### **Understanding Basic Valuation Principles - A 101 Guide for Lawyers**

As lawyers work on cases, they may need to evaluate valuation reports for their clients. At a recent webinar themed "Understanding Basic Valuation Principles – A 101 Guide for Lawyers" organised by the Institute of Valuers and Appraisers, Singapore (IVAS) and Singapore Academy of Law (SAL), CVAs from established valuation practices gave an overview of valuations and the key concepts, principles and methods behind them.

# Understanding the basis of value

"When someone says that a business is worth \$50 million, that is not a meaningful statement to a valuer. Is \$50 million what you get when you sell the business in an orderly transaction? In a fire sale? Or is that what you get when you liquidate the business and sell its component parts... To really understand what the value means, we need to know its basis of value," said Mr Loh Yee Chuan, CVA, Director, Corporate Finance, Valuations in KPMG in Singapore.

### Principal valuation approaches and business valuation

Mr Loh outlined the three main valuation approaches, and the principles guiding valuations. The three valuation approaches are:

#### 1. The income approach

This creates a valuation by discounting the asset's projected future cash flow to a present value. It is typically used when the asset's ability to produce income is the main element that affects its value.

The discount rate should reflect not only the time value of money but risks associated with the projected cash flows. Mr Loh explained: "When you are valuing a start-up, it may have rosy cash flow projections, but those projections may be risky. The start-up may not achieve those projections or survive until a profitable exit. The discount rate should account for those risks."

### 2. The market approach

This approach works by comparing the asset to identical or similar ones for which price information is available. Such price information can come from the comparable assets being actively traded, or recent transactions involving them.

Valuers should look at the industry, stage of development, growth rates, margins, and capital requirements among other factors when selecting comparable assets. They may also have to consider discounts or premiums in their valuation to adjust for differences between the subject asset to be valued and the comparable assets selected. For example, shares in private firms may warrant a discount for lack of marketability relative to shares in otherwise identical, publicly-traded firms, since it would take a longer time and higher cost to sell those shares.

### 3. The cost approach

This approach is based on the assumption that a buyer will pay no more for an asset than the cost it would take to acquire one of equal utility. It may be used when the asset does not generate income directly, or when its unique nature rules out using the market and income approaches.

There are several valuation methods under the cost approach. The replacement cost method estimates an asset's value by determining the cost of an asset that offers equivalent utility. The reproduction cost method calculates the cost of creating a replica of the asset. The summation method values an asset by adding the values of its component parts.

Mr Loh noted that appropriate valuation methods, inputs and assumptions must be applied to get credible valuations. He said: "Valuers should maximise the use of relevant observable market information, with price information from an active market generally considered to be the strongest evidence of value."

At the same time, valuers can employ multiple approaches and methods for a single valuation, especially if there are insufficient inputs for one method to produce a reliable result.

He added: "If the different approaches lead to widely divergent valuations, the valuer should analyse why this is so, check that the results from each method are reasonable, and reconcile the differing values into a single conclusion."

## Insights into valuing intangible assets

With intangible assets on the rise, Mr Loh also elaborated on ways to value them. The income approach is most commonly adopted to value a range of intangible assets, including technologies, customer-related assets such as contracts and relationships, brands, trademarks, and other intangible assets such as franchise agreements and licenses.

Some common income approach valuation methods are:

### 1. The relief-from-royalty method

This is commonly used for valuing technologies, brands, tradenames and trademarks, and this looks at the value of hypothetical royalty payments that would be saved through owning the asset.

## 2. The multi-period excess earnings method

This estimates the present value of cash flows attributable to assets such as customer relationships, order backlogs, technology, and in-process research and development. It excludes the proportion attributable to other assets required to generate the cash flows.

"When it comes to customer relationships, for instance, in order to generate revenues from those relationships, you may need other assets such as factories, staff and working capital. Valuers need to deduct the returns needed by these contributory assets when estimating the value of customer relationships," Mr Loh explained. Valuers sometimes apply the cost approach for intangible assets, including acquired third-party software, and internally-developed and internally-used non-marketable software. "The market approach, however, is rarely used because intangible assets are rarely actively traded in markets," Mr Loh said.

This calculates the value of an intangible asset by looking at the difference in a business' value with and without the subject intangible asset. This method is often used in the valuation of noncompete agreements.

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#### A look at financial instruments

Lawyers may also come across valuations of financial instruments in the course of their work. In accounting standards, financial instruments refer to contracts that give rise to a financial asset in one entity and a financial liability or equity instrument in another entity, said Mr Chew Kwan Eng, CVA, a Partner from Ernst & Young.

Mr Chew shared that there are different ways of categorising financial instruments, one of the ways is to categorise into the following 3 groups:

- 1. Fundamental instruments, such as loans, shares and bonds.
- 2. Derivative instruments, which are instruments whose value is derived from the value of an underlying asset, such as a commodity, forex, bond or stock. Examples of derivative instruments include futures, forwards, options and swaps.
- 3. Hybrid instruments, are constructed using fundamental and derivative instruments, such as structured notes, exchangeable notes, convertible bonds and dual currency bonds.

Financial instruments can also be categorised into different asset classes, including interest rate, equity, commodity, credit and other classes.

While the valuation of financial instruments with linear payoffs, such as futures and forwards, are usually straightforward, the valuation of those with non-linear payoffs, including various types of options, is more complex.

"For the non-linear products, mathematical models for the evolution of the underlying key variables, such as stock price, interest rates and foreign exchange rates, are assumed and used to model expected future cash flows, which are discounted to present value," Mr Chew said, adding that the models include closed-form formulas and Monte Carlo simulations.

Furthermore, even as valuers use different inputs to value financial instruments, they should maximise the use of relevant observable inputs, and minimise the use of unobservable ones, he continued.

Concluding the webinar, Mr Loh emphasised that lawyers should examine valuations closely: "You need to do a deep dive into how the valuation was done, what inputs were used, and what work the valuer has and has not performed."

"If a valuer says that the cash flow projections came from management, and the valuer has not looked at them, for instance, you may need to be more cautious," he said. "Delving into the nuances and details will help you to determine the credibility of a valuation."