 1.²⁵⁷

Since the non-capital expenses of depreciation and amortization are expenses with no actual outflow of cash, they are added to the EBIT and are subject to a corporate tax deduction because they are treated as expenses on

²⁴⁸ It is calculated by subtracting current liabilities from current assets. Free cash flow is a concept first suggested by prominent financial economist Michael C. Jensen, and means cash flow left over after investment. Jensen said accumulation of free cash flow deteriorates corporate value. See Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323, 324-26 (1986).

²⁴⁹ See KOLLER ET AL., *supra* note 53, at 164.

²⁵⁰ The formula is as follows: FCF = EBIT (1 - Corporate tax rate) + (Non-capital expenses) - (Capital expenditure) - (Additional working capital). It can be represented differently as follows: FCF = (Net operating profits less adjusted taxes) + (Noncash operating expenses) - (Investments in invested capital). See KOLLER ET AL., *supra* note 53, at 160 & 178.

²⁵¹ See KING, *supra* note 88, at 40.

²⁵² See KOLLER ET AL., *supra* note 53, at 164; see also BRIGHAM & HOUSTON, *supra* note 240, at 56 ("[F]ree cash flow represents the cash that is actually available for distribution to investors.").

²⁵³ KING, *supra* note 88, at 40.

²⁵⁴ See *supra* note 145 and accompanying text; see also *infra* notes 277-283 and accompanying text.

²⁵⁵ See Ben McClure, *Free Cash Flow: Free, But Not Always Easy* INVESTOPEDIA, <http://www.investopedia.com/articles/fundamental/03/091703.asp>.

²⁵⁶ "[I]n choosing an appropriate discount rate, most U.S. courts now refer to the price-earning (P/E) ratios of the shares of corporations in the same business as the reorganized firm." Schwartz, *supra* note 29, at 1736.

²⁵⁷ Here, E [I] is expected interest rate.

the income statement.²⁵⁸ In order for a corporation to continue to achieve the expected profit, the operating assets must be maintained at the current level.²⁵⁹ This calls for constant capital expenditures and, depending on the level of growth of these capital expenditures, consideration as to whether this falls at or below the level of depreciation.²⁶⁰ For a corporation to run the business and achieve sales, it is necessary to maintain a certain amount of current assets and current liabilities. Such working capital is calculated based on the premise that it changes at the same rate as the amount of sale changes according to the past turnover rate.²⁶¹

D. Appropriate Discount Rate

Choosing the proper discount rate in valuation can vary and the method of determining appropriate percentages is controversial. The four methods outlined in this section are most often applied.

1. Dividend Discount Model

To obtain reliable valuation results, the most important process of the DCF method is calculating the appropriate discount rate.²⁶² It should be noted that the dividend discount model (DDM) calculates (i) the present value of the future dividends, (ii) the expected return implied by the current dividend yield, and (iii) projected dividend growth.²⁶³ DDM can be defined as “any formula to value the equity of a corporation by computing the present value of all expected future dividends.”²⁶⁴ DDM, in theory, can be applied to all cases, but it is most effective when a corporation has already distributed a meaningful volume of profits as dividends. DDM is an equity valuation tool that uses dividends as a measure of the cash flows returned to the shareholder and calculates the present value of future dividends that a

²⁵⁸ See HORNGREN ET AL., *supra* note 131, at 288–89 & 294–95.

²⁵⁹ This can be inferred from the following equation: Assets = Liabilities + Owner’s Equity; Assets – Liabilities = Owner’s Equity. WARREN ET AL., *supra* note 112, at 11. “Owner’s equity is the owner’s right to the assets of the business.” *Id.* For a corporation, “the owner’s equity on the balance sheet is called stockholders’ equity and is represented by the balance of the capital stock and retained earnings accounts.” *Id.* at 454.

²⁶⁰ KOLLER ET AL., *supra* note 53, at 238–39.

²⁶¹ WARREN ET AL., *supra* note 112, at 152, 598 (“If the current liabilities are greater than the current assets, the business may not be able to pay its debts and continue in business.”).

²⁶² See *Med Diversified, Inc. et al.*, 346 B.R. 621, 635 (Bankr. E.D.N.Y. 2006).

²⁶³ The Dividend Discount Model is also known as the “Gordon Model” named after Professor Myron J. Gordon who popularized the model. Professor Gordon wrote about the model in a book he authored in 1962 titled “The Investment, Financing and Valuation of the Corporation.” See Diran Bodenhorn, *The Investment, Financing and Valuation of the Corporation by Myron J. Gordon*, 52 AM. ECON. REV. 1174–76 (1962).

²⁶⁴ See FERNANDEZ, *supra* note 197, at 599.

corporation is expected to distribute to its shareholders.²⁶⁵ If the corporation does not have a history of distributing dividends, the calculation may be based on a sound assumption regarding what the dividends would

²⁶⁵ Under the investor perspective, one industry expert states that:

Proponents of the dividend discount model say that only future cash dividends can give [the investor] a reliable estimate of a company's intrinsic value. . . .

In truth, the [DDM] requires an enormous amount of speculation in trying to forecast future dividends. Even when [investors] apply it to steady, reliable, dividend-paying companies, [he or she] still need[s] to make plenty of assumptions about their future. . . . Furthermore, the inputs that produce valuations are always changing and susceptible to error.

The first big assumption that the DDM makes is that dividends are steady, or grow at a constant rate indefinitely. But even for steady, reliable, utility-type stocks, it can be tricky to forecast exactly what the dividend payment will be next year

. . . .

Another sticking point with the DDM is that no one really knows for certain the appropriate expected rate of return to use. It's not always wise simply to use the long-term interest rate because the appropriateness of this can change.

. . . .

In fact, even if the growth rate does not exceed the expected return rate, growth stocks, which don't pay dividends, are even tougher to value using this model. If [investors] hope to value a growth stock with the [DDM], [his or her] valuation will be based on nothing more than guesses about the corporation's future profits and dividend policy decisions. Most growth stocks don't pay out dividends. Rather they re-invest earnings into the company with the hopes of providing shareholders with returns by means of a higher share price.

. . . .

The [DDM] is by no means the be-all and end-all for valuation. . . . It forces investors to evaluate different assumptions about growth and future prospects. If nothing else, the DDM demonstrates the underlying principle that a company is worth the sum of its discounted future cash flows. (Whether or not dividends are the correct measure of cash flow is another question.) The challenge is to make the model as applicable to reality as possible, which means using the most reliable assumptions possible.

Ben McClure, *Digging into the Dividend Discount Model*, INVESTOPEDIA *1, <http://www.investopedia.com/articles/fundamental/04/041404.asp> (last visited Dec. 31, 2007).

be if the corporation did distribute dividends.²⁶⁶

One expert states that DDM is “garbage in garbage out” which means assumptions are based only on exact data.²⁶⁷ The substantial disadvantage of DDM is that it is not helpful in explaining the corporation’s intangible assets, such as an employee’s skill.²⁶⁸

2. Weighted Average Cost of Capital

A corporation must raise necessary funds for smooth business activity or new investment. However, regardless of the sources of the funds raised, such as debt or equity capital, compensation for the use of funds must be paid. Investors require a certain return as compensation for providing funds to the corporation and the corporation must bear this cost in order to use the funds.²⁶⁹

At this time, the required rate of return by the person providing the funds, known as the essential rate of return, is the opportunity cost, or rate that could be earned from a similar investment elsewhere.²⁷⁰ Therefore, the cost of equity capital of the corporation and the required rate of return of the investors are the same, similar to two sides of the same coin.

On the other hand, when evaluating a corporation’s investment plan, the appropriate discount rate, called the capitalization rate, is applied to the conversion of future cash flow from the investment into the present value or the opportunity cost.²⁷¹ In other words, to be economically efficient, the minimum rate of return on the investment must equal the cost of equity capital of the investment funds. Therefore, the investment’s optimal size is the point where the cost of capital and the marginal rate of return meet.²⁷²

In general, if the risk and return are in an ordinary relation to one another, the corporation’s cost of capital reflects the risk to the corporation and is determined in the capital market.²⁷³ The cost of capital needed for

²⁶⁶ *Id.*

²⁶⁷ *Id.*

²⁶⁸ The formula is as follows: $DDM k_e = (\text{Expected earning rate on dividend}) + (\text{Dividend growth rate})$ (or Net profit growth rate). See DAMODARAN, *supra* note 112, at 191–218.

²⁶⁹ Bernstein, Seabury & Williams, *supra* note 99, at 192 (“[T]he price paid for an asset must yield an expected return sufficient to compensate the investor for the risk that the expected future value is not realized.”).

²⁷⁰ See KOLLER ET AL., *supra* note 53, at 291.

²⁷¹ See WARREN ET AL., *supra* note 112, at 949–62.

²⁷² See Terry Black & Lynn Gallagher, *Are Physical Capacity Constraints Relevant?: Applying Finance-Economics Theory to a Management Accounting Misconception*, 24 AUSTL. J. MGMT. 143, 147–50 (1999).

