

# EXPERT insights

A Quarterly Newsletter for the Legal Community

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## Welcome to the winter edition of Expert Insights – a quarterly newsletter for lawyers

### IN OUR PREVIOUS NEWSLETTER:

- we began our series on financial concepts and frameworks commonly used in business valuation, discussing the basis used for measuring value; and
- discussed the uses and limitations of financial statements in intellectual property litigation.

### IN THIS EDITION OF EXPERT INSIGHTS:

- we continue our series on business valuations concepts, discussing the approaches generally used to determine value; and
- we discuss how the recent ruling in the Uniloc USA, Inc. et al v Microsoft Corporation case impacts the evaluation of royalty rates used as a basis of determining damages.

We hope you find this newsletter to be informative. We of course appreciate any feedback you may have. Please feel free to contact us at [info@cvpl.com](mailto:info@cvpl.com), or by calling 416.597.1198.

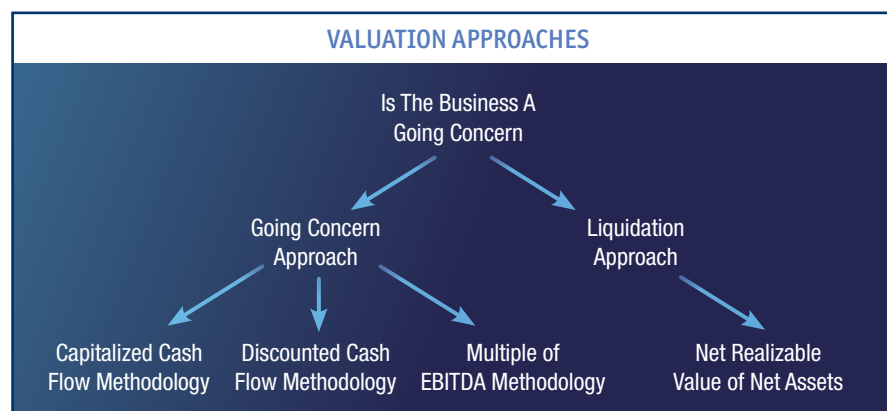
Note: This newsletter is meant to encourage general best practices only and is not intended as a substitute for professional advice. Specific situations or circumstances may warrant alternative approaches.

# APPROACHES TO DETERMINE VALUE

by *Dennis Leung, CA, CBV, CF, Senior Director, Campbell Valuation Partners Limited*

When determining the value of a business, an assessment must be made as to whether the premise of value should be based on a going concern approach or a liquidation approach. A going concern approach is generally adopted when the business being valued is deemed to be economically viable. Where a business is forecast to generate minimal or negative operating cash flow for an extended period of time, a liquidation approach may be warranted.

- a mature business with relatively consistent discretionary cash flows;
  - a business where the average discretionary cash flows through business cycles can be reasonably estimated. In situations where the average discretionary cash flows cannot be reasonably estimated into perpetuity, the discounted cash flow approach may be more appropriate to determine the value of a business (discussed below);
- and
- a reliable cash flow forecast is not available.



The primary components of the capitalized cash flow methodology are discussed below.

## **Maintainable Discretionary After-Tax Cash Flow**

To determine the maintainable discretionary after-tax cash flow, the

While there are several methodologies to determine value under a going concern approach, the most common methods are the capitalized cash flow methodology, the discounted cash flow methodology and the multiple of EBITDA methodology. Under the liquidation approach, value is determined based on the net realizable value of the business' net assets (assets less liabilities). We discuss each of the approaches below.

## **Capitalized Cash Flow Methodology**

Under the capitalized cash flow methodology, an estimated range of maintainable discretionary after-tax cash flow is “capitalized” by a rate of return. Adjustments are then made for the present value of existing tax pools, redundant assets, and outstanding interest bearing debt and equivalents to derive the en bloc equity value of the shares of a business. This methodology inherently assumes that the business will generate relatively stable discretionary cash flows into perpetuity. As such, the capitalized cash flow methodology is generally applied to:

estimated range of maintainable cash flow from operations, normally defined as earnings before interest, income taxes, depreciation and amortization (“EBITDA”) is determined. The estimate is generally based on an analysis of historical, current, and when available, projected results, as well as the company, industry and economic factors that may impact a business’ ability to generate cash flow in the future. Income taxes at the prevailing tax rate are deducted, along with the sustaining capital reinvestment, which represents the annual cash required to purchase fixed assets in order to sustain the maintainable discretionary after-tax cash flow.

