YOUR INSIGHT JOURNAL

THE VALUATION PROFESSIONAL

DECEMBER 2022
JANUARY &
FEBRUARY 2023

ICMAI REGISTERED VALUERS ORGANISATION

About ICMAI Registered Valuers Organisation

The Companies Act, 2013 brought into the light the concept of 'Registered Valuers' to regulate the practice of Valuation in India and to standardize the valuation in line with International Valuation Standards. Consequentially, The Ministry of Corporate Affairs (MCA) notified the provisions governing valuation by registered Valuers [section 247 of the Companies Act, 2013] and the Companies (Registered Valuers and Valuation) Rules, 2017, both came into effect from 18 October, 2017.

In view of the above, the Institute of Cost Accountants of India (Statutory body under an Act of Parliament) has promoted ICMAI Registered Valuers Organisation (ICMAI RVO), a section 8 company under Companies Act, 2013 on 23rd February 2018, which is recognised under Insolvency and Bankruptcy Board of India (IBBI) to conduct educational courses on Valuation for three different asset classes - Land & Building, Plant & Machinery and Securities or Financial Assets and to act as frontline regulator as Registered Valuers Organisation. ICMAI Registered Valuers Organisation is an Academic Member of International Valuation Standards Council.

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ICMAI REGISTERED VALUERS ORGANISATION

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FROM THE CHAIRMAN's DESK

CS (Dr.) Shyam Agarwal
Chairman
ICMAI Registered Valuers Organisation

Valuation is evolving in India. However till now due to lack of any regulatory architecture to regulate, guide and develop the practice of valuation in India different valuers have been taking different assumptions, following discrete approaches to valuation leading to significant differences in value conclusions.

Different Regulators in India have prescribed different and in some cases even contradictory valuation requirements to be applied in specific situations. For long, in absence of any statutory provisions and rules in place, the valuation services have been delivered by the auditors, merchant bankers, company secretaries and chartered accountants. The services delivered were largely based on subjective opinions and not on any universal standard or established frameworks. Regulation of this profession is important to ascertain standardisation of practices and reduction in commercial uncertainties.

The concept of a registered valuer is likely to have a major impact on the industry, professionals, shareholders and government. The increase in requirements for valuation will lead to a substantial increase in professional opportunities for Registered valuers. Stakeholder confidence would be boosted with the increased transparency and fairness in the valuation system. Government revenues may improve as loopholes in valuations may be plugged.

FROM THE PRESIDENT's DESK

CMA Vijender Sharma
Nominee Director
ICMAI Registered Valuers Organisation

President
The Institute of Cost Accountant of India

Credible valuations are critical to the efficient functioning of the capital markets, businesses, government and all its stakeholders. Global Financial Crisis revealed deep fault lines and taught many important lessons, one of those being that valuation really does matter! With accounting moving more and more towards value, there is need for competent and professional valuation experts globally.

Valuation is the process of determining the Economic Worth of an Asset under certain Assumptions and Limiting Conditions and subject to the data available on the Valuation date. Valuation is important because it provides prospective buyers with an idea of how much they should pay for an asset or company and for prospective sellers, how much they should sell for. Business valuation is an independent appraisal of the worth of a company. Valuation is an art and science of estimating the value for a specific purpose of a particular interest in asset at a particular moment in time taking into account all features of the asset and considering all relevant factors of the market.

Business valuation is critical for transactions including fund raising, mergers & acquisitions (M&A), sale of businesses, strategic business decisions like family or shareholders disputes, voluntary value assessment and also for regulatory compliance, tax and financial reporting purposes in India under RBI, Income Tax, Companies Act, SEBI Laws etc.

FROM THE MD's DESK

Dr. S. K. Gupta
Managing Director
ICMAI Registered Valuers Organisation

Registered Valuer – A 'Valuable' Valuer

A Valuer by being entrusted with the responsibility of arriving at valuation; upon which the entire decision of stakeholders is being dependent upon; remains a key player in the valuation exercise. A registered valuer brings on table the following advantages / assurance for the users of the services offered by RV:

- **Qualification :** A registered valuer of a particular asset class has to mandatorily possess the minimum laid down / prescribed qualification
- **Updated knowledge:** A Registered valuer is required to earn a certain minimum prescribed Continuing Professional Education credits by attending various Professional development programs being organized by the RVOs/ IBBI from time to time. This ensures continuous updation of the knowledge of the Registered valuer.
- **Regulated Professional:** The Registered valuer is regulated by Registered Valuers Organization and Insolvency and Bankruptcy Board of India in terms of :

- **Consistent application of Valuation Standards:** Valuations are relied upon by a range of stakeholders. As part of this, it is vital that valuations are conducted in a manner which is consistent and transparent across the valuation profession. The Registered valuers are mandated to use and apply International Valuation Standards which lead to credibility, relevancy and transparency of valuation information. Furthermore, they augment quality, comparability and uniformity of valuation information.
- **Professional conduct :** The Registered valuers are governed by a Model Code of Conduct prescribed under Valuation Rules 2017 which ensures that RVs follow and focus on Integrity, Objectivity, Fairness, Confidentiality, avoiding conflict of interest. In case of any reported violation of the code action is taken by RVO /IBBI
- **Peer Review :** All RVOs have a laid down process for Peer Review where the valuation report of one RV is Peer reviewed by other / senior RV for facilitating mutual learning and constant improvement in quality of the valuation process / report.

HEARTIEST CONGRATULATIONS TO NEWLY ELECTED PRESIDENT OF THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

PROFESSIONAL DEVELOPMENT

ICMAI REGISTERED VALUERS' ORGANISATION

Registered Office
The Institute of Cost Accountants of India
4th Floor, CMA Bhawan 3, Institutional Area
Lodhi Road, New Delhi – 110003

www.rvoicmai.in

PROFESSIONAL DEVELOPMENT PROGRAMS

October '2022 to December '2022	
Date	**PD Programs**
2nd October 2022	Master Class on Valuation
06th-07th October 2022	Building Valuation Practice
11th - 12th October 2022	Tool Kit for Registered Valuers
18th October 2022	National Conference Valuation Day
19th-20th October 2022	Byte Size Certificate Courses in Valuation
27th -28th October 2022	Master Class on Valuation
29th -30th October 2022	Mastering Valuation Techniques
02nd-03rd -4rth November 2022	Master Class-Understanding and developing skills to cope up with Changing landscape of Valuation
05th-6th November 2022	Master Class - Developing expertise in application of valuation Approaches
09th-10th-11th November 2022	Certificate Course- Valuation of Intangible Assets
12th-13th November 2022	THE POWER Workshop on Valuation
15th November 2022	International Lecture Series -Power Talk Automated Valuation Models
16th-17th-18th November 2022	Skill Development Program on Valuation
19th-20th November 2022	Workshop on Valuation Report Writing
23rd-24th-25th November 2022	Workshop on Changes in International Valuation Standards w.e.f 31st January 2022
26th -27th November 2022	Master Class Practical Aspects of Valuation
28th November 2022	Learning Session Emerging Business and Economic Environment
30th November & 1st-2nd December 2022	Workshop Case Studies in Valuation
3rd-4th December 2022	Professional Opportunities in Valuation
07th-08th-09th December-2022	Mastering Shades of Valuation
10th-11th December 2022	Valuation Boot Camp
12th to 30th December 2022	Post Graduate Certificate Program in Valuation
12th December 2022	Learning Session Valuation of Performing and Non-Performing Loans
14th-15th-16th December 2022	Master Class in Valuation

December '2022 to February '2023	
Date	**PD Programs**
30th November & 1st-2nd December 2022	Workshop Case Studies in Valuation
3rd-4th December 2022	Professional Opportunities in Valuation
07th-08th-09th December-2022	Mastering Shades of Valuation
10th-11th December 2022	Valuation Boot Camp
12th to 30th December 2022	Post Graduate Certificate Program in Valuation

12th December 2022	Learning Session Valuation of Performing and Non-Performing Loans
14th-15th-16th December 2022	Master Class in Valuation
17th-18th December 2022	Advanced Valuation
19th December 2022	ICMAI RVO - RICS Webinar
20th December 2022	Learning Session - COMPLEX IBC VALUATIONS-PRACTICAL CASE STUDIES
21st -22nd-23rd December 2022	Mastering Valuation Techniques
24th-25th December 2022	Master Class Practical Insights Into Valuation
26th December 2022	Knowledge Upgradation Session on Using Software in Property Valuation
27th December 2022	Learning Session Practical aspects of Mergers and Acquisition
28th-29th-30th December 2022	Experiential Learning Workshop on Valuation
31st December 2022 -01st January 2023	The POWER UP workshop on Valuation Unravelling the Riddles of Valuation
03rd January 2023	Learning Session - S Curve Concept in Depreciation of Assets
04rth -5th -6th January 2023	New Year New Opportunities New Skills Emerging Dimensions of Valuation
07th - 08th January 2023	Workshop on Valuation
09th January 2023	International Lecture Series World Valuers' Concerns on their Future Tips on the Valuation of Business
10th January 2023	Learning Session, The true acquisition cost of a Merger and Acquisition Deal
11th-12th-13th January 2023	Achieving excellence in Valuation
14th -15th January 2023	Master Class on Valuation
17th January 2023	Learning Session For Valuation Professionals of Nepal
18th-19th-20th January 2023	Valuation Bootcamp
21st -22nd January 2023	Workshop on Valuation
25th-26th-27th January 2023	Certificate Course on International Valuation Standards
28th-29th January 2023	Demystifying Valuation
28th-29th January 2023	Crash Course Preparation for Valuation Examination
1st-2nd-3rd February 2023	Learning Session in Valuation
04th-5th February 2023	Advanced workshop on Valuation
06th-12th February 2023	30 Hours Online Certificate Course in Valuation in association with Insolvency & Bankruptcy Board of India (IBBI
6th February 2023	Perspectives on International Valuation Standards Council, International Valuation Standards
7th February 2023	Learning Session IMPACT OF UNION BUDGET ON VALUATION
8th-09th-10th February 2023	Master Class on Tools and Techniques of Valuation
11th-12th February 2023	Demystifying Complex Valuation Issues
15th-16th February 2023	Learning Session on Valuation
17th February 2023	Master Class
18th February 2023	Master Class
20th February 2023	Learning Session on Valuation

PROFESSIONAL DEVELOPMENT PROGRAMS

50 Hours Training Programs

October '2022 to December'2022	
Date	**Programs**
20th to 23rd October 2022 & 28th to 30th October 2022	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)
28th to 30th October 2022 & 3rd to 06th November 2022	50 hours Valuation Course on Land & Building
2nd to 11th December 2022	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)
25th to 27th December 2022 & 1st to 4th December 2022	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building

December '2022 to February'2023	
Date	**Programs**
2nd to 11th December 2022	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)
09th to 18th December 2022	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building
22nd December 2022 to 01st January 2023	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)
06th to 22nd January 2023	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building
19th to 29th January 2023	50 Hrs. Educational Course on Valuation (Land & Building)

Upcoming Professional Development Programs

Date	PD Programs
17th-18th December 2022	Advanced Valuation Workshop
19th December 2022	ICMAI RVO - RICS Webinar
20th December 2022	Learning Session - COMPLEX IBC VALUATIONS-PRACTICAL CASE STUDIES
22nd -23rd February 2023	Master Class on Valuation
25th -26th February 2023	Master Class on Valuation

Upcoming 50 Hours Training Programs

Date	PD Programs
22nd December 2022 to 01st January 2023	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building
22nd December 2022 to 01st January 2023	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)
24th February 2023 to 5th March 2023	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building
23rd February 2023 to 5th March 2023	50 Hrs. Educational Course on Valuation (Securities or Financial Assets)


Articles

WHY AND HOW SHOULD DATA BE VALUED

Dr. S. K. Gupta

Managing Director
ICMAI Registered Valuers Organization

&

Raja AK

Student – Graduate Insolvency Program, IICA

The Perspective

Over thousands of years, the importance of data then evolved – particularly in retail and trade, where a value was attached to certain assets, whether it be products or services. At that point it was only simple data – the supply and demand of a product or service – that would help to place a value on it. Since then, far more abstract assets have been and continue to be valued; from stocks, to brands, patents and trademarks. And yet, there has always been a difficulty in putting a value on the data itself, particularly as there are far more complex types of data, vast amounts more of the data, and because its use has become far more sophisticated.

In the knowledge economy, data has become a strategic asset that allows companies to acquire or maintain a competitive edge. For the shareholder, data embodies a financial potential. For the company itself, data can be used to optimize the way it does business: acquisition, retention, targeting, pricing, etc. In 1975, tangible assets comprised up to 83% of a company's valuation; but today up to 90% lies in intangible assets – data, intellectual property, brand, reputation and trust. Today's shared wealth lies in data – it is cited as the most valuable resource in the digital age.3 It promises commercial gain for business, improved public services for governments, better convenience and well-being for individuals, and positive outcomes for the planet and society.

Data is a very non-conventional asset and the valuation of data is a relatively modern practice that is still in its infancy. However, data valuation affects companies of all sizes—from newly emerged local start-ups to big multinational corporations. Companies must understand how to value their data to be able to monetize it accurately. The issue is, there are currently no common standard models for data valuation, and generally accepted accounting principles do not yet recognize data as an asset. Data valuation is complex, as the value of data can depend on several factors, and even the same data can have a different value for different users. This is a serious challenge for both potential investors and the company itself.

Forward-thinking executives have begun measuring the value of their organization's data assets to forge a data-driven culture that generates increased business benefits from data. These business leaders aren't allowing antiquated accounting standards to stand in their way. It doesn't matter that current accounting regulations such as IFRS and US GAAP generally prohibit reporting the value of data on balance sheets. They care about putting data to work.

Data as assets

Some people talk about data as the new oil, but this is too simplistic. Oil is a commodity–to be bought and sold. Data is an asset, an asset that grows in value through use. Intuitively, we all understand that data has value. It's why companies are investing heavily into data and why so many people have chosen data as their professional career path.

Think of data as an asset; organizations deploy assets to create value for different stakeholders. They also invest in assets to make them fit for purpose and, at any point in time, they have to consider which assets are worth investing in. You can think of this as the data value/data valuation cycle. You have to assess and understand what data you have (data assessment). You have to put a value on this data (data valuation) so your people recognize the value of data, treat it with respect inside your organization and work out how to make it more valuable. From this, you then have to invest (data investment) to make sure your data is fit for purpose. You have to ensure you have good governance in place, an appropriate data strategy, standards, systems and procedures to ensure you achieve good data quality.

And data can even be used as collateral, just like United Airlines and American Airlines did during the Covid-19 pandemic. Data from their customer loyalty programs were valued at around $20 billion for each airline.

Characteristics of Data

Data are raw alphanumeric values obtained and owned by data producers. When a data producer uses data for operations, they can be treated as **physical assets**. There are mature methods for assessing the value of physical assets. When data are used for other purposes (decision-making, regulatory, and research) they often are treated as **intangible assets**. These assets are more difficult to value and the methods are less mature and less precise.

Unlike a 'typical' asset that provides value to the organization that owns it, data also have immense value for secondary users creating value for multiple organizations for multiple purposes at the same time. Here, data behave as a **derived asset** (or non-rival good) whose value is tied to an end use. Methods for valuing derived assets are in their infancy.

Data assets are intangible, and generally

- **Are identifiable and definable** – Data assets may be made up of specific files, specific tables, or records within a database.
- **Promise probable future economic benefits** – To have value, data assets need to have a useful application. Identifying productive uses for data is often necessary to assign value to the asset.
- **Are under the organisation's control** – The organisation must also have rights to use the data in a way that is consistent with its rights under applicable law and any contractual licensing arrangements, while protecting the data and restricting access to it by others.

Several metaphors have emerged to help businesses, governments and individuals better grasp the unique nature of data – it has been compared to oxygen, soil and sunlight for its prevalence and exponentiality and negatively to carbon dioxide. There is debate about whether it should be treated as an asset at all, with proposals based on the fact that in economic models data acts more like labour than property. China has gone further in explicitly recognizing data as a factor of production in its own right. Ultimately, each of these metaphors and existing economic concepts offers something useful in communicating the foundational importance of data but has limitations in capturing data's unique characteristics. To date, there is little momentum on any one approach.

Data Characteristics Common to Other Tradeable Intangibles

- high initial creation cost but low replication cost for data in particular (although infinite reproduction may diminish commercial value in the long run)
- little inherent value: value potential depends on enabling value streams
- value creation potential depends on complementary business assets and context
- potential ability to create multiple simultaneous value streams in multiple context

Unique Characteristics of Data

- growing exponentially faster than any other category of intangibles
- for many organizations, value creation potential depends on emergence of relevant data value chains
- legal protections around data not as well defined as for IP. Some types of data are easy for competitors to emulate.
- risks related to privacy and protection of personal and corporate data • potential value time limited
- Internet-accessible data more exposed to theft and misuse than many other categories of intangible

What's Your Data Worth?

Many businesses don't yet know the answer to that question. But going forward, companies will need to develop greater expertise at valuing their data assets. The economy has been transformed by data in recent years. Data-driven firms made up seven of the global top 10 firms by stock market capitalisation in 2021. It is therefore obvious that data has value in an economically meaningful sense. However, despite the broad recognition of its value, and the need to develop appropriate policy frameworks, there is still no consensus method for empirically determining the value of data.

While there is broad consensus that data is foundational to new value creation in an increasingly digitized economy, there is little consensus about how to quantify the value of data. Data and data-driven value have a number of unique attributes that make them different from other types of goods or services in the economy. As such, current economic and accounting approaches are limited. Some new approaches are beginning to emerge.

Many companies, however, fail to understand both the value of their existing data assets and the underlying levers that can increase data value. This can mean, in turn, that they miss out on the competitive advantages and shareholder value that their data assets can generate. In order to capture and harvest the value of data over time, organizations must fi rst seek clarity on how to value data as an asset, then follow through with a comprehensive data strategy to drive value enhancement. Increasingly, data assets are the engine driving the total value and growth of modern organizations. As a result, building a framework to discover and realize the potential of your data is critical to increasing the value you provide to

shareholders, and to optimizing the future success of your organization.

Data from a Financial Reporting Perspective

In financial reporting, the cost of accumulating a data portfolio has traditionally been treated as an expense unless the data is acquired as part of a third-party transaction, in which case it can be recorded on a balance sheet at the fair value paid on the purchase date.4 Updated accounting standards now provide for recognition of certain self-generated intangibles (including data) as cost provided evidence of future economic benefits is strong and cost can be reliably determined. At present, and likely for the foreseeable future, balance sheets will continue to record data (and many other non-financial assets) at amortized cost less impairments. Traditionally, the purpose of transaction-centric financial reporting has not included accounting for the market or economic value of these [intangible] assets.

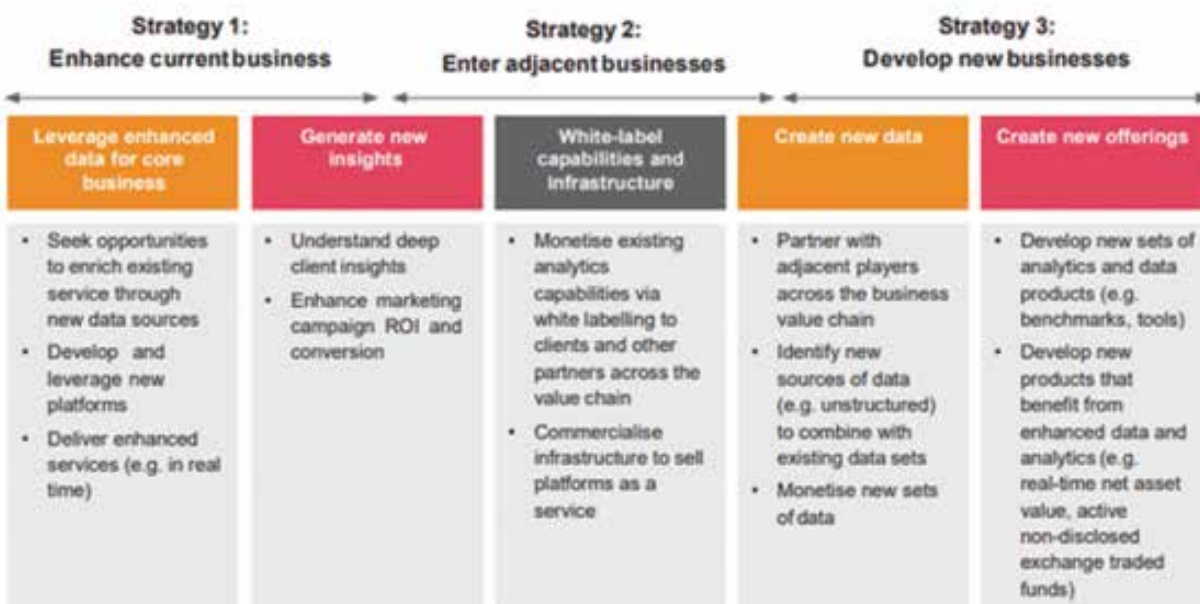
Data Value Drivers

Organisations are under increasing pressure to invest in data assets, either organically or through acquisitions. Assessing those investments robustly and making the right strategic decisions requires an understanding of data valuation methods and value drivers.

Data value drivers

Assuming an organisation invests the time to create an inventory of its data, the value of that data lies in its ability to allow an organisation to generate future economic benefit ('data monetisation'). Some examples of data monetisation strategies are shown in Figure 3 below:

Figure 3 – Typical data monetisation strategies



- **Completeness :** Completeness refers to how much of a known universe the dataset covers. In general, the more complete a dataset, the more valuable it is due to the increased accuracy of insights derived. Enhancing the completeness of data increases the value of the data. Consistency
- **Consistency :** Data is consistent if it conforms to the syntax of its definition. For example, structured data such as storekeeping inventory and business transactions are data that conform to a pre-defined syntax and format. These data have a high degree of organisation, making analysis and processing easier. On the other hand, unstructured data such as images and sounds may require some degree of processing to conform to defined rules and syntaxes so as to enhance their consistency. In such cases, the more processing is done, the more valuable the data is.
- **Accuracy :** Accuracy describes the degree to which data correctly describes an object or event. Reliability of the data significantly impacts the value of the data. Inaccurate data produces unreliable insights, which makes it ineffective for any organisation seeking to utilise the data. In addition,

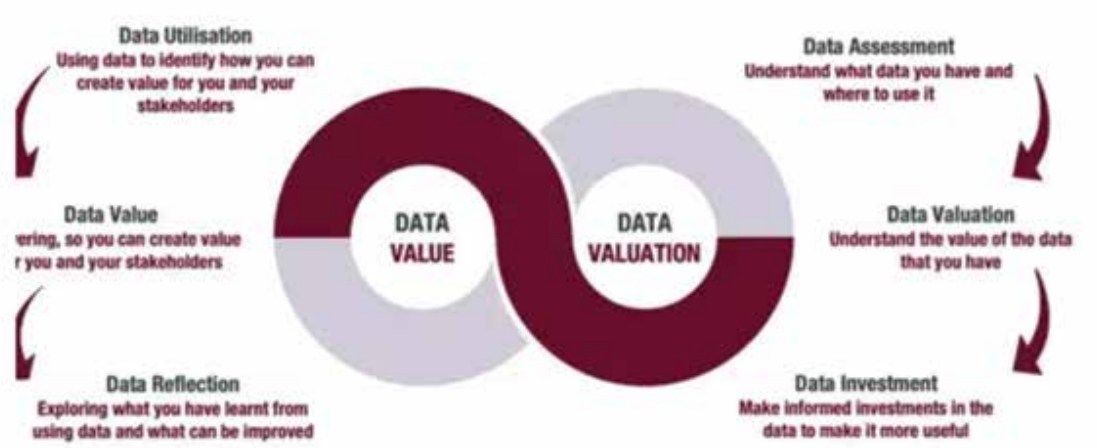
knowing the data's

- **Timeliness :** Timeliness refers to the degree to which the data is up-to-date at the required point in time of use. In general, the more up-to-date the data, the more valuable it is. However, timeliness is a relative measure, which is dependent on the intended use case for the data.
- **Exclusivity :** Exclusivity refers to the uniqueness of the data. In general, the fewer existing alternatives for the data, the more valuable the data is. The key driver of value for exclusivity lies in the competitive advantages and revenue opportunities afforded by the data. Exclusivity can be enhanced by: a. creating unique datasets by integrating and enriching existing data with data from other sources; b. controlling access to the data through technical and procedural means; and c. identifying new sources of data or creating new means of capturing data.
- **Interoperability/Accessibility :** Interoperability/Accessibility is critical to the value of the data. This is because in many cases, the value of data lies in its potential to be combined with an internal dataset. Without the ability to combine and enrich the data, the data is generally of little value to potential consumers.
- **Restriction, Liability and Risk Usage :** restrictions have to be compatible with the sharing use case for the data to have value. In general, the less restricted the use of data, the higher its value. In addition, potential liability and risks associated with the data could reduce the value of the data, and are very often the main deterrents to data sharing. Sharing arrangements between organisations would require organisations to design contractual obligations to satisfy internal risk management policies. provenance (or source) is a critical aspect of determining its accuracy, as it informs the data consumer of the history of the data and account for errors, if any.

Figure 4 – Data value drivers

Data Valuation Methodologies

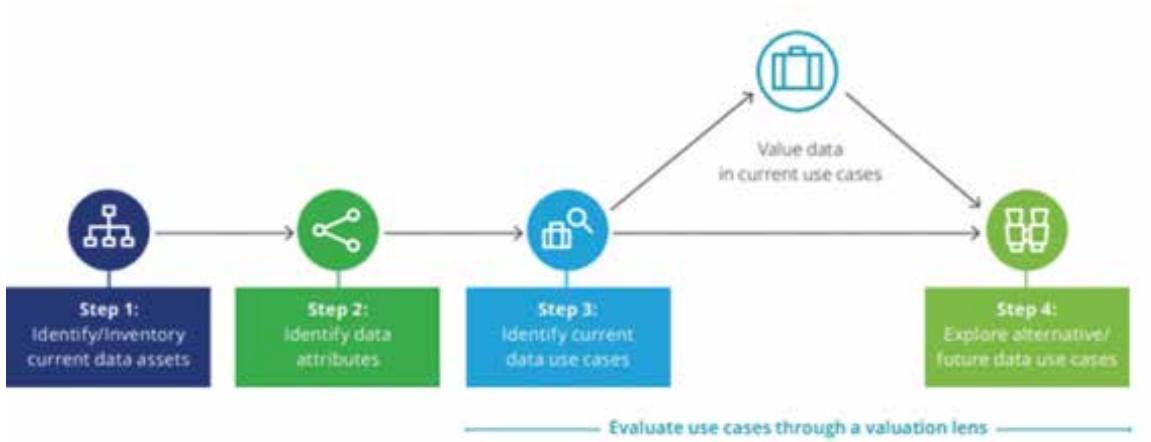
The distinct characteristics and dynamics of data – contextual, relational and cumulative – call for new approaches to articulating its value. This requires a mindset shift – businesses should value data based on cases that go beyond the transactional monetization of data and take into account the broader context, future opportunities to collaborate and innovate, and value created for its ecosystem stakeholders. Assessing data against key value and cost drivers, in the context of different use cases and with attention to shared value for stakeholders, will encourage companies to think about the future value data can help generate, beyond the existing data lakes they sit on, and open them up to collaboration opportunities.



There are many different methods for determining the value of data. Regardless of which method you choose to determine the value of your data, the first step will always be to understand what your data assets are. From there, the next step is understanding how data drives value.

What are the aims of Data Valuation?

- **quantify** the **value** and the **costs** of data assets,
- understand how to **improve** data management,
- **identify** innovation **opportunities**
- **promote** more **data-oriented** business culture.



The cost approach

This method is based on the cost to produce and store data, as well as the cost to replace lost data and what the impact on cash flow would be A method that uses the concept of replacement cost as an indicator of value. The premise is that an investor would pay no more for an asset than the amount for which the utility of the asset could be replaced, plus a required profit/return to incentivise a third party to replace the asset.

One of the main advantages to this overall method are that it is easier to execute than many of the other methods. Additionally, it provides part of the answer to quantifying the return on data, because it captures some of the costs. However, this method is extremely subjective. While it does allow an organisation to conceptualise the value of their data, in part, it falls short of providing a reliable economic picture. Put simply, cost-based methods of data valuation will always undervalue data because it is only concerned with one aspect of value, it ignores the question of how does data becomes business value. There's much more to the question of what is data valuation, than just cost.

With-and-without method

A method for estimating the value of data assets by quantifying the impact on cash flows if the data assets needed to be replaced (assuming all of the other assets required to

operate the business are in place and have the same productive capacity). The projected revenues, operating expenses and cash flows are calculated in scenarios "with" and "without" the data, and the difference between the cash flows in the two scenarios is used to estimate the data's value.

Relief from royalty method

A method built on the assumption that if the company doesn't own the data asset, it might be willing to license the data from a hypothetical third party who does. In this method, the company would forgo a certain amount of profitability to license the data from a third party over a certain lifecycle.

The market value approach

This approach is based on what others pay for comparable data on the open market, by observing those selling data (thus drawing on an example of data value) and calculating the data selling price. Today, companies are using advanced analytics to more fully understand their data, and to identify ways to license it to third parties. In addition, within various ecosystems, data exchanges are being developed so market participants can aggregate and trade data assets, and participating companies can exchange data to create even more value for their enterprises. As companies continue to mine their data and develop models to transact in this asset category, these transactions can be used to derive market indications of value.

While simple to calculate, it has some significant drawbacks. Some data is simply not traded – there may be no comparable examples of business data – either because others are not interested at this time, or because a company is keeping its data to preserve a competitive edge. Additionally, some data is one-of-a-kind, so there will be no comparable examples to study. Getting a true price of the data relies on there being an efficient market, which at present, there isn't. Alongside this, users of this method must understand that price is not the same as value.

Multi-period excess earnings method (MPEEM)

An income-approach methodology that measures economic benefits by calculating the cash flow attributable to an asset after deducting "contributory asset charges" (CACs), which are appropriate returns for contributory assets used by the business in generating the data asset's revenue and earnings.

The economic value approach

On the economic value approaches, there are two key methods.

The first is **income or utility valuation**, which tracks the impact of data on the business' bottom line, therefore it can identify value added to the business by data and can be used to identify value add for specific business functions or use cases. However, this is hard to measure, particularly distinguishing value added by data from value added more broadly. Much like the other approaches, a lot of this is subjective and it is incredibly hard to predict the future value of data.

The second approach is around **use case valuation** – and there are two separate techniques here.

The first is the business model maturity index (Internet of Water), which calculates the value of data by identifying a number of business use cases, estimating the value of each of these use cases, and calculating how much of this value is contributed by data. The benefit of this approach is that it values the data based on a thorough analysis of multiple use cases within the business, and ties it to real business outcomes. However, it is one of the most subjective as the contribution of data assigned to each use case is through surveying, based on hypothetical scenarios rather than real use cases. The margin for error is large.

The **decision-based valuation** method is similar but has an increased degree of sophistication as it models frequency of data collection, accuracy and how fit for purpose the data is. However, once again there is a degree of subjective estimation. It is also a complex model to apply for data assets as it requires the ability to conceive and project use cases.

There is also an issue with 'unknown unknowns' – in other words, using this method businesses can only model use cases and desired outcomes that can be thought of from inside of the business. This relates back to the importance of what question a business is asking – sometimes if it is too specific, and if the data set is also very specific, a business will get the answers it wants, but this discounts many of the other factors and unknowns.

The stakeholder value approach

Value is in the eye of the beholder. The stakeholder value approach goes right to the source of value, by measuring the economic value created for each stakeholder. Not just shareholders, but customers, employees, suppliers, communities and the environment.

This makes it a more modern approach, aligned with the shift from shareholder to stakeholder capitalism much discussed at the World Economic Forum 2020, and mirrored by the growth of environmental, societal and governance (ESG) factors in investing. It's not perfect, but it does overcome many of the problems of previous data valuation methodologies. While other data valuation methodologies race towards data monetisation, they ignore the broader context, to focus

on data in use, or not. The stakeholder method works from an understanding of the total economic value the organisation creates for its stakeholders. Valuation isn't an end in itself, it's a means to achieve better management and decisions. Decisions are never taken out of context, so data valuation shouldn't be either. The most difficult part of this methodology is attributing the right portion of the organisation's total value to specific activities, and from there, into the data that underpins them.