²⁷³ See Bernstein, Seabury & Willimas, *supra* note 99, at 190–91 (“The cost of debt capital is typically defined as the yield to maturity on comparable debt instruments traded in the public market, as adjusted for specific risk factors related to the relevant company.”).

the valuation of a corporation refers to the cost of capital for the funds that the corporation raised.²⁷⁴ Therefore, in order to estimate the cost of capital by a corporation, it is important to consider what kinds of funds are used and how much the corporation uses on the whole; in short, the capital structure from the credit side of the balance sheet should be taken into account.

If a corporation is financed entirely by capital, the cost of capital of the stock will equal the rate of return for the corporation.²⁷⁵ However, when debt capital and the equity capital costs of the corporation are split fifty-fifty, the cost of capital of the corporation becomes the average of the two.²⁷⁶

On the balance sheet of most corporations, it is shown that various sources of capital are in use and the cost of capital for such corporations is estimated by the WACC. From the standpoint of value-production, the accurate estimated capital cost, as well as being the prime factor in the valuation of a corporation, is the core factor for consideration in determining the corporation's main purpose which may include choosing the right budget for the capital, determining the most optimal capital structure that minimizes the cost of capital, or making the proper price decisions for various public utility charges.²⁷⁷

The WACC is the weighted average of the cost of equity and cost of debt based on the proportion of debt and equity in the corporation's capital structure.²⁷⁸ To calculate WACC, it is necessary to estimate the cost of capital for the specific business area,²⁷⁹ which, in being reviewed by the appraisers, must determine the corporation's cost of debt and cost of equity.²⁸⁰ The WACC is the opportunity cost that both creditors and shareholders expect to be compensated for when they make an investment in risky assets.²⁸¹ It is also used as the discount rate to convert future cash

²⁷⁴ *Id.* at 190. ("The costs of capital (debt and equity) used in the WACC are estimates of appropriate expected returns for the various providers of capital to the company.").

²⁷⁵ See WARREN ET AL., *supra* note 112, at 959.

²⁷⁶ See *id.* (showing the calculation of the combined financing).

²⁷⁷ See KANG ET AL., *supra* note 230, at 80.

²⁷⁸ "The WACC is going to be lower (thus arriving at a higher value) to the extent that the calculation assumes more low-cost debt and less high-cost equity." KING, *supra* note 88, at 105.

²⁷⁹ See KOLLER ET AL., *supra* note 53, at 275.

²⁸⁰ Cost of Equity = Risk Free Rate + (Beta × Equity Risk Premium) + Size of Risk; Cost of Equity = Risk-free Interest Rate + (beta × [Expected Market Return – Risk-Free Interest Rate]). See *Am. HomePatient, Inc.*, 298 B.R. at 176.

²⁸¹ Fundamentally, value is based on three factors: growth, risk, and cash flows. See Bernstein, Seabury & Williams, *supra* note 99, at 171.

flow to present value²⁸² and is the weighted average cost of the equity capital, as well as others, in the form of the component ratio of the total capital.²⁸³

In *In re Mirant Corporation*, the court determined that the WACC is the key component for calculating a value using the DCF method.²⁸⁴ The simple formula for calculating the WACC is $\sum K_i \times W_i$.²⁸⁵ Here, K_i is the cost of capital after the source of capital supply makes a certain number of tax payments (i) and W_i is the weight of the source of capital supply.²⁸⁶

Once the cost of equity is calculated, an adjustment can be made to take into account the risk factors specific to the corporation, which may decrease or increase the corporation's risk profile.²⁸⁷ The WACC takes into account the cost of each capital, such as debt and equity capital, and is expressed as the component ratio of each.²⁸⁸

3. Capital Asset Pricing Model

The capital asset pricing model (CAPM) is a risk-return rate model.²⁸⁹ This is a formula that was developed to calculate a firm's cost of equity capital. In the CAPM, "the risk-free rate and market risk premium are common to all corporations but only beta varies across corporations."²⁹⁰

The discount rate for the calculation of the going concern value

²⁸² See KING, *supra* note 88, at 104.

²⁸³ See KOLLER ET AL., *supra* note 53, at 291.

²⁸⁴ See *In re Mirant Corp.*, et. al., 334 B.R. 800, 839 (Bankr. N.D.Tex. 2005).

²⁸⁵ See KANG ET AL., *supra* note 230, at 94.

²⁸⁶ The relevant data for the formula of the WACC is presented *infra* Appendix I.

²⁸⁷ Bernstein, Seabury & Williams, *supra* note 99, at 171 ("Although the fundamental concepts of business valuation hold true when valuing distressed businesses, particular facts and circumstances may require certain adjustments and additional considerations.").

²⁸⁸ See KOLLER ET AL., *supra* note 53, at 292; see also KING, *supra* note 88, at 105.

²⁸⁹ It is represented as follows: $K_e = E(R_i) = R_f + \beta_i [E(R_m) - R_f]$.

Here, R_m is the market return and R_f is the risk free interest rate. $E(R_i)$ is the expected return rate on asset i ; β_i is beta of asset i (= the beta of stock i); $E(R_m)$ is the expected return rate on the market portfolio; and $E[R_m] - R_f$ is the risk premium on the market portfolio.

FORMULA: $K_e = R_f + \beta \times (K_m - R_f)$ Here, K_e is the risk-adjusted discount rate (also known as the cost of capital), R_f is the rate of a "risk-free" investment, i.e., cash, and K_m is the return rate of a market benchmark, like the S&P 500.

²⁹⁰ See KOLLER ET AL., *supra* note 53, at 295; see also DAMODARAN, *supra* note 112, at 70-73 (noting that the capital asset pricing model is built on the premise that the variance in returns is the appropriate measure of risk, but only that portion of variance that is not diversifiable is rewarded).

consists of the risk free interest rate (R_f) and the risk premium rate (RP). In the CAPM, the most common asset-pricing model, the nondiversifiable variance of a certain asset is measured by (β_i), and the expected earning rate ($E(R_i)$) is estimated by the standard of the beta.²⁹¹ Generally, “[w]here the debtor is publicly traded, the historical beta is used to determine the discount rate.”²⁹² Thus, CAPM is not a proper valuation method for closely held corporations, but was devised to measure publicly held corporate stock value under the past data.²⁹³

The estimated expected return (earning rate or $E(R_i)$) on the assets is based on the risk-free interest rate and the “beta risk” is the cost of equity capital and the discount rate.²⁹⁴

When calculating corporate value, what problems would arise if only the rate of return on bonds was used to calculate the discount rate?²⁹⁵ The risk premium used in the CAPM is estimated from historical data and is calculated by subtracting the average return (earning rate) on the risk-free assets from the average return of the stock.²⁹⁶ Generally, the risk-free interest rate, which uses the short-term government bonds return rate and the market portfolio return rate exceeding the government bond rate becomes the risk premium.²⁹⁷

In *Northern Trust Co. v. C.I.R.*,²⁹⁸ the U.S. Tax Court stated that “the beta coefficient is a ratio which compares the movement of stock prices for publicly traded companies deemed comparable to the company in issue with the movement of stock prices in general.”²⁹⁹ Thus, it is necessary to adjust the magnitude of the equity risk premium as the historical average premium of common stock to the risk profile of the subject company.

²⁹¹ See BRIGHAM & HOUSTON, *supra* note 240, at 250–51.

²⁹² See Heroy & Schaeffer, *supra* note 33, at 54.

²⁹³ See Exide Technologies, 303 B.R. 48, 64 (Bankr. D. Del. 2003).

²⁹⁴ See Bernstein, Seabury & Williams, *supra* note 99, at 192–93 (“Beta is the standardized measure of nondiversifiable risk. . . . Technically, beta is defined as the covariance of the returns on the particular asset with the returns on the market portfolio divided by the variance of the returns on the market portfolio.”).

²⁹⁵ Schwartz, *supra* note 29, at 1735 (noting that the discount rate which is based on the future cash flow in lieu of the present value of the cash flow must reflect the percentage of return that a hypothetical investor, knowing all of the facts available to the court, would expect on every dollar presently invested in the reorganized corporations).

²⁹⁶ See Pullman Const. Indus., Inc., 107 B.R. 909, 921 (Bankr. N.D. Ill. 1989).

²⁹⁷ See KOLLER ET AL., *supra* note 53, at 296; see also BRIGHAM & HOUSTON, *supra* note 240, at 196–97; Novikoff & Jacobs, *supra* note 85, at 411–12 (quoting expert’s argument on the risk rate).

²⁹⁸ 87 T.C. 349 (1986).

²⁹⁹ *Id.* at 381.

