Market Approach IP Valuation Methods

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Many valuation analysts automatically apply income approach or cost approach methods in the valuation of intellectual property (IP) within a commercial bankruptcy environment. This discussion describes and illustrates the market approach methods that may also be used in the bankruptcy-related IP valuation.

Introduction

Valuation analysts (analysts) may be asked to value debtor company intellectual property (IP) for many bankruptcy reasons.

These bankruptcy-related reasons include the following:

1. The assessment of the debtor company solvency
2. A secured creditor's collateral and protection
3. The fairness of a Section 363 IP asset sale or license transaction
4. The debtor's Section 365(n) rejection of its IP licenses (and the implications of that rejection on the IP licensees)
5. The reasonableness of a plan of reorganization
6. Various other reasons

Many analysts immediately think of applying income approach or cost approach intangible asset valuation methods to value a debtor company's IP. However, if sufficient market-derived pricing data are available, market approach intangible asset valuations can also be used to provide guidance with regard to the debtor company IP value.

First, this discussion summarizes the various types of debtor company IP that analysts may be asked to value within a bankruptcy context.

Second, this discussion summarizes the generally accepted IP valuation approaches and methods.

Finally, this discussion describes and illustrates a common market approach method for valuing debtor company IP. Analysts (and debtors, creditors, counsel, and other parties to the bankruptcy proceeding) should consider the application of market approach methods in the debtor company IP valuation.

IP Types

Bankruptcy Code Section 101 (35A) provides the following definition of IP:

> (35A) The term "intellectual property" means–
>
> (A) trade secret;
>
> (B) invention, process, design, or plant protected under title 35;
>
> (C) patent application;
>
> (D) plant variety;
>
> (E) work of authorship protected under title 17; or
>
> (F) mask work protected under chapter 9 of title 17;
>
> to the extent protected by applicable nonbankruptcy law.

Outside of the bankruptcy context, trademarks and trade names are also considered to be common IP types. However, trademarks are not mentioned as part of the Bankruptcy Code definition of IP. Within the bankruptcy context or otherwise, these IP types are considered to be a specific subset of the general category of commercial intangible assets.

For valuation purposes, the patent category of IP is often expanded to include patent applications, the proprietary technology and product or process designs encompassed by the patent, and the engineering drawings, schematics and diagrams, and other technical documentation that relate to the patent or patent application.

The copyrights category of IP is often expanded to include both registered and unregistered copyrights on publications, manuscripts, white papers, musical compositions, plays, manuals, films, computer source code, blueprints, technical drawings, and other forms of documentation.

And, the trade secrets category of IP is often expanded to include any information or procedures that (1) the owner/operator keeps secret and (2) provides some economic benefit to the owner/operator.

Trade secret IP may include computer software source code, employee manuals and procedures, computer system user manuals and procedures, station or employee operating manuals and procedures, chemical formulas, food and beverage recipes, product designs, engineering drawings and technical documentation, plant or process schematics, financial statements, employee files and records, customer files and records, vendor files and records, and contracts and agreements.

Valuation Approaches and Methods

All of the generally accepted intangible asset valuation approaches may be applicable to the analysis of debtor IP. Exhibit 1 lists the generally accepted intangible asset cost approach, market approach, and income approach valuation methods that are applicable to the analysis of debtor company IP.

Market approach IP valuation methods are particularly applicable when there are a sufficient quantity of transactional data related to either comparable (almost identical to the subject) IP or guideline (similar from an investment risk and expected return perspective to the subject) IP. These IP transactions may relate to either sale or license transactions. Such arm's-length, third-party transactions involving IP are typically called "comparable uncontrolled transaction (CUT) sales or licenses."

The analyst attempts to extract market-derived valuation pricing metrics (e.g., sale pricing multiples, license royalty rates, or income capitalization rates) from these CUT data in order to apply them to the corresponding metrics of the debtor company financial fundamentals. The result of applying the market-derived pricing multiples or rates to the debtor company fundamentals in the market approach indication of the subject IP value.