Intrinsic Value of Information

The IVI allows you to evaluate the innate quality of data assets. This method describes how complete and accurate your information is and how likely it is that other organizations have this data.

$$IVI = Validity \times Coverage \times Scarcity \times Useful\ Life$$

The formula for the Intrinsic Value of Information (IVI)

- **Validity:** The percent of records with correct values
- **Scarcity:** An estimate of the percent of other organizations who **don't** have this data.
- **Coverage:** The number of records in the dataset as a percentage of the total universe of potential records
- **Useful Life:** The number of periods (months, for example) that each record can reasonably be used or is relevant

Business Value of Information

Unlike the IVI, the BVI recognizes the relevance of the information to business activities, as well as the quality and timeliness of that information. It can be used as a quick-and-dirty way to measure the potential real-world benefit information assets provide.

$$BVI = \sum_{p=1}^{n} Relevance_p \times Validity \times Coverage \times Timeliness$$

The formula for the Business Value of Information (BVI)

- **Relevance(p) —** The potential usefulness (0 to 1) of the information to the business process **p**
- **Validity —** The percent of records with correct values
- **Coverage —** The number of records in the dataset as a percentage of the total universe of potential records
- **Timeliness —** The probability that at any time, the information is current (matches real-world facts). This is a more easily measured version of the time-lag between real-world events and the appearance of those events in a dataset.

Performance Value of Information

The PVI approach defines the value of information by its impact on improving some business performance driver, as measured by a Key Performance Indicator (KPI). Some examples of potential KPIs are "Conversion Rate" or "Order Fulfillment Time."

IVI and BVI are leading indicators of business value, whereas this measure is a lagging indicator because we have to run a controlled experiment to determine the impact of the information on KPIs.

$$PVI = [(\frac{KPI_i}{KPI_c}) - 1] \times \frac{T}{t}$$

The formula for the Performance Value of Information

- **KPI(*i*) —** The KPI for the business process *with* the information
- **KPI(*c*) —** The KPI for the business process *without* the information (control group)
- **T —** The usable life of any datum
- ***t* —** The time over which the KPI was measured

The KPI ratio provides a measure for the lift in KPI when using this information asset and the time ratio projects the lift over the useful life of the data.

A positive PVI indicates a net benefit for the process, whereas a negative PVI detracts from the KPI.

Choice of an appropriate method

Some key considerations for the most appropriate method which have been mentioned in this paper are:

- what is being valued?
- who is valuing the data?
- when is the valuation taking place?
- what is the purpose of the valuation?

Conclusions

Organizations are under increasing pressure to collect, process and assess data – by 2025 company values will reflect their information portfolios; going public, mergers and acquisitions require companies to answer questions about data valuation. In the US, lawmakers have introduced legislation requiring companies to disclose what data they collect from consumers and how they benefit from it; while others have proposed a data dividend to share the wealth created from consumer data.

It's hard to estimate the company's business value and future potential accurately. This is especially true if neither the investor nor the company properly understand the potential future value of the company's data assets.

However, what makes data valuation difficult is that data is an asset not yet recognized by generally accepted accounting practices.

The distinct characteristics and dynamics of data – contextual, relational and cumulative – call for new approaches to articulating its value. This requires a mindset shift – businesses should value data based on cases that go beyond the transactional monetization of data and take into account the broader context, future opportunities to collaborate and innovate, and value created for its ecosystem stakeholders. Assessing data against key value and cost drivers, in the context of different use cases and with attention to shared value for stakeholders, will encourage companies to think about the future value data can help generate, beyond the existing data lakes they sit on, and open them up to collaboration opportunities.

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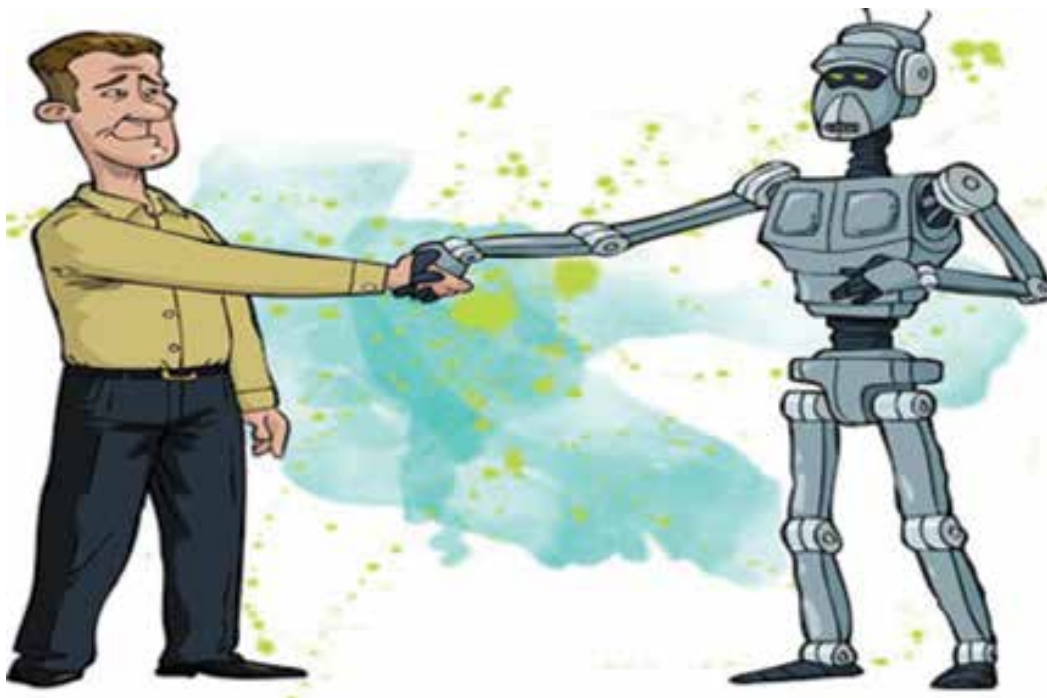
AVANT-GARDE VALUATIONS: A WALK INTO THE FUTURE

CMA Jyoti Prakash Gadia



Executive summary

The objective of this article is to encourage dialogue between valuers and clients on the necessary and prospective forms that valuations could take. In order to remain relevant, valuers will need to be aware of and take into account new expectations and needs of clients, as well as new and more complex aspects influencing markets. The article delves into international valuation standards and draws a comparison to Indian valuation standards. We also examine new developments in data (especially big data), blockchain, artificial intelligence (AI), and automated valuation techniques, along with a few other elements that influence the valuation process.

Revisiting the current valuations landscape

Valuation exercises have long been the purview of subject-matter specialists, each claiming to be an authority in a specific area. The nuances of specialised categories, such as real estate, financial assets, personal assets, intangibles, etc., made sure that the profession of valuation remained within the confines of professional niches – each functioning and specialising in a single domain area.

The idea of developing a distinct class of specialists who would be entrusted with the responsibility of carrying out valuations has recently been influenced by a number of considerations and developments in the Indian context.

The Valuation Standards play, in a way, play an inert role in standardising the judgments, estimations, subjectivities, presumptions, and perceptions that are an inherent basis and purpose of a valuation exercise, in contrast to contemporary Accounting Standards, Auditing Standards, Standards of Internal Audit, etc. Further, the specific knowledge, experience and skillset required to value any asset or class of assets, makes it imperative for the professional to be recognised as the specialised valuer.

There is a window of opportunity to standardize valuation methods along with the general scope of a valuation exercise and establish a dynamic framework for valuation specialists.

Foundations, standards and approaches for valuation

Globally, several well-defined valuation rules apply to diverse jurisdictions. The Uniform Standards of Professional Appraisal Practice (USPAP) issued by The Appraisal Foundation - USA (TAF) is primarily used in the United States of America; the International Valuation Standards (IVS) issued by the International Valuations Standards Council is applied across numerous countries; while the European Valuation Standards (EVS) issued by The European Group of Valuers is applicable to some countries in Europe.

These well-known sets of valuation norms deviate more than they agree in terms of construct, approach, guidance, and application. Despite efforts to lessen the disparity among these well-known valuation standards, there are considerable gaps between them.

While the EVS and USPAP lean more toward a rule-based approach, the IVS has a strong inclination towards a principle-based approach.

The passages that follow give a summary of the key elements of Indian Valuation Standards (ICAI Valuation Standards, 2018) and shed light on areas where Indian Valuation Standards and International Valuation Standards diverge.

Indian Valuation Standard (ICAI Valuation Standard – 101)	**International Valuation standard**
The goal of this goal of this valuation standardis to outline precise definitions and guidelines that apply to the ICAI Valuation Standards. Certain terminologies used in other valuation standards required herein shall be guided by and defined in accordance with the definitions provided in this standard. The words used in the ICAI Valuation Standards are defined in this standard's definitions. Since professionals are expected to have a fundamental understanding of such words, this Standard may not provide definitions for some concepts that are thought to be basic from a financial and accounting standpoint.	The terminologies used in the International Valuation Standards are defined in this glossary. Since valuers are deemed to be familiar with basic words in valuation, accounting, and finance (see the definition of "valuer"), this glossary solely applies to the International Valuation Standards and makes no attempt to explain them.
Scope: When a valuer is compelled to utilise a definition specified by law, regulation, rule, or instruction of any governmental or regulatory authority, the terms described in this Standard do not apply to the valuation. If the valuer must employ a definition that significantly deviates from those in this document, they must explain why and declare it in the valuation report. A valuer must use the terms established in this Standard while carrying out a valuation engagement.	Not defined.
Active Market: An active market is one in which the volume and frequency of transactions for assets or liabilities are high enough to provide continual pricing information. An active market for listed securities would be one where activity or transactions are ongoing and as specified under SEBI regulations.	Not defined.
Asset: The term "asset" would be used to describe the items that must be valued throughout an engagement, as well as a group of items such as a firm or ownership interests in a business.	Asset or Assets: The terms "asset" and "assets" refer broadly to objects that might be the subject of a valuation engagement in order to improve the readability of the standards and minimize duplication. These phrases can be interpreted to imply "asset, group of assets, liability, group of liabilities, or group of assets and liabilities" unless otherwise stated in the standard.
As-is-where-is Basis: The asset's current usage, which may or may not be its most efficient and optimal use, shall be taken into account when determining the term "as-is, where-is" basis.	As-is-where-is In IVS, the basis is not specified. However, present usage/existing use is defined in IVS 104 Bases of Value as "the current way an *asset*, liability, or group of *assets* and/or liabilities is used. The current use *may* be, but is not necessarily, also the highest and best use".
Client: The client is defined as an entity or individual who commissions a valuation engagement and is named as such in the valuation engagement letter signed by the company or individual and the valuer.	Client: The person, individuals, or entity for which the valuation is carried out is referred to as the "client." This may include both internal clients and external clients (i.e., when a valuer is hired by a third-party customer) (i.e., valuations performed for an employer).

Comparable Companies Multiple Method: It is often referred to as the Guideline Public Company Method. It entails determining the transaction multiples used to value an asset based on the costs of similar assets traded in an active market.	The publicly traded comparable method, according to IVS 105 Valuation Approaches and Methods, "uses information on publicly traded-comparables that are the same as or similar to the subject asset to arrive at an indication of value."
Comparable Transaction Multiple Method: It is sometimes referred to as the Guideline Transaction Method. It entails evaluating an asset using transaction multiples that are obtained from the prices paid in transactions involving comparable assets that need to be valued (comparable transactions).	The comparable transactions approach, also known as the guideline transactions method, uses information on transactions involving assets that are the same as or similar to the subject asset to arrive at an indication of value, according to IVS 105 Valuation Approaches and Methods.

Control Premium: A buyer's willingness to pay more than a publicly traded company's current market price in order to obtain a controlling stake in an asset is known as a control premium. When valuing a noncontrolling or minority interest, it is the opposite of applying a discount for lack of control.	In accordance with IVS 105 Valuation Approaches and Methods, "Control Premiums and Discounts for Lack of Control (DLOC) are applied to reflect differences between the comparable assets and the subject asset with regard to the ability to make decisions and the changes that can be made as a result of exercising control. Participants would typically choose to have control over a subject asset versus not having it, all things being equal. However, whether the capacity to exert control improves the financial advantages available to the owner of the subject asset will often depend on participants' willingness to pay a Control Premium or DLOC.
Cost approach: It is a method of valuing assets that takes into account how much would be needed right now to restore the asset's service capacity (often referred to as current replacement cost).	"The cost approach provides an indication of value using the economic principle that a buyer will not pay more for an asset than the cost to obtain an asset of equal utility, whether by purchase or by construction, unless undue time, inconvenience, risk, or other factors are involved," according to IVS 105 Valuation Approaches and Methods. By figuring out the current replacement or reproduction cost of an asset and subtracting for physical wear and tear and all other pertinent forms of obsolescence, the approach gives an indication of value.
Discount Rate: The return a market participant expects from a specific investment is known as the discount rate, which must account for the risk associated with both the asset being evaluated and generating future cash flows in addition to the time value of money.	"The rate at which the predicted cash flow is discounted should reflect not only the time value of money but also the risks associated with the kind of cash flow and the future operations of the asset," according to IVS 105 Valuation Approaches and Methods.
Discounted Cash Flow ('DCF') Method: By discounting the cash flows that are anticipated to be generated by the asset throughout the specified period as well as the perpetuity value (or terminal value) in the case of assets with an indefinite life, the DCF technique values the asset.	According to IVS 105 Valuation Approaches and Methods, "the expected cash flow is discounted back to the valuation date, resulting in a present value of the asset, under the Discounted Cash Flow ('DCF') Method. In some cases, DCF may contain a terminal value for long-lived or indefinite-lived assets. This value indicates the asset's worth at the conclusion of the stated period. In other cases, a terminal value alone, without a specific projection time, may be used to determine an asset's worth. This is also known as the "income capitalization approach."
Documentation: The term "documentation" refers to the record of the valuation operations carried out, pertinent information gathered, and judgments made by the valuer.	IVS 102 Investigations and Compliance states that "a record must be kept of the work performed during the valuation process and the basis for the work on which the conclusions were reached for a reasonable period after the assignment, taking into account any relevant statutory, legal, or regulatory requirements" despite the fact that the term "documentation" is not defined in IVS. This record should contain the primary inputs, all computations, investigations, and analyses pertinent to the conclusion, as well as a copy of any draft or final report(s) delivered to the client, subject to any such requirements.

Future Trajectory: Valuation Processes

The valuation processes of the future might mirror the following.

Smart contracts

Negotiating the parameters of an engagement may be replaced by automated smart contracts, which are computer protocols that facilitate, verify, or enforce the negotiation or execution of a contract. By automating processes in accordance with rules and standards, time and money will be saved.

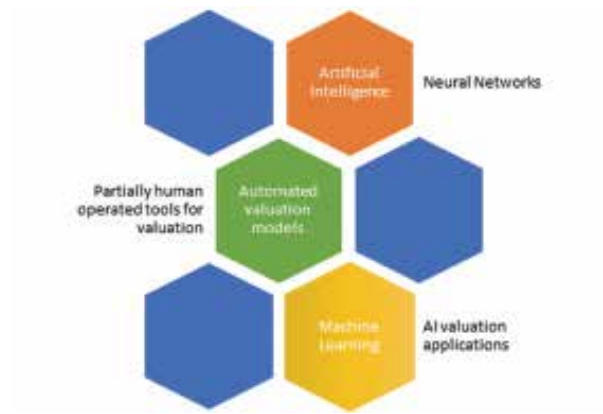
Machine-led inspection

In real estate valuations, on-site inspection and property analysis may one day be largely or totally substituted. Image streaming, for instance, if effectively carried out and stored, could also make an on-site visit completely pointless, though the person doing the recording will still need to be trained, or guided.

With data being remotely available, smart buildings and the Internet of Things are enhancing all areas of data quality (accuracy, availability, dependability, and security). Building passports, in like manner, use blockchain and BIM to ensure that building data and information are always accessible. Based on the information and data thus obtained, the valuer could decide if a personal on-site examination is required as a follow-up. Current checklists might also be modified, whether utilised by humans or machines.

Big-data gathering

Fewer primary data sources (clients, inspections, property analyses, market analyses, and public data) will likely be used in the valuation process in the future. Big data can be utilised by valuers in relation to valuation to help them predict future values and provide a clearer view of the present value. It will include several more forms of data as compared to the primary data that is available today. The availability of data in close to real-time will be an extra benefit, though the quality and dependability of big data sources would need to be reckoned with by both the valuer and the client.



Automated Valuation Models (AVMs)

AVMs will advance along with technologies like big data and artificial intelligence. With the help of new algorithms, AVMs are shifting away from low-risk assessments with adequate comparables and towards increasingly complicated valuations. The full, long-drawn processes will still be used for valuations that are more complicated, and the valuer's position as an independent and unbiased judge will remain vital.

Analysing and interpreting

A valuer will frequently need to verify and explain the results of the AVM, especially for more complicated valuations. The valuer's skill set will increasingly include statistical analysis.

Interactive valuation report

This is about the transition from PDF or paper reports to interactive content, aided by advancements like augmented or virtual reality, and BIM 3D modelling. The customer receives important information through interactive valuation reporting that goes beyond valuations to support decision-making.

Blockchain

A blockchain will allow valuation reports to be stored, making them available to a large audience of potential customers or readers. The usage of blockchain might reduce the number of valuations required by several clients at once and/or serve as a historical source when revaluations are required.

Valuation expertise

It is imperative to upgrade and expand the weapons in the armoury of valuations professionals, specifically in the following domains of work.

- Statistical analysis – Gathering, analysing, interpreting, presenting, and organizing data will become a key talent for valuers to have.
- AVM (Automated valuation models) interaction – valuers must be conversant with the many forms of AVM and know how to use and put the tool to good use.
- Interpersonal skills — including a stronger emphasis on client interaction, communication, conflict management, etc. Valuers will need to speak the client's language.
- Sustainability -- To illustrate the point, let's consider the following instance. Being able to evaluate the effects of energy efficiency and wellness on a building's value would require a new and different viewpoint and a different method of data collection. Sustainability also needs to be seen as an intrinsic part of long-term value.

Valuer independence and objectivity

Apparently, while there are components that must diverge from conventional approaches, some essential elements of valuation must still be preserved. Professional valuations must always meet strict, inflexible norms for valuer independence and objectivity. For both the valuer and the client, there may be numerous motivations and pressures to modify the value. During the valuation process, valuers and their clients usually are in direct contact, but it's crucial to be continually mindful of the potential influence the clients may have on the process; there ought to be a clear boundary, always. Numerous regulations and guidelines pertaining to valuation and valuers stipulate that the valuer must operate impartially and independently.

An impartial, responsible valuer will be able to examine the peaks and valleys of historical profits. An unbiased and impartial valuation offers several advantages to the company such as

- Maximising value
- Strengthening credibility
- Producing reliable valuation reports

In the past several decades, valuation mechanisms have advanced significantly, as have the principles that guide them. For valuers to remain relevant, they need to be au fait with changing client expectations and requirements, as well as the new and more complex variables driving markets. Given the increasing complexity of the environment, valuers must be thoroughly familiar with various aspects and the impact these factors bring to bear on the final outcomes. It becomes even more crucial, in an exceedingly dynamic ecosystem, to conduct a fair and unbiased appraisal while keeping pace with the shifting dynamics of the market.

ARTICLE

ENGINEERING ECONOMICS – VALUATION APPRAISAL- INFRASTRUCTURE DEVELOPMENTS - THE REAL ESTATE SECTOR

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Abstract:

Economics begins with human wants and ends with the satisfaction of those wants. Man undertakes efforts to satisfy his innumerable wants. It studies only one aspect of man's life. All activities of man are centered around the satisfaction of his wants. Economics is concerned with the satisfaction of wants. Acceleration of economic growth has become the main thrust of economic development these days. The aim may be the removal of poverty or raising the production of goods and services in the country. Therefore, one can conclude that economics is both a science and an art also. Knowledge of Economics is highly essential for human survival. Economics is the baseline of all human activities. Being economically rich means, the citizens are experiencing and enjoying a very good standard of living. Quality & Affordability are two key factors that play a major role in all of the academies, like Medical, Engineering, Law, Sciences, Arts, Cultural, etc. Civilisation makes everyone gain knowledge in cost analysis of various aspects of life. Valuation is an extension of cost analysis in a framed structure of study comprising all relevant legal frameworks, standards, procedures, methods, approaches, assumptions, justifications, reasonableness, research activities, developments, tiny products, etc. Engineering Economics depicts some phenomena related to valuation as under

- Our ancestors followed a barter system of trading i.e. by exchanging their goods and services for equivalent valued sizes of goods & commodities between them
- This enhances so many problems like over/under appraisal, following inspection of goods before the vendors or buyers to assess the equivalent value of the goods
- Compulsorily, public spaces such as Markets, Halls, Fields, etc. to be made available for merchandisers for trading activities
- Moreover, some goods are perishable in nature and time-bound
- Similarly, some services are also time-bound and urge immediate disposal
- For these reasons, our ancestors found an alternate system of trading and implemented
- The introduction of currency/valet makes the necessity for a system/method of valuation of Goods and Services
- With this adoption of an alternative trading system, the secondary sector got a boom & Industrialising started.
- Among the Nations, necessitated adopting uniform parameters in various aspects such as weights & measures like kilogram, meter, etc.
- Uniform currency has been adopted among the countries for trade transactions, such as US Dollar.
- This further enhances the transfer of technology in both Primary & secondary sectors like Agriculture, Defense, Science & Technology, Space science, Aeronautical fields, Marine, Textile, Food industries, Trade policies, Memorandum of understanding, etc.
- Nowadays, the Internet explored the International market and new avenues of business started between both Buyers and sellers in countries
- Buyers/sellers living in any part of the world can pursue & analyse the quality and quantity of their needs improves the business ties among international countries
- Nowadays, Free trade agreements amongst countries under procedural formats via communications & negotiations allow everyone to order their needs by simple procedures and digital signatures
- The supply chain so generated booms logistics industry either sea-fare or air-fare
- This allows every trader to sell/buy their goods and services throughout the world without actually sending the goods for physical inspection and business proceeds based on International standards followed by various countries
- This adds additional revenue to Governments through taxation

Introduction:

- Nation's Wealth means the economic prosperity of Citizens by way of infrastructure facilities of all kinds
- Nation's growth means the development potential of Infrastructure facilities & Service industries
- Real estate field is developing continuously all over the world
- These developments are a result of Privatisation, Partnering with global firms, Governmental, Private – government partnerships, Foreign Direct Investments, etc.
- Valuation appraisal of these developments needs a structured authenticated presentation to get Budget sanctions of Governments, Global Tenders, etc.
- Valuation appraisal is much needed in infrastructure development, which is two-fold, one is positive growth, and another negative means loss of assets
- In both cases valuation assessment plays a crucial and major role, namely allocation of budget proposal in developing infrastructure and the other one for loss assessment to compensate the extent of damage
- In all the GDP gets altered according to positive/ reversal developments

Objectives

- The Authors are intending to explore and establish the need for the valuation process followed in real estate to evolve the intrinsic market value
- This study aim is to mention the facts and truths behind over-valuation and under-valuation
- The importance, purpose, and methodologies are put forth herewith
- The hierarchy of conducting valuations is explained in Valuation standards IVS 2022 & RICS, some of the clauses discussed

Contents:

- Introduction
- Importance of the article
- Review of literature
- Valuation – definition
- Multi-disciplinary subjects
- Drawbacks of undervaluation
- Effects of overvaluation
- Valuation purposes
- Real Estate & Real Property
- Valuation standards
  - IVSC2022
  - RICS
  - ICAI 2018
- Development of Software
- 3 approaches
- Implications of the Market Approach
- Joint ventures - valuations
- Case Study- Apartment Construction
- Computation of land rate based on a flat rate
- Valuation of Skyscrapers – one aspect
- Synergistic value – merger
- Role of Valuer in investment options
- Conclusions
- References

Introduction:

- Valuation as an art & science is an exercise falling within the domain of economics as well as law.
- Valuation is composed of two parts namely Business & Asset Valuation for all Industrial Valuation
- Financial Appraisal (Business Valuation) is the analytical process of deducing the current value of the property or an organization under transparency and better governance as the Net Present Value (NPV) of all future cash flows the investment will produce, also involves futuristic forecasting based on past & present performance but not limited to earnings on profits only
- Asset valuation is determining the prevailing market value of real estate/closely held companies/industries based on sales data at a price at which a competent seller is willing to sell his or her property for less than a purchaser is ready to buy, usually done at the request of an individual or a bank looking to finance the purchase of a property.
- The intrinsic value of an asset/investment is the price a rational investor would pay for the investment.
- However, when an asset trades away from true/ intrinsic value, it is then considered undervalued or overvalued.
- Real Estate Infrastructure Development accounts for nearly 10% GDP of the nation's GDP annually.
- Buying/Selling of Used/New Capital Goods of Movable/Immovable assets of any kind occurring in the market frequently
- Fixation of reasonable rates/Pricing of Goods and Services based on price equilibrium has been done by Registered Professional valuers
- Globalization, both purchases, and supplies necessitate having an idea of the Value/cost involved in that particular transaction
- Globalization attracts investments from across every

country in the world following a common yardstick

- This gives rise to the need for some sort of valuation standards and uniformity that are acceptable to all concerned.
- Although based on Indian legislation, the principles, approaches, methods, and bundle of property rights can be applied to other countries within their particular legal frameworks, with exceptions.
- The degree of accuracy of the report is wholly dependent on data either primary or secondary which further ensures the amount of reliability/ dependability
- Merger and Acquisition/Start-up/ Going Concerns/ Liquidation/Insolvency Proceedings / Reinvestment/
- Disinvestment requires a prevailing market-based valuation
- Appropriation of Family Shareholding/Partitions in closely held organizations/Legal Suits/Divorce/
- Settlements/Acquisition /Life loss Compensation/ Demurrage/Insurance loss assessment/Damages/
- Court Proceedings also need a valuation
- Disclosure of Voluntary Tax assessment/ Statement of all Financials/ including Tax evasion/Issue of Equity Shares based on projected Valuation reports

Importance of this article

- An American Judge was posed with the question, "Is appraising an art or a science?"
- Before his answer the Judge was looking at two different appraisals with a wide difference in views.
- Then he answered, "It is neither an art nor a science, I view it as a mystery!"
- If a situation occurs to sell one used Car/Machine to a prospective seller/buyer, a local Mechanic will be consulted to analyze the present condition of the Car/ Machine to appraise the reasonable/fair value.
- In the same way, the seller/buyer will have the intention to re-investigate the quoted price with another Mechanic on their behalf.
- But both the Costs/Value/Quotes differ.
- Thus, the Price of an asset/Capital goods can be the same for everyone but the value of that asset cannot be the same for everyone
- Then an experienced Registered Valuer, mandatorily registered with Government Statutory bodies, has been engaged
- Based on the Registered Valuers experience and expertise, analyses the condition of the Car/Machine, Market, and other scenarios and furnishes his authenticated Valuation Report including the validity period of his report
- Therefore, the study of the Valuation Process and the importance of the Role of the Registered Valuer becomes envisaged

Review of Literature:

- It is time immemorial, in the early stages, the invasion of Agriculture to human life, harvesting of food grains, and consequent trading practice turns civilization of mankind and a further rise in the standard of living
- The theory of valuations was started in 1912 by the Hungarian mathematician Josef Kurschak who formulated the valuation axioms.
- The main motivation was to provide a solid foundation for the theory of basic fields as defined by **Kurt Hensel.**
- Also, **Helmut Hasse** uses valuation theoretic notions and methods to create outstanding development.
- In 1934, the application of number theory after valuation theory, analysed by **Alexander Ostrowski**
- Followed, **Wolfgang Krull** defines the valuation

concept in a universally adopted manner.

- **Value under Sea Customs Act. 1878** was based on "real value". The real value was defined as the wholesale price for which like goods are capable of being sold at the time and place of importation (excluding duties payable) and also contained provisions for taking over imported goods by the Government on payment of an amount equal to declared real value (Section 32).

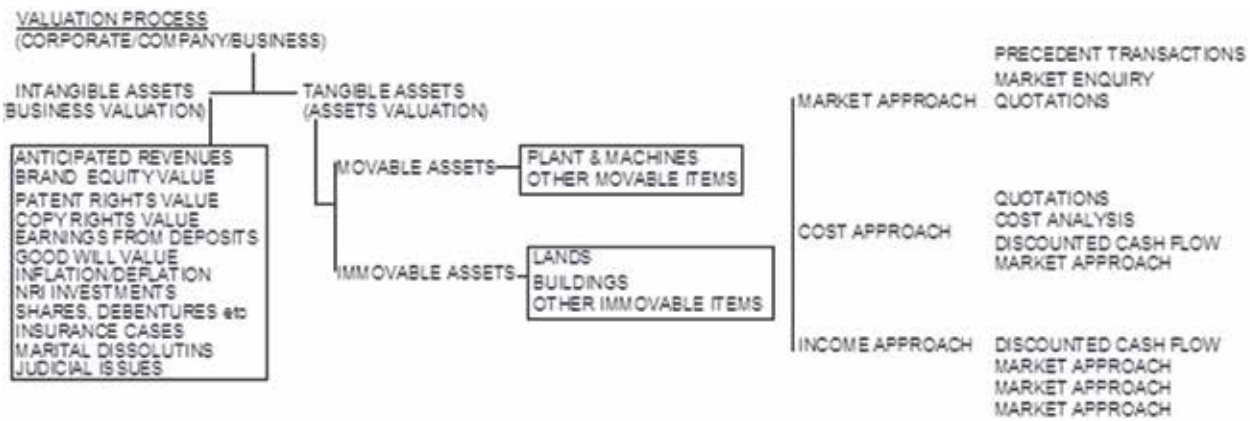
Definition: Valuation is the analytical process of determining the current (or projected) worth of an asset or a company according to procedures.

- It is imperative to mention that every walk of routine life involves the valuation of certain aspects to proceed with further activities.
- Valuation is essential even to take up in a running business/ travel on how much allocation of funds is necessary for successful completion of that particular trip or event.
- Knowledge of the Global market for Demand & Supply chain, a mandatory justification of the value of goods and services is to be acquired for international market transactions to attract foreign investors to invest in our country to enlarge employment opportunities for our citizens
- Valuation concerns itself with all species of legal interests arising out of land and building as well as plant & machinery which are exchanged for money and therefore entails the phenomena of exchange, scarcity, and choice that characterizes a 'market' in the economic sense of the term, to create value for shareholders and to preserve the legal rights of Stack-holders fundamental rights
- The financial burden for Start-up companies can be met with Financial Institutions like Banks etc based on Valuation/Budgetary report against Valued Collated securities that nourishes the Secondary sector like Industrial growth, Service Industries, etc, and employment opportunities in ancillary units. The subsidy, Grant, share pricing, Athma Nirbar scheme, and Make in India are such schemes wherein a Valuation Report is compulsory for decision making
- The valuation report [stage-wise] depicts the cash flow pattern over some time and hence pooling of funds, as well as allocation of funds, comes to a clear optimistic utilization of fund flow
- The valuation report is compulsory to conclude/reject any Merger/ Acquisition of Industries or the like
- Converting a private limited concern to a public shares or industry leads to disinvestments, thereby nullifying the loss so incurred in case it is declared as a sick unit
- The balance sheet of every company is to be analyzed by Registered Valuers and associated assets to be valued to be checked and notified in the recent years
- Crowdfunding pattern of investment is to be investigated properly to make sure of proper utilization of Capital investment by proper evaluation technique
- Tax calculations need to be assessed based on the Valuation Report of Registered Valuer, ex. Capital gains tax, Insurance premium, Claims, settlements, etc.
- Intrinsic/true valuation produces optimal pricing of products of enhanced quality adopting price equilibrium

Multi-disciplinary subjects: The valuation process requires adequate knowledge in the following fields:

- ECONOMICS – SUPPLY & DEMAND CHAIN & LOGISTICS, INFLATION/DEFLATION, GDP
- E-COMMERCE – TRANSACTIONS/CURRENCY /PARALLEL MONEY/MONEY LAUNDERING
- TOWN & COUNTRY PLANNING – BUILDING BYE LAWS- RICS STANDARDS
- ARCHITECTURAL ASPECTS- PLANNING & AESTHETICS
- COMMON LAWS – SUCCESSION HIERARCHY– PROPERTY LAWS- COURT PROCEEDINGS
- CONTRACT LAWS – COMPENSATIONS/ CLAIMS/SETTLEMENTS
- LAND ACQUISITION ACTS – COMPENSATION- PROCEDURES
- URBAN LAND ECONOMICS – THEORY OF HYPOTHESIS
- DISINVESTMENTS OF SICK INDUSTRIES & CONSEQUENCES
- INSURANCE – SETTLEMENT, COMPENSATION ETC
- STATISTICS – TREND OF PREVAILING MARKET STRATEGY- REGRESSION/ PROBABILITIES
- MANAGEMENT SCIENCE – COST ANALYSIS – DATA COLLECTIONS/FACT-BASED
- INDIAN & INTERNATIONAL ACCOUNTING SYSTEMS- MARKET STRATEGIES
- BUSINESS ACCOUNTING – HIDDEN COSTS- STOCK MARKET, SHARES & DEBENTURES
- INTERNATIONAL MARKET/DEMAND & SUPPLY
- ENVIRONMENTAL ASPECTS- IMPAIRMENT & LOSS/GAINS

- ECOLOGICAL SYSTEMS- GREEN ENERGY RESOURCES
- ENGINEERING- TECHNICAL KNOW-HOW – METHODS OF EVALUATION OF ASSETS
- ARBITRATION & CONCILIATION – LAWS & REGULATIONS
- GOVERNMENT POLICIES/SCHEMES FOR EXPANSION/CONVERSION OF REGIONS
- POLITICAL SCIENCES – TREND SETTING IN SOCIAL ERGONOMICS
- SOCIO-ECONOMIC BENEFITS – ASSESSMENT – SOCIAL CUSTOMS
- FACTORY ACTS – INDUSTRIAL SAFETY NORMS – GUIDELINES
- ARCHEOLOGICAL IMPORTANCE/ INSCRIPTIONS/SOCIAL IMPACTS
- ARTS & SCIENCE – HERITAGE IMPORTANCE
- POLLUTION CONTROLS & MEASURES – STANDARD OPERATING PROCEDURES
- INDIAN BANKING REGULATION ACTS
- REAL ESTATE REGULATION ACT
- SARFAESI ACT, NCLT REGULATIONS
- GEO POLITICS – GEOGRAPHICAL LOCATIONS
- ENERGY CONSERVATION SYSTEMS
- INTERNATIONAL VALUATION STANDARDS



Drawbacks of undervaluation:

- An undervalued asset well below the intrinsic value does not help the Industrialist to attain the desired allotment of Funds by the Financial Institutions.
- The undercut funds might have been funded by some other Funding agency with higher interest rates, leading to a loss in the form of over-interested payment resulting in increased production cost and thereby component prices hike
- An undervalued stock can be evaluated by looking at the underlying company's financial statements and analyzing its fundamentals, such as cash flow, return on assets, profit generation, and capital management to estimate the stock's intrinsic value.
- In these circumstances, value investors may focus on acquiring these investments as a method of pulling in reasonable returns for a lower initial cost
- The Stakeholders/Beneficiaries/Shareholders/ all concerned do not meet the requisite financial share against the demand/offer due to under-valued collated security assets
- Effective protection against imports through undervaluation, means reduced competition, which could also make local firms less competitive.