4. Arbitrage Pricing Model

The one risk-return rate model is the arbitrage pricing model (APM).³⁰⁰ Different from the CAPM, the APM uses various economic factors in calculating risk,³⁰¹ although it also sets risk as non-diversifiable. The risk parameter is estimated by deciding the beta as well as the risk premium on each general economic factor that determines the return (earning rate) of the stock as the prime factor in the analysis of the return on the stock.³⁰² Therefore, once the risk premium of the beta factor on particular factors of a corporation is estimated, it can be used to estimate the expected return on the stock.³⁰³

The deciding factor for the risk parameter is the type of business and the degree of operating and financial leverage.³⁰⁴ The degree of business exposure to the economic risk factors and prime beta factors are determined by the type of business. In the case of a reorganizing corporation running multiple businesses, the beta factor of each business is calculated by taking the weighted average of the market value of each business against the corporation's market value.³⁰⁵ As the degree of operating leverage and the degree of financial leverage get larger, the beta on the stock will be higher and, particularly, the beta on certain economic factors will get higher.³⁰⁶

E. Estimation and Application of Growth Rate

The going concern value by the DCF approach is determined by the expected cash flow in the future.³⁰⁷ Calculating the exact going concern value of the expected cash flow in the future must be done by a logical method. If the expected cash flow is estimated by using the past growth rate

³⁰⁰ The model can be represented as follows:

$$K_e = R_f + \sum_{j=1}^k \{ \beta_j (E[R_j] - R_f) \}$$

$= R_f + [E(F_1) - R_f] \beta_1 + [E(F_2) - R_f] \beta_2 + \dots + [E(F_k) - R_f] \beta_k$. Here, R_f is the risk-free interest rate; β_j is beta on the factor j ; $E[R_j] - R_f$ is the risk premium per j factor; k is a variety of factors.

³⁰¹ See Pullman Const. Indus., Inc., 107 B.R. at 921.

³⁰² See KOLLER ET AL., *supra* note 53, at 294, 317.

³⁰³ See Shaked & Michel, *supra* note 142, at 41 (“Beta is an element of the cost of equity when using the Capital Asset Pricing Model (CAPM).”).

³⁰⁴ See Bernstein, Seabury & Williams, *supra* note 99, at 191–93.

³⁰⁵ *Id.*

³⁰⁶ *Id.* at 193 (“The higher the perceived risk of a particular common stock investment, relative to an average common stock investment, the higher the beta.”).

³⁰⁷ See *supra* Part III C.1; see also *supra* note 225 and accompanying text; *infra* note 325 and accompanying text.

based on the operating performance of the specific corporation,³⁰⁸ using the “time-series OLS [ordinary least squares] regression,” much of the compounding effect of the net profit and the growth rate trend for the mid period can be reflected using the formula from above.³⁰⁹ The application of the growth rate, assuming single infinite growth, calculates the present value using the Gordon Growth Model.³¹⁰

In the case of a certain single growth rate assumed to be of infinite growth, because there can be a problem of continuation in the growth rate,³¹¹ the growth phase is divided in two, in which the individual cash flow in each year is estimated at the beginning phase and thereafter, an infinite growth at a certain rate is assumed in the calculation.³¹²

Applying such a formula to corporate reorganization valuation in uniformity is done on the assumption that the cash flow takes place one time at the end of year.³¹³ However, as cash flow does not occur once at the end of the year, but takes place continuously during the year, it should be calculated on the assumption that the cash flow takes place in the middle of

³⁰⁸ See, e.g., *MFS/Sun Life Trust-High Yield Series v. Van Dusen Airport Services Co.*, 910 F. Supp. 913, 941–42 (S.D.N.Y. 1995).

³⁰⁹ $E_t = a + b E_{t-1} + e$.

In this case, the term variable of the regression coefficient “*b*” represents the change in net profit per period. In addition, there will be an investment income generated by $b \cdot E_0 \cdot ROE$ every year if the corporation reserves some of the earnings per share every year by a certain rate “*b*” and pays $(1-b)$ it as a dividend and makes reinvestment of the reserved earning “*b*” generating an investment income by ROE. Therefore, the earnings per share E_1 of the next year becomes $E_0 + b \cdot E_0 \cdot ROE$. Here, E_1 becomes $(1+g)E_0$, an increase by $b \cdot ROE$ and thus $g = b \cdot ROE$.

³¹⁰ $PV = NCF_0 (1+g) / k-g$.

This is a model for determining the intrinsic value of a stock, based on a future series of dividends that grow at a constant rate. Given a dividend per share that is payable in one year, and the assumption that the dividend grows at a constant rate in perpetuity, the model calculates the present value of the infinite series of future dividends. The formula is as follows: Stock Value = $[D = \text{Expected dividend per share one year from now}] / [k = \text{Required rate of return for equity investor}] - [G = \text{Growth rate in dividends (in perpetuity)}]$.

³¹¹ Inflationary expectations prompt investors to project growth in a firm’s earnings even when no real growth is expected. See Schwartz, *supra* note 29, at 1745. As the risk-free rate rises because of inflationary expectations, investors also increase the rate by which their expectation of the inflated future income is discounted. See *id.*

³¹²

$$PV = \sum_{n=1}^t [NCF_n / (1+k)^n + NCF_t / k-g \times 1 / (1+k)^t].$$

³¹³ This assumption is based on the generally accepted accounting principles and best strategies for the specific cases. See FINANCIAL ACCOUNTING STANDARDS BOARD (FASB), STATEMENTS OF FINANCIAL ACCOUNTING STANDARDS (SFAS), NO 95. STATEMENT OF CASH FLOWS (Nov. 1987).

the year.³¹⁴

F. Constructive Approach to the Valuation Methodologies

The practice of the Seoul Central District Court in calculating the appropriate discount rate is to use the future expected return that creditors of the concerned corporation expect to be compensated for the risk inherent in owning the debts.³¹⁵ This serves as a means of converting future cash flow into present value. It is calculated by adding the risk premium to the risk-free interest rate of the financial assets with risk-free investment.³¹⁶ In a situation where a corporation has applied for the commencement of the corporate reorganization proceeding, the appropriate discount rate takes into account that the risk premium is higher than that of ordinary corporations.³¹⁷ One Japanese commentator insists that the discount rate in the United States is between 8% and 10%,³¹⁸ whereas in Korea it is between 13% and 15%.³¹⁹

Since corporations basically have equity capital as the foundation, should not the discount rate be either the rate of return on the equity capital or that of the debt capital? In the case of general corporations, unless there are special circumstances, one cannot assume that there is no equity capital. It would be desirable to calculate the discount rate allowing for the

$$^{314} PC = NCF_t (1+k)^{0.5} / k-g.$$

$$PV = \sum_{n=1}^t [NCF_n / (1+k)^{n-0.5} + NCF_t (1+g) (1+k)^{0.5} / k-g \times 1 / (1+k)^t].$$

³¹⁵ See Bernstein, Seabury & Williams, *supra* note 99, at 189 (“The discount rate [here] is the rate of return that would be required by providers of capital (both debt and equity) to the company to compensate the investors for the time value of money and the systematic risk inherent in the particular investment.”).

³¹⁶ In the United States, the situation is not so different. Thus, “one caveat to the CAPM formula is that whenever warranted, experts add a specific risk premium. The specific risk premium is sometimes calculated using Ibbotson’s size premiums, according to the company’s size.” Shaked & Michel, *supra* note 142, at 41. “The court must also choose a discount rate (or multiplier) that reflects both the current risk-free rate of interest and a risk premium for uncertainty of the projected income.” Schwartz, *supra* note 29, at 1743.

³¹⁷ See *supra* Part III D; see also Jae-pan-yeah-gyoo je-1219-ho (Jaemin 2006-5) [Korea S. Ct. Civil Trial Rule (No. 1219) (Jaemin 2006-5)], art. 9 (S. Korea); SEOUL CENTRAL DISTRICT COURT, *supra* note 187, at 108; *supra* notes 244, 279–83, 290 & 300–03, *infra* note 318 and each accompanying text.

³¹⁸ See MIKAZUKI ET AL., *supra* note 127, at 106. However, in *In re King Resources Co.*, the 10th Circuit Court of Appeals determined that the appropriate discount rate for the oil exploration corporation was 14.5%. Schwartz, *supra* note 29, at 1736 (citing *In re King Resources Co.*, 651 F.2d 1326 (10th Cir. 1980)).