## **Rate of Return**

The maintainable discretionary after-tax cash flow is “capitalized” by a rate of return or “capitalization rate” to determine the capitalized discretionary cash flow of a business. The capitalization rate reflects anticipated future discretionary cash flow growth and the perceived level of risk of achieving the estimated maintainable discretionary after-tax cash flow. The perceived level of risk is a function of the prevailing and forecast economic conditions, the nature

of the industry, and company-specific factors. Company-specific factors may include customer dependency, supply risk, and reliance on key employees.

### ***En Bloc Fair Market Value under the Capitalized Cash Flow Methodology***

To determine the en bloc fair market of the shares of a business, adjustments to the capitalized discretionary cash flow are made for:

- existing income tax pools, which normally include the undepreciated capital cost of assets utilized by the business at the valuation date and available tax losses, and other prospective tax benefits not accounted for as a component of discretionary cash flows;
- redundant assets (or non-operating assets), which are assets that are not required by a business to generate the prospective discretionary cash flow;
- other items not reflected in the capitalized discretionary cash flow. These may include one-time costs or benefits that are not included in the determination of the maintainable discretionary cash flow; and
- outstanding interest bearing debt and interest bearing debt equivalents. As the interest on outstanding debt is not deducted in the determination of the maintainable discretionary after-tax cash flow it is deducted from the capitalized discretionary cash flow.

### ***Discounted Cash Flow Methodology***

The discounted cash flow methodology is in essence an extension of the capitalized cash flow methodology. The primary difference is that the capitalized cash flow methodology is based on one annual maintainable discretionary cash flow amount and assumes that the annual discretionary cash flow remains at the same level into perpetuity. The discounted cash flow methodology adopts a forecast of the prospective discretionary cash flow a business is expected to generate over a period of time (generally three to five years). The forecast cash flows are discounted by a rate of return to determine the net present value of the forecast discretionary after-tax cash flow. Beyond the forecast period, an estimate is then made of the value of the annual maintainable discretionary cash flows, which is capitalized to determine the terminal value and then

discounted to the valuation date to reflect the net present value. The discounted cash flow methodology is generally applied in situations where a reasonable forecast has been prepared.

The primary components of the discounted cash flow methodology are discussed below.

### ***Present Value of the Annual Discretionary Cash Flow during the Forecast Period***

To determine the present value of the annual discretionary cash flow, the annual prospective cash flow from operations (EBITDA) is estimated, generally for a three to five year period (the "Forecast Period"). Income taxes at applicable rates and the capital investment requirements are deducted over the Forecast Period. Adjustments are then made for incremental net trade working capital requirements. The annual prospective cash flow after deducting income taxes and the capital investment requirements and adjusting for incremental net trade working capital requirements result in the forecast annual discretionary cash flow.

The forecast annual discretionary cash flow is discounted to a present value amount using a discount rate. The discount rate reflects the risk of achieving the projected annual discretionary cash flow during the Forecast Period, and takes into consideration the prospective economic conditions, the outlook of the industry that the business operates in and company-specific factors.

### ***Terminal Value***

The terminal value is calculated by estimating the annual maintainable discretionary cash flow beyond the Forecast Period, divided by a capitalization rate (similar to the capitalized cash flow methodology). The terminal value is discounted to its present value using the discount rate applied to the annual discretionary cash flow over the Forecast Period.

### ***En Bloc Fair Market Value under the Discounted Cash Flow Methodology***

The en bloc fair market of the shares of a business under the discounted cash flow methodology is the sum of the present value of the annual discretionary cash flow during the Forecast Period and the terminal value. This results in the net present value of all prospective discretionary cash flow. Existing income tax pools and redundant assets are

added and outstanding interest bearing debt and debt equivalents are deducted from the net present value of all prospective discretionary cash flow to determine the en bloc fair market value of the shares of a business.

## Multiple of EBITDA Methodology

Under the multiple of EBITDA methodology, an estimated maintainable EBITDA is multiplied by an EBITDA multiple to derive an enterprise value. Redundant assets are added and outstanding interest bearing debt and debt equivalents are deducted from the enterprise value to determine the en bloc fair market value of the shares of a business.

This methodology does not specifically address the valuation implications of income taxes and capital expenditure requirements, both of which are considered in

the capitalized cash flow methodology and the discounted cash flow methodology. As such, while the multiple of EBITDA methodology is frequently utilized, it is fraught with challenges if it is not properly applied.

## Liquidation Value Basis

When it is determined that a business is not viable as a going concern, value is typically determined on liquidation value basis. This methodology may also be appropriate in the infrequent circumstance where the expected liquidation value exceeds the en bloc fair market value of a business. Liquidation value is calculated as the net realizable value of each asset, net of disposition costs (i.e. sales commission), less the fair market value of liabilities and all liquidation related costs.