In the relief from royalty (RFR) method, the analyst searches for arm's-length licenses of IP that may provide pricing guidance with regard to the subject IP. Typically, the analyst is looking for a market-derived royalty rate that is expressed as a percentage (or multiple) of a common financial metric. The most common IP royalty rate metric that analysts look for is a royalty rate expressed as a percent of the licensee's revenue.

In other words, the analyst looks for arm's-length license agreements where the use of the comparable IP is licensed from an independent licensor to an independent licensee for a license fee that is expressed as a percentage of the licensee's revenue.

In the CUT method, the analyst searches for arm's-length sales of IP between independent parties. In other words, the analyst is looking for the arm's-length sale of a fee simple interest in the comparable IP from an independent seller to an independent buyer.

In particular, the analyst is looking for CUT sales data that can be expressed as a multiple of the number of IP units sold or as a multiple (or ratio) of the IP owner/operator's revenue or income. Such pricing metrics could include dollars per number of

Exhibit 1
Generally Accepted Valuation Approaches and Methods Applicable to the IP Valuation

Cost approach methods
- Reproduction cost new less depreciation method
- Replacement cost new less depreciation method
- Trended historical cost less depreciation method

Market approach methods
- Relief from royalty method
- Comparable uncontrolled transactions method
- Comparable profit margin method

Income approach methods
- Differential income (with/without) method
- Incremental income method
- Profit split method (or residual profit split method)
- Residual (excess) income method

patents in an IP portfolio, dollars for line of computer software source code, or dollars per number of engineering drawings or blueprints transferred.

Exhibit 2 presents some of the automated data sources that analysts commonly refer to in the search for guideline IP sale or license transactions. These automated databases provide complete copies of the IP sale or license documents. The analyst reviews these potential CUT transactions and selects the most comparable transactions to provide pricing guidance related to the debtor company IP.

These databases are searchable by type of IP, by owner/operator SIC code, by transaction date time period, by country of transaction participants, and by other search criteria. These online data sources typically obtain their source documents from SEC-registered company (sale or license transaction participants) public filings.

In the comparable profit margin (CPM) method, the analyst searches for publicly traded companies that are sufficiently comparable to the subject debtor company—except that the subject debtor company owns and operates the unique IP and the selected public companies own and operate a generic (or no) IP. This CPM method is based on the premise that the subject IP provides a profit margin advantage for the subject debtor company compared to the selected guideline companies.

This profit margin advantage is typically measured at the earnings before interest and taxes (EBIT) profit margin level. For example, let's assume that the subject IP owner/operator earns a 20 percent EBIT margin and that the median EBIT margin of the selected guideline companies is a 15 percent EBIT margin. According to the CPM method, the IP owner/operator's 5 percent profit margin advantage could be assigned as a reasonable royalty rate for the subject IP.

That royalty rate (based on the incremental profit margin) is multiplied by the debtor company's revenue to estimate a royalty income stream. The present value of the royalty income stream over the IP remaining useful life (RUL) is the CPM method value indication for the debtor IP.

Exhibit 3 provides a list of the common online data sources that analysts use to identify either industry average or comparable company profit margins. These comparable profit margins are then compared to owner/operator's profit margin in order to identify any IP-related excess profit margin.

Exhibit 2
Common Online Databases for IP Sale or License Transaction Data

RoyaltySource

www.royaltysource.com—This AUS Consultants database provides IP license royalty rates and IP sale data. Source documents are available for download.

RoyaltyStat, LLC

www.royaltystat.com—RoyaltyStat is a subscription-based database of IP license royalty rates, IP license agreements, and IP sale data compiled from Securities and Exchange Commission documents.

Royalty Connection

www.royaltyconnection.com—Royalty ConnectionTM provides online access to license royalty rate and other license information related to all types of technology, patents, trade secrets, and know-how IP.

ktMINE

www.bvmarketdata.com—ktMINE is an interactive database that provides direct access to IP license royalty rates, IP license agreements, and IP sale agreements. Source documents may be printed.

Market Approach IP Valuation Illustrative Example

Let's assume that DIP Company is seeking debtor in possession (DIP) financing. All of the debtor company's tangible assets are already pledged as a secured financing collateral. However, the lender will accept the debtor's trademarks and trade names as collateral for the DIP financing. Before extending the DIP financing, the lender requires an independent valuation of the subject trademarks and trade names.