³¹⁹ The Korean Bankruptcy Court fixed the discount rate in advance to apply it uniformly to a reorganizing corporation’s valuation and, thus, there is no room for discretion by the appraiser. See *supra* note 316 and accompanying text.

expected equity capital rather than assuming only debt capital.³²⁰

The shareholders will claim that a low discount rate on the equity capital and a high discount rate on the debt capital should be applied to claim their right. On the other hand, the creditors will claim a high discount rate on the equity capital and a low discount rate on the debt capital to deny the shareholders' claim.³²¹

The return on equity capital (the cost of equity capital) is a method that estimates only the value of the equity capital invested in a corporation, but the weighted average return on the capital (the weighted average cost of equity capital) is a valuation method that estimates not only the equity capital but also the entire corporate value as well as the capital of all other claims, including preferred shareholders and creditors.³²² If debts are included in debt capital, it could be possible to set the discount rate separately for secured and unsecured claims. Since the discount rate is a concept opposite of return, it can be classified by the characteristics of the investors and by shareholders and creditors.³²³

IV. DISTRIBUTIONS OF CORPORATE VALUE

Corporate valuation, settling debts, and the distribution of corporate value are clearly separate proceedings in Korea and are not executed with mathematical precision. Therefore, at the corporate value distribution phase, changes in the rights to settled debts can be made.³²⁴

Under the water hypothetical (mentioned above at Section I. sub-part A), the reorganization plan allowing only cash repayment is centered on the calculation of the amount of water coming from the upper stream and the structure of distributions made to the creditors. However, it shows no concern for the structure that allows investment into the upper stream to increase the amount of water coming from the upper stream. Therefore, no matter how conservative a standpoint the future cash flow and the corporate value are evaluated from, the feasibility will most likely fade away in the long term.³²⁵ For example, the total sales of construction corporations are

³²⁰ "The greater the percentage of debt, the lower the WACC." See King, *supra* note 88, at 150.

³²¹ In order to be assigned some distributions in the reorganization plan, the shareholder had to show that the corporate value was sufficient to cover entire debts and any remaining excess could be distributed to the equity holder. See Frye, *supra* note 15, at 396.

³²² See Bernstein, Seabury & Williams, *supra* note 99, at 186–93.

³²³ See KING ET AL., *supra* note 88, at 149–51.

³²⁴ See *supra* notes 56 & 71 and each accompanying text.

³²⁵ See John Yozzo, Kevin Regan, & Don May, *Return On Assets: So Useful . . . And So Misused*, 20-NOV AM. BANKR. INST. J. 18, 19 (2001).

This fair value is generally determined by means of discounted cash flow (DCF)

conservatively estimated. However, when the reorganization plan commences, it becomes impossible to take orders because of external factors of the reorganizing corporation such as the pre-eligibility test. Furthermore, a factor such as rainfall may be difficult for the corporation to increase at its discretion. However, if the reorganizing corporation takes a structure where it is easy for the water from the upper stream to flow in while still making distribution to the creditors, the reorganization plan will have a high feasibility.

A. Distributions of Corporate Value

Why is the guarantee of both liquidation value and going concern value necessary in bankruptcy law? In the United States, “the debtor’s management has substantial control over the process with an exclusive right to initially propose a reorganization plan.”³²⁶ In order to protect creditors, “[t]he reorganization plan is premised on an estimate of value for the restructured firm.”³²⁷ Some believe that “[b]ankruptcy law resolves valuation through negotiations.”³²⁸ To support that belief, either liquidation or going concern business value must be guaranteed with fair distribution.

What is the role of debt-for-equity swaps in guaranteeing the liquidation value and going concern value? From a legal perspective, in carrying out the debt-for-equity swap, creditors, such as financial institutions, become subscribers to the paid-in capital increase through third-party allotment of newly issued stock.³²⁹ In this case, financial organizations’ legal status changes from creditors to shareholders and their responsibilities and duties change along with it. Then, financial institutions convert loans into investments to promote corporate restructuring and

methodology—that is, by applying a market multiple to the projected operating income (EBIT) of the reorganized entity and then discounting this amount to present value. The reorganization value becomes the basis for the emerging entity’s assets on its first post-emergence balance sheet, and is subsequently allocated to the specific assets of the reorganized company. Given the precarious prospects of most reorganized entities, conservative operating assumptions and multiples are typically applied in the determination of reorganization value. This tendency toward conservatism frequently results in a reorganization value that is significantly, perhaps drastically, below the debtor’s pre-emergence asset values based on historical costs.

Id.

³²⁶ Gilson et al., *supra* note 191, at 471.

³²⁷ *Id.*

³²⁸ *Id.*

³²⁹ The debt-for-equity swap emerged as the most attractive measure as it transfers debt items to capital items without actual transfer of capital. See LARRY D. SODERQUIST, A. A. SOMMER, JR., & LINDA O. SMIDDY, *CORPORATIONS AND OTHER BUSINESS ORGANIZATIONS* 172 (4th ed. 1997).

actively intervene in corporate management as shareholders.³³⁰ By actively intervening, companies can save financial costs, such as interest, reduce their debt ratios, and improve their financial structures through additional capital finance.³³¹ However, the debt-for-equity swap needs a legal process to minimize adverse effects and drawbacks and maximize usefulness.

The distribution method of corporate value calls for cash payment first, but supplemental debt-for-equity swaps are acknowledged in Korea.³³² In setting the terms of payment for creditors, the discount rate used in calculating the rate for the present value should be the same as the discount rate in the inspector's report in order to determine whether an amount in excess of the liquidation value has been guaranteed.³³³ Can the discount rate used in calculation of the rate for the present value be differentiated for each class of creditors between secured claims and unsecured claims? If the secured creditor uses the asset standard, and the unsecured creditors use the earning power standard for making cash payment as the principle, the money for repayment will not be sufficient. However, if the secured creditors make the cash payments by the asset standard in principle and the unsecured creditors receive, not the cash payment, but the corporate value itself in distribution, the shortage problem in repayment will not occur.

Upon establishing the cram-down at the time of reorganization confirmation, the amount in excess of liquidation value needs to be guaranteed in repayment to the bankruptcy court's discretion, rather than the going concern value.³³⁴

Is the fair market price set by the bankruptcy court going to be liquidation value or going concern value? Should the means of guaranteeing the rights between secured creditors and unsecured creditors be differentiated? When the stock concept is used for secured creditors and the flow concept for unsecured creditors in evaluating the going concern value, the appraiser should apply different methods for the evaluation.

³³⁰ The debt-for-equity swap's economic effects differ from scheme to scheme. See Derek Asiedu-Akrofi, *A Comparative Analysis of Debt for Equity Swap Program in Five Major Debtor Countries*, 12 HASTINGS INT'L & COMP. L. REV. 537, 568-71 (1988-1989).

³³¹ See SODERQUIST ET AL., *supra* note 329, at 172.

³³² In Korea the acceptance of new shares in a paid-in capital increase is roughly separated into: (i) allotment to shareholders, (ii) priority subscription of shareholders, (iii) allotment to third parties, and (iv) general public subscription. See Regulation on Securities Issuance and Disclosure, Sec. 3, Art. 57 (Dec. 29, 2000).

³³³ "A reorganization court should determine the discount rate for future earnings expectancies as the typical investor would, by first determining the risk-free rate of return and then adding an appropriate risk premium." Schwartz, *supra* note 29, at 1735.

³³⁴ In the United States, "[the cram-down and best interest of creditor] test entitles creditors and shareholders to value not less than they would receive in a hypothetical liquidation of the debtor under Chapter 7 of the Bankruptcy Code." Lopucki, *supra* note 30, at 762.

Generally accepted accounting principles allow the appraiser to apply these methods.

When the bankruptcy court sets the cram-down, appropriate interest payments should be paid to secured creditors and unsecured creditors. Some argue that the interest portion pertaining to the discount rate on the inspector's report should be used, while others claim the amount should be based on the market interest rate. One U.S. bankruptcy court suggested that "the proper cram-down interest rate in the Chapter 11 proceeding must provide for a 'stream of payment' of the bank's claim under present value basis."³³⁵ This seems to be a good answer.

Tax creditors and wage creditors have special status that allows priority rights in corporate reorganization proceedings over other unsecured creditors under special laws such as the National Tax Collection Act³³⁶ and the Labor Standards Act.³³⁷ What impact does the gain on exemption of debts have on the distribution of corporate value in tax law? What roles do tax creditors and wage creditors have in the distribution of corporate value?³³⁸ Is it possible to separately execute the bankruptcy reorganization proceeding for corporations under financial distress and economic depression?

By reason of its subjective nature,³³⁹ regardless of the appropriate method applied, no valuation can be perfect.³⁴⁰ The following are hypothetical comparisons among different values which are the available standard in distribution of corporate value. Notwithstanding the possibility of these issues being litigated in court, there is a chance that nothing would happen in the following cases:

- 1.1. $AV > GCV > L > LV$
- 1.2. $AV > GCV > LV > L$
- 1.3. $AV > LV > L > GCV$
- 1.4. $AV > LV > GCV > L$
- 1.5. $AV > L > LV > GCV$
- 1.6. $AV > L > GCV > LV$
- 2.1. $LV > GCV > AV > L$

³³⁵ See *Cellular Information Systems, Inc.*, 171 B.R. 926, 943 (Bankr. S.D.N.Y. 1994).

³³⁶ *Kook-se-jing-soo-beop Je-2680-ho* [National Tax Collection Act of 1975] (Dec. 21, 1974) (amended 2004) (S. Korea).

³³⁷ *Keun-rho-ki-joon-beop Je-7566-ho* [Labor Standards Act No. 7566] (May 31, 2005) (S. Korea).

³³⁸ See Schwartz, *supra* note 29, at 1730.