Effects of overvaluation:

- An overvalued asset means an investment that transacts more than its intrinsic value.
- Wilful defaulters in general tend to value their collated securities on higher values to avail more financial support in Financial Institutions like Banks, etc.
- Due to non-payment of their regular loan installments by more than 90 days, then the account will be declared as NPA & consequently Nations loss gets reflected in the GDP decline
- Overvaluation may result from an uptick in emotional trading, or illogical, gut-driven decision-making that artificially inflates the stock's market price.
- Overvaluation can also occur due to deterioration in a company's fundamentals and financial strength.
- Potential investors strive to avoid overpaying for stocks.
- Investors prefer to buy overvalued stocks or assets, as short-term investments and sell the same at an anticipated price improved for optimal gain
- An inflated Valuation Report allows sanctioning of Over stated budget provision/Loan
- Purposely, the Officials sanction more Financial assistance than actually eligible

- The Defaulter the unpaid the EMIs and the converted as NPA
- The So-called NPA, Legal Consequences, Waste of Time, etc
- Similarly, the undervaluation also hampers the client doesn't meet the Demand
- Leads to explore alternate funding agencies to find the balance equity/fund
- Finally, the account becomes a Non-Performing Asset/Loan

Valuation purposes: The purpose of a valuation is to compare the calculated value of the business or asset to that of others in a similar industry and the present market price.

- Planning the business development and growth
- Globalization opened the door to attract more additional Foreign Investors to fund company growth or save it from financial disaster, the investor is going to want to see a full company valuation report to buy/ sell company shares, technical knowledge sharing, management participation
- Valuation reports according to current data provide potential investors on how the capital being invested with assured return of revenue for the equity invested
- Such activities by providing Valuation reports gain the attention of potential investors when they can see that their funds will carry the company to the next level, profile, increase its brand value, and motivate the investors put more money back into their products.
- To Preserve the legal rights of Stakeholders/ Beneficiaries/Shareholders/all concerned thoroughly in the Organisational meetings the consequences based on current Valuation projections on the Financial Statements of the Company and also to reinvest the shareholder's capital
- Promotes Industrial growth by financial aid for sick industries, going concerns, etc based on Valuation Reports supported by other Financial Documents to examine by Governmental/Non- Governmental/ Private Investors/ Crowd Funding/other Monetary Funding agencies
- Better during Mergers/Acquisitions: Valuing an asset can be required to perform merger and acquisition transactions, capital budgeting, investment analysis, litigation purposes as well as financial reporting.
- Multinational companies or Major industries may merge or amalgamate with similar ancillary units to improve synergy in manufacturing or production based on valuation reports and financial statements
- Thereby, Merger [Vertical/Horizontal] and acquisition of Industries enhance productivity through the amalgamation
- To insure any business or to claim benefits of insurance coverage, valuation reports are essential either to invest or sell in any industry
- If contemplating selling a company, knowing its true/intrinsic value is necessary.
- Before floating the sale proceeds on the open market, any industry needs to be insured and other mandatory regulations may offer to achieve a higher selling price

Valuation standards

IVSC 2022: (effective from 31 January 2022 – latest edition)

- The International Valuation Standards Council (IVSC) Autonomous body provides the confidence and trust of users of valuation services by establishing transparent and consistent valuation practices
- To producing standards and securing their universal adoption and implementation for the valuation of assets globally forms a fundamental part of the financial system along with high levels of professionalism.
- Valuation appraisals required for regulatory compliance and other financial statements to secured lending and transactional activity
- The IVSC put forth the practical approaches and methodology for valuation appraisals and competency of professional valuers for valuing different types of assets or liabilities.
- To create new standards or material alterations to existing standards and liaises with other bodies that have a standard-setting function in the financial markets, regulators, valuation professional organisations, etc.

RICS: The Royal Institution of Chartered Surveyors (RICS), is a pioneering professional body to establish and enforces standards for valuing real estate property maintaining 134,000 highly qualified trainees and professionals, and offices in every significant financial market, policies, and standards within local market places to protect consumers across the globe

- Before IVS, global standards, leading professional and trusted data and insight to promote and enforce the highest professional standards in the development and management of land, real estate, construction, and infrastructure.

ICAI valuation standards 2018: (1st July 2018)

- The Institute of Chartered Accountants of India (ICAI Valuation Standards 2018) constituted consistent, uniform, and transparent valuation

policies for Income Tax, SEBI, FEMA, etc

- Continuous practice Chartered Accountants for uniform adoption of standards in valuation assignments
- Companies Act 2013, internationally recognized standards applicable for all valuation engagements on a mandatory basis including legal framework and practices prevalent in India ensuring high-quality work
- These Valuation Standards are effective for the valuation reports issued on or after 1st July 2018.

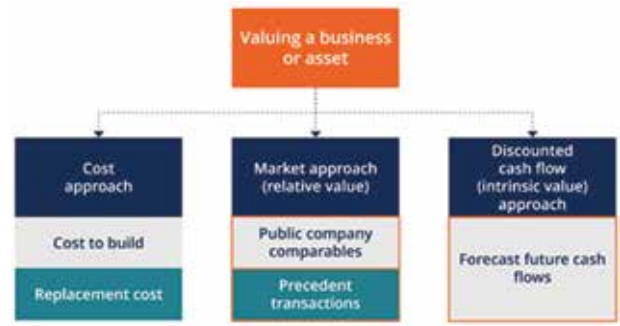
Real Estate

- Land = (Soil) + (All-natural attachments up to the space and below to the Centre of the earth)
- Land = (Natural Surface) + (Natural Subsurface) + (Natural Airspace)
- Real Estate = Land + All Man-Made Fixtures
- Real Property = (Real Estate) + (Rights and benefits attached to real estate)
- Real estate is defined as the land above and below the earth's surface, including all things that are permanently attached to it either natural or artificial.
- It includes not only the natural components of the land but also all artificially improved immovable features made by man.
- Any artificial thing that is attached to the land, such as a building or a structure or a fence is concerned as a part of real estate.
- Land is also converted into real estate as it is improved using providing access, utilities, sewerage systems, and other services that make it suitable for habitable buildings, also called serviced lands, improved lands, or developed lands.
- Such parcels of land are called real estate since they have been reshaped from their natural features.
- At the same time, it is clear that the land becomes usable when it is converted into real estate.
- This means when land becomes real estate, it is usable for planned activities.

Real Property:

- "Real property" is defined as the interests, benefits, and rights inherent in the ownership of the real estate.
- Indeed, real estate is valuable, usable, and marketable as it possesses several real properties.
- Hence, the term "real property" is broader than both the terms "land" and "real estate".
- It includes the physical surface of the land, what lies above and below it, what is permanently attached to it, as well as the bundle of legal rights: legal rights of ownership which are attached to the ownership of a parcel of real estate.

Three approaches to Valuation



Cost Approach:

- The actual cost involved in infrastructure structures building or equivalent
- Three components such as land cost, construction cost, and depreciation loss are the factors governing the cost of any infrastructure
- This type cost of estimation is 100% more accurate than any other alternative methods like
- **Reproduction method**: the cost is like a replica of the existing structure with the original materials used in the original construction
- **Replacement method**. The cost incurred adopting a new modern and updated design built using prevailing construction methods

Income Approach:

- The periodical anticipated revenue from an infrastructure project is accounted for the value project's current worthiness
- Based on the future cash flows, the project or infrastructure will generate income in the form of rent, dividends, shares, and deposits which in turn capitalized to evaluate the current projection of capital investment

The Direct Capitalization Method

- Asset valuation appraised based on single years income probably Net Operating Income
- Based on recent sales data from comparable properties in the vicinity, Net income can be derived
- Direct capitalization requires that the income and expense ratios are similar for the comparable and the subject property and that the next year's income is representative of future years.

The Yield Capitalization Method: The yield capitalization method also includes an estimate of the

expected sales price at the end of the holding period.

Market Approach:

- Trading prices of both selling and buying in the market determine the value of the asset
- Data is primary since the prices are available in website portals
- Assumptions and presumptions are minimum and reliable
- Sales instances of similar properties in the nearby locality ensure a high degree of accuracy

Implications of the Market Approach:

- The market comparable assets of similar size and fashion or industries could not be ascertained in the same region
- In posh areas, there won't be any recent sale transactions for comparable sales
- In such cases, nearest zone data will be taken for analysis with certain assumptions
- The derived data obtained from primary data i. e, secondary data may have errors
- Privately or closely held companies never disclose the actuarial transaction details or sizes, etc.
- Trade secrets and branding details can't be legally explored in the public

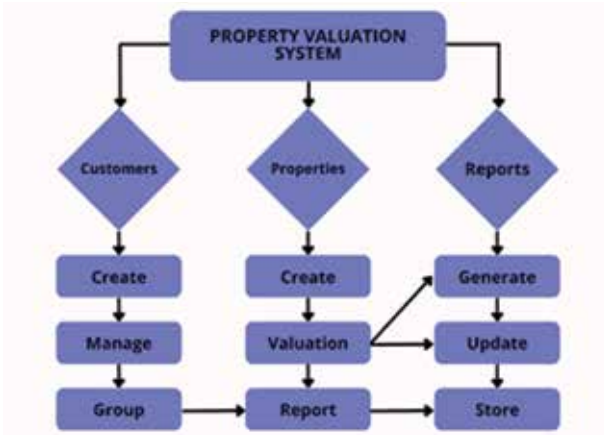
Development of Software for Valuation Appraisal: Need

- Justification of Fair Market Value assessment has to always be cross-checked
- No mechanism/Software is available to examine the correctness of reported value by a professional valuer to compare with intrinsic value
- Willful Fraudulent persons voluntarily over-value intentionally to avail overstated value
- Intentional/Un-Intentionally boost the actual value of any asset/property (movable/immovable) and get extra subsidies granted by both State & Central Governments
- To score more credentials in case of solvency opinions
- There are no hard and fast rules to cross-check these manipulated reports
- Lack of knowledge of Officials scrutinizing such reports is another issue
- Sometimes, hearsay evidence/documents put forth as proof behind such valuations
- Deceitful/fabricated records lead to a rise/lower in the true market potential value
- Forged/ Mollified /Fake/irrelevant documents produced for overvaluation
- Biased earlier/previous improper documents used for valuation
- Unethical valuation methods intentionally lead to overvaluation
- Currently, property valuation engineers use traditional methods and technics to evaluate any property and to determine its fair valuation.
- Hence, there seems a great necessity to automate the property valuation process, which would be beneficial to Property buyers, sellers, and lenders, and further would eventually bring down the rate of loan accounts becoming Non-Performing Assets.
- This software project is conceptualized keeping the above points in mind and was architecture to be used by a registered property valuer to perform his valuation process in an automated and systematic approach.

Features:

- Design and development of a Property Valuation System as a completely web-based software.
- The Property Valuation System software will be controlled by User-based login access.
- The Software has provided to create a new customer, a customer can be an individual, bank, or company.
- A customer can have any number of property valuations performed and reports generated. That is assuming a bank is a customer, then the bank can give valuation requests for multiple properties daily.
- Every property's valuation report is stored in a unique file identification number within the system and the same ID is handled as a global ID across the software system.
- The generated reports are stored as completed reports in the software and are retrievable at any time in the future.
- The completed valuation report is possible to download as a pdf document or can also be printed.
- The following are the key features of the software.
  - User-based Access Management
  - Customer Management
  - Property Management
  - Valuation Process
  - Image upload feature
  - Google Maps location
  - What3word location
  - Report Management
  - Report update Management

Below is a high-level design diagram explaining the project.



There are three major tasks operations in the software, which are

- Customers tasks
- Property Valuation tasks
- Reporting tasks

The process flow in the software is as follows

Tech Stack

Frontend	HTML, CSS
Web Framework	Laravel
Programming Language	PHP
Database	MySQL
Cloud Server	Digital Ocean – Cloudways

Tech Team

UI developer	1
Full stack developer	1
Database Engineer	1
QA & Testing	1

Benefits of Using Secured Structured Data

- The database keeps all your important information securely stored in a single place. Instead of relying on numerous spreadsheets, software, and other unsafe places that may end up costing you essential information without even realizing it, centralize everything with the database
- When you create a case for valuation, you can search your database and find out if the record of the property is already available. Everyone has access to the same information, confirming there's no duplicate information and it's always up-to-date
- When you open one of your valuation entries, you can see all the actions related to it and the corresponding audit trails
- Enables you to analyse data, trends, business progress

Benefits of Using Report Generation:

- The application makes it easier for you to easily access your valuations wherever you are
- You can save your traveling time to and from your office as details of the property valuations (Applicant Name, Contact Number, Address, and Documents) can be shared with you over the application
- Property Pics, Coordinates, and Data Sheets can be uploaded in the application. This data is available for the data entry user within a few minutes and helps in reducing the overall TAT

Property Valuation System Software Screenshots:

1. Login Screen

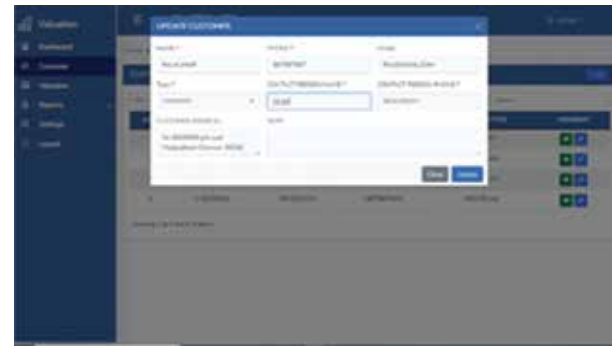
2. DASHBOARD

3. CUSTOMER:

4 CREATE CUSTOMER

* VIEW CUSTOMERS

* EDIT CUSTOMER



3. PROPERTY VALUATION:

4. VALUATION PROCESS

Step 1

Step 2

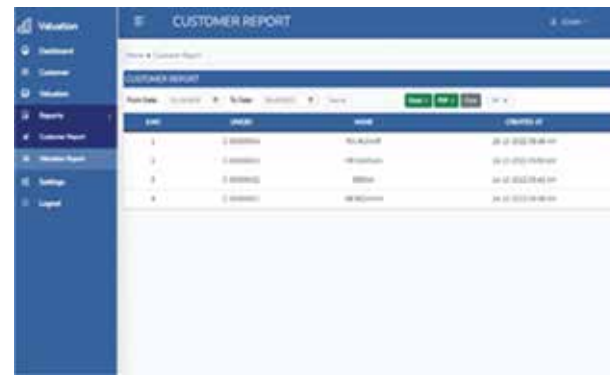
Step 3

Step 4

Step 5

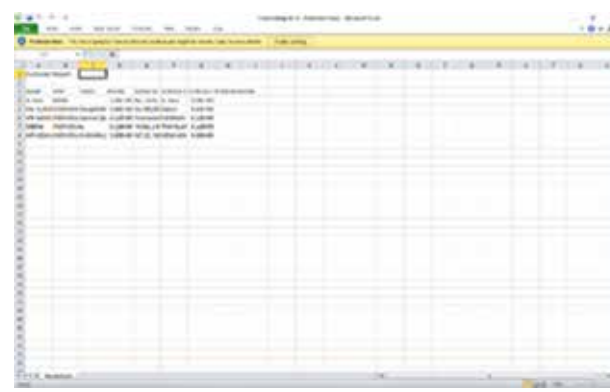
Step 6

5. REPORTS: * CUSTOMER REPORTS

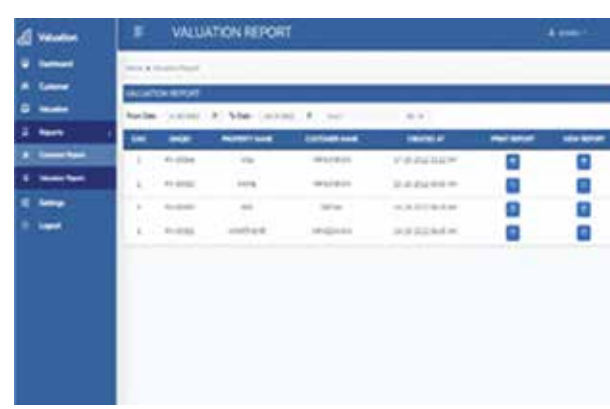


CUSTOMER REPORT PDF

CUSTOMER REPORT EXCEL



* VALUATION REPORT



A joint venture is a business entity created by two or more parties, generally characterized by shared ownership, shared returns and risks, and shared governance. Normally, a Joint venture scheme may be for the construction of Buildings & infrastructures or shares distribution, buying & selling of shares or debentures, or Building, operating, and maintenance.

Joint venture agreements are entered to execute any new project or similar activity through an agreed business agreement between more than two parties, agents, agencies, organisations, management, entities, trusts, incorporations, industries, etc. such as Capital investment, technology, expertise, commercial trade upon terms and conditions. In the case of private individuals JV, the agreement entered between the owner of the land and a promoter with all conditions thereon. But a common R&D wing operates for capturing market potentials and to assess market demand including price determination. All agencies entering into joint venture proposals stipulate

- Sharing the profits earned according to accepted terms as per MoU
- Equally shared profits among participating companies

Joint venture companies may be the same product manufacturers or dissimilar. Joint ventures aim to

- Capture Foreign markets with quality products selling and buying
- Technological expertise knowledge sharing abroad to obtain improved productivity
- To obtain cost savings by a combined method of production
- Cost-wise, economical leverage by reducing the overhead cost of manufacturing

Joint venture arrangements are ideally suited for

- Industries striving for the lack of capital formation for routine running the company
- Industries planning for expansion with limited capital investment for new development
- Industries to share the production for the high market demand
- Industrial products may be either current manufacturing or a new variety of components
- Individuals possessing land alone and no resources for the construction of the superstructure
- High-valued projects, in need of simultaneous development within a fixed time, may invite JD
- In Emergencies, the Government sector invites joint operations for quick restoration
- Amalgamation through JV of two or more existing sick units to create an umbrella corporate for manufacturing a different product that was not produced by these units

Features:

- Scouting and identification of local partners
- Market survey
- Preparation of the feasibility study
- Preparation of the business plan
- Preparation of the JV agreement (or consortium agreement)
- Funding agencies and details
- Finalizing the JV among negotiation strategy.

Methodology: Joint ventures must follow legal guidelines and agreements should be executed accordingly in a registered format

FDI companies enter JV with Government departments or with joint-owned companies on an agreed investment share. The market can be either domestic or global as per JV agreements

- Foreign investors buying an interest in a local company domestically
- Domestic local firm acquiring an interest in an existing foreign firm
- Both the foreign and local entities forming a new company
- Government public capital and/or Nationalised bank assistance

Limitations:

- The incorporation to be two or more similar or dissimilar consortium
- Specific cause or implementation or new proposal
- Underwriting of agreements under standard terms and conditions
- JV ends if a specific task is over
- Sharing not only for profits but loss if so incurred
- JV can also continue among coventurers according to the situation

Merits & Demerits: **Merits** of joint venture proposals

- Short-time JV is convenient and normally preferred
- Resources of all kinds can be distributed and utilized optimally
- Technology and expertise sharing help business growth
- Risk associated can be shared equally or the agreed conditions
- Commitment is a minimum that is a portion of the whole business is only undertaken by JV
- More flexibility in getting out of JV at any point in time
- Using of JVs new avenues of business open and the scope extends the potential market
- Synergic value is gained in terms of high-potential project executions
- If two monopolies combine can become still pioneer in monopolistic the market
- Similarly, if two or more sick units combine can become successful manufacturers
- Sometimes, two or more competitors can join hands to produce cheap cost products
- There can be still better-quality products can be manufactured

Demerits of joint venture proposals

- Volatile market conditions break JV partnership safely
- Flexibility in business mode diverts to concentrate on own jobs instead of JV dealings
- Responsibility sharing may fail and fix the burden on others
- Imbalance in knowledge share, investment, risk bearing, etc.
- Management cooperation fails by the non-adoption of standards, status, inputs, etc.
- Mis - communication spreads low productivity
- Co- ventures quality may dissolve JV and are not dependable
- Technical advancements may be protected and not ready to share by partners

Some of the JV companies in India:

- ICICI Prudential Life Insurance Company
- Chomoodeley MS General Insurance Company
- Future Generali Life Insurance
- Tata AIG General Insurance Co. Ltd
- IFFCO Tokio General Insurance
- ICICI Lombard General Insurance Company Ltd
- Petronet LNG Limited
- Indian Oil Petronas Pvt Ltd
- Delhi Aviation Fuel Facility Private Limited
- Indo Cat Pvt. Limited
- Aavantika Gas Limited
- IOT Infrastructure & Energy Services Ltd
- Mahanagar Gas Limited
- Mahanagar Gas Limited
- Ratnagiri Gas and Power Private Limited
- Indian Oil Skytanking Limited

Case study: **Joint Venture Proposals - Residential Apartment Units – Private entities**

Data: Measurement of Plot – 40’ (Width) x 60’ (Depth) – 2400 sqft facing north

Road width: 20’. Apartment construction

Find: Homeowner Vs Promoter share percentage of infrastructure development in these locations

Statement of Construction value:

Sl No	Location/Place	Prevailing cost of plot (Rs/ per sqft)	Value of Plot	Prevailing cost of construction of building (Rs/ per sqft)	Value of construction
1	Chengalpattu	3000	2400 x 3000 = 72,00,000	2200	6x 650x 2200 = 8580000
2	Kattangulathur	4000	2400 x 4000 = 96,00,000	2250	6x 650x 2250 = 8775000
3	Vandalur	4500	2400 x 4500 = 108,00,000	2300	6x 650x 2300 = 8970000

4	Perungalathur	4750	2400 x 4750 = 114,00,000	2400	6x 650x 2400 = 9360000
5	Tambaram	5000	2400 x 5000 = 120,00,000	2500	6x 650x 2500 = 9750000
6	Pallavaram	6000	2400 x 7000 = 168,00,000	2550	6x 650x 2550 = 9945000
7	Velachery	9000	2400 x 9000 = 216,00,000	2600	6x 650x 2600 = 101,40,000
8	Saidapet	10000	2400 x 10000 = 240,00,000	2600	6x 650x 2600 = 10140000
9	Nandanam	12000	2400 x 12000 = 288,00,000	2650	6x 650x 2650 = 10335000
10	Mylapore	14000	2400 x 15000 = 360,00,000	2700	6x 650x 2700 = 10530000

Solution:

For the road width of 20', Stilt plus three floors (with 4 passenger Lift) allowed by sanctioning authority
Permissible FSI/FSA – 2.00
Permissible Plinth area of construction: 2 x 2400 = 4800 sqft

Statement of Amenities:

Sl No:	Amenities	Value (Rs) Lakhs									
		Chengalattu	Kattangulathur	Vandalur	Perungalathur	Tambaram	Pallavaram	Velachery	Saidapet	Nandanam	Mylapore
1	4 Passenger Lift (Cost & Installation)	10	10	10	10	10	10	10	10	10	10
2	Staircase around Lift including handrail, headroom, etc (200 sqft x Rs 2200 x 5 Floors) = 26,00,000/-	22	23	23	24	25	26	26	26	27	27
3	Compound wall including main grill gates – Rs 2,00,000/- Grill gate – 40 x Rs 2500/ft = 1,00,000/-	3	3	3	3	3	3	3	3	3	3
4	Pavement all-round	3	3	3	3	3	3	3	3	3	3
5	Construction of Stilt Floor = 1500 sqft x Rs 2000 = 33,00,000/- [Plinth area = 30 x 50 = 1500 sqft] [side set back all around – 5']	30	30	30	30	32	33	33	33	33	33
6	Overhead Water Tank - 30000 liters capacity	3	3	3	3	3	4	4	4	4	4
7	Underground water sump- 20000 liters	3	3	3	3	3	3	3	3	3	3
8	External electrification (Common)	4	4	4	4	4	5	5	5	5	5
9	Internal Electrification (Stilt)	2	2	2	2	2	3	3	3	3	3
10	White & Color wash (Stilt & other common areas)	2	2	2	2	2	4	4	4	4	4
11	Lift Motor Room	3	3	3	3	3	3	3	3	3	3
12	Civic body approval	6	6	6	6	6	7	8	8	8	8
13	Rainwater harvesting	2	2	2	2	2	2	2	2	2	2
14	Engineer & Architect Charges	2	2	2	2	2	2	2	2	2	2
15	Political expenses	3	3	3	3	3	5	5	5	5	5
16	External water supply	3	3	3	3	3	6	6	6	6	6
		101	102	102	103	106	119	120	120	121	121

Statement of JV business share:

Location	Value of land	Value of construction	Value Amenities	Value of Project	Investment ratio	Share of Built-up area		Homeowner Vs Promoter share percentage of infrastructure development	
						Homeowner (Sqft)	Promoter (Sqft)	Homeowner (BHK plus Amount)	Promoter
Chengalpattu	72.00	85.80	101.00	258.80	27: 73	0.27x6x650 = 1053	6x650-1053 = 2847	1 BHK + 403 x Rs 3000/ Sqft = Rs 12,09,000	5 BHK

Kattangulathur	96.00	87.75	102.00	285.75	34: 66	0.34x6x650 = 1326	6x650-1326 = 5174	2 BHK + 26 x Rs 4000/Sqft = Rs 1,04,000	4 BHK
Vandalur	108.00	89.70	102.00	299.70	36: 64	0.36x6x650 = 1404	6x650-1404 = 2496	2 BHK + 104 x Rs 4500/ Sqft = Rs 4,68,000	4 BHK
Perungalathur	114.00	93.60	103.00	310.60	37: 63	0.37x6x650 = 1443	6x650-1443 = 2457	2 BHK + 143 x Rs 4500/ Sqft = Rs 6,43,500	4 BHK
Tambaram	120.00	97.50	106.00	323.50	37: 63	0.37x6x650 = 1443	6x650-1443 = 2457	2 BHK + 143 x Rs 5000/ Sqft = Rs 7,15,000	4 BHK
Pallavaram	168.00	99.45	119.00	386.45	43: 57	0.43x6x650 = 1677	6x650-1677 = 2223	2 BHK + 377 x Rs 6000/ Sqft = Rs 54,99,000	4 BHK
Velachery	216.00	101.40	120.00	437.40	49: 51	0.49x6x650 = 1911	6x650-1911 = 1989	2 BHK + 611 x Rs 9000/ Sqft = Rs 62,01,000	4 BHK
Saidapet	240.00	101.40	120.00	461.40	52: 48	0.52x6x650 = 2028	6x650-2028 = 1872	3 BHK + 78 x Rs 10000/ Sqft = Rs 7,80,000	3 BHK
Nandanam	288.00	103.35	121.00	512.35	56: 44	0.56x6x650 = 2184	6x650-2184 = 1716	3 BHK + 234 x Rs 11000/ Sqft = Rs 25,74,000	3 BHK
Mylapore	360.00	105.30	121.00	586.30	61: 39	0.61x6x650 = 2379	6x650-2379 = 1521	3 BHK + 429 x Rs 12000/ Sqft = Rs 51,48,000	3 BHK

Case Study: COMPUTATION OF LAND/PLOT RATE @ MARKET FLAT RATE

- In Posh zones, there won't be recent transaction data since no homeowners sell their assets as being enjoying dynastic
- In such cases, Internet websites will be searched and computations based on Flat rates available in the nearby Vicinity/Property Developers can be best utilized for evaluation
- Given the Composite rate of Flat/Apartment in the vicinity as per Magic bricks.com or 99 acres.com
- To compute the value of the plot, which comprises 3 components namely UDS share of the land value, Plinth area of the Flat, and share of common utilities @ the rate of 25% of flat value along with profit on Capital Investment
- Value of Project= Construction cost + Cost of Plot + Profit @ 5.00 %

  = [(Plot area x FSI x Construction rate x 1.25) + (Plot area x Plot rate)] x 1.05

  = Plot area [(1.05 x Construction rate x 1.25 Floor space index) + 1.05 Plot rate]

  = Plot area [(1.313 Construction rate x Floor space index) + 1.05 Plot rate]
- Composite Rate = Value of Project / (Floor space index x Plot area)
- $$= \frac{\text{Plot area [(1.313 Construction rate x Floor space index) + 1.05 Plot rate]}}{\text{Plot area x Floor space index}}$$

  $$= \frac{\text{[(1.313 Construction rate x Floor space index) + 1.05 Plot rate]}}{\text{Floor space index}}$$
- Composite Rate x Floor space index = (1.313 Construction rate x Floor space index) +1.05 Plot area
- $$\text{Plot rate} = \frac{\text{[Composite Rate X Floor space index – 1.313 Construction rate x Floor space index]}}{1.05}$$

  $$= \text{Floor space index } \frac{\text{[Composite Rate - (Construction rate x 1.313)]}}{1.05}$$

  = 0.952 Max. Floor space index [Composite Rate – 1.313 Construction rate]

Sl No	Location/Place	Prevailing rate of cost of Flat (Rs/ per sqft) (Comp R)	Construction Cost (Cons R) (Rs/per sqft)	**FSI (Max)**	Rate of Cost of Plot (Rs/ per sqft) = 0.952 FSI [Comp R – 1.313 Cons R] = 1.904(Comp R – 1.313 Cons R)
1	Chengalpattu	3000	2200	2.00	212

2	Kattangulathur	4000	2250	2.00	1991
3	Vandalur	4500	2300	2.00	2818
4	Perungalathur	4500	2400	2.00	2568
5	Tambaram	5000	2500	2.00	3270
6	Pallavaram	6000	2550	2.00	5049
7	Velachery	9000	2600	2.00	10636
8	Saidapet	10000	2600	2.00	12540
9	Nandanam	11000	2650	2.00	14319
10	Mylapore	12000	2700	2.00	16098