An analyst is retained to perform the IP collateral value valuation as of January 1, 2016. The analyst selects the market approach and the RFR method.

After analyzing several guideline IP license agreements, the analyst selects 2 percent of revenue as the appropriate market-derived IP license royalty rate. DIP Company management provided the analyst with a five-year revenue projection for the debtor company.

Working with DIP Company management, the analyst selected (1) a 12 percent present value discount rate (based on the debtor's weighted average cost of capital), (2) a 15-year trademark total RUL,

Exhibit 3
Common Online Data Sources for the Selection of IP CPM Data

FactSet Research Systems, Inc.—FactSet
Hoover's, Inc.—Hoover's Company Records
Mergent, Inc.—MergentOnline
Standard & Poor's—Capital IQ
Thomson Reuters—Thomson ONE Analytics

and (3) a 0 percent expected long-term growth rate beyond the discrete projection period.

The analyst's market approach RFR method IP valuation analysis is summarized in Exhibit 4.

Based on the illustrative fact set, the analyst concluded that the fair market value of the hypothetical DIP Company trademarks and trade names is $590 million.

Summary

Analysts may be called on to value a debtor company's IP for a variety of bankruptcy-related reasons. This discussion summarized the generally accepted IP valuation approaches and methods.

Analysts (and other parties to the bankruptcy) often initially think of applying income approach or market approach valuation methods to value the debtor company IP. However, if there are sufficient market-derived sale or license transactional data available, the market approach can also provide meaningful pricing guidance with regard to the debtor company IP.

This discussion summarized the generally accepted market approach IP valuation methods. And, this discussion provided a simplified illustration of one common market approach IP valuation method—the RFR method. Analysts (and other parties to the bankruptcy) should consider market approach methods in the bankruptcy-related IP valuation.

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Exhibit 4
DIP Company
Trademarks and Trade Names
Fair Market Value Valuation
Market Approach—Relief from Royalty Method
As of January 1, 2016

	Projected Calendar Years				
	2016	2017	2018	2019	2020
Discrete Projection Period Trademark Income:	$000	$000	$000	$000	$000
Management-Provided Revenue Projection [a]	8,634,139	8,358,945	8,042,393	7,720,369	7,377,326
Arm's-Length Trademark License Royalty Rate [b]	2%	2%	2%	2%	2%
Projected Pretax Trademark License Income	172,683	167,179	160,848	154,407	147,547
Less: Projected Income Tax Rate [c]	37%	37%	37%	37%	37%
Projected After-Tax Trademark License Income	108,790	105,323	101,334	97,277	92,954
Discounting Periods [d]	1	2	3	4	5
Present Value Factor @ 12% [e]	.8929	.7972	.7118	.6355	.5674
Present Value of Trademark License Income	97,138	83,964	72,130	61,820	52,742
Sum of Present Value of Trademark License Income	397,018				
Terminal Period Trademark Income:					
Fiscal 2021 Normalized Trademark Income [f]	$92,954				
Direct Capitalization Multiple [g]	5.6502				
Terminal Value of Trademark License Income	525,209				
Present Value Factor @ 12%	.5674				
Present Value of Terminal Period Trademark Income	$298,003				
Trademark Value Summary:					
Present Value of Discrete Period Trademark Income	$287,794				
Present Value of Terminal Period Trademark Income	298,003				
Fair Market Value of the DIP Trademarks (rounded)	$590,000				

[a] Revenue projection provided by DIP Company management, consistent with the company's plan of reorganization.
[b] Based on the analyst's selection and review of arm's-length guideline IP license agreements.
[c] Based on the DIP Company expected income tax rate.
[d] Assumes year-end discounting for simplification purposes only.
[e] Based on the DIP Company 12 percent weighted average cost of capital.
[f] Based on the 2020 projected after-tax trademark income and a 0% expected long-term growth rate.
[g] Based on a present value of an annuity factor for a 12 percent discount rate and a 10-year expected RUL (after the 5-year discrete projection period).