³³⁹ See Bernstein, Seabury & Williams, *supra* note 99, at 171 ("Valuation is both an objective and subjective process with many areas ripe for the exercise of the discretion of an expert.").

³⁴⁰ See Heroy & Schaeffer, *supra* note 33, at 63.

- 2.2. $LV > GCV > L > AV$
- 2.3. $LV > AV > GCV > L$
- 2.4. $LV > AV > L > GCV$
- 2.5. $LV > L > AV > GCV$
- 2.6. $LV > L > GCV > AV$
- 3.1. $GCV > AV > LV > L$
- 3.2. $GCV > AV > L > LV$
- 3.3. $GCV > L > AV > LV$
- 3.4. $GCV > L > LV > AV$
- 3.5. $GCV > LV > AV > L$
- 3.6. $GCV > LV > L > AV$
- 4.1. $L > AV > GCV > LV$
- 4.2. $L > AV > LV > GCV$
- 4.3. $L > GCV > AV > LV$
- 4.4. $L > GCV > LV > AV$
- 4.5. $L > LV > AV > GCV$
- 4.6. $L > LV > GCV > AV$

In the above equations, AV refers to “asset value;” GCV refers to “going concern value;” L refers to “liabilities;” and LV refers to “liquidation value.” AV is measured as of a specified point of time; GCV and L are appraised based on the DCF method.

Not many cases exist, according to Korean law, that present a problem comparable to going concern value and liquidation value. If the latter is higher than the former, the bankruptcy judge should mandatorily terminate the corporate reorganization because liabilities exceed assets.

B. Feasibility of the Reorganization Plan

Under U.S. bankruptcy law, when the court decides to approve a corporate reorganization plan, it determines the guarantee of the liquidation value and feasibility at the same time.³⁴¹ The feasibility is the logical prospect of the reorganization plan’s success³⁴² and, as expressed in the

³⁴¹ 11 U.S.C. § 1129(a)(11) (2005). This subsection provides that:

The court shall confirm a plan only if all of the following requirements are met: Confirmation of the plan is not likely to be followed by the liquidation, or the need for further financial reorganization, of the debtor or any successor to the debtor under the plan, unless such liquidation or reorganization is proposed in the plan.

Id.

³⁴² The definition of “success” in the reorganization of financially distressed companies requires several factors: plan confirmation, firm survival, significant debt reduction and avoidance of post-reorganization financial distress. See Alderson & Betker,

provision, it means that there is no possibility of liquidation or repetition of reorganization resulting from the plan's failure.³⁴³

The proper capital structures, existence of earning power,³⁴⁴ economic circumstances, management ability, and management continuity are considered in determining the feasibility of the reorganization plan.³⁴⁵ This standard is subjective but the bankruptcy court at least suggests a comprehensive standard that requires a comparison between the capital structure of the corporation concerned and another corporation in the same industry. Therefore, a reorganization plan that includes a comparison to a business with a high rate of loan capital can be said to have no feasibility.

To give a concrete example, a fundamental question is whether there is a logical possibility of financial stability and success for a corporation being forced to pay debts. Sound finance refers to the harmony between the capital structure of the corporation and corporate value, along with the requirement that a feasible return be considered during estimation.³⁴⁶ The earning power of the corporation and its value sets the capital structure.³⁴⁷

The issue of feasibility concerns the problem of corporate financial soundness, specifically relating to the capital structure containing the debts.³⁴⁸ However, it must be noted that the problem of feasibility does not

supra note 35, at 2.

³⁴³ Courts examine several factors, including:

- (1) the adequacy of the [debtor's] capital structure;
- (2) the earning power of the [debtor's] business;
- (3) economic conditions [that the debtor will face during the plan period];
- (4) the ability of [the debtor's present] management;
- (5) the probability of the continuation of the same management; and
- (6) any other related matter which determines the prospects of a sufficiently successful operation to enable performance of the provisions of the plan.

Am. Home Patient, Inc. 298 B.R. 152, 169 (Bankr. M.D.Tenn. 2003).

³⁴⁴ "An estimation of earning power must rest upon the corporation's past history of earnings, the present income, and the indication of future earnings." Caplin, *supra* note 41, at 785.

³⁴⁵ The overall standard of the feasibility requirement does not require a guarantee of the plan's success, but rather that the plan offer "a reasonable prospect" or "reasonable assurance of success and be workable." U.S. v. Haas, 162 F. 3d 1087, 1090 (11th Cir. 1998).

³⁴⁶ Debt is not always bad for a reorganized corporation's capital structure. "Researchers in corporate finance have identified many advantages to debt as a means of mitigating a wide array of agency problems. If the reorganized firm holds too little debt, agency problems may prove formidable, thereby reducing the total value of the debtor's assets." Listokin, *supra* note 216, at 794-95.

³⁴⁷ See Chiyong Lim, *Jung-ri-kye-hoek-ahn-eui-kong-jung, hyung-pyung, soo-haeng-ga-neung-sung-eh-kwan-han-yeon-gu* [A Study on the Fair and Equitable Corporate Reorganization Plan and Feasibility], 31 SA-BEOP-NON-GYP [JUD. REV.] 755 (2004).

³⁴⁸ See Listokin, *supra* note 216, at 794 ("The less debt in the bankrupt company assumed by the reorganized company, the greater the value of the reorganized company's

address the feasibility of the prepared reorganization plan itself.³⁴⁹ In the United States, if the majority of creditors involved in the court's decision have agreed to the reorganization plan, it is considered inappropriate for the judge to second-guess the proposed plan.³⁵⁰

Chapter 11 of the U.S. Bankruptcy Code allows ordinary debtors to follow the relative order of priority.³⁵¹ Though claims at each priority order have an equal right to the liquidation value, the surplus realized through the reorganization's capture of going concern value can be mostly distributed in the manner agreed upon by both creditors and debtor.³⁵²

However, without such an agreement, the law sets a very strict order of priority.³⁵³ To put it differently, Chapter 11 allows the relative order of priority in the distribution to follow the reorganization plan as long as a sufficient number of creditors are satisfied with such distribution.³⁵⁴

The corporate reorganization systems of Korea, not having adopted U.S. law, are quite different in terms of the reorganization plan's preparation and practice.

In the United States, the word reorganization takes a literal meaning in making capital structure the focus of the reorganization of a corporation.³⁵⁵ In other words, there is an argument about the priority of rights between the creditors and shareholders centering on the rights of the shareholders in the newly reorganized corporation. This argument's main point is that

equity.”).

³⁴⁹ *Id.* at 755.

³⁵⁰ See MICHAEL J. HERBERT, UNDERSTANDING BANKRUPTCY 341 (1995).

³⁵¹ *Id.* at 343.

³⁵² *Id.*

³⁵³ See *id.*; 11 U.S.C. §§ 1129(b)(2), (b)(2)(B), (b)(2)(B)(ii) (2005) provides that:

[T]he condition that a plan be fair and equitable with respect to a class includes the

....

... unsecured claims ...

[T]he holder of any claim or interest that is junior to the claims of such class will not receive or retain under the plan on account of such junior claim or interest any property ...

This is the absolute priority rule for the unsecured creditor under the premise that the corporate value appraised by the going concern value. 11 U.S.C. § 1129(b)(2)(C)(ii) (2005) also provides that: “[t]he holder of any interest that is junior to the interests of such class will not receive or retain under the plan on account of such junior interest any property.”

³⁵⁴ See HERBERT, *supra* note 350, at 343.

³⁵⁵ Listokin, *supra* note 216, at 808 (“[r]eorganization of the capital structure is one of [receiver’s] essential roles in bankruptcy.”).

compensation for the creditors should be made according to the issuance of new stocks equivalent to the amount of debts.

On the other hand, the reorganization practice in Korea emphasizes cash payment centered on the means of performance, the repayment period, and the rate of indebtedness discharge for ordinary creditors and secured creditors, rather than the rights of shareholders. Now that the U.S. practice is focused on whether the capital structure of a new corporation is reorganized in a fair and equitable manner, the argument has centered on the fairness and equity rather than on feasibility.³⁵⁶ However, in Korea, a matter of great interest is whether it is feasible to make payment for the unsecured claims in accordance with the reorganization plan using operating profit rather than fairness or equity. Therefore, the general public ends up resentful of the bankruptcy court's policy when the court fails to carry out the reorganization plan and the reorganization proceeding is terminated before it is completed.³⁵⁷ The public strongly criticizes the corporate reorganization act as an evil law because it protects the previous owner of the corporation at the expense of the creditors.³⁵⁸

If the liquidation value has to be guaranteed, the feasibility of a reorganization plan whose going concern value is smaller than liquidation value would not be possible in Korea without debt-for-equity swaps. In such a situation, if the reorganization plan makes payment without debt-for-equity swaps, the reorganization plan would lack feasibility. However, if a reorganization plan is the proper size for a debt-for-equity swap, it could become feasible.³⁵⁹

When there is a debt-for-equity swap,³⁶⁰ there is a question as to the

³⁵⁶ 11 U.S.C. § 1129(b)(2) (2005) ("The condition that a plan be fair and equitable with respect to a class includes the following requirements . . .").