Intermittent values can be computed by interpolation of figures

Valuation of Skyscrapers: an important factor

Structural Engineering	Valuation aspect
• There will be more crowd on Ground Floor since all commercial shops are located • By the same way, there will be a crowd on the First floor but comparatively less than the ground floor and vice versa • This population density or Live load goes on reducing in the upper floors • This live load reduction accounted for 10% which proceeds from the ground floor to the upper floors • But limited up to 50% practically • Hence, only 50% of the live load is accounted in the rest of the floors • Thus, the reduced live load factor reduces the utility of these floors, which causes a slight reduction in structural reinforcements, component member sizes, etc.	• Emphasize of Valuation is based on four factors namely Demand, Utility, Scarcity & Transferability. • Therefore, the utility aspect needs to be considered while valuing upper floors • Similar to structural engineering, a reduction to the tune of 3 - 5 % in value can be entertained in valuation also. • By this, the Ground floor will fetch high value and starts to reducing according to the upper floors • But any way upper limitation to be fixed • It can be up to 5% • Based on this reason, the rental charges are high in lower floors than upper floors • Also, construction cost is low in upper floors than lower ones • This analogy also applies to Multistoried buildings

Synergistic value by combining individual adjacent plots or assets or interests:

- Synergistic Value is an additional element of value created by the combination of two or more assets or interests where the combined value is more than the sum of the separate values
- If the synergies are only available to one specific buyer then Synergistic Value will differ from Market Value, as the Synergistic Value will reflect particular attributes of an asset that are only of value to a specific purchaser.
- If the synergies are available to multiple market participants, then the Synergistic Value may be consistent with the Market Value, as the price the asset should exchange on the valuation date between a willing buyer and a willing seller would likely reflect the value of any synergies available to multiple market participants
- Synergy is the concept that the combined value and performance of two companies will be greater than the sum of the separate individual parts.
- Synergy is a term that is most commonly used in the context of mergers and acquisitions (M&A).
- Synergy, or the potential financial benefit achieved through the combining of companies, is often a driving force behind a merger.
- If two companies can merge to create greater efficiency or scale, the result is what is sometimes referred to as a synergy merger.
- The expected synergy achieved through a merger can be attributed to various factors, such as increased revenues, combined talent and technology, and cost reduction.
- In addition to merging with another company, a company can also create synergy by combining products or markets, such as when one company cross-sells another company's products to increase revenues.
- Companies can also achieve synergy between different departments by setting up cross-disciplinary workgroups in which teams work cooperatively to increase productivity and innovation.
- In the case of Plots, The Built-up area got increased when joined together than those individual plots, thereby increasing project value as per Town Planning Parameters and enhancing profits

Role of A Valuer in Investment Decisions

- A Business Investor who finance tends to take back higher profit in the best possible utilization.
- The valuer is a person who knows upgraded ideas in the Share market, Bonds, Sock exchange, and current business strategy to suggest these investors capitalize the money after careful Techno – Economical examinations.
- His quotations should match the current developments in the Industry

- Equipped with all Governmental policies, tax structure, subsidies, grants, etc
- He should be familiar with Cash flow techniques to predict and analyse the economically feasible alternatives
- He should offer valid suggestions in the decision-making process along with Managers of the top cadre
- His perceptions should be supported by documentary evidence and proofs using statistical data, computer, and other mathematical calculations.
- His ideas should make more profits with less input of Investment, considering other factors
- His decisions should be fool proof and procurement of physical assets and liabilities must align with the organization requirement
- He should possess to put forth the correct methodology and procedural activities likely to be adopted in the manufacturing process also. It should be acceptable by all in the organization both in the Managerial cadre and employees' side also.
- He should investigate thoroughly compare with Goals fixed by the Business organization and current practices adopted in the System.
- His decisions and suggestions are not against public policy. Health hazards, Transparency
- Environmental Factors, Expenses on Environmental Audit & Implementation of Banned Items, violation of rules and regulations
- The following practical situations could be encountered by a valuer
- To select between alternate components, designs, services, or processes where project investment is involved.
- To estimate and analyse the economic consequences of improvement in operations
- To select among proposed projects within the annual capital budget limit established in an organization
- To choose between asset lease and purchase options for supporting a new product line within an organization
- Likewise, those who consume [spend] capital by designing and implementing new processes, products, systems, and services are equally concerned that available capital is invested wisely
- For example: Suppose a landlord wishes to sell his house property to a sitting tenant of an existing building and wants to fix a fair and reasonable asset value. The Sitting tenant will try to minimize the worthiness of the property and whereas the Landlord may fix it at a higher value. Now it is the role of a valuer to fix a reasonable and fair market value of the said property.
- Secondly if one Business person wants to buy a machine of foreign origin, the Valuer must have some fair knowledge of the item imported to assess the value to pay customs duty, etc

Conclusions:

- Land/Plot is an appreciating asset, whereas Building is depreciating as time passes
- Undivided share of plot component (appreciating) and Building plinth area (depreciating).
- On completion of Building life, needs demolition and reconstruction
- At the far end of Economical life of the Building portion, the value of the Building portion becomes null
- Therefore, requires the value of only UDS of the plot area, which is the only right of the owner.
- Hence while valuing apartment portions, the actual market value of the UDS of the plot and the depreciated value of the building portion are taken for valuation
- Normally valuers take 75 – 85 % of the composite rate of land and multiply this figure with the Built-up area of apartments, which is not correct
- UDS portion of the plot area to be multiplied with land value (not with a plinth area of the building)
- By doing this mistake, actually we are over-valuing the property rights of the owner of the premises
- This sometimes may lead to the NPA of that loan
- This can be seen in our case study, the UDS value is as follows assuming no value for the building after say 30 years (for some reason or dilapidated condition or poor maintenance or dispute), the rate of land only may likely increase, say Rs 2500/- per sqft
- The State Government recently laid conditions for strict registration of all JV agreements
- The Stamp duty has been reduced by 2% (Previously 11%)
- Real estate Regulation Authority is looking at these activities including the implementation
- Joint ventures agreements create new entities like incorporation, private limited, or limited liability company between existing industries or companies legally structured
- Such newly formed may be in the management of the board of venture companies or either of the only one of the Company
- If the new legal entity is a corporation, if the founding company may grasp equal shares of management responsibilities and representation on the board of directors.

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FUND RAISING BY START-UPS

CS Lalit Rajput
&
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"Fundraising is a marathon and not a sprint."

INTRODUCTION:

Startup India is a Government of India flagship initiative to build startups and nurture innovation. Through this initiative, the Government plans to empower startup ventures to boost entrepreneurship, economic growth and employment across India. India's startup eco-system has become a talking point for the entire world. With hundreds of innovative youngsters choosing to pursue the path of entrepreneurship instead of joining the multinational corporations and government ventures, the business world has witnessed an explosion of ground-breaking startups providing solutions to the real problems at a mass level in the past years. The paper discusses few issues and challenges that an Indian startup has to face and the opportunities that the country can provide in the current eco-system.

A startup venture could be defined as, a new business that is in the initial stages of operation, beginning to grow and is typically financed by an individual or small group of individuals. It is a young entrepreneurial, scalable business model built on technology and innovation wherein the founders develop a product or service for which they foresee demand through disruption of existing or by creating entirely new markets. Startups are nothing but an idea that manifests into a commercial undertaking.

Funding refers to the money required to start and run a business. It is a financial investment in a company for product development, manufacturing, expansion, sales and marketing, office spaces, and inventory. Many startups choose to not raise funding from third parties and are funded by their founders only (to prevent debts and equity dilution). However, most startups do raise funding, especially as they grow larger and scale their operations. This page shall be your virtual guide to Startup funding.

A startup might require funding for one, a few, or all of the following purposes. It is important that an entrepreneur is clear about why they are raising funds. Founders should have a detailed financial and business plan before they approach investors.

Funds, i.e. Cash and Liquidity is the basic need for every business to run. An enterprise can easily be set up for self-employment. The major eligibility criteria are return on the investment and profitability of the project proposed to be set up. Fund raising will help Entrepreneurs / Businesses to get financial aid and source of liquidity to run business.

Investors essentially buy a piece of the company with their investment. They are putting down capital, in exchange for equity: a portion of ownership in the startup and rights to its potential future profits. Investors form a partnership with the startups they choose to invest in – if the company turns a profit, investors make returns proportionate to their amount of equity in the startup; if the startup fails, the investors lose the money they've invested.

Investors realize their return on investment from startups through various means of exit. Ideally, the VC firm and the entrepreneur should discuss the various exit options at the beginning of investment negotiations. A well-performing, high-growth startup that also has excellent management and organizational processes is more likely of being exit-ready earlier than other startups. Venture Capital and Private Equity funds must exit all their investments before the end of the fund's life. There are **various** types of fundraising **options available in the market** and no 'one-size-fits-all' approach. To survive and thrive in a changing world, a Start-up organization must develop a fundraising plan.

Let us discuss types of fundraising options available to Start-ups:

Sl.	Types of Fundraising	Briefing
1	Equity Financing	A process under which capital will be raised through the sale of Equity Shares of the particular Company. Equity financing is used when companies, often start-ups, have a short-term need for cash. It is typical for companies to use equity financing several times during the process of reaching maturity. **For example,** • an entrepreneur's friends and family, investors, or an initial public offering (IPO). • Industry giants raised billions in capital through IPOs. **Risk factor** for the investor is higher because there is no guarantee against his investment made though

2.	Debt Financing	A process under which a company borrows money to be paid back at a future date with interest, known as debt financing. There are two types of debt financing: secured and unsecured. Debt Fund have very less involvement in decision making. **Pressure for Repayment for startups:** More pressure for startups to adhere to repayment timeline and as a result more pressure to generate cash flows to meet interest repayments **Sources of debt financing includes:** Banks, Non-Banking Financial Institutions, Government Loan Schemes (CGTMSE, Mudra Loan, Standup India)
3	Grants	Grants are the sum of money given or awarded by government to the business that you don't have to pay back, i.e. Grants are non-repayable funds. **Re-payment pressure:** No pressure for repayment as grants are a form of monetary support provided for a specific purpose. **Sources of fund-raising through grants includes:** Central Government, State Governments, Corporate Challenges, Grant Programs of Private Entities

Sources of funding

i. **Bootstrapping-** Self-funding or bootstrapping is an effective way of financing, particularly when you are just starting your business. First-time entrepreneurs often have trouble getting funding without first showing some traction and a plan for potential success. You can invest from your own savings or can get your family and friends to contribute. This will be easy to raise due to less formalities/compliances, plus less costs of raising.

ii. **Crowdfunding-** Crowdfunding is any financing method that involves taking small amounts of money from a large number of individuals. The people who fund these projects and entities may do so without expecting anything in return—they're donations to a cause they support. Others fund these projects in exchange for products, services, or equity in the entity.

iii. **Angel Investment-** An angel investor is a person who invests in a new or small business venture, providing capital for start-up or expansion. Angel investors are typically individuals who have spare cash available and are looking for a higher rate of return than would be given by more traditional investments.

iv. **Venture Capital-** It is a private or institutional investment made into early-stage / start-up companies (new ventures). Ventures involve risk (having uncertain outcome) in the expectation of a sizeable gain. Venture Capital is money invested in businesses that are small; or exist only as an initiative, but have huge potential to grow. The people who invest this money are called venture capitalists (VCs). Venture Capital investment is also referred to risk capital or patient risk capital, as it includes the risk of losing the money if the venture doesn't succeed and takes medium to long term period for the investments to fructify. Venture capital firms infused a total of $17.2 billion investment into the Indian startup ecosystem during January-July 2021, according to data released by the Indian Private Equity and Venture Capital Association (IVCA) and Venture Intelligence (VI). Some of the big VC deals included those in Udaan, Lenskart, Zomato, Swiggy, PharmEasy, Meesho, Pine Labs, Zeta, Cred, RazorPay, HealthifyMe, Byju's, Unacademy, Eruditus, Vedantu, Dunzo, Bira 91, Boat, Mamaearth, MyGlamm, Uniphore Software Systems, Yellow.ai, Entropik and others.

The Top 10 Investment Rounds Of First Quarter Of 2021:

a. Udaan: $280 Mn
b. Zomato: $250 Mn
c. BharatPe: $143 Mn
d. Zetwerk: $120 Mn
e. Infra.Market: $107 Mn
f. Innovaccer: $105 Mn
g. Dailyhunt: $100 Mn
h. boAt: $100 Mn
i. Mobile Premier League: $96 Mn
j. Cred: $81 Mn

v. **Incubators & Accelerators-** Early stage businesses can consider Incubator and Accelerator programs as a funding option. Though used interchangeably, there are few fundamental differences between the two. Incubators are like a parent to a child, who nurture the business providing shelter tools and training and network to a business. Accelerators are more or less the same thing, but an incubator helps/assists/nurtures a business to walk, while accelerator helps to run/take a giant leap.

vi. **Raise Funds by Winning Contests-** An increase in the number of contests has tremendously helped to maximize the opportunities for fund raising. It encourages entrepreneurs with business ideas to set up their own businesses. In such competitions, you either have to build a product or prepare a business plan. Winning these competitions can also get you some media coverage.

vii. **Bank Loans-** The bank provides two kinds of financing for businesses. One is working capital loan, and other is funding. Working Capital loan

is the loan required to run one complete cycle of revenue generating operations, and the limit is usually decided by hypothecating stocks and debtors. Funding from bank would involve the usual process of sharing the business plan and the valuation details, along with the project report, based on which the loan is sanctioned.

viii. **Business Loans from Microfinance Providers or NBFCs-** Microfinance is basically access of financial services to those who would not have access to conventional banking services. It is increasingly becoming popular for those whose requirements are limited and credit ratings not favoured by bank.

Similarly, NBFCs are Non-Banking Financial Corporations are corporations that provide Banking services without meeting legal requirement/ definition of a bank.

ix. **Govt Programs-** The Government of India has launched 10,000 Crore Start-up Fund in Union budget 2014-15 to improve start-up ecosystem in India. Government backed **'MUDRA'** was also started with an initial corpus of Rs. 20,000 crores to extend benefits to around 10 lakhs SMEs. Also, different states have come up different programs to encourage small businesses.

x. **SIDBI Fund of Funds Scheme -** The Government of India formed a fund of INR 10,000 CR to increase capital availability as well as to catalyze private investments and thereby accelerate the growth of the Indian startup ecosystem. The Fund was set up as a Fund of Funds for Startups (FFS), approved by the Cabinet and established by the Department for Promotion of Industry and Internal Trade (DPIIT) in June 2016. FFS does not invest in startups directly but provides capital to SEBI-registered Alternate Investment Funds (AIFs), known as daughter funds, who in turn invest money in high-potential Indian startups. SIDBI has been given the mandate of managing the FFS through the selection of daughter funds and overseeing the disbursal of committed capital. The fund of funds makes downstream investments in venture capital and alternative investment funds that in turn invest in startups. The fund has been formed in a way that creates a catalyzing effect. Funding is provided to startups across different life cycles.

xi. **Startup India Seed Fund Scheme -** Department for Promotion of Industry and Internal Trade (DPIIT) has created Startup India Seed Fund Scheme (SISFS) with an outlay of Rs. 945.00 CR, which aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialization. This would enable these startups to graduate to a level where they will be able to raise investments from angel investors or venture capitalists or seek loans from commercial banks or financial institutions. The scheme will support an estimated 3,600 entrepreneurs through 300 incubators in the next 4 years. The Seed Fund will be disbursed to eligible startups through eligible incubators across India.

Reasons for funding

Reasons	Particulars
Scale up operations	One of the most prominent reasons for funding is to scale up your operations, for expansion and achieve economies of scale.
Establish a competitive advantage	Another reason is to establish a competitive advantage over your competition and quickly acquire a substantial market share.
Funding short term operational expenses.	The third reason is to fund your short-term operational expenses or working capital.
Research and development.	In very few specific cases, depending on the nature of the business, the business might demand a considerable gestation period or extensive research and development. For these businesses, it is imperative to get funding from the start without which the company cannot be set up. This kind of funding is generally applicable if the product is unique and innovative.

Apart from these reasons and a few exceptions, you would struggle to justify your funding need. Ensure that you create a strong foundation for the business before looking for funding. Seeking funds for wrong reasons is a recipe for disaster.

What do investors look for before investing?

Let us understand the investment criteria from the investors' point of view that drives an investment.

Key points	Briefing
Idea and its potential	The starting point is the idea and its potential. The idea must be feasible, scalable, unique, and innovative and must have a market opportunity. Startups should showcase the potential to scale in the near future, along with a sustainable and stable business plan. They should also consider barriers to entry, imitation costs, growth rate, and expansion plans.

Business	The investors also focus on the business, including the credibility and credential of the core team and their ability to execute the idea. The business model and revenue model, along with your positioning, pricing, and cost structures, are equally important.
Future potential	Investors not only focus on the present but also the future potential of the business, which can be showcased through a well-drafted business plan, which includes the business strategies, the usage of funds, value proposition, and the exit strategy.
Market Landscape	Market size, obtainable market share, product adoption rate, historical and forecasted market growth rates, macroeconomic drivers for the market your plans to target.
Financial Assessment and Return on investment	A detailed financial business model that showcases cash inflows over the years, investments required key milestones, break-even points, and growth rates. Assumptions used at this stage should be reasonable and clearly mentioned. Along with all of these, the most crucial point that the investors look for is the return on investment. It is essential that the investors feel confident of the investment proposition and are convinced that they will be able to earn back their investments.
Exit Avenues	A startup showcasing potential future acquirers or alliance partners becomes a valuable decision parameter for the investor. Initial public offerings, acquisitions, subsequent rounds of funding are all examples of exit options.

Documents preparation

All documents have to be well-structured so investors can read and understand immediately. Entrepreneurs must spend adequate time and effort researching, creating, and preparing the components of the pitch before approaching the investors.

Investor Pitch Deck	Business Plan
It's the first communication you send to the investor and it's approx. 10-page presentation.	It's an in-depth document that will outline everything about your business – from history to vision/mission, from strategies to exit plan – it will have it all.

ISSUES AND CHALLENGES FACED BY STARTUPS IN INDIA

1. Financial resources Availability of finance is critical for the startups and is always a problem to get sufficient amounts. A number of finance options ranging from family members, friends, loans, grants, angel funding, venture capitalists, crowd funding etc are available. The requirement starts increasing as the business progresses. Scaling of business requires timely infusion of capital. Proper cash management is critical for the success of the startups. A recent report paints a gloomy picture with 85% of new company's reportedly underfunded indicating potential failure.
2. Revenue generation Several startups fail due to poor revenue generation as the business grows. As the operations increase, expenses grow with reduced revenues forcing startups to concentrate on the funding aspect, thus, diluting the focus on the fundamentals of business. Hence, revenue generation is critical, warranting efficient management of burn rate which in common parlance is the rate at which startups spend money in the initial stages. The challenge is not to generate enough capital but also to expand and sustain the growth.
3. Regulations Starting a business requires a number of permissions from government agencies. Although there is a perceptible change, it is still a challenge to register a company. Regulations pertaining to labor laws, intellectual property rights, dispute resolution etc. are rigorous in India.
4. Lack of a good branding strategy Absence of an effective branding strategy is another issue that prevents startups from flourishing at a faster pace. Hemant Arora, Business Head-Branded Content, Times Network opines that branding demands paramount attention as it gives an identity and occupies a space in the consumer minds.

Conclusion:

The current economic scenario in India is on expansion mode. The Indian government is increasingly showing greater enthusiasm to increase the GDP rate of growth from grass root levels with introduction of liberal policies and initiatives for entrepreneurs like 'Make in India', 'Startup India', MUDRA etc. 'Make in India' is great opportunity for the Indian start-ups. With government going full hog on developing entrepreneurs, it could arrest brain drain and provide an environment to improve availability of local talent for hiring by startup firms.

ARTICLE

ROLE OF VALUERS IN FINANCIALS FRAUDS

Abhishek Goel

Executive Summary:

Through this article, the author wish to put an emphasis of the increasing role of the valuers in the decision-making of the investors specially in the present times when the occurrence of financial frauds is increasing substantially. This article highlights the need of an valuer to be objective and fair while undertaking valuation engagements to help the stakeholders determine and prevent frauds.

Background

The news of the Gomechanic, a fast growing vehicle service startup is now raising the investor's eyebrows on not just the financial reporting process and the audits being conducted but the role of overall ecosystem by which the management is in the position to undertake such financial crimes. This is something not new coming before however, the recent backdrop of financial irregularities found in Byju's & Bharatpe alongwith the significant losses to the retail investors in the IPOs of the leading startups like Zomato, Nykaa, PayTM has now questioned not just the role of the management at large but of the professionals who are conducting the audits, due diligences and the valuation of these businesses.

The recent layoffs as announced by all the tech majors such as Google, Amazon etc has also shown to the world that as we are moving forward in the future, the businesses are becoming host of volatility and the quality which one typically expects from technology companies is declining.

While the current set of events reflect the weaknesses of not just the auditors but also of the regulators to take the appropriate corrective steps. This can be seen from the instances of Gomechanic & Byju's where the auditors have been raising concerns on the financial reporting process however, inaction on the part of regulators until it grew significantly.

Having said so, the recent valuation for the IPO of Mamaearth opens a plethora of questions on how the valuation has been arrived for the purpose of the IPO which is different from the fundamental ratios of the company. In this regard, it is pertinent for the Valuers to consider reasonableness and fariness while they value the business. Further, the Valuers cannot blatantly rely on the financial reporting, audit report or the management projections presented as the data provided may be biased and inappropriate for the purpose of the valuation.

Issue under Consideration

The question that comes up in the mind is that the role of the valuer is only to conduct the valuation and provide its report for the specific purpose use. In various circumstances, it is neither appropriate nor convenient for the valuer to put itself in the shoes of the Management or the auditor to review the financial information. However, this does not dispense the Valuer from its duty to conduct interviews and the due diligence on the information provided by the Management. In majority of the cases where the management provided projections appears to be too optimistic, it is the responsibility of the Valuer to undertake various adjustments which as per valuer present the fair representation of the business.

While it is easy to expect an valuer to undertake certain adjustments however, for the growing businesses at times the challenge is the supernormal growth which gets impacted due to different business scenarios and ultimately impacting the valuation of the companies significantly. For instance, Oyo's valuation was USD 10 Billion in 2019 which has been reduced to USD 2.7 Billion. While one may argue that the reduction in the valuation is on account of the COVID-19 Pandemic which is true to an extent as the valuation which was derived in 2019 has not taken into account the uncertain once in a century pandemic however, a part of the decline in valuation can also be attributed to unrealistic growth expectations. In these cases, the imperative of the Valuers judgement becomes extremely important and as such the valuer should consider all such factors before issuing the its valuation report.

In this regard, wish to highlight that Prof. Damodaran (considered as a prominent Valuer) has valued Zomato's share at ₹ 40.79 per share while it has gone to the bourses for IPO at 120 per share. The effect of the seen now as the share price moved to ₹ 50 per share. While the Valuation is an art and the valuation conducted by different valuers are based on variety of factors such as assumptions, perspective and understanding of the industry etc. however, in the recent period it is noticed that the differences between the value derived by one valuer is significantly different from the others. This will lead to the valuation profession to a junction where the trust & faith of the stakeholders will be shaken.

Possible Solution

It is the need of an hour for the valuation professional to introspect and upskill themselves and also to ensure independence during the course of valuing a business to ensure that the opinion of the valuer is unbiased and can be relied upon by the investors without them looking for any corroborative valuations. One of the best way to ensure that the valuation conducted is free for any exception error is to use multiple approaches of the valuation. In case the valuation result from multiple approaches are significantly different, then the Valuer needs to put special emphasis to identify the reasons for such differences and make appropriate adjustments to their valuation. One of the biggest dilemma for a Valuation Professional while calculating the value of an enterprise by using multiple approaches is the allocation of the weight to each approach. While there is no straight jacket

formula to determine the weights and the same are dependent on the Individual's wisdom however, it is expected that the Valuer use adequate date to substantiate the weightage considered by it for a particular valuation approach.

As the report of a Valuer is considered by all the stakeholders including the regulatory authorities, the Valuers can play a indelible role in ensuring that the financial frauds does not effect the investors by undertaking additional due diligence on the management representations and also, by corroborating the valuation with the additional external data to ensure that the valuation conducted is fair. The Valuation conducted by the Valuer should not just be based on the past information however, should also consider various future possibilities.

As per ICAI Valuation Standards 201: Scope of Work, Analyses and Evaluation, the Valuer is required to also review the non-financial information such as economic environment, industry, business risks and future outlook of the business. Another important aspect that needs to be considered by the valuers is along with the present growth of the company, what is also important is the operating ratios of the company. In last 3-5 years with the emergence of the technology startups, the valuation surges significantly wherein the Valuer may be relying on the valuation done by the previous valuer however, the valuer needs to review the previous valuation as well to place its reliance.

Most of the technology startups are asset light meaning thereby that there will be significant difference in the fair valuation of the company vis-à-vis the book value of the company. In these circumstances, the risk on the valuer while determining the fair value is significant as the valuation determined through market or income approach may not correspond to the valuation conducted by cost approach. While the non-reliance on cost approach is correct in such cases, however, even within the market and the income approach, it is important for the valuer to apply multiple methods to arrive at a fair value.

Further, wherever the valuer is using the work of a previous valuation conducted for any previous round of fund raise, the valuer needs to undertake additional due diligence to determine whether actually the valuer can use the work of the previous valuer specially it requires deeper analysis into the valuation methodology adopted by the previous valuer. The responsibility of the valuer cannot be reduced by merely relying on the previous valuer and thus, review of the previous valuers report becomes essential.

In this regard, another important consideration is the difference in the accounting treatment vis-à-vis treatment for the purpose of valuation. This happens with most of the technology companies where the accountants are expensing off the salary expenses while for the purpose of valuation, the management considers the salary cost associated with the technology related employees as capex. In such a scenario, the valuer should obtain additional information to ascertain whether the differential treatment is actually required and the effect of the same on the valuation exercise carried out.

In most of the cases, the valuers are also a Chartered Accountant by qualification and thus, the expectations of the stakeholders in terms of review of the financial statements increases. This happens specially as the law requires the valuation report to also include the UDIN issued as a Chartered Accountant and thus, the stakeholders believe that the prospective financial information is also reviewed by the valuer.

Another challenge that the Valuation professionals are facing today is the embedded biased in the data available for the application of market approach for the purpose of valuation. For instance, GoMechanic was valued at very high valuation and the valuers subsequently might have used the GoMechanic Multiples for the purpose of their valuation. Since now it is revealed that the GoMechanic's financials were inappropriate, the comparisons done by the valuer basis the GoMechanic's financial data would have revealed incorrect details and thus, the valuation concluded by the valuers becomes inappropriate. While this is an issue which is outside the scope of the valuers to look into as the information wasn't available at the time of conducting the valuation exercise, however, while applying the market approach, the valuers needs to place special emphasis on the other non-financial information of the comparable companies.

In most of the cases, the technology company's growth is significantly higher and thus, due consideration should be given to the business cycle of the industry. Since the historical trends are now being visible for the startups as well which shows that the business cycles of the startups are very fast and the contraction and trough in the same comes every 3-5 years period, adequate adjustments needs to be considered to include the effect in the valuation.

As a part of forward looking approach, the valuers should emphasize on obtaining a long term strategy & the financial projections from the businesses (i.e. 10 years projections instead of 5 years) and a comparison is required with the historical data to undertake adequate adjustments in valuation under the income approach.

Basis the above, below is the summary of additional points to be considered by the valuers while undertaking valuation exercise:

Approach	Additional Considerations
Cost Approach	- Valuer needs to apply on a case to case basis however, the value under this approach to be also kept in mind while determining the fair value
Market Approach	- The inherent biased in the comparable data to be reduced by obtaining larger set of comparable companies. - The valuation should be conducted by applying multiple methods under this approach.
Income Approach	- Longer period projections (preferably 10 years) should be obtained. - Historic actual data to be compared with previous projections if any. - Difference in Accounting treatment v/s treatment for the purpose of valuation needs to be aligned. - Adjustment to be undertaken in the projections basis the Valuers Wisdom

HOW TO AVOID ERRORS IN VALUATION REPORTS

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Background

- Knowing what an asset is worth and what determines that value is a pre-requisite for intelligent decision making.
- The premise of valuation is that we can make reasonable estimates of value for most assets, and that the same fundamental principles determine the values of all types of assets, real as well as financial.
- Some assets are easier to value than others, the details of valuation vary from asset to asset, and the uncertainty associated with value estimates is different for different assets, but the core principles remain the same.
- At the same time, there is inherent subjectivity involved in the valuation process. What assumptions will work for one stakeholder may seem patently absurd to another.
- As valuers, we are given a seemingly impossible task – to predict the future. Even if no one can hold us accountable if the future does not turn out exactly like we predicted, our reports will be thoroughly scrutinised for any errors in our calculations, assumptions and disclosures.
- Herein lies the core of our topic – what are the expectations from valuers to produce error free reports?

"Error"

- In order to understand what is an error-free report, we need to understand the meaning of the term "error".
- The Oxford dictionary defines error as "a mistake, a state of being wrong."
- An error in valuation report would encompass mistakes like wrong calculations, wrong assumptions on risk, errors in using multiples and so on.
- This leads us to conclude that even if the value of the asset does not turn out as predicted in the valuation report, it is not necessarily an "error" in the report.
- To draw a corollary, while it is not fair to expect valuers to play the role of astrologers in predicting the future value of an asset, it is a valid expectation from us to produce error-free reports.

Common errors seen in valuation reports – an Indian perspective

- The Companies (Registered Valuers and Valuation) Rules, 2017 require every Registered Valuer to prepare their valuation report in compliance with Act, Rules, Valuation Standards, Guidelines etc. as applicable to them under relevant statutes.
- Since the past 3 years, the Insolvency and Bankruptcy Board of India (IBBI) has been conducting a yearly peer review of valuation reports in association with all the RVOs.
- The findings of the peer review highlight various errors and inconsistencies in the valuation reports, assumptions and premises.
- In the latest peer review report from April 2022, there were 24 errors which were commonly observed by peer reviewers from all RVOs, in addition to the individual observations.
- The key observations are captured and summarised below -
  - A. Date of appointment, valuation date, inspection date and date of report were not included in many valuation reports
  - B. Identity of the valuer and any other experts involved in the valuation is not explicitly mentioned.
  - C. Under purpose of valuation and appointing authority, it has been observed that there have been incorrect mention of legislation.
  - D. Though the scope of assignment has been clearly mentioned in majority reports, in some reports it has not been mentioned that the valuation analysis is done per International Valuation Standards (IVS).
  - E. In some cases, no clear indication of valuation approaches being used in the assignment has been made.
  - F. In many reports, nature and source of information relied upon has not been clearly disclosed as required.
  - G. Restriction on use, distribution and publication of valuation report has not been placed in some of the valuation reports.
  - H. While most reports reflect that the procedures

adopted in carrying out the valuation standards have been followed, in some cases rationale for using NAV (cost as per books) and not PECV etc. is not clearly elaborated.

I. Base of value relied upon not clearly stated in some reports.

J. Clear and accurate description of intended use and users through majorly covered but could have been given more precisely.

K. Limiting conditions impacting valuation have not been covered in few isolated cases.

L. In some of the reports, Valuation Standards followed not disclosed or explicitly stated though the method is covered by ICAI Valuation Standard.

M. The caveats, limitations and disclaimers are forming part of most of the reports barring few exceptions. Further, the assumption underlying the projections have not been reviewed. The assumptions should be report relevant and should not be a mere copy paste from other valuation assignments.

N. Disclosure of valuer's interest or conflict of interest not explicitly stated in isolated reports.

O. Methods and Approaches have been interchangeably used which leads to confusion for the readers.

P. While ensuring that compliance is sufficient to communicate work performed, analysis of historical information should ideally form part of the report.

Q. Compliance sufficient to communicate conclusions reached could be more detailed in some reports for better understanding of end users of valuation reports.

How to generate error-free valuation reports

Having seen the different types of errors, let us analyse how valuers can generate error-free reports.

1. Adherence to statutory and regulatory requirements

A Registered Valuer while performing its Assignment is required to adhere to the various Statutory cum Regulatory Compliances such as:

- Compliance of the provisions of the Companies Act, 2013 and Companies (Registered Valuers and Valuation) Rules, 2017
- Compliance of the provisions of the Insolvency and Bankruptcy Code, 2016
- Compliance of Code of Conduct of the concerned Registered Valuers Organisation of which he is a member
- Compliance of Bye-Laws and Internal Regulations of the Registered Valuers Organisation of which he is a member
- Compliance of Valuation Standards- i.e. Internationally Accepted Valuation Standards or ICAI Valuation Standards 2018
- Compliance of Guidelines/ Circulars/Notifications issued by IBBI from time to time.
- Compliance of the provisions of the Law under which the Assignment has been accepted such as SEBI, Income Tax Act, 1961, RBI, IBC etc

2. Religiously follow code of conduct and best practices

The valuer should adhere to the code of conduct laid down by the Companies (Registered Valuers and Valuation) Rules, 2017 – integrity, fairness, confidentiality, professional competence and due care, independence and disclosures etc. For instance, there must be a maker-checker concept in preparation of valuation report as this will help to reduce errors.