# RECENT UNILOC CASE RAISES THE BAR FOR EXPERTS

by *Suzanne C. Loomer, MAcc, CA, CBV, Managing Director, Campbell Valuation Partners Limited*

A recent decision in a United States case raises the bar for experts in calculating damages and has called into question the future use of what has come to be known as the “Rule of 25”. The Rule of 25 is a popular method in Canada and the US for evaluating royalty rates, including royalty rates used as a basis for determining damages. The “Rule” was intended to provide a benchmark to estimate the royalty rate that would be arrived at between the parties in a hypothetical negotiation by looking at the resulting split of estimated profits; a profit split between licensor and licensee that leaves the licensor with 25% of the pre-tax profits from the sale of the product and the licensee receiving 75%.

In *Uniloc USA, Inc. et al v Microsoft Corporation*, the Court of Appeals for the Federal Circuit ruled “this Court now holds as a matter of Federal Circuit law that the 25 percent rule of thumb is a fundamentally flawed tool for determining a baseline royalty rate in a hypothetical negotiation. Evidence relying on the 25 percent rule of thumb is thus inadmissible under *Daubert* and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case at issue.”

## What is the Rule of 25

The Rule of 25 is a tool that has been used and written about for many decades. The “Rule” was intended to provide a benchmark from which a reasonable royalty rate could be determined. While the history of the rule is based on empirical evidence from various studies and data that have shown that, on average, the profit split between licensor and licensee is 25% and 75%, respectively, most valuers would acknowledge that the “Rule” is only the starting point for the analysis. Properly applied, the “Rule” is not a rule at all, but rather a framework for thinking through the issues and relevant factors in determining a reasonable royalty, using 25%/75% profit split ratio as a starting point.

In the *Uniloc* case, the expert for *Uniloc* started with the 25% and then considered a number of case-specific factors to adjust the sharing ratio. After these considerations, he concluded that such considerations would offset, and that 25% was a reasonable sharing ratio in this case.

## Criticisms of the Rule in the Uniloc Case

The court summarized some of the supporting arguments for the Rule including that its veracity has been confirmed

by years of licensing and profit data across many different companies and industries. The court also set out some of the criticisms of the Rule, including:

- It fails to account for the unique relationship between the patent and the accused product;
- It fails to account for the unique relationship between the parties; and
- The Rule was not necessarily the basis for the original negotiations between the parties.

In the Uniloc case, there was no evidence that the parties had historically used the Rule of 25 in arriving at negotiated rates, and the 25% starting point was not at all tied to the facts of the case. As a result, the court found that even using the Rule as a starting point to which adjustments were made for case-specific factors (referring to the factors in *Georgia-Pacific Corp. v. United States Plywood Corp.*) were then applied was not sound because “beginning from a fundamentally flawed premise and adjusting it based on legitimate considerations specific to the facts of the case nevertheless results in a fundamentally flawed conclusion.”

### **Alternative Approach**

The Court was asked to rule on whether Microsoft was entitled to a new trial on damages, so an acceptable set of calculations was not yet in front of the Court. While the Court did not rule as to what the appropriate approach should have been, it did offer the following guidance:

- Expert evidence must carefully tie proof of damages to the claimed invention’s footprint in the market place; and
- Evidence relating to royalties paid or received in licenses for the patent that is the subject of the lawsuit, or in comparable licenses, must be tied to the facts of the case at issue and what hypothetical negotiations may have taken place in light of the facts and circumstances of the case.

### **What does it Mean for Expert Testimony?**

This case highlights the importance of experts considering the facts and circumstances of a particular case. In calculating a reasonable royalty rate, the expert should attempt to calculate what may have occurred as part of the hypothetical negotiation between the specific parties for the specific product in the case at hand.

The Uniloc case highlights the importance of experts performing sufficient due diligence on the facts and preparing good quality analysis and interpretation of the data.

As for the Rule of 25, the framework for thinking about profit sharing between licensor and licensee in determining a reasonable royalty may still hold (particularly if this kind of analysis would have been considered by the parties in a hypothetical negotiation); however, the use of 25% as a starting point is now in question.

## **DID YOU KNOW?**

Derek van der Plaat has joined Veracap Corporate Finance, an affiliated firm of Campbell Valuation Partners, as a Managing Director. Derek has a stellar background, which includes almost 10 years at CIBC World Markets, where he held the role of Managing Director for their Mid-Market M&A and Private Placements business. Following that role, Derek co-founded Puretracks Inc., an online digital music company, which he built and eventually sold to Bell Canada in 2006. Most recently, Derek was the CEO of SilverBirch Inc., a mobile phone video game developer. We at CVPL are excited to incorporate Derek’s “real world” industry experience into our valuation and damages practice.

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## **Campbell Valuation Partners Limited**

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