³⁵⁷ See Inman Kang, *Sin-chung-in-eui-ip-jang-eh-seo-bon-do-san-cheo-ri-sil-moo* [*The Practice of the Bankruptcy Law in the Korean Court-Under Petitioner's Perspective*] (2002) (S. Korea), at 4-5, (S. Korea) available at http://www.baekimlee.com/data/data1_42.pdf.

³⁵⁸ See Lim, *supra* note 347, at 791.

³⁵⁹ When financial institutions convert loan claims through a debt-for-equity swap, company capital increases and debts decrease. This makes for highly effective and improved financial restructuring. Companies are freed from the burden of high interest rates and are more likely to increase their operating income. Companies that obtain solid financial structures through the debt-for-equity swap can then engage in active investments and paid-in capital increases and use mergers, splits, or asset sales to further the restructuring process. Cf. Christopher Gottscho, *Debt Equity Swap Financing of Third World Investments: Will the I.R.S. Hinder U.S. Swappers?* 8 VA. TAX REV. 143, 152 (1988-1989).

³⁶⁰ The debt-for-equity swap is a type of foreign loan restructuring that was used to solve foreign debt issues in South American countries including Chile, Brazil, and Argentina in the early 1980s. See Asiedu-Akrofi, *supra* note 330, at 540-54. The debt-for-equity swap broadly entails creditors' setting off loan obligations with the payment of the subscription price of new stocks, and specifically references insolvent companies' internal efforts to

guarantee of the liquidation value. However, since the creditors have a 100% right over the liquidation value as both creditors and shareholders of the reorganizing corporation, the swap will not violate the liquidation value guarantee principle. Moreover, if the corporate value is measured in different ways like in the United States,³⁶¹ the price of new procurement and the fair market price will be higher than the liquidation value, allowing creditors to have a right over the price of the new procurement and the fair market price through a debt-for-equity swap. Under this scenario, it would not be difficult to guarantee the liquidation value.

C. Post-Valuation

Does the bankruptcy judge have to decide the corporate value of a going concern and of liquidation at the commencement of a reorganization proceeding or at the time of the filing of the reorganization plan? If the bankruptcy judge must decide the going concern value of a corporation in advance, is there any jurisdiction that has such legislation?

At the time the bankruptcy court approves the reorganization plan, it would not be necessary to have legislation that advances the reporting of items used in determining the going concern value of a corporation. What are the possible problems that could arise when the bankruptcy court decides corporate value at the time of confirming the reorganization plan, as is the case with Chapter 11 in the United States? One commentator stated that even in the United States, during the valuation process, “critics have charged that some courts have manipulated the process to obtain a desired result.”³⁶²

Under Korean law, the receiver reports to the court on the management conditions of the corporation’s affairs and property and on such other matters as ordered by the court, and prepares an inventory and balance sheet at the time of confirmation of the reorganization plans, and at other times determined by the court, and submits certified copies thereof to the court.³⁶³

Upon confirmation of the reorganization plan, can a change in the plan be considered in evaluating corporate value if the reorganization plan fails and the parties are now seeking to change some conditions of the

eliminate lack of liquidity of funds due to paying fixed-rate interests or repaying principal and asking creditors to exchange loan obligations for their stocks at a certain ratio. The debt-for-equity swap mechanism in Korea differs slightly from Latin American countries. For example, the Latin America countries exchange sovereign debts for local currency equity in a local company but the Korean debt-for-equity swap used individual private company’s debt from domestic financial institutions. Thus, there are different issues related to the swap. *See id.* at 540.

³⁶¹ See Gilson et al., *supra* note 191, at 476–89 (introducing various valuation techniques); *see also* Heroy & Schaeffer, *supra* note 33, at 44–63.

³⁶² See Schwartz, *supra* note 29, at 1731.

³⁶³ DRBA, *supra* note 1, art. 93.

reorganization plan? The answer to this query is related to the possibility that the debtor corporation might default again in payment of its post-confirmation plan obligations even if the debts are adjusted.³⁶⁴

In stretching the meaning of the statute, it seems possible for the bankruptcy court to order the receiver to calculate the going concern value and the liquidation value following the confirmation of the reorganization plan. The receiver can be made to include the collected data calculated based on these values, setting the standard of the annual report to be reported to the bankruptcy court at year-end, and the court can continue to review the feasibility of the reorganization plan based on such date. Thus, reevaluations can be done any number of times. The rationale is that even in the same bankruptcy reorganization proceeding for different purposes, the post-valuation of a debtor corporation's assets, property, and enterprise value is not *res judicata*.³⁶⁵

D. Mergers and Acquisitions

Generally, in business or economics, a merger or acquisition is a combination of two corporations into one larger company.³⁶⁶ Such actions are commonly voluntary and involve stock swap or cash payment to the target.³⁶⁷ In Korea, however, the merger or acquisition of a reorganizing corporation is a special sale of a reorganized corporation to an acquirer, with proceeds distributed to creditors. Revival of an insolvent company through a third-party acquisition or merger has been introduced as a useful method throughout the world.³⁶⁸ It is regulated by the bankruptcy court's supervisory power over a reorganized corporation.

Prior to the Asian financial crisis in 1997, the concept of corporate restructuring was narrowly interpreted to denote negative ideas such as job cuts, wage reductions, and the elimination of ailing companies.³⁶⁹ However, following the crisis, the concept was expanded to describe the process used by companies to attain greater efficiency and competitiveness. Today, a majority of Korean companies recognize that corporate

³⁶⁴ See Novikoff & Jacobs, *supra* note 85, at 401–02 (answering this question using court holdings).

³⁶⁵ See Richardson, 97 B.R. 161, 162 (Bankr. W.D.N.Y. 1989); see also *Fairchild v. Lebanon Prod. Credit Ass'n*, 31 B.R. 789, 795 (Bankr. S.D. Ohio 1983).

³⁶⁶ A merger is the perfection of economic corporate combination. However, “[a] merger differs from a consolidation, which is a business combination whereby two or more companies join to form an entirely new company.” GAUGHAN, *supra* note 93, at 7.

³⁶⁷ See DRBA, *supra* note 1, arts. 207–08, 210–11 & 213.

³⁶⁸ See Kent Clark & Eli Ofek, *Mergers as a Means of Restructuring Distressed Firms: An Empirical Investigation*, 29 J. FIN. & QUANTITATIVE ANALYSIS 541 (1994).

³⁶⁹ See Martin Hart-Landsberg & Paul Burkett, *Economic Crisis and Restructuring in South Korea: Beyond the Free Market-Statist Debate*, 33:3 CRITICAL ASIAN STUDIES 413, 415 & 421 (2001).

restructuring is a process that must be relentlessly pursued as an ongoing concern.³⁷⁰ Under Korea's Chapter 11, companies are always sold and restructured simultaneously because liquidation assumes that a business has no future.³⁷¹

The corporate restructuring process should depend purely on negotiations between creditor and debtor in the market mechanism,³⁷² as the reorganizing company is an independent operating company, without any intervention from creditors. The number of corporate reorganizations and compositions sharply increased between 1997 and 1998.³⁷³ Korea's corporate restructuring model³⁷⁴ is quite different from U.S. Chapter 11. In

³⁷⁰ See Yon Won-young Yon, *KAMCO Spurs Corporate Restructuring*, KOREA TIMES, May 13, 2004, at 9 (on file with author).

³⁷¹ The sales are controlled by the court in a commercially reasonable manner. See Hoi-saeng-sil-moo-jun-chik-je-11-ho: Hoi-saeng-jeol-cha-eh-seo-eui-M&A-eh-kwan-han-jun-chik [Model Rule of a Reorganizing Firm 11: M&A Model Rule of a Reorganizing Firm] (Apr. 1, 2006) (Seoul Central District Court) (S. Korea). Cf. U.C.C. § 9-504(1) (1978).

³⁷² In a bullish economy, there are more acquirers than sellers in the corporate mergers and acquisitions market. On the contrary, in the weak economy of the bear market, the opposite is true.

³⁷³ See NATIONAL COURT ADMINISTRATION, SA-BEOP-YEON-GAM 1998 [JUDICIAL YEARBOOK OF 1998] (1998) (S. Korea).