Further, best practices laid down by the valuer bodies including global best practices from valuer bodies around the world are a model example. For instance, the International Valuation Standards Council (IVSC) has given guidance on following fundamental principles and has laid down threats and safeguards for valuer professionals.

3. Comprehensive Planning

Abraham Lincoln has famously remarked "*Give me six hours to chop down a tree and I will spend the first four sharpening the axe.*"

Planning is the crux of the entire valuation exercise. Planning helps the valuer face uncertainty and ensures all aspects are covered. A good plan also helps timely completion of the assignment. It is recommended to have a plan set in advance and then execute the agreed plan meticulously. This will help avoid errors in the valuation process.

4. Strict documentation

There is an old adage in the audit community – "*Work not documented is work not done.*"

This holds true for the valuation world as well. As valuers, we undertake a host of measures during the valuation exercise, most of which do not find any mention in the final report. It is thus important to maintain working papers which will help the valuer in remembering the measures and procedures performed. Further, in case of

any inquiry in the future into the valuation report, the valuer can refer to the documentation and provide backups and explanations as necessary.

5. The content of valuation report

The Companies (Registered Valuers and Valuation) Rules, 2017 clearly spells out the minimum requirements for a valuation report.

a. background information of the asset being valued;
b. purpose of valuation and appointing authority;
c. identity of the Valuer and any other experts involved in the valuation;
d. disclosure of Valuer interest or conflict, if any;
e. date of appointment, valuation date and date of report;
f. inspections and/or investigations undertaken;
g. nature and sources of the information used or relied upon;
h. procedures adopted in carrying out the valuation and valuation standards followed;
i. restrictions on use of the report, if any;
j. major factors that were taken into account during the valuation;
k. conclusion; and
l. caveats, limitations and disclaimers.

The form and content of the valuation report depends on the nature of the engagement and purpose of the valuation.

6. Judicious use of Caveats, Limitations and Disclaimers in the Valuation Report

The caveats, limitations and disclaimers paragraph has been much talked about by the Insolvency and Bankruptcy Board of India and various RVOs as well. This section has been used to disclaim responsibility and thus many a times is found unacceptable to the end users. The paragraph must explain or elucidate the limitations faced by Valuer, which shall not be for the purpose of limiting his responsibility for the valuation report.

7. Stay up-to-date with valuation laws, regulations and judicial pronouncements

Valuation is a constantly evolving field especially in the Indian context. There are various new regulations and judicial pronouncements which change or refine the valuation concepts and practices. It is imperative for the valuer to stay up-to-date with the new rules and judicial pronouncements even in a global context.

The intention is that the valuation report should communicate the results of the valuation exercise to the end user in a comprehensive and easily understandable manner.

To conclude

A valuation report should tell a story to the reader which makes it easy to understand as well as demonstrates the professional judgment and skills exercised by the valuer. It is pertinent to note that it should not miss out on any information which may affect the end user's judgment.

Valuation is a dynamic exercise and no two valuation exercises are exactly the same.

While this makes the profession an exciting one, it also dictates an increased level of professional competence and care to be exercised by the valuer.

In such a case, it is important to understand how to generate error-free reports.

Veteran cricketer MS Dhoni always says in his interviews "Focus on the process, and the outcome will take care of itself."

If the valuer focuses on the process (i.e. following the code of conduct, best practices, statutes etc.), the outcome (i.e. an error-free valuation report) will take care of itself.

Thank you for reading!

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APPROPRIATE CAP. & DISCOUNT RATE IN NEPAL FOR VALUATION BASED ON INCOME APPROACH FOR SECURED LENDING

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Executive Summary:

Almost all valuation reports in Nepal are intended for secured lending of Banks and Financial Institutions (BFIs). A genuine investor will refrain from investing on an auctioned property in Nepal because of ambiguous provisions in Act, unforeseen litigation and likely problems associated with the auctioned property unless the value of the asset can be justified by its return.

Therefore, it is suggested that a valuer must take sensible and careful approach to form opinion of value for Secured Lending which can be substantiated and convincible.

Thus, it will be rational to find the value of the asset based on income approach for secured lending in Nepal, however, it requires selection of appropriate Cap or discount rate. The intention of this article is to support my supposition.

There are several hurdles to prepare a credible valuation report in Nepal due to lack of authenticate data and inefficient property market because of ambiguous and lenient financial practices and regulations.

It is accepted that the appropriate basis of valuation for secured lending is normally market value, however, due to unavailability of reliable market evidence in Nepal, it is difficult to compute a convincible market value that may be used as secured lending value.

No authenticate and reliable data is available in Nepal because there is no regulation to register the property transaction on actual price assessed by a qualified independent valuer. Government offices levy tax by stipulating minimum land and building rate they have fixed. There is no maximum registration rate and one can easily convert ill-gotten money to white by paying extra registration fee. Therefore, information of transaction collected from land registration office (if available) are totally misleading and can't be considered reliable Market Rate. Thus, the valuer has no option but to collect all related information from the unorganized market prevailing in the country.

Let us try to list some of the information required to apply for accepted three approaches to compute the value:

- *Information to apply Market Approach:*

In Nepal, the transactions of properties are not transparent and one can't get hold of official transaction data. Moreover, the properties are rarely transacted in actual price the buyers pay to sellers because the main criteria of Land Registration

Department are that the transaction rate of land shall not be less than the minimum land rate published by the department and for building, it shall not be less than the value assessed by Municipality office for the sake of collecting property tax.

To apply the Market Approach, following reliable information are necessary:

o recent sell information appropriate for consideration,

o similar assets actively publicly traded, and/or

o frequent or recent transactions in substantially similar assets.

Most of the transactions exchange between willing buyers and sellers are supposed to be in arm-length transactions, after proper marketing where each party has acted knowledgably, prudently and without compulsion.

It is therefore difficult to source evidence of transactions which have occurred outside of normal realms of Market Value. It is even more difficult to research sales evidence of transactions which have occurred with comparable constraints to those a Valuer may be requested to assume. In these cases. It is important for the Valuer, when providing a likely realisable price subject to a constraint, to provide the instructing party with explanation surrounding the available evidence, reliability, and basis of the advice. Therefore, market approach to compute the value for secured lending is not reliable.

- *Information to apply Cost Approach:*

Similarly, to apply the Cost Approach, optimized replacement cost of an asset has to be calculated. But credible plinth area rates of optimized model buildings are not available in Nepal.

Moreover, the cost approach provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or by construction, unless undue time, inconvenience, risk or other factors are involved.

Cost approach is used to check reasonableness of the value arrived at by using another approach. This method is often referred to as the "method of last resort" due to its unreliability, as the market value is determined by the economic forces of supply and demand, not by the cost of production. Therefore, cost approach to compute the value is not appropriate for secured lending.

• Information to apply Income Approach

To apply the Income Approach, the capitalization and discount rates are vital but these are very sensitive. Therefore, market evidence to support the capitalization and discount rates that reflect the risk of the business have neither been compiled nor published by any credible agency in Nepal.

The income approach is a general way of determining a value indication of a property by using one or more methods through which anticipated benefits are converted into values. Property is purchased both for use and investment; but in both the cases the purchaser measures the expected return or benefits to be received from the property against cost outlay.

Capitalization Rate (Cap Rate) & Discount Rate

Capitalisation Rate (Cap Rate) that considers all the risks and rewards associated with ownership of an investment and reflected in the purchase price of that investment is termed All Risks Yield (ARY). Essentially, a lower cap rate implies lower risk, while a higher cap rate implies higher risk.

Discount Rate

IVSC has suggested following method for developing a discount rate in IVS-2022: IVS 105 Valuation Approaches and Methods: Discount Rate section

"*Valuers may use any reasonable method for developing a discount rate. While there are many methods for developing or determining the reasonableness o discount rate, a non-exhaustive list of common methods includes:*

(a) the capital asset pricing model (CAPM),

(b) the weighted average cost of capital (WACC),

(c) the observed or inferred rates/ yields,

(d) the build-up method."

In those countries, where the real estate market is regulated and stabilized, cap rate of different types of properties like Apartment Buildings, Family Rental Homes, Commercial Real Estate, are readily available though it may somewhat vary from city to city and area to area but the prevailing trend of cap rate will be clearly predicted.

In Nepal the real estate market is unregulated and un-stabilized hence cap rate is not available. Though, it has been observed that on several apartment towers and buildings situated inside colonies, especially in Kathmandu valley, some sort of cap rate exists which may be unnoticed.

In this scenario, most realistic Cap or Discount Rate appropriate has to be computed to apply income approach. In the absence of Cap or Discount Rate prescribed or suggested by any authorized agencies, it may be practical to use WACC to find the Cap or Discount Rate by realistically assuming some unsubstantiated parameters of WACC with appropriate modifications.

Generally, WACC is determined as:

*WACC=D/(D+E) * Kd + E/(D+E) * Ke*

Where: D is the total debt; E is the total shareholder's equity; Ke is the cost of equity & Kd is the cost of debt.

Cost of Debt

Because of the tax deductibility of interest, the cost of borrowed funds is computed as an after- effective rate of interest. For this purpose, average BFIs lending rate is adjusted published by Nepal Rastra Bank (NRB) which acts as the Reserve Bank of Nepal, for tax liability of the company with the following formula:

K=R (1-T)

Where: K is Cost of debt; R is Minimum BFIs lending rate for Real estate & T is Corporate Tax rate

Cost of Equity

CAPM shall be used to compute the cost of equity but needs modification it due to lack of appropriate market data.

The general idea behind CAPM is that investors need to be compensated in two ways: time value of money and risk. The time value of money is represented by the risk-free (Rf) rate in the formula and compensates the investors for placing money in any investment over a period of time.

Average fixed deposit (FD) interest rate of A-class commercial banks which are regularly published by NRB may be considered to be the least risk bearing investment in Nepal. Cost of Equity may be derived by adding risk premium (multiple of equity risk premium with beta) to the risk-free rate.

Cost of Equity (Ke)=Rf+β(Rm-Rf)

Where: Ke is Expected return of investment; Rm is Expected return of market; Rf is Risk-free Rate of return; (Rm-Rf) is Market risk premium & β is Beta Value (Sensitivity of the stock returns to market returns)

Since Beta value of real-estate sector are not compiled and published in Nepal, it may be rational to add reasonable percentage on the average interest rate on FD of reputed commercial banks as expected "Cost of Equity" as market risk premium cover

Adjustment for Inflation

The motivation behind the investment decision on the kind of the present project is from the fact that the value of the capital assets goes on appreciating while the cost of the debt remains constant.

One of the approaches is to adjust the discount rate with inflation before discounting the cash flows. In this approach forecast of future cash flows exclude the impact of expected inflation. That is, projection of accruable rent is made on current price. The average inflation rate of the real-sector can be adopted from the publication of NRB.

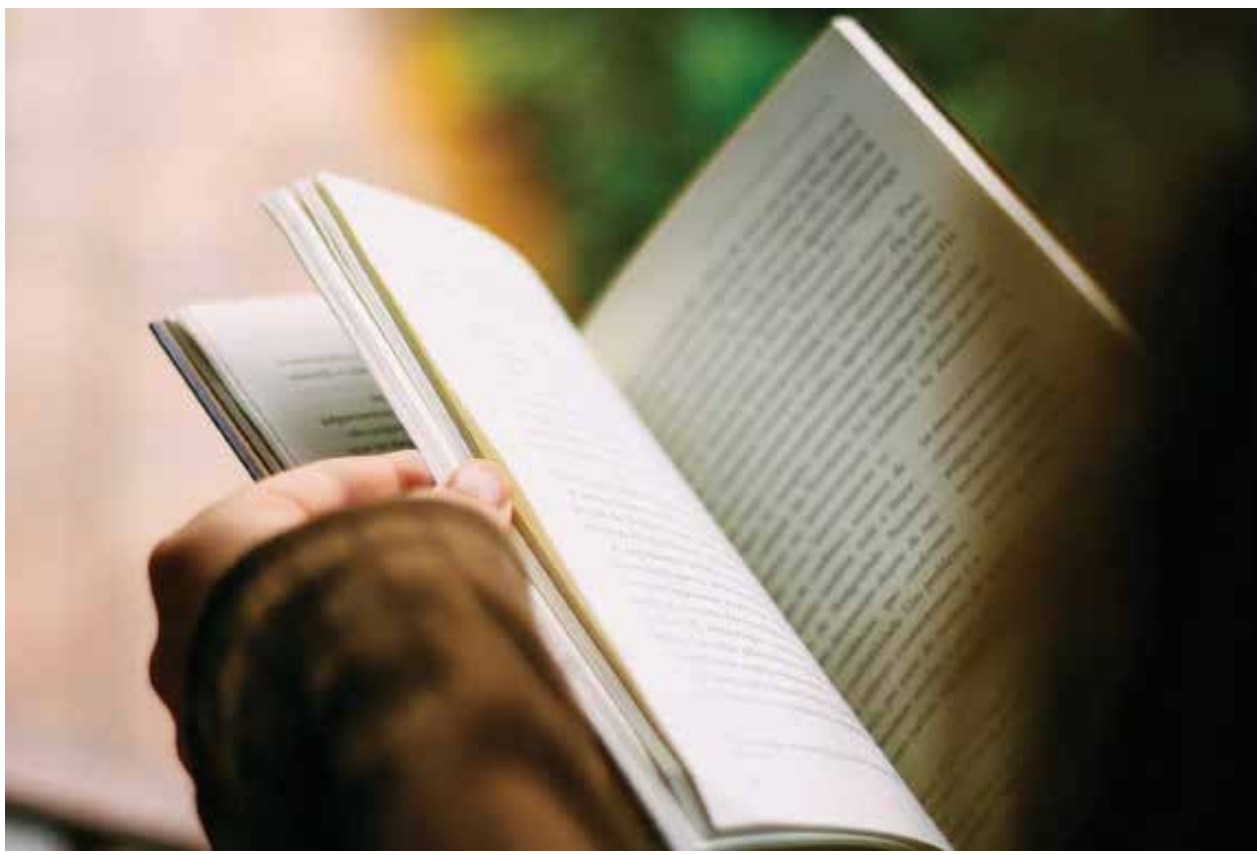
The formula used for adjusting the discount rate (WACC) with the inflation rate is as follows:

D = (C-i) / (1+i)

Where: D is required discount rate; C is Weighted Average Cost of Capital & I is Average Inflation rate

Thus, to compute the value of fixed asset for secured lending in Nepal, it will be rational to find the value of the asset based on income approach by considering Cap or Discount rate determined by WACC.

OTHER READINGS



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Perspective Paper
AUTOMATED VALUATION MODELS AND RESIDENTIAL VALUATIONS

The IVSC issues Perspectives Papers from time to time, which focus on pertinent valuation topics and emerging issues. Perspectives Papers serve a number of purposes: they initiate and foster debate on valuation topics as they relate to the International Valuation Standards (IVS); they provide contextual information on a topic from the perspective of the standard setter; and they support the valuation community in their application of IVS through guidance and case studies.

Perspectives Papers are complementary to the IVS and do not replace or supersede the standards. Valuers have a responsibility to read and follow the standards when carrying out valuations.

By: The IVSC's Tangible Assets Board & IVSC AVM, Data and Modelling Working Group

The IVSC has issued this Perspectives Paper as the first in a series designed to initiate discussion and debate on the topic of automated valuation models and residential valuation. Future perspective papers in this series will consider non-residential AVMs. Share your thoughts and perspectives with us through LinkedIn

Residential AVM: For the purposes of this Perspective's Paper, a residential AVM is a fully automated valuation carried out on a homogenous single or multifamily residential building.

Automated Valuation Model (AVM): A system that provides an indication of value of a specified Asset at a specified date, using calculation techniques in an automated manner.

Model: The quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to derive value.

Background

In October 2020 the IVSC issued its Agenda Consultation 2020 which highlighted Automatic Valuation Models ("AVMs") as a key topic to be considered by the IVSC over the next few years. The Agenda Consultation stated that the *"IVSC Technical Boards had originally begun to look at this topic due to market feedback on technological disruption caused by the increasing use of Automated Valuation Models (AVMs) in many markets, particularly by banks and valuers for the valuation of residential properties for secured lending purposes.*

The IVSC's Technical Boards felt that many of these AVMs were used by stakeholders who may take the valuations at face value without fully understanding the purpose, workings, or limitations of the model that they are using. Moreover, certain valuers could mistakenly believe that calculations (such as those derived from AVMs) are compliant with IVS."

Further to the publication of *IVS (effective 31 January 2022)* the IVSC Technical Boards set up an AVM Data and Modelling Working Group to review the General and Asset Standards and see if further standards were required in relation to these areas. These Working Groups recognised that AVMs are not only increasingly used in tangible asset valuations as a tool to aid banks and other entities in making secured lending decisions for commercial mortgages, but are also commonly used for financial instrument valuations.

The Working Groups also discussed the current definition of value within IVS:

"The word "value" refers to the opinion resulting from a valuation process that is compliant with IVS. It is an estimate of either the most probable monetary consideration for an interest in an asset or the economic benefits of holding an interest in an asset on a stated basis of value."].

The definition challenged the Working Group as it implied that an Automated Valuation Model with no human input could provide "an opinion". The working group noted that the use of AVMs was already commonplace in the valuation of financial instruments. Different forms of AVMs were often exclusively applied to financial instruments, but in these instances, the valuer's judgements were included towards the beginning of the process.

The fundamental questions around human judgement in AVMs and the algorithms used and the discrepancy in the use of AVMs across assets have led market participants to request clarity as to when the use of AVMs could state compliance with IVS. As stated in the RICS' AVM

Roadmap for its members and stakeholders published June 2021; *"there is a clear need for a better understanding of the opportunities and risks associated with AVMs"*.

In January 2021, the IVS *Additional Technical Revisions 2021 Exposure Draft* went into consultation. The Exposure Draft contained a proposed new definition for an Automated Valuation Model and a Model. An AVM was defined as:

"a system that provides an indication of value of a specified Asset at a specified date, using calculation techniques in an automated manner. An AVM may not meet the requirements of a Model as defined in this glossary."

The Exposure Draft also contained proposed revisions to the existing definitions of "valuation" and "value" contained within IVS. Additionally, the Exposure Draft contained a new section on Data Management to work in conjunction with the existing section on Models, which was added to IVS 105

- *Valuation Approaches and Methods* in IVS (Effective 31 January 2020).

In September 2021 the IVSC published *IVS: Basis of Conclusions,* outlining changes introduced to IVS that became effective as of 31 January 2022. Within the Basis of Conclusions, the IVSC noted that:

"there was also a wide diversity of views related not only to the appropriate depth and level of proposed additional technical revisions, but also in relation to the inclusion of glossary definitions for "Automated Valuation Model", "Model", "Social Asset", "Social Value", "Valuation Assignment" and "Valuation Engagement", as well as the inclusion of the new sections on "Data Management" and "Governance".

In addition, the Boards further noted that *"much of the diversity of views were across specialities (Business Valuation, Financial Instruments and Tangible Assets)"* and, as such, engaged in further market outreach with key IVS stakeholders, member organisations, and the IVSC Advisory Forum Working Group to fully examine and explore the issues raised as part of the consultation process.

As a consequence of this outreach, IVSC took the decision to delay including the terms "Automated Valuation Model" and "Model" in IVS, as well as the new section on "Data Management" until further investigations could be made to ensure these proposed revisions to the General Standard could work across all specialisms.

The Boards are currently carrying out a review of the IVS General Standards to include additional sections on Data and Inputs, and Models. These inclusions will be published in the next edition of IVS, effective from July 2024. The IVSC has decided to publish this Perspective Paper in the interim, as a means of responding to market participants' requests.

The IVSC's current position is that the use of Automated Valuation Models for residential secured lending purposes, in isolation, cannot produce an IVS compliant valuation unless all the other requirements contained within IVS are met.

Can a Residential AVM ever produce an IVS Compliant Valuation?

In determining whether a Residential AVM can be compliant with IVS, it is first necessary to note that valuation is a process.

This process includes several requirements in relation to scope of work, investigations and compliance, reporting, bases of value and valuation approaches and methods, all of which have to be met to produce an IVS compliant valuation.

Residential valuations may or may not include the use of a valuation model. When they do, this model may be automated to some extent, thus producing what might be referred to as "valuations performed with the use of an Automated Valuation Model", or "Valuer AVM-assisted valuations". A valuer AVM-assisted valuation is a type of automated valuation offered by some valuation service providers and other participants, where a valuer "checks" the result produced by the AVM. It should be noted that valuer- assisted AVMs are not IVS compliant valuations as in this instance the valuer is carrying out a review of the results of an AVM and not an IVS compliant valuation. Producing an IVS compliant valuation implies that the valuer may use the AVM as a tool in the process but must follow all the requirements of IVS. However, the reverse, where the valuer merely validates the findings of an AVM, does not constitute an IVS compliant valuation.

Valuations that use fully or partly automated models, but include professional judgement throughout the process, may be IVS compliant providing the valuer follows all the requirements contained within IVS. Therefore, a Residential AVM may be used as a tool within the valuation process, for which the valuer is wholly responsible and still produces an IVS compliant valuation. However, as outlined below, a Residential AVM, without valuer input and an understanding of the model, cannot produce an IVS compliant valuation.

The current edition of IVS (effective 31st of January 2022) defines valuation as:

"the act or process of determining an opinion or conclusion of value of an asset on a stated basis of value at a specified date in compliance with IVS."

Furthermore, IVS defines value as:

"the opinion resulting from a valuation process that is compliant with IVS. It is an estimate of either

the most probable monetary consideration for an interest in an asset or the economic benefits of holding an interest in an asset on a stated basis of value."

Both these definitions refer to "an opinion" or "conclusion of value" that is compliant with IVS.

The current state of development of AVMs does not unequivocally support the position that a residential AVM can ever provide an "opinion" or "conclusion of value" without the input of a valuer's professional judgement.

From an IVS compliance perspective, once the valuer begins to use their professional judgement to exclude or include certain inputs within an AVM then the model is no longer fully automated. As a consequence, the following requirements contained within the IVS General Standards including the prescriptions contained in I*VS 105 - Valuation Approaches* and Methods must be applied for a valuation to be IVS compliant:

90. Valuation Model

90.1. A valuation model refers collectively to the quantitative methods, systems, techniques and qualitative judgements used to estimate and document value.

90.2. When using or creating a valuation model, the valuer must:

- *(a) Keep appropriate records to support the selection or creation of the model,*
- *(b) Understand and ensure the output of the valuation model, the significant assumptions and limiting conditions are consistent with the basis and scope of the valuation, and*
- *(c) Consider the key risks associated with the assumptions made in the valuation model.*

90.3. Regardless of the nature of the valuation model, to be IVS compliant, the valuer must ensure that the valuation complies with all other requirements contained within IVS.

In reality, valuation models can vary in range and complexity, from a simple spreadsheet used to help the valuer analyse comparable assets or to calculate average values; to sophisticated machine learning models utilising artificial intelligence with no valuer input. In the case of the latter, the model researches and "thinks" for itself, its opacity insulating it from the valuer's judgement.

Within this range, there are vast differences. For example, it could include models where the valuer is the author, or at least fully understands all the assumptions, calculations, and criteria, or it could include a valuation model built by someone else where the valuer is simply the user and has little understanding of the assumptions, calculations and criteria used. When relying on a model designed by a third party, a valuer retains the same level of responsibility as when they rely on any other expert for analysis outside their area of expertise. The valuer cannot blindly rely on that model without a supported basis to do so as the valuer must perform analysis to evaluate the data inputs, the assumptions underlying the data inputs and their appropriateness for the valuation purpose.

Although all the requirements listed in section 90 above are important, perhaps the most important requirement stems from paragraph

90.3, which states that:

"Regardless of the nature of the valuation model, to be IVS compliant the valuer must ensure that the valuation complies with all other requirements contained within IVS."

Therefore, to understand whether a valuation that uses a Residential AVM can be compliant with the requirements contained within IVS, it is necessary to review the IVS General Standards, so any barriers to compliance can be understood. In addition, the valuer needs to understand and have tested the Residential AVM in order to be IVS compliant.

This requirement is also highlighted in the IVS Framework, which states the following in relation to Compliance with the Standards::

10. Compliance with Standards

10.1. When a statement is made that a valuation will be, or has been, undertaken in accordance with the IVS, it is implicit that the valuation has been prepared in compliance with all relevant standards issued by the IVSC.

10.2. In order for a valuation to be compliant with IVS the valuer must comply with all the requirements contained within IVS.

Furthermore, in relation to competence, the IVS Framework states that:

"valuations must be prepared by an individual, group of individuals or individual within an entity, regardless of whether employed (internal) or engaged (contracted/ external), possessing the necessary qualifications, ability and experience to execute a valuation in an objective, unbiased, ethical and competent manner and having the appropriate technical skills, experience and knowledge of the subject of the valuation, the market(s) in which it trades and the purpose of the valuation."

Even though the valuer could state that they meet these requirements and are only using a Residential AVM as part of their valuation approach, the valuation would still not produce an IVS compliant valuation. A Residential AVM is not able to provide an IVS compliant valuation. Indeed, even though a Residential AVM can provide a conclusion of value, it cannot provide an "opinion of

value" and therefore the use of a Residential AVM for secured lending or other purposes, whether or not it meets mortgage- lending conditions, would not be IVS compliant, as it cannot meet this fundamental requirement.

What are the IVS Scope of Work requirements that a Residential AVM alone might not achieve in isolation?

IVS 101 - Scope of Work contains the "fundamental terms of a valuation, such as the asset(s) being valued, the purpose of the valuation and the responsibilities of parties involved in the valuation." IVS 101 Section 20.3 provides a list of the elements a valuer must communicate within their scope of work. The majority of these do not cause concern when using a Residential AVM. However, the following requirements may prove problematic:

(a) Identity of the valuer: The valuer may be an individual, group of individuals or a firm. If the valuer has any material connection or involvement with the subject asset or the other parties to the valuation assignment, or if there are any other factors that could limit the valuer's ability to provide an unbiased and objective valuation, such factors must be disclosed at the outset. If such disclosure does not take place, the valuation assignment is not in compliance with IVS. If the valuer needs to seek material assistance from others in relation to any aspect of the assignment, the nature of such assistance and the extent of reliance must be made clear.

Although all the requirements listed in section 90 above are important, perhaps the most important requirement stems from paragraph

20.3, which states that:

(g) Basis/bases of value used: As required by IVS 104 Bases of Value, the valuation basis must be appropriate for the purpose of the valuation. The source of the definition of any basis of value used must be cited or the basis explained.

(i) The nature and extent of the valuer's work and any limitations thereon: Any limitations or restrictions on the inspection, enquiry and/or analysis in the valuation assignment must be identified (see IVS Framework, paras 60.1-60.4) If relevant information is not available because the conditions of the assignment restrict the investigation, these restrictions and any necessary assumptions or special assumptions (see IVS 104 Bases of Value, paras

200.1-200.5) made as a result of the restriction must be identified.

(j) The nature and sources of information upon which the valuer relies: The nature and source of any relevant information that is to be relied upon and the extent of any verification to be undertaken during the valuation process must be identified.

(k) Significant assumptions and/or special assumptions: All significant assumptions and special assumptions that are to be made in the conduct and reporting of the valuation assignment must be identified.

(n) That the valuation will be prepared in compliance with IVS and that the valuer will assess the appropriateness of all significant inputs: The nature of any departures must be explained, for example, identifying that the valuation was performed in accordance with IVS and local tax regulations. See IVS Framework paras 60.1-60.4 relating to departures.

Except for (g), which is addressed later in this paper, when we are reviewing the requirement contained within *IVS 104 - Bases of Value*, many of these requirements are further emphasised within the previously mentioned section on valuation models within I*VS 105 - Valuation Approaches and Methods,* and apply to the use of all valuation models, whether fully automated or semi-automated.

In reviewing these requirements, unless the valuer has had full control of the inputs into the valuation model, it is unlikely that the valuer will be able to meet the requirements of (i), (j) (k) and (n) listed above. Many Residential AVMs are designed with little input from the valuer, and it is unlikely that the valuer can assess the appropriateness of all significant inputs, as many of the inputs will be automated and will have had minimal, if any verification, and will be subject to a number of limitations and constraints. As a result, the valuer will not be able to comment on the appropriateness of the data sources, inputs and relevant assumptions. Indeed, if a valuer is not involved in the Residential AVM process, requirement '(a)' cannot be met.

What are the IVS requirements for Investigations and Reporting?

IVS 102 - Investigations and Compliance states:

"Investigations made during the course of a valuation assignment must be appropriate for the purpose of the valuation assignment and the basis(es) of value. References to a valuation or valuation assignment in this standard include a valuation review."

Section 20.23 further states::

"Sufficient evidence must be assembled by means such as inspection, inquiry, computation and analysis to ensure that the valuation is properly supported. When determining the extent of evidence necessary, professional judgement is required to ensure the information to be obtained is adequate for the purpose of the valuation."

In the case of Residential AVMs, it is impossible that the subject property (let alone the comparable properties) have

been subject to a physical inspection to determine their comparability without the assistance of a valuer. However, if the use of a Residential AVM included physical inspection and other relevant proxy data sources for the assessment of condition and the other requirements contained in IVS including a valuer's professional judgement, then this could in theory produce an IVS compliant valuation, provided the other requirements of IVS are also met. However, it should be noted that in these circumstances the Residential AVM is no longer fully automated.

Furthermore, the real world sometimes presents the valuer with interesting challenges. The asset being valued could have characteristics that would make it worth less than the market norm. Alternatively, it could have elements of development potential that should be considered under the valuation premise of 'highest and best use'. In either case, it is unlikely that these characteristics would be adequately reflected by a Residential AVM. However, if the valuer was embedded from the outset into the process, then it may be possible for the conclusions from a valuer's inspection to be incorporated into a semi- automated residential valuation model. This would lead to more refined valuation outcomes.into the process, then it may be possible for the conclusions from a valuer's inspection to be incorporated into a semi- automated residential valuation model. This would lead to more refined valuation outcomes.

IVS 102 section 20.3 states that though limits may be agreed on the extent of a valuer's investigation, the valuer is required:

"to perform sufficient analysis to evaluate all inputs and assumptions and their appropriateness for the valuation purpose. If limitations on investigations are so substantial that the valuer cannot sufficiently evaluate the inputs and assumptions, the valuation engagement must not state that it has been performed in compliance with IVS."

In a Residential AVM, the valuer is not able to "evaluate all inputs and assumptions" as many of the model parameters are pre-programmed. Therefore, it is very likely that the "limits on investigations" within a Residential AVM "are so substantial that the valuer cannot sufficiently evaluate the inputs and assumptions" and therefore "the valuation engagement must not state that it has been performed in compliance with IVS."

IVS 103 - Reporting further highlights this issue as section 10.2 states:

"the valuation report must include "disclosure of any assumptions, special assumptions (IVS 104 - Bases of Value, para 200.4), significant uncertainty or limiting conditions that directly affect the valuation."

Once again, it is unlikely that a Residential AVM in isolation would meet these reporting requirements. While a Residential AVM may be able to generate a standardised report which meets certain disclosure requirements, its ability to truly provide detail on considerations of the reasonableness and impact of certain assumptions in all valuations is highly questionable.

Can a Residential AVM be intelligent enough to interpret the meaning of a particular Basis of Value?

IVS 104 - Bases of Value defines bases of value (sometimes called 'standards of value') as;:

"the fundamental premises on which the reported values will be based."

Most secured lending is derived from Market Value, which is defined as:

"the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion."

It should be noted that the definition of Market Value must reflect the highest and best use, which is;:

"the use of an asset that maximises its potential and that is possible, legally permissible, and financially feasible. The highest and best use may be for continuation of an asset's existing use or for some alternative use.

This is determined by the use that a market participant would have in mind for the asset when formulating the price that it would be willing to bid."