³⁷⁴ One practitioner states that:

The corporate restructuring process in Korea can be categorized into three major stages. During the first stage (financial crisis of 1997 to August 2000), the government pushed forward structural reforms based on the International Monetary Fund agreement. In 1998, the five largest business groups engaged in "Big Deals," or the swapping of business areas amongst themselves, and also signed capital structure improvement plans approved by their main creditor banks. The restructuring of the 6th to 64th largest corporations focused on addressing short-term liquidity problems in the form of bank-led "workouts." For small- and medium-sized enterprises ("SMEs"), creditor banks assessed their credit risks and placed those deemed viable in workouts and provided support. After several failed attempts to restructure itself independently, Daewoo Group (one of the five largest corporations) was also placed under the management of its creditor banks to reduce market instability. The second stage (September 2000 to February 2001) began with the president's appointment of a new economic team to address the growing concern of possibly another economic crisis due to the liquidity problems of the Hyundai Group and high oil prices. While focusing on the resolution of potentially insolvent companies and improvements in corporate governance and financial structures, the government pursued reforms in four main sectors: corporate, financial, public and labor. During the third stage (March 2001 to present), corporate reform shifted from government-led to market-driven reform. The introduction of the Corporate Credit Risk Evaluation System in March 2001 and the KCRPA in September 2001 provided the framework to facilitate market-led corporate restructuring and the self-restructuring of SMEs.

Korea, previous owners' stakes are written off by capital reduction or diluted by a debt-for-equity swap by creditors.³⁷⁵ Then a third party acquirer comes in to subscribe for new shares. The proceeds from the new shares are used for repaying remaining debt after conversion.³⁷⁶ Hence, the acquirer gets a majority stake in the company and if the acquirer wants to exit from his investment, he has to process another merger or acquisition or block the transaction through the capital market. Therefore, it is not easy for a financial investor to get out of this position. The Korean bankruptcy court has initiated an active mergers and acquisitions program for those under court supervision. When mergers and acquisitions are dealt with in the bankruptcy court, creditors negotiate more on capital reduction ratio, treatment of secured and unsecured credits, and stock prices, rather than on a debtor company's profitability.³⁷⁷ Secured and unsecured creditors have opposing positions on corporate valuation for workouts,³⁷⁸ mergers and acquisitions, and the process is even more difficult because there is no judge involved to decide between different creditors' interests.³⁷⁹

It seems that the direction in which the bankruptcy reorganization proceeding should be headed is properly suggested by the bankruptcy law that sets the basis of the policy for the bankruptcy court and by which the reorganized corporation's mergers and acquisitions are also being executed. Until now, among many of the reorganized corporations that have successfully completed mergers and acquisitions, the liquidation value is higher than the going concern value.³⁸⁰ It is economical to terminate the reorganization proceeding when the liquidation value is high. At that point, transfer to a liquidation proceeding does not seem logical for either creditors or debtors.

In mergers and acquisitions of a reorganizing corporation with a high liquidation value, the acquisition fee or proceeds should in principle be more than the liquidation value.³⁸¹ If more cash is brought in than the

Yoo Ji-chang, *Restructuring Means More Than Payroll Cut*, KOREA TIMES, Oct. 4, 2004 (on file with author).

³⁷⁵ See DRBA, *supra* note 1, art. 205(3).

³⁷⁶ See SEOUL CENTRAL DISTRICT COURT, *supra* note 187, at 516.

³⁷⁷ *Id.* at 514–27.

³⁷⁸ See GAUGHAN, *supra* note 93, at 447–48.

³⁷⁹ Detailed official statistics are not available from the Korean Bankruptcy Court, but the court succeeded in two M&A cases in 2000, fourteen cases in 2001, eighteen cases in 2002, eight cases in 2003, fifteen cases in 2004, six cases in 2005. See Jejeong Lee, *Hoi-sa-jung-ri-jeol-cha-eui-seo-eui-M&A* [*Mergers and Acquisitions in Corporate Reorganization Proceedings*], INKWON-KWA-CHONGUI [HUM. RTS. & JUST.], Dec. 2005, at 64 (S. Korea).

³⁸⁰ See HYOSOOON NAM & JAEHYUNG KIM, DO-SAN-BEOP-GANG-EUI [BANKRUPTCY LAW] 677-78 (2005) (S. Korea).

³⁸¹ Lorie R. Beers, *Preparing The Distressed Company For Sale*, 26 AM. BANKR. INST. J. 44 (2007).

liquidation value, the merger and acquisition is, in fact, considered to be equal to the liquidation sale to a third party as a going concern value. However, if the acquirer insists on paying an acquisition fee equal to the level of the going concern value because it is lower than the liquidation value, such mergers and acquisitions will have no chance of success. From the creditors' standpoint, the capital amounts to more than the going concern value and can be recovered even if the corporation goes bankrupt.³⁸² Moreover, the cost of new procurement and the fair market price are far higher than the liquidation value.

Even for a corporation with a high liquidation value, the acquirer will often make the acquisition fee or merger proceeds payment exceed the going concern value or, for a listed corporation, the acquirer will make a proper size debt-for-equity swap with the creditors.³⁸³ When the structure allows both the creditors and the acquirer to share the corporate value through the debt-for-equity swap and the issuance of premium bonds, it is reconstruction in a genuine sense. It may also take the form of succession to liabilities for certain amounts that bring more economic benefits than in the bankruptcy policy.³⁸⁴

In the comparatively short history of the corporate reorganization regime, I would consider the mergers and acquisitions from Korea outlined above to generally occur during the transitional stages of the reorganization plan. I propose, however, that such mergers and acquisitions should be made not at the stage of changing the reorganization plan, but at the stage of preparing the reorganization plan. At the stage of preparing the reorganization plan, rather than using the bankruptcy reorganization proceeding, a more advantageous restructuring strategy for creditors would be liquidation value, the corporate value derived from future cash flow, and

In a healthy M&A environment, one can rely on the marketplace to yield an appropriate value for the company. In a distressed environment, likely buyers will disregard the opportunity because they do not like "hair on the deal" and will not buy into an operational turnaround. Additionally, when the market perceives distressed sellers as desperate, buyers often offer considerably less than they might otherwise.

Id.

³⁸² This result is extremely natural because "bankruptcy was designed as a creditor's remedy." M. Jonathan Hayes, *Formulating and Confirming a Chapter 11 Plan of Reorganization*, 2 J. LEGAL ADVOC. & PRAC. 5 (2000).

³⁸³ Beers, *supra* note 381, at 44 ("Sellers in the distressed market should, however, have a clear picture of what the liquidation value of the company's assets looks like as compared to the sale of the company on a going-concern basis.").

³⁸⁴ See Alderson & Betker, *supra* note 35, at 4 ("Chapter 11 reorganization gives distressed firms an incentive to separate by providing the shareholders of inefficient firms a share of the surplus created from reducing overinvestment.").

the price of new procurement and the fair market price.³⁸⁵

According to such a restructuring plan, it should be noted that the corporation can return to normal operation or begin getting back to normalization.³⁸⁶ If the corporation gets back to normalization and gains approval of the reorganization plan at the same time, the controlling shareholders will be determined according to the rate of the debt-for-equity swap, the rate of reduction in capital for stocks, and through stock transactions by the controlling shareholder. Under this scenario, the merger or acquisition advantageous to the creditors can be carried out naturally. Especially if the going concern value is clearly higher than the liquidation value, a merger or acquisition and a reorganization plan where only the liquidation value is paid back to the creditors without the debt-for-equity swap cannot be considered reorganization in a true sense.

When dealing with a corporation whose going concern value is higher than the liquidation value as opposed to a corporation whose liquidation value is higher than the going concern value, the method and terms for a merger or acquisition should be determined differently. If the corporation has a high going concern value and is a listed corporation, the right to participate in the reconstruction of the corporation should be given to the creditors first.

As in *Pan Ocean Shipping Company*,³⁸⁷ after making a debt-for-equity swap without a merger or acquisition terminating the reorganization plan, execution can become a basic model. If a reorganization plan is changed in the midst of being carried out by the bankruptcy court, there can be problems of fairness and equity due to the change in liquidation value of the fixed accounting policy that is the basis of valuation for the secured claims.

E. Balance Sheet After Reorganization Plan Approval

If the going concern value is estimated by the earning power standard, as in Korea, the balance sheet should be prepared³⁸⁸ using the going concern value based on the earning power.³⁸⁹ In this way, the inconsistency

³⁸⁵ See Novikoff & Jacobs, *supra* note 85, at 411 (discussing valuation methods for mergers and acquisition. Under the current situation, if “the DCF methodology is well-accepted in valuing [reorganizing] companies in the M&A context” in the United States, then the same valuation methods are applied in Korea).

³⁸⁶ See Alderson & Betker, *supra* note 35, at 5 (“If in spite of being inefficient, reorganization is chosen over liquidation, the success of a Chapter 11 plan can only be evaluated by comparing the cash flows from reorganization with the cash flows that would have been available under liquidation.”).

³⁸⁷ Judgment of May 20, 2002, 92 Pa 1040 (Seoul Dist. Court).

³⁸⁸ See *supra* note 100–101 and accompanying text.

³⁸⁹ Caplin, *supra* note 41, at 779 (“Earning power, it is said, is the only realistic basis for valuation.”); *id.* at 787 (“It might be true that, all things being equal, earning power would prove the best and most accurate basis for valuing the railroad property. Surely the

between the assets on the balance sheet and the going concern value can be settled. If there is a dispute about the current law in Korea, it should be resolved via legislation.