However, not only are all valuations the "act or process of determining an opinion or conclusion of value", all bases of value are reported as the valuer's opinion of value. A Residential AVM is not capable of providing a Market Value opinion since, by construction, only a human can have an opinion. Because of the fluid nature of markets, it is also highly questionable as to whether Residential AVMs are currently sophisticated enough to incorporate highest and best concept use to a satisfactory level of reliability. Other premises of value which can be used in conjunction with a basis of value might also include current use/existing use and orderly liquidation concepts. It is also highly questionable as to whether Residential AVMs can reliably and effectively incorporate these nuances.

In addition, IVS 104 states that:

"the nature and source of the valuation inputs must be consistent with the basis of value."

This requirement is further elaborated in IVS 105 section 20.5 which states:

"when comparable market information does not relate to the exact or substantially the same asset, the

valuer must perform a comparative analysis of qualitative and quantitative similarities and differences between the comparable assets and the subject asset. It will often be necessary to make adjustments based on this comparative analysis. Those adjustments must be reasonable and valuers must document the reasons for the adjustments and how they were quantified."

Both these requirements can cause issues when using Residential AVMs for calculating Market Value since some markets are quite opaque, with limited accurate comparable evidence. Even in developed markets, it may be difficult to ensure that the data used in the Residential AVM is relevant to the subject asset. A simple example of this is area measurement, as there is no consistent basis of area measurement used within markets, let alone between markets. Many of the assumptions within a Residential AVM such as market rent and refurbishment costs are measurement based. Without human, professional judgement, these inaccuracies, of which measurement is only one, will compound and invalidate the relevance of any finding generated by a Residential AVM.

Can a Residential AVM incorporate different Valuation Approaches and Methods with any level of reliability?

IVS 105 - Valuation Approaches and Methods states that the three principal valuation approaches are the 'Market Approach', the 'Income Approach', and the 'Cost Approach' but almost all Residential AVMs use the Market Approach exclusively. In selecting the valuation approach(es) and methods for an asset there are several factors which should be considered, one of which is "the availability of reliable information needed to apply the method(s)." Further to discussions amongst the TAB it was noted that in many markets around the world such as parts of Africa, South America and India would be unable to use a Residential AVM as the data available within these markets, both in terms of quality or quantity, is either unavailable or insufficient to produce accurate results. This issue is further highlighted in IVS 105 section 10.4, which states that:

"valuers should consider the use of multiple approaches and methods and more than one valuation approach or method should be considered and may be used to arrive at an indication of value, particularly when there are insufficient factual or observable inputs for a single method to produce a reliable conclusion."

Therefore, in these markets it would be reasonable to argue that a Residential AVM could be used to support the results of a valuation when another valuation approach is used but could not be used as the primary or sole valuation approach in these circumstances.

However, one of the main challenges for AVMs in IVS 105 is section 10.7, which states:

"valuers should maximise the use of relevant observable market information in all three approaches. Regardless of the source of the inputs and assumptions used in a valuation, a valuer must perform appropriate analysis to evaluate those inputs and assumptions and their appropriateness for the valuation purpose."

Even though the data used in a Residential AVM may come from "observable market information", it may not be possible for the valuer to evaluate "all the inputs and assumptions" as many of these assumptions may have been made by the modeller, without direct (or limited) valuer input. Furthermore, IVS 105 section 20.4 states that;

"the heterogeneous nature of many assets means that it is often not possible to find market evidence of transactions involving identical or similar assets",

This makes the use of residential AVMs inappropriate in these circumstances. This is amplified by the idiosyncrasy of assets characteristics and the low frequency of trading in the market.

IVS 105 section 30.6 seeks to outline the key steps within the comparable transaction method including the requirement to:

(c) perform a consistent comparative analysis of qualitative and quantitative similarities and differences between the comparable assets and the subject asset,

(d) make necessary adjustments, if any, to the valuation metrics to reflect differences between the subject asset and the comparable assets (see para 30.12(d))

Both of these require the professional judgement of a valuer, and at this point in time this could not be carried out sufficiently by a Residential AVM without some degree of valuer intervention. Moreover, IVS 105 section 30.7 provides the requirements for the valuer's choice of comparables, which are largely based on the valuer's competence, experience, and professional judgement. These qualitative and judgemental factors would be difficult to include in a Residential AVM without the participation of the valuer in both the model design and data selection phases. This issue is further highlighted in IVS 105 section 30.8 which states:

"the valuer should analyse and make adjustments for any material differences between the comparable transactions and the subject asset."

Once again, it would not be possible for a Residential AVM to be IVS compliant without the input and professional judgement of a valuer to make these adjustments.

Can Residential AVMs comply with *IVS 400 - Real*

Property Interests?

In addition to the mandatory requirements contained within the IVS General Standards and illustrated above, a valuation derived using a Residential AVM also needs to comply with the requirements contained within *IVS 400 - Real Property Interests:*

20.6. To comply with the requirements to state the extent of the investigation and the nature and source of the information to be relied upon in IVS 101 Scope of Work, para 20.3.(j) and IVS 102 Investigations and Compliance, the following matters should be considered:

(a) the evidence, if available, required to verify the real property interest and any relevant related interests,

(b) the extent of any inspection,

(c) responsibility for information on the site area, site characteristics and building floor areas,

(d) responsibility for confirming the specification and condition of any building,

(e) the extent of investigation into the nature, specification and adequacy of services,

(f) the existence of any information on ground conditions and soil conditions,

(g) responsibility for the identification of actual or potential environmental factors,

(h) legal permissions or restrictions on the use of the property and any buildings, as well as any expected or potential changes to legal permissions and restrictions.

These requirements, though part of the standard due diligence for a valuer, would generally not be carried out within the context of a Residential AVM, as the majority of these requirements would require the intervention of a valuer. Once again, a Residential AVM would not be compliant with IVS on this basis.

IVS 400 section 30.2 states:

"under most bases of value, a valuer must consider the highest and best use of the real property, which may differ from its current use (see IVS 104 Bases of Value, para 30.3). This assessment is particularly important to real property interests which can be changed from one use to another or that have development potential."

However as previously discussed, it is highly unlikely that in their current state of development, Residential AVMs can reliably incorporate the highest and best use concept, making them non-compliant with IVS on this basis.

IVS 400 also provides further details on the use of the Market Approach for real property assets and states within the Market Approach in section 50.2 that:

"a unit of comparison is only useful when it is consistently selected and applied to the subject property and the comparable properties in each analysis."

Section 50.4 further states that:

"in accordance with IVS 105 Valuation Approaches and Methods, para 30.8. Specific differences that should be considered in valuing real property interests include, but are not limited to:

(a) the type of interest providing the price evidence and the type of interest being valued,

(b) the respective locations,

(c) the respective quality of the land or the age and specification of the buildings,

(d) the permitted use or zoning at each property,

(e) the circumstances under which the price was determined, and the basis of value required,

(f) the effective date of the price evidence and the valuation date, and

(g) market conditions at the time of the relevant transactions and how they differ from conditions at the valuation date."

These sections once again highlight the importance of using the same unit of comparison for the subject asset and comparable assets, and the need for the inclusion of the valuer's professional judgement. This judgement is required both in the creation of the Residential AVM, and for reviewing its output to ensure that it is fit for purpose.

Global views around the increasing use of Residential AVMs

Several IVSC member Valuation Professional Organisations (VPOs) have noted the increased use of Residential AVMs for secured lending. In April 2022, the Appraisal Foundation's Automated Valuation Model Task Force issued their report on the *'Current Generation of AVMs used in Housing.'* The report noted that:

"Throughout the mortgage pipeline, big data and algorithmic machine learning are increasingly being deployed to improve decisions and reduce costs. Consumers use AVMs to understand the value of their most important asset. Mortgage lenders, institutional investors and rating agencies use AVMs to understand, manage and price risk."

The report divided their findings into the following three main components:

1) AVM Development: Data and Models

2) AVM Reporting: Metrics and Confidence Scores

3) AVM Use and Testing: Stakeholder

Needs and Risk Factors.

The report made a number of recommendations including:

- *Consistency in measurement and reporting of AVMs must be developed.*
- *AVM testing, measurement and auditing must be independent and standardised.*
- *A list of minimally required reporting elements needs to be developed and adopted for all certified models. Quality data are the crucial and consequential inputs for creating the highest quality AVMs.*
- *Standards should be consistent, as much as possible between appraisals and AVMs, as well as all other valuation products and services.*

The RICS also issued an insight paper on '*Automated valuation models (AVMs): implications for the profession and their clients'* in April 2022. Within the paper, RICS "recognises AVMs' widespread use in influencing and informing valuation and transaction- related activity" and identifies key themes including:

- *Automation and the use of digital data impact the whole valuation process, for almost all asset types and across the majority of world markets.*
- *Both existing and any proposed new standards need to align regarding the impact of data, technology and increased automation.*
- *The concept of due diligence for both valuers and users of valuations must evolve and reflect the new landscape of digital data and automation.*
- *With the increased reliance on automation and digital data sources, the extent, levels and provision of liability and assurance on valuations must evolve and reflect the risks and how those risks are allocated across stakeholders.*
- *There needs to be clarity about the scope and boundaries of our standards and regulatory reach, and the need to work with other standard and regulatory bodies for a whole-system approach.*

The IVSC have acknowledged the findings of these reports, and the IVSC Standards Review Board and its Technical Boards are currently considering the inclusion of additional standards in relation to automation and modelling within the next edition of IVS (effective 31st July 2024).

Conclusion

In conclusion, a fully automated Residential AVM with no valuer interaction is not IVS compliant for the following reasons:

- There is no valuer involvement in either the creation of the model or the output;
- It does not include the valuer's judgement noting that a valuation is defined in IVS as "the act or process of determining an opinion or conclusion of value of an asset on a stated basis of value at a specific date in compliance with IVS; and
- A residential AVM is unable to provide an opinion on value.

However, these limitations do not mean that a Residential AVM could not be used by a valuer, and with another valuation approach or method to provide an IVS compliant valuation. As such, IVSC would consider an AVM in isolation a tool that may (or may not) assist a valuation professional in a valuation exercise.

As stated in the IVSC's Agenda Consultation, there are several Hybrid valuation models which are quasi or semi-automated residential valuation models. These models may include some valuer input into both the model design and sources of data and may use the valuer's professional judgement. In these instances, a semi- automated residential valuation model could be IVS compliant, providing the valuer follows "all other requirements contained within IVS", which could include physical inspection of the subject asset and comparable assets.

The Boards have noted the increasing use of automation and models within the valuation process and included standards for a valuation model within *IVS 105 Valuation Approaches and Methods Section 90 that states;*

"valuation model refers collectively to the quantitative methods, systems, techniques and qualitative judgements used to estimate and document value."

In light of this, the Boards will continue to carry out a review of the General Standards and plan for the next edition of IVS to include additional standards on 'Data Availability & Reliability', 'Modelling Appropriateness & Limitations', and 'Quality Control and Review' to provide more guidance in these areas, particularly as they relate to Residential AVMs.

The IVSC will continue to monitor the topics in this article and would welcome your insight and feedback to understand what ongoing issues (if any) you or your stakeholders continue to have with the use of Residential AVMs for secured lending within in your jurisdiction.

Perspectives Paper
TIME TO GET TANGIBLE ABOUT INTANGIBLE ASSETS

Part 3: Rethinking Brand Value

The IVSC issues Perspectives Papers from time to time, which focus on pertinent valuation topics and emerging issues. Perspectives Papers serve a number of purposes: they initiate and foster debate on valuation topics as they relate to the International Valuation Standards (IVS); they provide contextual information on a topic from the perspective of the standard setter; and they support the valuation community in their application of IVS through guidance and case studies.

Perspectives Papers are complementary to the IVS and do not replace or supersede the standards. Valuers have a responsibility to read and follow the standards when carrying out valuations.

By: Kevin Prall and members of the IVSC's Business Valuation Board

The ideas and opinions set out the IVSC's Perspectives Papers do not necessarily reflect the views of the firms represented amongst the author group.

The limitation of the current reporting frameworks to convey value creation and preservation activities is largely because the prevailing value creation strategies that existed when the standards were enacted decades ago, have evolved. As many current business models have evolved over decades, namely, to rely more heavily on intangible assets at the expense of tangible, the standards and the economics have become misaligned. This article series looks to contribute to realigning accounting and reporting standards with the value creation and preservation strategies utilised in modern business models.

In Parts 1 and 2 of our series, we examined the Case for Realigning Reporting Standards with Modern Value Creation and took a deep dive into human capital value creation and measurement. In this paper, Part 3 of our series, we take a deeper dive into brands and reputation value creation.

Brand Insights at a Glance:

- Due to multiple factors brands have become the most critical competitive advantage for many enterprises.
- To assess brand value creation, one must consider the full impact of the brand in its primary market as well as the interrelationship with other assets, especially intangible assets.
- The emergence of ESG suggests that investors require more information on the impact brand has on enterprise value.
- As the role of brand in enterprise value creation evolves, the techniques and assumptions to measure its value may need to change as well.

Introduction

In this paper we will:

- Examine how brands generate value for organizations and the attributes of such value creation,
- Analyze how investors assess the enterprise value creation attributable to brands; and
- Discuss the value measurement techniques and assumptions used to estimate the value of brands.

Of any group of intangible assets, brands likely have the most diverse impact on enterprise value creation. Brands are simultaneously capable of increasing revenues, reducing costs, and lowering risk.

Like most intangible assets, the definition of brand can mean different things to different people. Brands can be thought of narrowly, such as trademarks and trade names. Investors tend to prefer a view that encompasses broader considerations. While such broad considerations may not meet the definition for recognition as an asset for accounting purposes, disclosures as part of financial and sustainability reporting are an achievable goal that is also directly responsive to investor feedback.[i] As such, in the below discussion we focus on a broader definition inclusive of brand.

How do brands create value?

Central to brand value creation is its enduring ability to generate incremental revenue as compared to unbranded and lesser branded substitute products via enhanced

[i] CFA Institute Report Highlights Investor Views on Goodwill Accounting and the Importance of a Global Approach

prominence, expectation of superior performance, and trust as perceived by stakeholders. Therefore, incremental revenue from a strong brand can be generated in two ways. Most typical is through the ability to charge a higher price or achieve a consumer preference as compared to a similar unbranded or lesser branded product (i.e., price or market share premium).

Additionally, strong brands can also be leveraged to enable entrance into new sectors, markets, and geographies (i.e., the scalability of the brand). Scalability may take the form of direct entry into new markets by the enterprise, or through one of numerous forms of licensing. The scalability of a brand, and therefore its potential to create value, is unlike any other intangible asset. For example, even the most valuable technology is limited to finite applications and market segments.

Brand can also create value through cost reduction. The most direct form of cost reduction is the ability of a strong brand to lower the amount of sales and marketing expenses needed to generate a certain amount of revenue.

However, a brand's impact on cost reduction can go much further. As noted in the previous article, a strong brand likely attracts workforce to the enterprise and reduces recruiting and hiring costs. A strong brand can also enable the enterprise to achieve more favorable terms with suppliers, especially as it relates to suppliers of capital (e.g., better access to capital, better terms, and lower cost of capital).

Finally, a strong brand can lower the risk of achieving future cash flows as compared to unbranded or lesser branded enterprises and products. A strong brand achieves the lower risk by enabling an enterprise to create and maintain an effective barrier from competition (i.e., an economic moat).

An economic moat is often an advantage that is difficult to duplicate.

Despite these benefits, there are risks unique to brands, as brands exhibit a non-linear downside risk. The value of a brand can be quickly and permanently impaired despite taking a long time to build. As the value of brands has risen in modern intangible driven economies, so too has investors desire to understand and monitor the risk factors that could lead to such impairments. In this context, we believe there is a strong connection between the relative importance of brand and reputation value creation and the rise of ESG factors which attempt to assess this downside event risk for an enterprise's brand.

Like most intangible assets, it's also critically important for one to consider the relationship with other complimentary assets. As discussed in our previous article on Human Capital, there exist interrelationships with other assets such as technology, human capital, and relationship assets.

Therefore, the ability to create value from brand and reputational assets is both a function of the assets' own characteristics, but also the complementary nature of the other intangible assets. For example, strong human capital will likely have a positive synergistic effect with a strong corporate brand. Less valuable human capital may diminish the brand value of an enterprise or increase the risk of impairment. As an illustration, perhaps the greatest risk to banking institutions are cyber security breaches that threaten their brand. As such, the banking industry invests substantially to train their personnel (i.e., enhance Human Capital) on information technology risk to protect the firm's resources and information. The value of brand and human capital aiire inextricably linked.

Somewhat surprisingly, the empirical evidence from business combinations shows that brands account for relatively less value than other intangible assets.

As one moves from narrow definitions of brand to more holistic considerations, the shift results in stark differences in the nature and capacity for value creation. Therefore, as the role of brand in enterprise value creation evolves, as explored further below, the techniques to measure its value may need to change as well.

Investor Insights on Brand Value Creation

While the current financial reporting regimes take a narrow view on the recognition and disclosures for brands, investors are clearly desiring more information on broader value creation and risk considerations. To fill this gap between the information reported and the information desired by investors, ESG reporting has begun to collect and synthesize these inputs. However, as noted in the previous article, in its current state ESG lacks standardization, attestation, and harmonization.

Similar to Human Capital, the lack of relevant information has led investors to seek creative solutions to obtain relevant information on brand value creation and risks.

For example, sell side equity research analysts harvest, cleanse, and connect data from various sources for investment insights. These include monitoring social media channels such as Instagram, Google, TikTok, etc. for insights related to brand value including recognition and sentiment.

As one example, UBS has a process to determine absolute performance across various metrics. The metrics are then compared over time and across peer group to determine trends and relative performance. Such absolute and relative performance metrics provide value relevant insights. For example, in a June 2022 report on Nike Inc., UBS notes how Nike's strong brand position can drive sales growth, reduce cost, and reduce risk. See excerpts

[ii] JPMorgan Chase & Co. Form 10-l for the fiscal year ended December 32, 2021, p. 145.

below:

- **Higher Price –** "The market may not realize Nike's brand image in China is still strong despite last year's boycotts and it is lapping very easy compares. UBS Evidence Lab Pricing data indicates Nike products continue to sell through at high prices with fewer promotions y/y in North America and Europe."
- **Lower Costs-** "UBS Evidence Lab survey and pricing data reveal the Nike brand currently has #1 in mindshare globally and the company has significant room to reduce promotions [and associated expenses]."
- **Lower Risk –** "We believe Nike has the brand strength, strategy, skills, and resources to outperform peers through a potential recession."

Licensing arrangements between third parties can provide additional insights on brand value creation, and the importance of complimentary assets. The first example comes from the apparel industry.

In 2019, Arezzo Indústria e Comércio S.A reached an agreement to become the exclusive distributor of VF Corporation's brand Vans in Brazil under a licensing agreement. The agreement more than doubled Vans gross sales in Brazil from 2019 to 2021. UBS states that the Vans "brand has benefited from Arezzo's local sourcing, eCommerce infrastructure, and its solid relationship with malls, which enabled a faster store expansion." They continue to suggest additional value creation is possible through "licensing of further brands, either from VF Corp or other international brands, which, although may have appeal with customers, historically struggled to operate and scale in Brazil, partially due to the complexity of its tax system." [iii] In this instance, the complementary assets held by Arezzo were critical to extracting maximum value of the Vans brand. Accordingly, the value creation is split between the two companies.

A second example comes from the toy and entertainment industries. Mattel, Inc. has multiple examples of in-licensing brands from the entertainment industry, and out licensing its own brands to various other industries. BMO Capital Markets and JP Morgan provide insights on the respective cases for value creation. Mattel has licensing agreements with numerous entertainment companies, including Disney, Universal, Nickelodeon and more.

In January 2022, Mattel announced a multi-year global licensing agreement with Disney to produce and sell toys based on Disney Princesses, winning the license back after losing it to Hasbro in 2015. BMO believes "the deal will be accretive by about+12%, give or take a movie year, with further accretion over time given synergies with MAT's doll infrastructure." In addition to the complimentary [iv] assets to design, manufacture, and distribute toys, BMO also notes the complimentary nature of one of MAT's product brands.

For insights on Mattel's out-licensing JP Morgan notes the potential for additional value creation from its owned brands, as it sees a significant opportunity to leverage the strength of its brands to drive additional revenue and profit through licensed partnerships and is actively looking to add new partners, enter new categories, and grow its retail footprint. "The company is collaborating with partners such as L'Oreal, General Mills, Zara, and Nike… Licensing IP is highly accretive for a margin standpoint as MAT receives a royalty with the supermajority flowing through to the bottom line." Much like Disney lacks the complementary assets to manufacture and sell tvoys, Mattel lacks the complementary assets to manufacture and sell cosmetics, branded food, and clothing. As such, the value creation is split between the licensee and licensor.

Value Measurement

While the analyst insights above help to show the importance of brands in corporate value creation, it does highlight some potential inconsistencies between market economics and the assumptions utilized in common value measurement methods.

Given the value creation characteristics discussed above, value measurement methods typically rely on the income approach. However, consideration of the investment to develop and maintain a brand, particularly in a brand's infancy, should not be overlooked.

The most common method to value brands is the Relief from Royalty Method, a form of the Income Approach. The Method estimates the cash flows the user would have to make to the owner of the asset in return for the rights to use that asset. The primary assumption in the application of the Relief from Royalty Method is the royalty rate (typically expressed as a percent of revenue) that would be paid for use of the brand. Royalty rates observed in licensing transactions between third parties are typically used as the primary evidence for determining the royalty rates used in the Relief from Royalty Method.

As seen in the examples discussed above, brand owner's out-license in markets in which they don't have the complimentary assets to extract the full value of the brand. It is more advantageous for the brand owner to license to an entity which can extract the brands full value with in-place complementary assets and split the resulting value creation. The implication is that the royalty rates observed in market licensing transactions

[iv] 27 JAN 22 — SSR: BMO Capital Markets: BMO Research Today - January 27, 2022

[v] 16 JUN 22 — SSR: JPMorgan: Toy Time : Sector/Company Deep Dive (HAS, MAT, FNKO)

may only reflect a portion of the brand's value creation capacity, the portion that accrues to the licensor in the form of a royalty.

Therefore, relying on royalty rates observed in licensing transactions between third parties implicitly assumes a brand would not be deployed with the complimentary assets to create its maximum value and therefore may not be valued at its highest and best use.

This conclusion highlights the limitations of leveraging observed royalty rates when one considers the requirements for many standards of value. For example, Fair Value as defined by the FASB and IASB requires the use of market participant assumptions. However, the observed licensing transactions are between parties that are not market participants in the same market (i.e., geography, product, segment). In other words, license transactions occur because the two parties are not in the same market.

Yet, it's common to leverage these agreements without consideration of whether the terms would be different if the parties operated in the same market. The result may be a mismatch of inputs to the Relief from Royalty Method, in which revenue forecasts for the primary market are utilized but are coupled with a royalty rate derived from a transaction outside of the brand's primary market.

The difference between observed royalty rates from secondary markets and the royalty rate that captures the full value creation in the primary market value chain will depend on multiple factors. For example, the more removed the secondary market from the primary market, the greater the value share will shift to the licensee (e.g., lower royalty rate). The more closely aligned the primary and secondly markets, the more likely the licensor is to have many of the contributory assets and thus would be unwilling to license the brand but for a greater share of the economic profit (e.g., higher royalty rate).

The absolute difference is also impacted by the amount of profit available in that market. As such, the difference would be lower in industries in which company brands are not the primary driver of value creation, such as business to business industries as well as low margin industries. Alternatively, this difference may be vast in highly branded industries with high margins. We look at an example of the latter in the below.

A review of EBITDA margins for a set of publicly traded branded food companies shows an average LTM EBITDA margin of 22%. However, the largest publicly traded private label food manufacturer has consistently earned an average EBITDA margin of 9% for the last four years. The difference in EBITDA margins is 13%, which implies the extent of excess profitability of branded products to unbranded products. [vi]

However, third party licensing data in this industry via a search of ktMINE shows an average royalty rate of 4%. Comparing the excess profitability of 13% in the industry to the average royalty rate of 4%, suggests that reliance on licensing transactions may not capture the full value creation in instances where brand is the primary asset driving incremental returns. The reason is that the license arrangement may only capture a portion of the value creation capacity of the brand. [1] This proposition is further supported by data from purchase price allocations, which show that brands on average are only valued at 3% of the total deal consideration. [vii]

An obvious alternative in such instances would be to leverage the Multi Period Excess Earnings Method (MPEEM). Alternatively, to continue use of the Relief from Royalty Method, some have started to more fully recognize the value of brands in certain instances by estimating a synthetic or simulated royalty that equates to the excess earnings generated by the business. The synthetic royalty rate derivation follows a similar process as the MPEEM, by subtracting charges from operating profit for contributory assets such as working capital, tangible assets, human capital, IP, and customer assets. Instead of asset charges, functional returns may also be used. In instances in which the brand is a key intangible asset for the enterprise, the calculated synthetic royalty would typically be higher than the observed royalties from licensing transactions. The advantages of the synthetic royalty approach are that it can better account for the full value of the brand that is not observed in licensing transactions, while still leveraging the preferred method for valuing brands.

Conclusions and Next Steps

We believe the above insights can help spur additional dialogue, help inform standard setters and similar stakeholders in order to drive value relevant policies, and ultimately improve value measurement considerations. Brands are more important and require more thoughtful consideration on the way in which they create value, and which methods and assumptions are most appropriate to inform value conclusions.

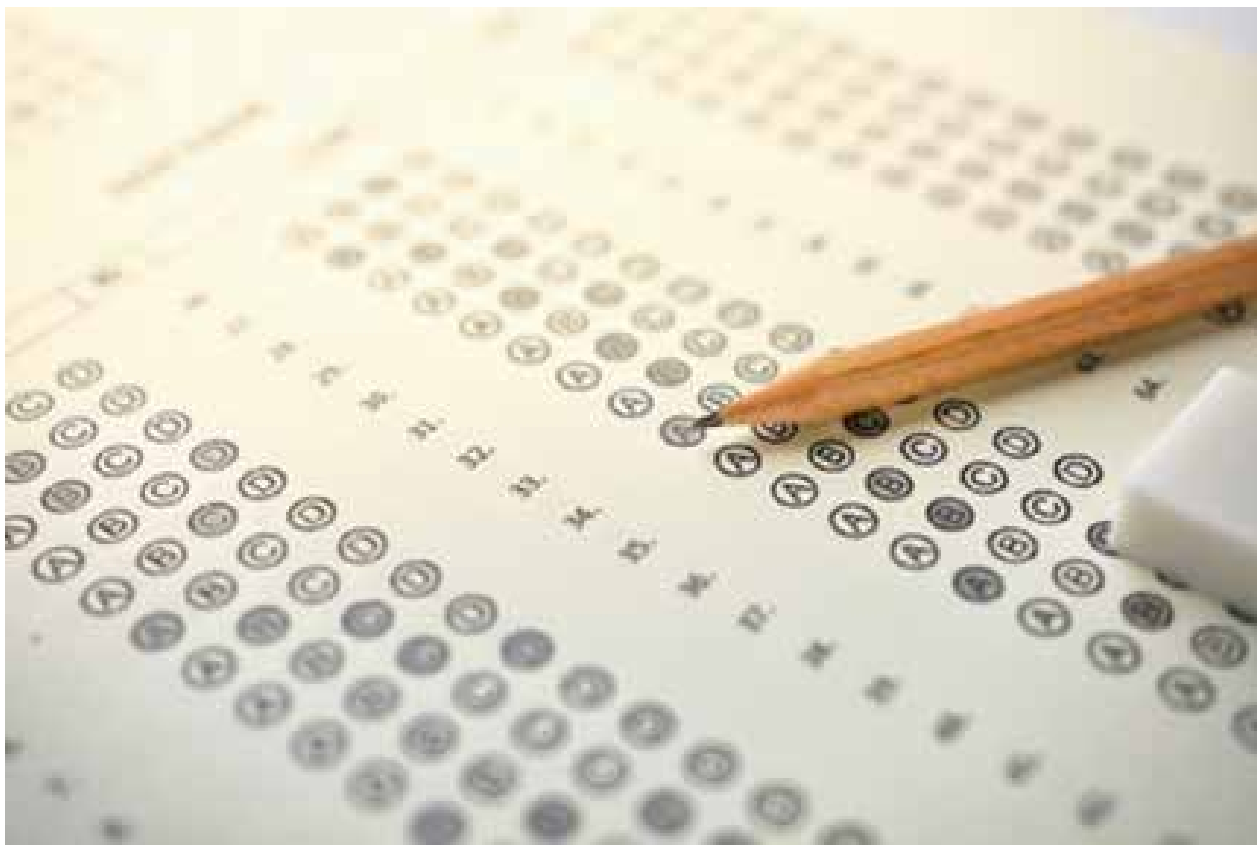
In our next article we will explore technology assets. The IVSC would be interested to hear your feedback on the subject discussed in this paper.

[vi] Source S&P Capital IQ

[vii] 2019 and 2020 Purchase Price Allocation Study (hl.com), page 21

[1] It's common to compare the royalty rate of royalty bearing assets to a rule-of-thumb of 25% to 33% of operating profit. This practice acknowledges that a majority of value is attributed to another asset, yet brands are often the differentiated asset which is primarily driving excess returns.

MULTIPLE CHOICE QUESTIONS



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MULTIPLE CHOICE QUESTIONS

MCQ FOR SFA

1.Twin deficit in a economy means
a) high current account deficit and high fiscal deficit.
b) high capital account deficit and high fiscal deficit.
c) high current account deficit and high capital account deficit.
d) high budget deficit and high fiscal deficit.

Ans) high current account deficit and high fiscal deficit.

2. Govt. taxing and spending policies are called:
a) Monetary policy
b) Commercial policy
c) Fiscal policy
d) Finance policy

Ans) Fiscal policy

3. With reference to deficit financing, monetized deficit is the part that is financed through
a) borrowings from public sector scheduled commercial banks
b) external commercial borrowings
c) borrowings from RBI
d) borrowings from private sector

Ans) borrowings from RBI

4.Which of the following may not be a part of projected Financial Statements?
a) Projected Income Statement
b) Projected TrialBalance
c) Projected Cash Flow Statement
d) Projected Balance Sheet.

Ans) Projected Trial Balance

5. Stock split is a form of
a) Dividend Payment
b) Bonus Issue
c) Financial restructuring
d) Dividend in kind

Ans) Financial restructuring

6. A preliminary prospectus is known as a
a) golden parachute.
b) red herring.
c) blue sky.
d) green shoe.

Ans) red herring.

7. First rating agency of India is
a) CRISIL
b) ICRA
c) SMERA
d) MOODY

Ans) CRISIL

8. The process of protecting oneself against future price changes by shifting some or all of the risk to someone else is called:
a) speculating
b) investing
c) hedging
d) gambling

Ans) hedging

9. Organised markets that enable new issues of equity and debt to be traded.
a) Secondary markets
b) Primary capital markets
c) BSE
d) NSE

Ans) Primary capital market

10. Which of the following is termed as Liquidity Decision?
a) Raising funds
b) Investing funds in assets
c) Distributing returns earned from the assets to shareholders
d) Balancing cash inflows and outflows

Ans) Balancing cash inflows and outflows

11. Which of the following is included in short term assets:
a) Raw Material
b) Debtor
c) Cash
d) All of the above

Ans) All of the above

12. Financing Decision determines:
a) Fixed Assets
b) Equity
c) Current Assets
d) Mixed Finance

Ans) Mixed Finance

13. Two alternative expected returns are compared with the help of:
a) Coefficient of standard
b) Coefficient of variation
c) Coefficient of return
d) Coefficient of deviation

Ans) Coefficient of variation

14. The charging section of the income under the head capital gains is:
a) Section 15
b) Section 17
c) Section 45
d) Section 22

Ans) Section 45

15. Mohan received a watch worth Rs 60,000 from his cousin grandfather (brother of his grandfather). What will be the taxable amount?
a) Nil
b) Rs 10,000
c) Rs 60,000
d) Rs 50,000

Ans) Nil

MULTIPLE CHOICE QUESTIONS

16. Loss due to fire of hired machinery is:
a) Capital Loss
b) Revenue Loss
c) Capital Expenditure
d) None of the above

Ans) Capital Loss

17. Embezzlement of cash by a cashier is:
a) A revenue loss
b) A capital loss
c) A casual loss
d) None of the above

Ans) A revenue loss

18. Perquisites to employees are covered in the Income Tax Act 1961 under
a) Sec 2a
b) Sec 17b
c) Sec 28a
d) Sec 36c

Ans) Sec 17b

19. Which of the following gifts is taxable?
a) Gift in kind from relatives
b) Gift from wife
c) Gift from son
d) Gift from office college

Ans) Gift from office college

20. Municipal taxes are deductible on ..... :
a) Accrual basis
b) Due basis
c) Payment basis
d) Not allowed

Ans) Payment basis

21. In case of individuals, the exempted limit of income for assessment year 2017-18 is:
a) 250000
b) 210000
c) 200000
d) 150000

Ans) 250000

22. Bad debts allowed earlier and recovered later on is:
a) Business income
b) Non business income
c) Exempted income
d) Income from other resources

Ans) Business income

23. Income from sale of rural agricultural land is:
a) Taxable capital gain
b) Exempted capital gain
c) Taxable income
d) None of the above

Ans) Exempted capital gain

24. Salary under section 17(1) of the Income Tax Act, 1961, does not include:
a) Wages
b) Pension
c) Interest
d) Gratuity

Ans) Interest

25. Unabsorbed depreciation can be carried forward for:
a) Any number of years
b) 8 years
c) 4 years
d) 7 years

Ans) Any number of years

26. When did the Insolvency and Bankruptcy Code 2016 receive the President's assent?
a) 5th August 2016
b) 28th May 2016
c) 5th May 2016
d) 15th June 2016

Ans) 28th May 2016

27. The Insolvency and Bankruptcy Code, 2016 is applicable to corporates if the default is?
a) 1 lakh or more
b) Above 1 lakh
c) 5 lakh
d) 5 lakh or more

Ans) 1 lakh or more

28. The term related party is defined in ..... of the Insolvency and Bankruptcy Code, 2016:
a) Section 5 (22)
b) Section 5 (23)
c) Section 5 (24)
d) Section 5 (25)

Ans) Section 5 (24)

29. Who can initiate the Corporate Insolvency Resolution Process under the Insolvency and Bankruptcy Code, 2016:
a) Financial Creditor
b) Operational Creditor
c) Corporate Creditor
d) All of the above

Ans) All of the above

30. Which of the following does not fall under financial asset:
a) A mortgage, charge, hypothecation or pledge of movable property
b) Any right or interest in the security, whether full or part underlying such debt or receivables
c) Any financial assistance
d) Prepaid expenses undertaken with respect to a movable or immovable property

Ans) Prepaid expenses undertaken with respect to a movable or immovable property

31. Financial assets permit all of the following except _____.
a) elimination of risk
b) separation of ownership and control

MULTIPLE CHOICE QUESTIONS

c) allocation of risk
d) consumption timing

Ans) elimination of risk

32. Which of the following does not fall under financial asset:
a) technologies
b) patents
c) intellectual properties
d) bonds

Ans) bonds

33. Which of the following intangibles is/ are prohibited from being recognised as an asset?
a) Home grown goodwill
b) Separately acquired intangible
c) Internally generated intangibles & Home grown goodwill
d) Goodwill acquired as part of an on-going business

Ans) Internally generated intangibles & Home grown goodwill

34. A business merger differs from a business consolidation because_
a) a merger dissolves all but one of the prior entities, but a consolidation dissolves all of the prior entities.
b) a consolidation dissolves all but one of the prior entities, but a merger dissolves all of the prior entities.
c) a merger is created when two entities join, but a consolidation is created when more than two entities join.
d) a consolidation is created when two entities join, but a merger is created when more than two entities join.

Ans) a merger dissolves all but one of the prior entities, but a consolidation dissolves all of the prior entities.

35. As an appraiser and in order to avoid bias in valuation, you would normally use_
a) One approach
b) Two different approaches
c) Better approach
d) Best approach

Ans) Two different approaches

36. Valuation done under Enterprise Model (DCF) and Economic Profit Model lead to identical results?
a) The Statement is True
b) The Statement is False
c) The Statement is conflicting as they are not used in valuation models
d) One cannot comment

Ans) The Statement is True

37. When valuing equity of high-growth companies, the bulk of the value will come from the_
a) Market value
b) Intrinsic value
c) Terminal value
d) Fair value

Ans) Terminal value

38. The difference between going concern value and liquidation value at the valuation date refers to:
a) Adjusted Book Value Method
b) Arbitrage Pricing Theory
c) Absolute risk
d) Asset based approach

Ans) Absolute risk

39. what are the types of Valuation Reports?
a) Comprehensive Valuation & Report Estimate Valuation Report
b) Comprehensive Valuation Report & Calculation Valuation Report
c) Calculation Valuation Report & Estimate Valuation Report
d) Calculation Valuation Report, Estimate Valuation Report & Comprehensive Valuation Report

Ans) Calculation Valuation Report, Estimate Valuation Report & Comprehensive Valuation Report

40. Comprehensive Valuation Report_
a) Based on a comprehensive review and analysis of the business, its industry and all other relevant factors,
b) Based on limited review, analysis and corroboration of relevant information,
c) Based on minimal review and analysis and little or no corroboration of relevant information.
d) Generally set out in a brief Valuation Report.

Ans) Based on a comprehensive review and analysis of the business, its industry and all other relevant factors,

41. Which of the following valuation methods is based on "Going concern concept_
a) Market value method
b) Book value method
c) Liquidation method
d) Salvage value method

Ans) Book value method

42. Who shall bear the cost of proving the claims under the liquidation process:
a) Claimant
b) Liquidator
c) Corporate Debtor
d) Creditors

Ans) Claimant

43. Which of the following reports is the liquidator required to prepare and submit under the liquidation process:
a) Preliminary Report or Progress Report
b) Preliminary Report and Progress Report
c) Preliminary Report and Annual Report

MULTIPLE CHOICE QUESTIONS

d) Sale Memorandum and Asset Report

Ans) Preliminary Report an Progress Report

44. Is liquidator fee part of the liquidation cost of corporate debtor_
a) Yes, liquidator fee is part of the liquidation cost of corporate debtor
b) No, liquidator fee is not a part of the liquidation cost of the corporate debtor
c) Depends on the agreement between liquidator and corporate debtor
d) Depends on the agreement between the financial creditors and liquidator

Ans) Yes, liquidator fee is part of the liquidation cost of corporate debtor

45. The key sources of value (earning an excess return) for a company can be attributed primarily to _____
a) Competitive advantage and access to capital
b) Quality management and industry attractiveness
c) Access to capitals and quality management
d) Industry attractiveness and competitive advantage

Ans) Industry attractiveness and competitive advantage

46. Which of the following procedure you would adopt while valuing nascent high-growth company?
a) Start backward
b) Start backward and work out the future
c) Start from future
d) Start from future and work backward

Ans) Start from future and work backward

47. Which of the following is the first and most important step when forecasting future financial statements?
a) Estimate the levels of investment in current and fixed assets
b) Determine the rate of interest that will be required for borrowed funds
c) Project the firm's sales revenues for the planning period
d) Determine the depreciation expense levels

Ans) Project the firm's sales revenues for the planning eriod

48. A commercial, industrial, service, or investment entity (or a combination thereof) pursuing an economic activity means:
a) Business Ownership Interest
b) Business Enterprise
c) Business Valuation
d) Business

Ans) Business Enterprise

49. A strategy to develop capabilities in company value chain is called_
a) Value resource
b) Substitute resource
c) Strategic resource
d) Resource modelling

Ans) Strategic resource

50. Monetizing an idea to make money with some method of operations is known to be_
a) Strategy
b) Scope
c) Business model
d) Business system

Ans) Business model

51. A tool to identify operational areas where competencies and capabilities exist is known to be_
a) Value proposition
b) Value chain
c) Profitability
d) Logistic margin

Ans) Value chain

52. A sustainable business model requires investment for_
a) Innovation & Human resources
b) Productivity & Innovation
c) Only Human resources
d) Innovation, Human resources & Productivity

Ans) Innovation, Human resources & Productivity

53. Level of strategy that uses capabilities and competencies for competitive advantage, is said to be at the_
a) Model level
b) Operational level
c) Corporate level
d) Competitive level

Ans) Competitive level

54. Quantitative components of a business model includes revenue sources, profitability and_
a) Cost
b) times
c) Quality
d) Efficiency

Ans) Cost

55. Which pricing model provides no guidance concerning the determination of the risk premium on factor portfolios?
a) The CAPM
b) The multifactor APT
c) Both the CAPM and the multifactor APT
d) Neither the CAPM nor the multifactor APT

MULTIPLE CHOICE QUESTIONS

Ans) The multifactor APT

56. An arbitrage opportunity exists if an investor can construct a _____ investment portfolio that will yield a sure profit.
a) positive
b) negative
c) zero
d) positive & zero

Ans) zero

57. Which of the following equation better represents value of intangible asset?
a) Intangible asset value = amortizable identified asset value – non-amortizable identified asset value + goodwill
b) Intangible asset value = amortizable identified asset value + non-amortizable identified asset value + goodwill
c) Intangible asset value = amortizable identified asset value – non-amortizable identified asset value - goodwill
d) Intangible asset value = amortizable identified asset value + non-amortizable identified asset value - goodwill

Ans) Intangible asset value = amortizable identified asset value + non-amortizable identified asset value + goodwill

58. Which of the following assets is not an intangible asset?
a) Patent
b) Brand name
c) Inventory
d) Goodwill

Ans) Inventory

59. The value of a franchise is directly related to the capacity to generate_
a) Returns
b) Normal returns
c) Excess returns
d) Not related to returns alone

Ans) Excess returns

60. Which of the following method, you would consider appropriate while valuing the intangible assets?
a) Multiple
b) relative
c) consistent
d) exclusive

Ans) relative

61. Which of the following intangibles is the only one which may be capitalised, at least initially, though (i) it is not separable (ii) there is no active market in it and (iii) flow of economic benefit from it is not probable?
a) Government granted intangible
b) Separately acquired brand
c) Home grown goodwill
d) Goodwill acquired with a business

Ans) Goodwill acquired with a business

62. Which of the following is not a reason for a company to expand through a combination, rather than by building new facilities?
a) A combination might provide cost advantages
b) A combination might provide fewer operating delays
c) A combination might provide easier access to intangible assets.
d) A combination might provide an opportunity to invest in a company without having to take responsibility for its financial results

Ans) A combination might provide an opportunity to invest in a company without having to take responsibility for its financial results

63. When accounting for a business combination any future costs associated with restructuring of an entity_
a) should be estimated and included as part of the acquisition cost
b) should be provided for as part of the cost of the combination
c) should be capitalised and amortised across the restructuring period
d) should be recognised only when the acquiree has an existing liability for restructuring

Ans) should be recognised only when the acquiree has an existing liability for restructuring

64. Allocation of available funds in various types funds are balancing risk & return is called ……
a) Portfolio diversification
b) Investment
c) Gambling
d) Checking

Ans) Portfolio diversification

65 …… Is a trust that pools the savings of a number of investors.
a) Financial derivatives
b) Mutual fund
c) Swaps
d) Real estate

Ans) Mutual fund

66. An insurer uses balanced scorecards as a strategic management tool. The main purpose of this is to_
a) calculate insurance premiums.
b) calculate its financial strength.
c) measure performance
d) reduce its costs.

Ans) measure performance

67. Which department within

MULTIPLE CHOICE QUESTIONS

an insurance company will primarily be responsible for analysing potential mergers and acquisitions?
a) Finance.
b) Internal audit.
c) Investment.
d) Strategy.

Ans) Strategy.

68. When reserving for claims under long-tail insurance classes, the amounts can be discounted to allow for
a) Corporation Tax
b) cost savings
c) investment income.
d) market risk.

Ans) investment income.

69. Which financial ratio gives an indication of an insurer's underwriting year performance?
a) Claims ratio.
b) Combined ratio
c) Credit turnover ratio.
d) Current ratio.

Ans) Combined ratio

70. Which type of activity in the Standard and Poor's insurance ratings frame work is most likely to be classified as a modifier?
a) Committee voting.
b) Enterprise risk management.
c) Gearing ratio analysis.
d) Industry and country risk.

Ans) Enterprise risk management.

71. Who arranges for a credit rating agency to produce a financial security rating on an insurance company?
a) External auditors.
b) The Government.
c) The insurance company
d) The regulator

Ans) The insurance company

72. An insurer intends to assess its position via a use test, to comply with proposed changes in regulations. This forms part of the rules relating to
a) capital adequacy.
b) . claims reserves.
c) internal audit
d) risk tolerance.

Ans) capital adequacy.

73. How will the recent acquisition of the subsidiary be shown on the insurer's cash flow statement?
a) As a cash inflow from financing activities.
b) As a cash inflow from investment activities
c) As a cash outflow from financing activities
d) As a cash outflow from investment activities

Ans) As a cash outflow from investment activities

74. The use of claims development tables provides valuable information about the_
a) ability to charge higher prices.
b) level of unrealised gains and losses.
c) nature of breaches of internal controls
d) prior estimates of outstanding amounts.

Ans) prior estimates of outstanding amounts.

75. The change in the combined ratio is most likely to indicate that the insurer has_
a) increased its administration expenses.
b) increased its long-term borrowing.
c) improved its investment returns.
d) improved its underwriting results.

Ans) improved its underwriting results.

76. The result of the recent liquidity calculation indicates that since last year the insurer's liquidity has_
a) become more volatile
b) worsened.
c) improved.
d) been unaffected.

Ans) improved.

77. In Swift Formulations Private Ltd., In. re (2004 121 Comp Case 27 (Punjab and Haryana), held that:
a) Where the shareholders of two companies in their collective wisdom had accepted the share exchange ratio worked out by experts and if mistake was pointed out, then it was not for the court to interfere with the decision of shareholders
b) Where the shareholders of two companies in their collective wisdom had not accepted the share exchange ratio worked out by experts and if mistake was pointed out, then it was not for the court to interfere with the decision of the shareholders
c) Where the shareholders of two companies in their collective wisdom had accepted the share exchange ratio worked out by experts and if no mistake was pointed out, then it was not for the court to interfere with the decision of shareholders
d) None of the above

Ans) Where the shareholders of two companies in their collective wisdom had accepted the share exchange ratio worked out by experts and if no mistake was pointed out, then it was not for the court to interfere with the decision of shareholders

78. In Gulmohar Finance Limited,

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In.re., (1995) 5 SCL 207 (Del) Delhi High Court held that:

a) Valuation and exchange ratio can be accepted if the shareholders, creditors and liquidation etc., have approved the scheme, even when Central Government has raised objections to exchange ratio

b) Valuation and exchange ratio can be accepted if the shareholders, creditors and liquidation etc., have not approved the scheme, even when the Central Government has not raised objections to exchange ratio

c) Valuation and exchange ratio can be accepted if the shareholders, creditors and liquidation etc., have approved the scheme, even when Central Government has not raised objections to exchange ratio

d) None of the above

Ans) Valuation and exchange ratio can be accepted if the shareholders, creditors and liquidation etc., have approved the scheme, even when Central Government has raised objections to exchange ratio

79. No person shall practice as a registered valuer without obtaining a:

a) Certificate of practice

b) Certificate of recognition

c) Certificate of registration

d) Certificate of association

Ans) Certificate of registration

80. A person shall not be eligible to be a registered valuer if he:

a) Is not a valuer member of a registered valuers organisation

b) Is a minor

c) Is not a discharged bankrupt

d) All of the above

Ans) All of the above

Use the following information to answer Questions 81-82
Sally Curten, Valuer, has gathered the following information on Jameston Fiber Optics, Inc.,
(JFOI) and industry norms

Selected Financial Data for JFOI (in millions)

Total sales:	$2,044	(fiscal year 2016)
Total assets:	$1,875	(FYE 2015)
Net income:	$322	(fiscal year 2016)
Total debt:	$1,465	(FYE 2015)
Industry ratios:	Net profit margin	= 15.7%
	Total asset turnover	= 1.1
	Return on equity	= 40.5%

81.The return on equity for JFOI is closest to:

a)17.2%.

b)37.4%.

c)78.5%.

d)none of the above

Ans) 78.5%.

82.Using DuPont analysis, Curten determines that the most influential factor(s) that management used to increase the ROE for JFOI compared to the industry is:

a) asset efficiency.

b) profitability.

c) leverage.

d)none of the above

Ans) leverage.

Use the following information to answer Questions 83-90

Gianna Peters is an investment analyst who focuses on dividend-paying stocks. Peters uses a discounted cash flow (DCF) approach to stock selection. She is meeting with her staff to evaluate portfolio holdings based on a bottom-up screening of stocks listed in the United State and Canada. Peters and her staff begin by reviewing the characteristics of the following portfolio candidates.

Company ABC

A Canadian company in the consumer staples sector with a required rate of return of 7.35%. Recent media reports suggest that ABC might be a takeover candidate. Peters and her team estimate that if the incumbent Canadian prime minister's party retains its power, the company's current annual dividend of C$0.65 per share will grow 12% a year for the next four years and then stabilize at a 3.5% growth rate a year indefinitely. However, if a new government takes office in Canada, then the team estimates that ABC will likely not experience the elevated 12% short-run growth because of new regulatory and tax changes, and instead will grow by 3.5% indefinitely.

Company XYZ

A mid-sized US company in the utilities sector with

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a required rate of return of 10%. Peters and her team believe that because of a recent restructuring, the company is unlikely to pay dividends for the next three years. However, the team expects XYZ to pay an annual dividend of US$1.72 per share beginning four years from now. Thereafter, the dividend is expected to grow indefinitely at 4% even though the current price implies a growth rate of 6% during this same period.

Company JZY

A large US company in the telecom sector with a required rate of return of 8%. The stock is currently trading at US$32.76 per share with an implied earnings growth rate of 5.3%. Peters believes that because JZY is mature and has a stable capital structure, the company will grow at its sustainable growth rate. Over the past 10 years, the company's return on equity (ROE) has averaged 8.17% and its payout ratio has averaged 40%. Recently, the company paid an annual dividend of US$0.84 per share.

Peters asks a newly hired analyst, Kurt Thomas, to comment on the evaluation approach for these three stocks. Thomas makes the following statements:

1. A free cash flow valuation model would not be appropriate to evaluate Company ABC if the firm becomes a takeover candidate.
2. A dividend discount model cannot be applied to Company XYZ if dividends are suspended for a few years.
3. A dividend discount model is suitable for evaluating the stock of Company JZY because of the historically consistent payout ratio.

Peters then asks the team to examine the growth opportunities of three Canadian stocks currently held in the portfolio. These stocks are listed in Exhibit 1. Peters believes that the stocks are fairly valued.

Exhibit 1 Selected Stock Characteristics

	Required Rate of	Next Year's Forecasted	Current Price per
Stock	Return	EPS (C$)	Share (C$)
ABTD	10.5%	7.30	80.00
BKKQ	8.0%	2.12	39.00
CPMN	12.0%	1.90	27.39

83. **Which of the following statements made by Thomas is *correct*?**

a) Statement 1
b) Statement 2
c) Statement 3
d) none of the above

Ans) Statement 3

84. **Assuming the incumbent government retains office in Canada, Peters and her team estimate that the current value of Company ABC stock would be closest to:**

a) C$22.18.
b) C$23.60.
c) C$25.30.
d) none of the above

Ans) C$23.60.

85. **Assuming a new government takes office in Canada, Peters and her team estimate that the current intrinsic value of Company ABC would be closest to:**

a) C$9.15.
b) C$16.88.
c) C$17.47.
d) none of the above

Ans) C$17.47.

86. **Assume that a new government takes office in Canada. If Peters and her team use the Gordon growth model and assume that Company ABC stock is fairly valued, then which of the following would most likely be true?**

a) The total return of ABC stock will be 10.85%.
b) The dividend yield of ABC stock will be 3.85%.
c) The stock price of ABC will grow at 7.35% annually.
d) none of the above

Ans) The dividend yield of ABC stock will be 3.85%.

87. **If the team uses the dividend discount model, the current intrinsic value of Company XYZ stock would be closest to:**

a) US$19.58.
b) US$20.36.
c) US$21.54.
d) none of the above

Ans) US$21.54.

88. **The dividend growth rate implied in the stock price of Company XYZ suggests that XYZ's stock price is most likely:**

a) undervalued.
b) fairly valued.
c) overvalued.

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d) need more information to answer

Ans) overvalued.

89.**Based on the relationship between the implied growth rate and the sustainable growth rate, Peters' team should conclude that Company JZY's stock price is most likely:**
a) undervalued.
b) fairly valued.
c) overvalued.
d) need more information to answer

Ans) overvalued.

90.**Based on Exhibit 1, the growth component of the leading P/E is largest for:**
a) ABTD.
b) BKKQ.
c) CPMN.
d) need more information to answer

Ans) CPMN.

9 Organised markets that enable new issues of equity and debt to be traded.
a) Secondary markets
b) Primary capital markets
c) BSE
d) NSE

Ans) Primary capital markets

10 The rate at which commercial banks make funds available to people is known as:
a) Success Rate
b) Bank Rate
c) Borrowing Rate
d) Lending Rate

Ans) Lending Rate

11 ..... means bailment of goods as security for payment of debt:
a) Hypothecation
b) Overdraft
c) Pledge
d) Consumer Credit

Ans) Pledge

12 Measurement and disclosure do not apply to which of the following?
a) Leasing based transactions
b) Net realizable values/Impairment of Assets
c) Share based payments
d) Price received to sell or buy an asset

Ans) Price received to sell or buy an asset

13 Which of the following statement is true?
a) Debenture holder is an owner of the company
b) Debenture holder can get back its money only on the liquidation of the company
c) A debenture issued at a discount can be redeemed at a premium
d) A debenture holder receives interest only in the event of profits

Ans) A debenture issued at a discount can be redeemed at a premium

14 Belated return can be filed by an assessee earlier or before completion of assessment and:
a) 6 months
b) 1 year
c) 2 years
d) 3 years

Ans) 1 year

15 Which of the following is not a capital receipt?
a) 'Salami' for settlement of tenancy
b) Insurance claim received on machinery lost by fire
c) Lump-sum received on sale of shares
d) Goods sold for cash under 'Patent Rights'

Ans) Goods sold for cash under 'Patent Rights'

16 Compensation for cancellation of a license by the government resulting in cessation of business is:
a) A casual receipt
b) A capital receipt
c) A revenue receipt
d) None of the above

Ans) A revenue receipt

17 Compensation received for loss of trading asset is a:
a) Capital receipt
b) Revenue receipt
c) Casual receipt
d) None of the above

Ans) Capital receipt

18 Which of the following is not a revenue expense?
a) Rent of office building
b) Sales tax and excise duty paid
c) Payment made on dismissal of company
d) Remuneration to employers of a temporary employee

Ans) Rent of office building

19 Any payment made to discharge a revenue liability, if refunded later on, shall be:
a) A revenue receipt
b) A capital receipt
c) A casual receipt
d) None of the above

Ans) A revenue receipt

20 Residential status of taxable entities is:
a) Fixed in nature
b) Can change from year to year

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c) Fixed once in 5 years
d) None of the above

Ans) Can change from year to year

21 Income received in India is taxable in the hands of:
a) Resident only
b) Resident and ordinarily resident only
c) Non-resident only
d) All assesses

Ans) All assesses

22 Exempted incomes are defined under section:
a) 15 of Income Tax Act
b) 18 of Income Tax Act
c) 10 of Income Tax Act
d) 20 of Income Tax Act

Ans) 10 of Income Tax Act

23 The basic exemption limit in case of a resident individual of the age of below 60 years is Rs ..... : (AY 2021-22)
a) Rs 2,00,000
b) Rs 2,50,000
c) Rs 3,00,000
d) Rs 5,00,000

Ans) Rs 3,00,000

24 A resident individual (whose net income does not exceed Rs 3,50,000) can avail rebate under section 87A. It is deductible from income-tax before calculating education cess. The amount of rebate is 100 percent of income-tax or Rs ....., whichever is
a) 10000
b) 2500
c) 2000
d) 1000

Ans) 2500

25 Which of the following is an agriculture income?
a) Dividend paid by a company out of its agriculture income
b) Share of Profit by a Partner from a firm engaged in an agriculture operation
c) Income from supply of water by a assessee from a tank in its agricultural land
d) Interest received by a money lender in the form of agricultural produce

Ans) Share of Profit by a Partner from a firm engaged in an agriculture operation

26 Which of the following incomes received by an assessee are exempt under section 10 of the Income Tax Act?
a) Agricultural Income
b) Salary of a partner from a firm
c) Salary received by a member of a ship's crew
d) All of the above

Ans) Agricultural Income

27 If control and management of its affairs was fully in India, a foreign company becomes:
a) Resident in India
b) Ordinarily resident in India
c) Non-resident
d) None of the above

Ans) Resident in India

28 A domestic company is taxable at 30%. However, tax rate is 25% if turnover or gross receipt of the company does not exceed: (AY 2021-22)
a) Rs 250 crore
b) Rs 25 crore
c) Rs 10 crore
d) Rs 200 crore

Ans) Rs 250 crore

29 Which of the following is not included in taxable income?
a) Income from smuggling activity
b) Casual Income
c) Gifts of personal nature subject to a maximum of 50,000 received in cash
d) Income received in kind

Ans) Gifts of personal nature subject to a maximum of 50,000 received in cash

30 Unexplained cash credits are chargeable to tax @ ..... :
a) 0.1
b) 0.2
c) 0.15
d) 0.3

Ans) 0.3

31 Income from subletting of house property is taxable under the head ..... :
a) Income from House Property
b) Profits & Gains from Business or Profession
c) Income from Other Sources
d) Capital Gains

Ans) Income from Other Sources

32 When a price for an identical asset or liability is not observable, an entity measures fair value using another valuation technique that:
a) Maximises the use of relevant observable inputs
b) Minimises the use of unobservable inputs.
c) both (a) and (b)
d) either (a) or (b)

Ans) c

33 In case of financial assets, an enity needs toidentify the principal market or, in the absence of a principal market, the most

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advantageous market.
a) TRUE
b) FALSE
c) All of these
d)None of the above

Ans) b

34 The price that would be received is 26, transaction costs in that market are 3 and the costs to transport the asset to that market are 2. Calculate the fair value of the asset, if market it is the principal market.
a) 26
b) 23
c) 21
d) 24

Ans) d

35 The price that would be received is 26, transaction costs in that market are 3 and the costs to transport the asset to that market are 2. Calculate the fair value of the asset, if market it is the most advantageous market.
a) 26
b) 23
c) 21
d) 24

Ans) c

36 Level 2 input does not include
a) quoted prices for similar assets or liabilities in active markets
b) quoted prices for identical or similar assets or liabilities in markets that are not active
c) quoted prices for identical assets or liabilities in active markets
d) market-corroborated inputs

Ans) c

37 Which of the following statement is true?
a) All valuation approaches must be considered
b) All valuation approaches must be applied
c) All valuation methods must be applied
d) Indications of value should be averaged

Ans) All valuation approaches must be considered

38 Which of the following principle of valuation would be more appropriate in respect of M & A
a) Principle of Integration
b) Principle of future Benefits
c) Principle of substitution
d) Principle of substitution,Interation & Future benefits

Ans) Principle of substitution, Interation & Future benefits

39 If the market value of security is above its intrinsic value, it is good_
a) for 'auction"
b) for 'buy"
c) for 'sell"
d) for retain

Ans) for 'sell"

40 While measuring the investment value we may add to the stand alone value of the business the followings:
a) Value premium, price premium
b) Market premium, control premium
c) Synergy premium, market premium
d) The control premium, The synergy premium

Ans) The control premium, The synergy premium

41 As an appraiser and in order to avoid bias in valuation, you would normally use_
a) One approach
b) Two different approaches
c) Better approach
d) Best approach

Ans) Two different approaches

42 Which one of the following methods do Valuators commonly use for valuation of Brands? (choose the nearest definition)
a) Sales multiples
b) Relief from Royalty
c) Real Option methodology
d) P/E multiples

Ans) Relief from Royalty

43 What doesnot valuation report include?
a) General description of the property
b) Resource management
c) Valuation process describing methods used
d) moderate level of assurance

Ans) moderate level of assurance

44 In arbitrage pricing theory, higher required rate of return is usually paid on stock_
a) higher market risk
b) higher dividend
c) lower dividend
d) lower market risk

Ans) higher market risk

45 Which of the following statements is false?
a) The primary assumption of the APT is that security returns are generated by a linear factor model
b) A benefit of the APT is that it does not specify which variables are the best to use as a common factor
c) The APT is considered to be less restrictive than the CAPM

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d) In practice, researchers claim that we need at least two factors for the APT model.

Ans) A benefit of the APT is that it does not specify which variables are the best to use as a common factor

46 Which of the following is an assumption of the APT?
a) All investors hold the market portfolio
b) Investors are risk averse
c) Short sales are allowed
d) Investors follow the mean-variance rule

Ans) Short sales are allowed

47 According to the APT, the value of the firm-specific factor is expected to be, on average_
a) more important than the value of the common factors
b) zero
c) positive
d) greater than the value of the common factors

Ans) zero

48 Arbitrage opportunity means you can earn a positive return with_
a) low risk
b) positive initial investment and zero risk
c) zero initial investment and zero risk
d) zero initial investment and some risk

Ans) zero initial investment and zero risk

49 Which of the following statements is true according to the theory of arbitrage?
a) Rational investors will arbitrage in a manner consistent with their risk tolerance
b) High-beta stocks are consistently under priced
c) Low-beta stocks are consistently overpriced
d) Positive alpha stocks will quickly disappear

Ans) Positive alpha stocks will quickly disappear

50 In a multi-factor APT model, the coefficients on the macro factors are often called _____.
a) systemic risk
b) firm-specific risk
c) idiosyncratic risk
d) factor loadings

Ans) factor loadings

51 The securities which are providing a fixed income to the investors is known as_
a) Fixed income securities
b) Short term securities
c) Medium term securities
d) Medium & short term securities

Ans) Fixed income securities

52 Yield-to-Maturity on a bond has increased from 8% to 9%. Then, the duration of the bond will_
a) Increase
b) Decrease
c) Remain unchanged
d) Nothing can be concluded from the given information.

Ans) Decrease

53 If coupon rate is equal to going rate of interest then bond will be sold_
a) at par value
b) below its par value
c) more than its par value
d) seasoned par value

Ans) at par value

54 The "modified duration" used by practitioners is equal to the Macaulay duration_
a) times the change in interest rate.
b) times (one plus the bond's yield to maturity).
c) divided by (one minus the bond's yield to maturity)
d) divided by (one plus the bond's yield to maturity)

Ans) divided by (one plus the bond's yield to maturity)

55 Given the time to maturity, the duration of a zero-coupon bond is higher when the discount rate is_
a) higher
b) lower
c) The bond's duration is independent of the discount rate.
d) equal to the risk free rate.

Ans) The bond's duration is independent of the discount rate.

56 The Majority shareholder in CRISIL is _____?
a) Standard and Poors'
b) Poors'
c) Moody's
d) Dun and Bradstreet

Ans) Standard and Poors'

57 Type of rating to which all credit rating agencies does not consider is classified as
a) split rating
b) sinking rating
c) automated rating
d) floating rating

Ans) split rating

58 What is the current rating (as of April 28, 2015) of India by S&P?
a) AA
b) A

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c) BBB
d) BB

Ans) BBB

59 CAMEL Model stands for_
a) Capital , Assets, Market, Earnings, Leverage
b) Capital, Action, Market, Earnings, Liquidity
c) Capital, Assets, Management, Earnings, Liquidity
d) Capital, Assets, Management, Earnings, Lliabilities

Ans) Capital, Assets, Management, Earnings, Liquidity

60 Credit Rating is an expression of opinion of an agency, regarding a debt instrument on a specific date, dependent on_
a) Organizational Structure
b) Products & Services
c) Risk Evaluation
d) Products evaluation

Ans) Risk Evaluation

61 Which of the following is not a measure to reduce credit risk in derivatives?
a) Netting
b) Collateralization
c) Downgrade Triggers
d) Upgrade Triggers

Ans) Upgrade Triggers

62 The credit rating of the firm is AAA, the description of the rating is;
a) issuer has missed one or more interest or principal payment."
b) Capacity to pay interest plus Principal is High"
c) Capacity to pay interest plus Principal is slightly susceptible to adverse economic conditions"
d) Significant chances that issuer could miss interest payment."

Ans) Capacity to pay interest plus Principal is High"

63 The credit rating of the firm is A, the description of the rating is;
a) issuer has missed one or more interest or principal payment."
b) Capacity to pay interest plus Principal is adequate Slightly speculative"
c) Capacity to pay interest plus Principal is slightly susceptible to adverse economic conditions"
d) Significant chances that issuer could miss interest payment."

Ans) Capacity to pay interest plus Principal is slightly susceptible to adverse economic conditions

64 The credit rating of the firm is BB, the description of the rating is;
a) . issuer has missed one or more interest or principal payment."
b) Capacity to pay interest plus Principal is adequate. Slightly speculative"
c) Capacity to pay interest plus Principal is slightly susceptible to adverse economic conditions"
d) Significant chances that issuer could miss interest payment."