CONCLUSION

One leading opinion suggests that if a corporation intends to file for bankruptcy reorganization, it should do so in the United States, not in Korea.³⁹⁰ In Korea, the economic players, as well as the government, have tried to create better circumstances for corporations to do business.³⁹¹ However, in the area of bankruptcy law, the dominant tendency up to this point has been to follow a macroeconomic approach. One of the reasons for such a tendency may be that there is not much helpful data on legislative cases from the United States.

In the bankruptcy reorganization proceeding, legislation that decides between liquidation and reorganization using only one measure, future cash flow, and current bankruptcy court practices, should be changed. Even if a corporation is in normal operation and generates operating profits under ordinary economic circumstances, many corporations in the future may become involuntarily insolvent.

For example, if large-scale tort actions are filed due to environmental pollution or a class-action results from a violation of securities regulations, the parties can request an attachment relief on the assets of a corporation, or other injunctive relief, resulting in temporary but extraordinary financial distress to the corporation. From debtors' and creditors' standpoints, if this situation is viewed dispassionately, it can appear to be involuntary. This is because no one can be sure about the estimation of future cash flow.

Under the current system, when the going concern value is lower than the liquidation value, the corporation must terminate the reorganization proceeding even if the going concern value is in principle higher than the debt. The decision should not be left unsettled where a corporation that followed the bankruptcy reorganization proceeding on account of involuntary circumstances cannot present a reorganization plan to its creditors for the sole reason of having a high liquidation value. The reason that it is possible for the going concern value to be higher than the debt is because not all of the claimed amount arising from the dispute will become debt. If no one can be sure of future cash flow, no executives or

logical answer to the valuation question would seem to lie in the earning capacity.”).

³⁹⁰ See Soonyoung Myung, *Pa-san-gi-up-eh-ya-bak-han-europe: Jae-gi-ha-ryuh-gudeon-mi-kuk-seo-mang-ha-rah?* [Europe's Stinginess Towards Bankrupt Corporations: Should a Failed Corporation Rebuild in the U.S.?], MAEKYUNG ECON., Apr. 10, 2002, at 53 (stating that should you wish to turn around it is best to go bankrupt in the U.S. and further stating that in England, the rebuilding of a corporation imitates the United States) (S. Korea).

³⁹¹ See KIM, *supra* note 25, at 466–71.

shareholders will want to undergo reconstruction in a bankruptcy reorganization proceeding where there is an uncertain future.

What is clear is that the bankruptcy reorganization proceedings in Korea should be executed differently. Even without reforming the law, revisions could still be made to the Supreme Court rule on valuation methods for going concern value and current practice of the bankruptcy court. Ultimately, the law that only allows unilateral valuation standards should be fundamentally reformed so that both the estimation of the final corporate value and its distribution can be made by the bankruptcy court. Multiple valuation methods should be used to increase the likelihood of the accuracy of the valuation.³⁹²

As no further support for new capital is needed for a corporation such as the one addressed above, neither the government nor the creditors can intervene, thus raising an issue of economic efficiency. The means of reorganizing a corporation should be discussed between the creditors and debtors, including those claiming to have suffered damage due to torts or statutory violations. If a corporation used a bankruptcy reorganization proceeding due to a dispute over large-scale environmental pollution, the fact that such a case is settled with a trust is noteworthy. The bankruptcy court need only review the arguments and settlement to ensure it was formed within the legal boundary.

Not surprisingly, the reality in Korea is different. As discussed earlier, due to the fear of bankruptcy liquidation, it is, in fact, impossible to dream of reorganizing a corporation within the bankruptcy reorganization proceeding. As a result, bankruptcy reorganization proceedings are perverted because the debtors or shareholders are led by creditors who are well acquainted with the weak points of the corporation. Some special creditors who have lots of information can easily control the outcome of every subject in a bankruptcy reorganization proceeding in Korea.

The DRBA, effective since May 2006, is in the process of adopting all of the provisions of the past Corporate Reorganization Act.³⁹³ Given the circumstances, it is important to keep in mind that a legal system can be made that is not appropriate for the actual conditions in Korea but merely a pursuit of the ideal. When interested parties in the bankruptcy system attempt to enact or reform bankruptcy law, they should make an effort to have a wide understanding of the Korean legal system and foreign legislative cases. I hope that there will be legal reforms of corporate valuation and its distribution methods that will be appropriate for the real situation in Korea.

³⁹² See Heroy & Schaeffer, *supra* note 33, at 63.

³⁹³ The Corporate Reorganization Act was repealed on March 31, 2006 and replaced with the DRBA.

APPENDIX I-CORPORATE VALUE OF KOREA INDUSTRY
DEVELOPMENT INC.

(KRW / BILLION)

KOREA INDUSTRY DEVELOPMENT	PREP. Yr	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
SALES	3,060	5,604	4,852	4,693	5,668	6,162
OPERATING PROFITS	51	451	376	361	474	529
CASH FLOW	386	718	669	385	124	326
DISCOUNT RATE (r)	0.155	0.154	0.153	0.152	0.151	0.15
PRESENT VALUE 10 Yr	346	558	451	225	63	144
PV After 11 Yr ³⁹⁴						
NON OPERATING ASSET						
GOING CONCERN VALUE						
LIQUIDATION VALUE						
ASSETS						
LIABILITUES						

KOREA INDUSTRY DEVELOPMENT	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	TOTAL
SALES	6,469	6,757	7,020	7,261	7,450	64,996
OPERATING PROFITS	557	576	599	619	632	5,225
CASH FLOW	352	328	369	394	404	4,455
DISCOUNT RATE (r)	0.15	0.15	0.15	0.15	0.15	
PRESENT VALUE 10 Yr	135	109	107	99	88	2,325
PV After 11 Yr						592
NON OPERATING ASSET						2,219
GOING CONCERN VALUE						5,173
LIQUIDATION VALUE						4,676
ASSETS						9,141
LIABILITUES						9,212

³⁹⁴ The Seoul Bankruptcy courts apply the growth rate in the final projected year as the terminal growth rate. This is true for "PV After 11 Yr" in each section of Appendix I.

APPENDIX I-CORPORATE VALUE OF KOREA INDUSTRY
DEVELOPMENT INC.

(KRW / BILLION) CONTINUED

KOREA INDUSTRY DEVELOPMENT	Annual Average	Y/r (0.15)	Y/r (0.1)	Y/r (0.05)
SALES	5,908			
OPERATING PROFITS	475			
CASH FLOW	405	405/ 0.15	405/ 0.1	405/ 00.05
DISCOUNT RATE (r)				
PRESENT VALUE 10 Yr		2,700	4,050	8,100
PV After 11 Yr				
NON OPERATING ASSET		2,219	2,219	2,219
GOING CONCERN VALUE		4,919	6,269	10,319
LIQUIDATION VALUE				
ASSETS				
LIABILITUES				

APPENDIX II-CORPORATE VALUE OF DONGSUH INDUSTRIAL
INC. (KRW / BILLION)

DONGSUH INDUSTRIAL	PREP. Yr	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
SALES	1,270	1,230	1,443	1,679	1,710	1,738
OPERATING PROFITS	-15	99	173	232	225	216
CASH FLOW	6	163	180	237	272	261
DISCOUNT RATE (r)	0.155	0.155	0.154	0.153	0.152	0.151
PRESENT VALUE 10 Yr	-2	105	113	118	133	110
PV After 11 Yr ³⁹⁵						
NON OPERATING ASSET						
GOING CONCERN VALUE						
LIQUIDATION VALUE						
ASSETS						
LIABILITUES						

³⁹⁵ The Seoul Bankruptcy courts apply the growth rate in the final projected year as the terminal growth rate. This is true for "PV After 11 Yr" in each section of Appendix II.

APPENDIX II-CORPORATE VALUE OF DONGSUH INDUSTRIAL
INC. (KRW / BILLION) CONTINUED

DONGSUH INDUSTRIAL	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	TOTAL
SALES	1,764	1,770	1,813	1,829	1,887	18,133
OPERATING PROFITS	209	192	177	157	145	1,810
CASH FLOW	218	196	178	172	155	2,038
DISCOUNT RATE (r)	0.15	0.15	0.15	0.15	0.15	
PRESENT VALUE 10 Yr	83	64	44	35	27	830
PV After 11 Yr						184
NON OPERATING ASSET						89
GOING CONCERN VALUE						1,108
LIQUIDATION VALUE						988
ASSETS						1,822
LIABILITUES						1,593

DONGSUH INDUSTRIAL	Annual Average	Y/r (0.15)	Y/r (0.1)	Y/r (0.05)
SALES	1,648			
OPERATING PROFITS	164			
CASH FLOW	185	185/ 0.15	185/ 0.1	185/ 0.05
DISCOUNT RATE (r)				
PRESENT VALUE 10 Yr		1,233	1,850	3,700
PV After 11 Yr				
NON OPERATING ASSET		89	89	89
GOING CONCERN VALUE		1,322	1,939	3,789
LIQUIDATION VALUE				
ASSETS				
LIABILITUES				