Ans) Significant chances that issuer could miss interest payment."

65 In binomial approach of option pricing model, last step for finding an option is_
a) price hike
b) price value
c) put price
d) call price

Ans) call price

66 In binomial approach of option pricing model, fourth step is to create_
a) equalize domain of payoff
b) equalize ending price
c) riskless investment
d) high risky investment

Ans) riskless investment

67 Second step in binomial approach of option pricing is to define range of values_
a) at expiration
b) at buying date
c) at exchange closing time
d) at exchange opening time

Ans) at expiration

68 The following statements about simulation models are true except:
a) Simulation models enable the financial manager to analyze risky projects without estimating the approximate cost of capital
b) Simulation models are complex and expensive to develop
c) Simulation models are specific to the project and every project requires anew simulation model
d) Simulation models usually ignore opportunities to expand or abandon the project

Ans) Simulation models enable the financial manager to analyze risky projects without estimating the approximate cost of capital

69 Monte Carlo simulation is likely to be most useful:
a) For simple problems
b) For problems of moderate complexity
c) For very complex problems
d) Regardless of the problem's complexity

Ans) For very complex problems

70 The following is not among the steps involved in the Monte Carlo method:
a) Modeling the project

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b) Specifying the numbers on the roulette wheel
c) Specifying probabilities
d) Simulating the cash flows

Ans) Specifying the numbers on the roulette wheel

71 Which of the following statements are NOT true of simulation?
a) A simulation model cannot prescribe what should be done about a problem
b) The equations describing the operating characteristics of the system are known
c) Simulation models the behaviour of a system
d) Simulation models can be used to study alternative solutions to a problem

Ans) The equations describing the operating characteristics of the system are known

72 Monte Carlo simulation gets its name from which of the following?
a) Data collection
b) Analysis
c) Model formulation
d) Random-number assignment

Ans) Random-number assignment

73 The first step in simulation is to_
a) set up possible courses of action for testing.
b) construct a numerical model.
c) validate the model.
d) define the problem.

Ans) define the problem.

74 The three types of mathematical simulation models are_
a) operational gaming, Monte Carlo, systems simulation.
b) Monte Carlo, queuing, maintenance policy.
c) Monte Carlo, systems simulation, computer gaming.
d) system simulation, operational gaming, weather forecasting.

Ans) operational gaming, Monte Carlo, systems simulation.

75 Simulation should be thought of as a technique for_
a) increasing one's understanding of a problem.
b) obtaining a relatively inexpensive solution to a problem.
c) obtaining an optimal solution to a problem.
d) providing quick and dirty answers to complex problems.

Ans) increasing one's understanding of a problem.

76 Which of the following is NOT an example of a financial asset/ liability?
a) Advances received on a construction project
b) A contract that will be settled in the company's own equity
c) Cash
d) Shares

Ans) Shares

77 What is the manner of selling the assets of corporate debtor under the liquidation process, if assets are of perishable nature:
a) Private Sale
b) Auction
c) Sale on standalone basis
d) Sale of asset by any method except on standalone basis

Ans) Private Sale

78 What is an ordinary manner of selling the assets of corporate debtor under the liquidation process_
a) Auction
b) Private Sale
c) Sale on standalone basis
d) Any suitable method adopted by the liquidator

Ans) Auction

79 In Bengal Tea Industries Ltd & Ors. vs. Union of India, a Division Bench of the Calcutta High Court held that:
a) In a scheme of amalgamation of two companies, it is necessary in law to call for a meeting of the creditors and obtain their views on the scheme
b) In a scheme of amalgamation of two companies, it is not necessary in law to call for a meeting of the director and obtain their views on the scheme
c) In a scheme of amalgamation of two companies, it is not necessary in law to call for a meeting of the creditors and obtain their views on the scheme
d) None of the above

Ans) In a scheme of amalgamation of two companies, it is not necessary in law to call for a meeting of the creditors and obtain their views on the scheme

80 Bengal Tea Industries Ltd &Ors. vs. Union of India, a Division Bench of the Calcutta High Court held that:
a) In the event, any shareholder of the Transferee Company had appeared before the Court and had objected to the valuation of the shares or to the exchange ratio, the matter would have taken an entirely different complexion and the Court would have been inclined
b) In the event, any shareholder of the Transferor Company had appeared before the Court and had objected to the valuation of the

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shares or to the exchange ratio, the matter would have taken an entirely same complexion and the Court would have been inclined
c) In the event, any shareholder of the Transferor Company had appeared before the Court and had objected to the valuation of the shares or to the exchange ratio, the matter would have taken an entirely different complexion and the Court would not have been inclined
d) None of the above

Ans) In the event, any shareholder of the Transferor Company had appeared before the Court and had objected to the valuation of the shares or to the exchange ratio, the matter would have taken an entirely different complexion and the Court would have been inclined

Use the following information to answer Questions 81-82

Sun Pharma is a large pharmaceutical company based in Sri Lanka that manufactures prescription drugs under license from large multinational pharmaceutical companies. Delenga Mahamurthy, CEO of Sun Pharma, is evaluating a potential acquisition of Island Cookware, a small manufacturing company that produces cooking utensils. Mahamurthy feels that Sun Pharma's excellent distribution network could add value to Island Cookware. Sun Pharma plans to acquire Island Cookware for cash. Several days later, Sun Pharma announces that they have acquired Island Cookware at market price.

81 Sun Pharma's most appropriate valuation for Island Cookware is its:
a) sum-of-the-parts value.
b) investment value.
c)liquidation value.
d)none of the above

Ans) investment value.

82 Upon announcement of the merger, the market price of Sun Pharma drops. This is most likely a result of:
a) the unrelated business effect.
b) the tax effect.
c) the conglomerate discount.
d) none of the above

Ans) the conglomerate discount.

Use the following information to answer Questions 83-90

Guardian Capital is a rapidly growing US investment firm. The Guardian Capital research team is responsible for identifying undervalued and overvalued publicly traded equities that have a market capitalization greater than $500 million. Due to the rapid growth of assets under management, Guardian Capital recently hired a new analyst, Jack Richardson, to support the research process. At the new analyst orientation meeting, the director of research made the following statements about equity valuation at Guardian:
Statement 1- "Analysts at Guardian Capital seek to identify mispricing, relying on price eventually converging to intrinsic value. However, convergence of the market price to an analyst's estimate of intrinsic value may not happen within the portfolio manager's investment time horizon. So, besides evidence of mispricing, analysts should look for the presence of a particular market or corporate event— that is, a catalyst—that will cause the marketplace to re- evaluate the subject firm's prospects."
Statement 2- "An active investment manager attempts to capture positive alpha. But mispricing of assets is not directly observable. It is therefore important that you understand the possible sources of perceived mispricing."
Statement 3- "For its distressed securities fund, Guardian Capital screens its investable universe of securities for companies in financial distress."
Statement 4- "For its core equity fund, Guardian Capital selects financially sound companies that are expected to generate significant positive free cash flow from core business operations within a multiyear forecast horizon."
Statement 5- "Guardian Capital's research process requires analysts to evaluate the reasonableness of the expectations implied by the market price by comparing the market's implied expectations to his or her own expectations."
After the orientation meeting, the director of research asks Richardson to evaluate three companies that are retailers of men's clothing: Diamond Co., Renaissance Clothing, and Deluxe Men's Wear. Richardson starts his analysis by evaluating the characteristics of the men's retail clothing industry. He finds few barriers to new retail entrants, high intra- industry rivalry among retailers, low product substitution costs for customers and a large number of wholesale clothing suppliers. While conducting his analysis, Richardson discovers that Renaissance Clothing included three non- recurring items in their most recent earnings release: a positive litigation settlement, a one- time tax credit, and the gain on the sale of a non- operating asset.

MULTIPLE CHOICE QUESTIONS

To estimate each firm's intrinsic value, Richardson applies appropriate discount rates to each firm's estimated free cash flows over a ten- year time horizon and to the estimated value of the firm at the end of the ten- year horizon. Michelle Lee, a junior technology analyst at Guardian, asks the director of research for advice as to which valuation model to use for VEGA, a fast-growing semiconductor company that is rapidly gaining market share. The director of research states that "the valuation model selected must be consistent with the characteristics of the company being valued." Lee tells the director of research that VEGA is not expected to be profitable for several more years. According to management guidance, when the company turns profitable, it will invest in new product development; as a result, it does not expect to initiate a dividend for an extended period of time. Lee also notes that she expects that certain larger competitors will become interested in acquiring VEGA because of its excellent growth prospects. The director of research advises Lee to consider that in her valuation.

83 Based on Statement 2, which of the following sources of perceived mispricing do active investment managers attempt to identify?
The difference between:
a) intrinsic value and market price.
b) estimated intrinsic value and market price.
c)intrinsic value and estimated intrinsic value.
d)none of the above

Ans) intrinsic value and market price.

84 With respect to Statements 3 and 4, which of the following measures of value would the distressed securities fund's analyst consider that a core equity fund analyst might ignore?
a) Fair value
b) Liquidation value
c) Fair market value
d) none of the above

Ans) Liquidation value

85 With respect to Statement 4, which measure of value is most relevant for the analyst of the fund described?
a) Liquidation value
b) Investment value
c) Going- concern value
d) none of the above

Ans) Going- concern value

86 According to Statement 5, analysts are expected to use valuation concepts and models to:
a) value private businesses.
b) render fairness opinions.
c)extract market expectations.
d)none of the above

Ans) extract market expectations.

87 Based on Richardson's industry analysis, which of the following characteristics of men's retail clothing retailing would positively affect its profitability?
That industry's:
a) entry costs.
b) substitution costs.
c) number of suppliers.
d) none of the above

Ans) number of suppliers.

88 Which of the following statements about the reported earnings of Renaissance Clothing is most accurate? Relative to sustainable earnings, reported earnings are likely:
a) unbiased.
b) upward biased.
c) downward biased
d) none of the above

Ans) upward biased.

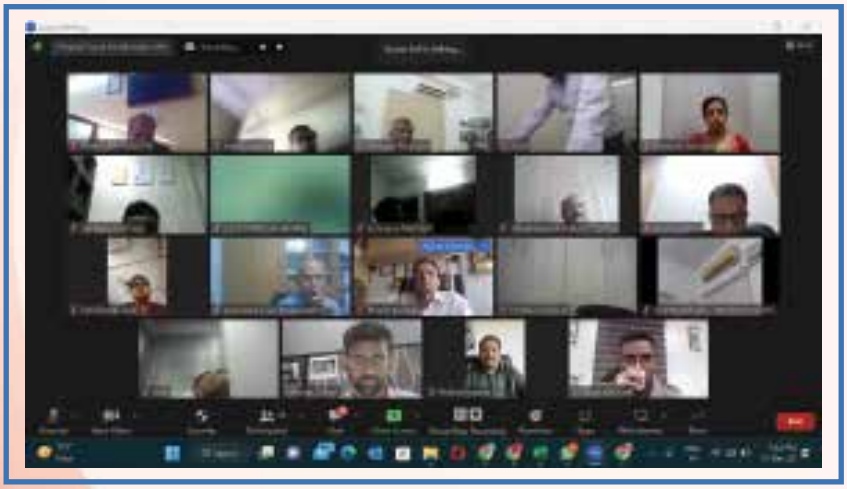
89 Which valuation model is Richardson applying in his analysis of the retailers?
a) Relative value
b) Absolute value
c) Sum- of- the- parts
d) none of the above

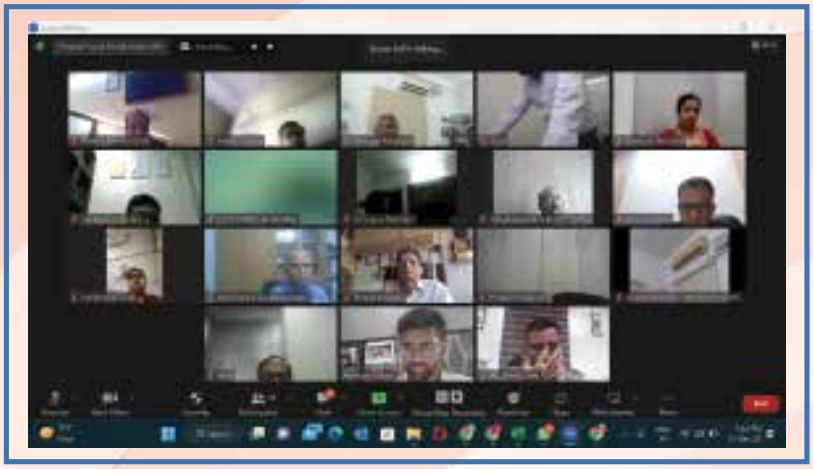
Ans) Absolute value

90 Which valuation model would the director of research most likely recommend Lee use to estimate the value of VEGA?
a) Free cash flow
b) Dividend discount
c) P/E relative valuation
d) none of the above

Ans) Free cash flow

CMA Vijender Sharma, President along with CMA Dr. S.K. Gupta, Managing Director, ICMAI Registered Valuers Organisation (RVO) extending greetings to Shri Ravi Mital, IAS (Retd)





Learning Session Valuation of Performing and Non-Performing Loans on 12th December 2022

Valuation of Performing and Non-Performing Loans 12th December 22

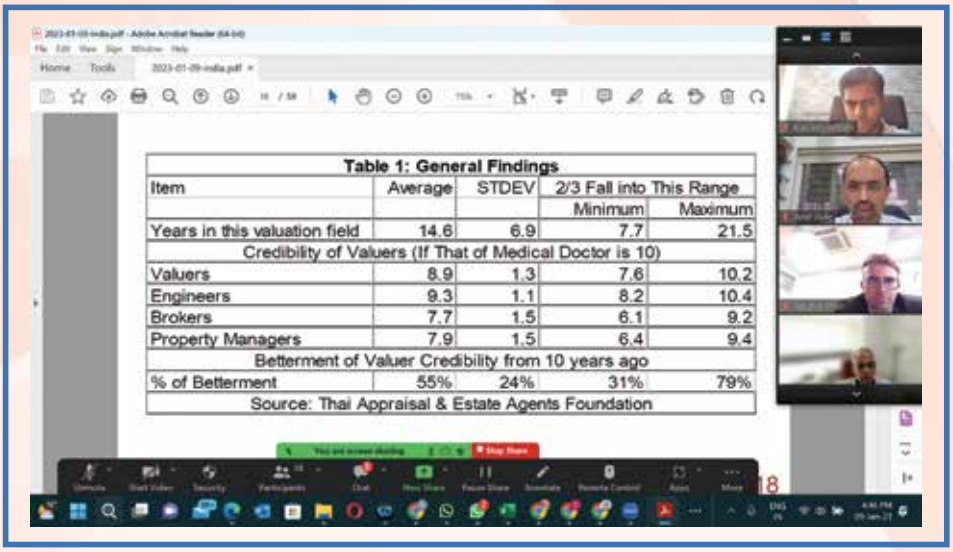
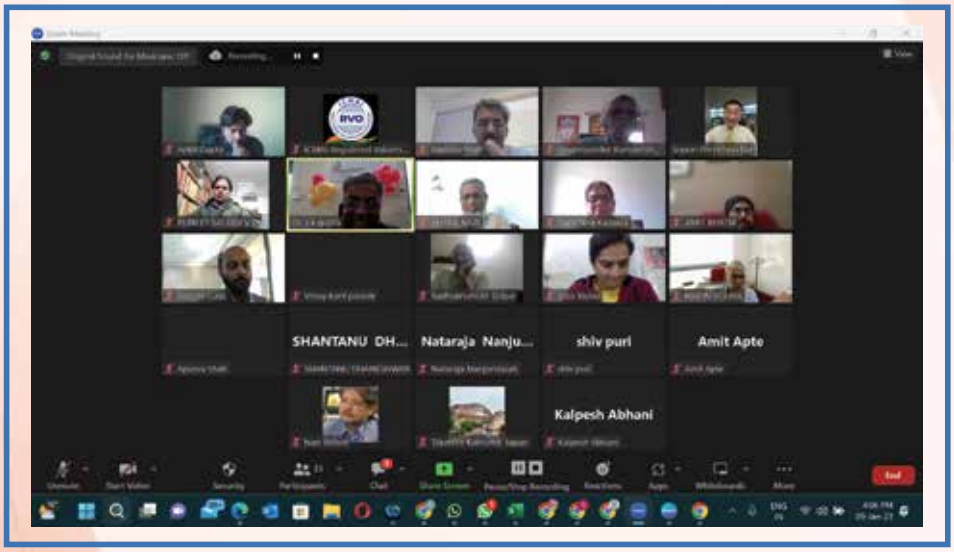
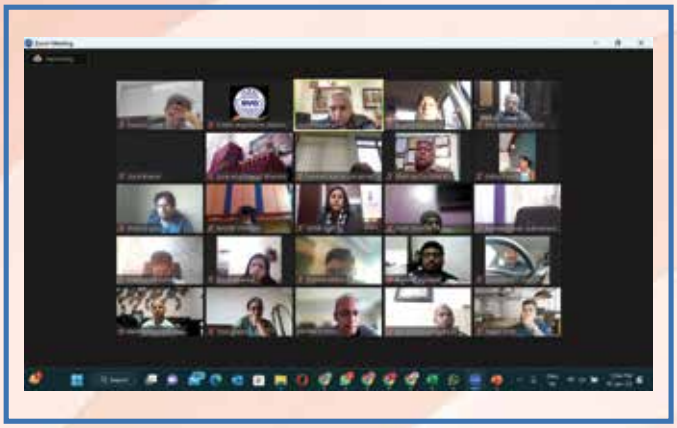
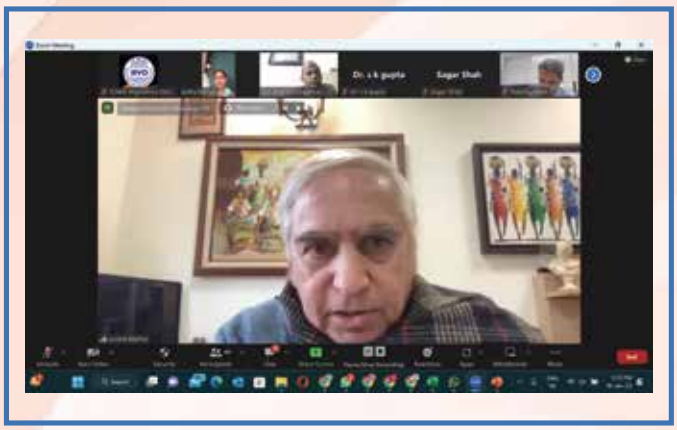


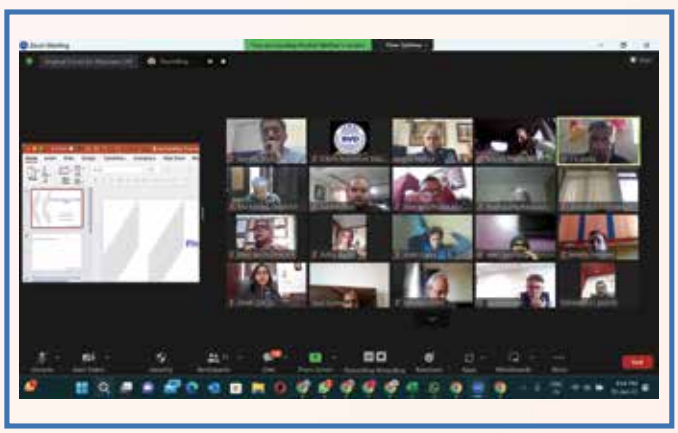
Table 1: General Findings				
Item	Average	STDEV	2/3 Fall into This Range	
			Minimum	Maximum
Years in this valuation field	14.6	6.9	7.7	21.5
Credibility of Valuers (If That of Medical Doctor is 10)				
Valuers	8.9	1.3	7.6	10.2
Engineers	9.3	1.1	8.2	10.4
Brokers	7.7	1.5	6.1	9.2
Property Managers	7.9	1.5	6.4	9.4
Betterment of Valuer Credibility from 10 years ago				
% of Betterment	55%	24%	31%	79%
Source: Thai Appraisal & Estate Agents Foundation				



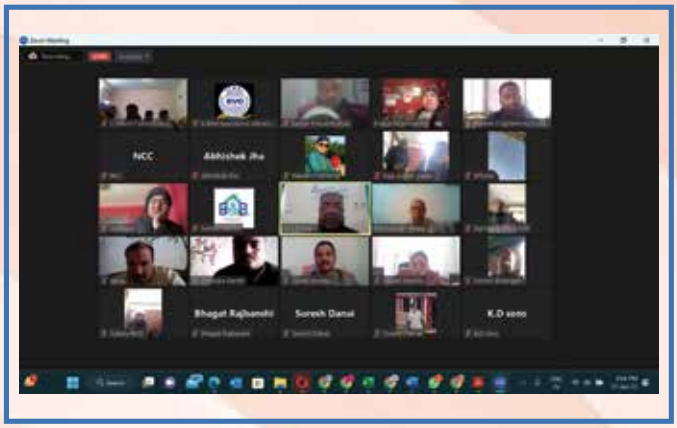
International Lecture Series World Valuers_ Concerns on their Future Tips on the Valuation of Business on 09th January 2023

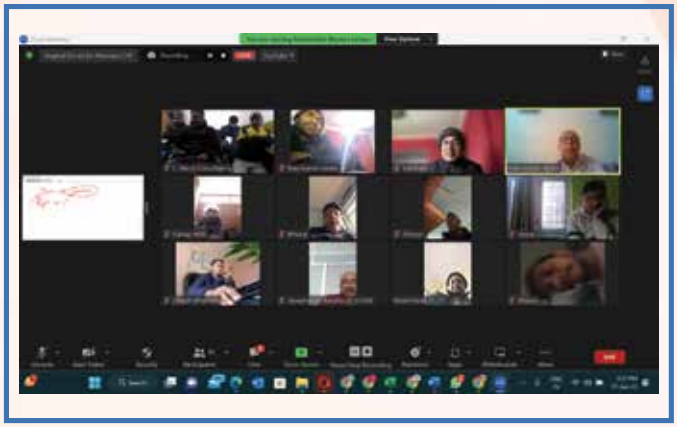


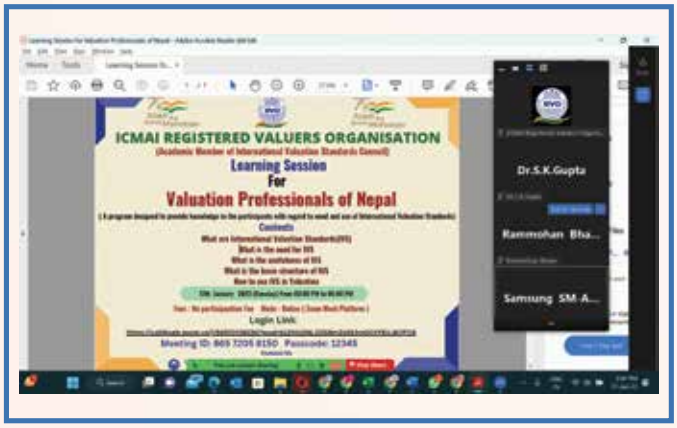




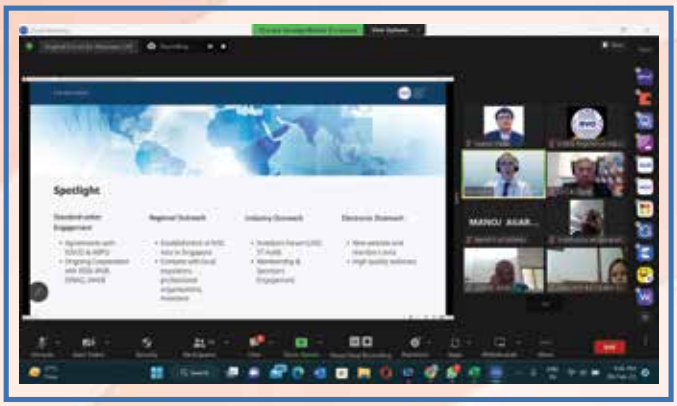
Learning Session The true acquisition cost of a Merger and Acquisition Deal on 10th January 2023

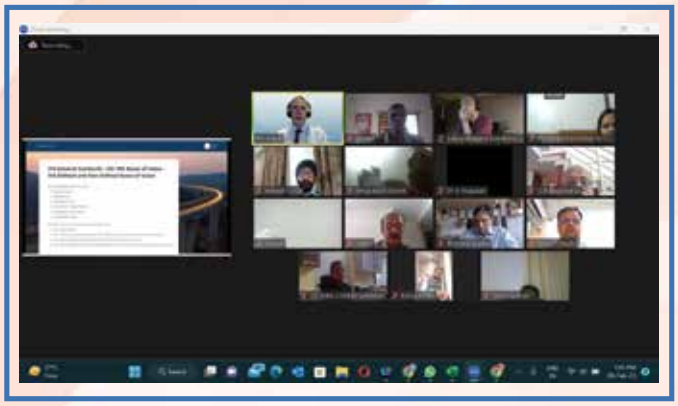




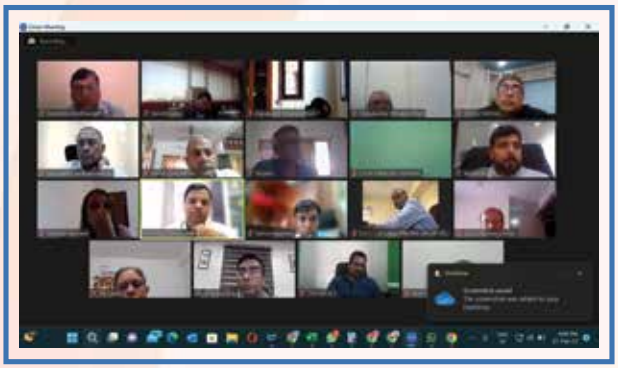


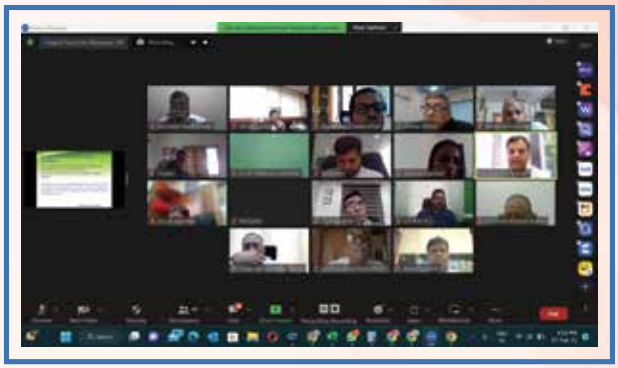
Learning Session organized for Valuation Professionals of Nepal





Perspectives on International Valuation Standards Council, International Valuation Standards On 6th February 2023





Learning Session IMPACT OF UNION BUDGET ON VALUATION on 7th February 2023

PROGRAMS FOR BANKS

Program with PNB

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Program With Union Bank of India

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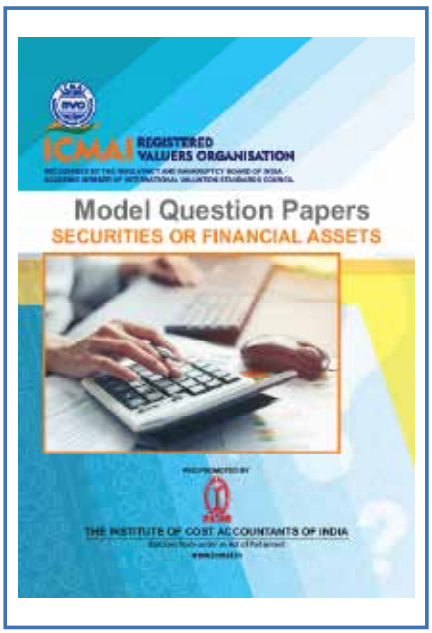
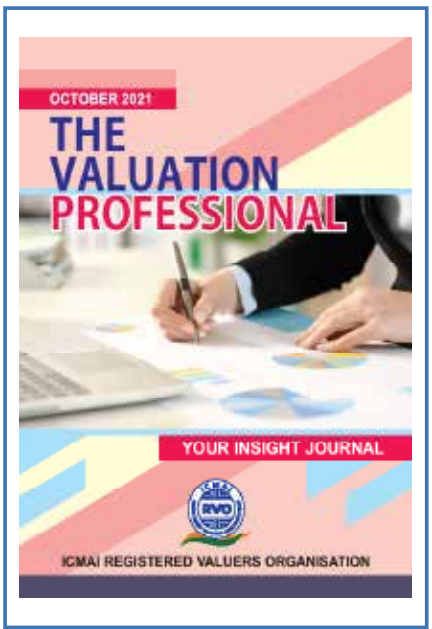
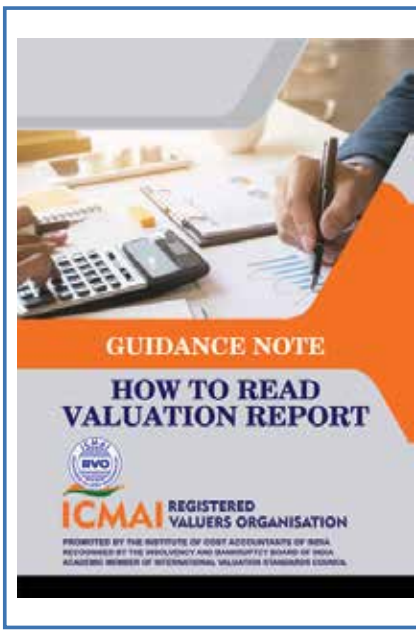


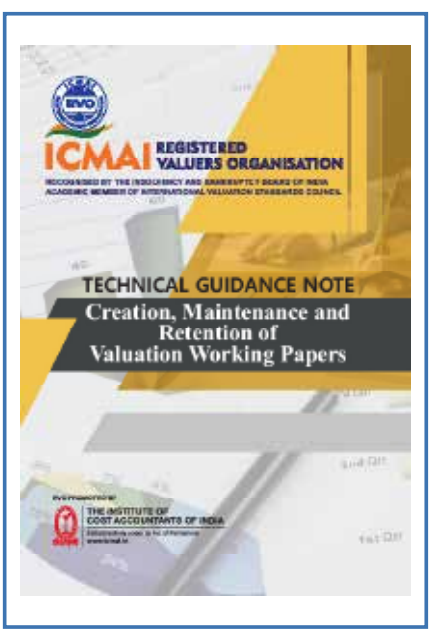
Model Question Papers
Securities or Financial Assets



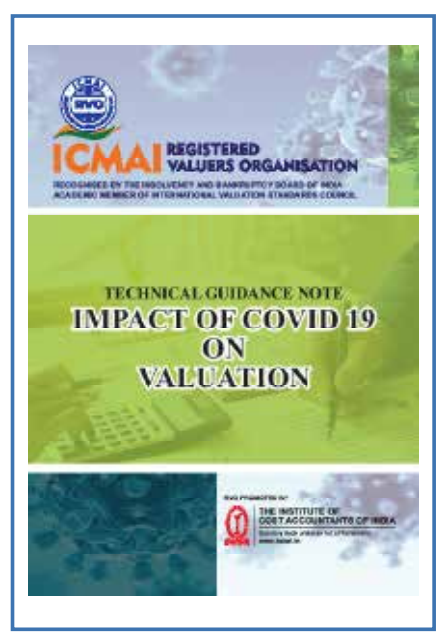
The Valuation Professional



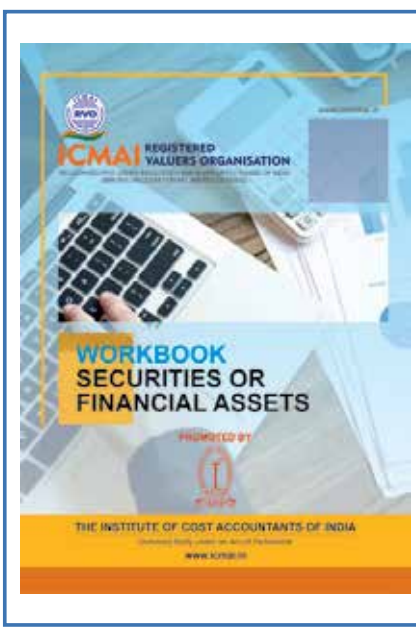
Guidance Note
How to Read Valuation Report



Technical Guidance Note
Creation Maintenance and
Retention of Valuation Working
Papers



Technical Guidence Note
Impact of Covid 19
on Valuation



Work Book
Securities or Financial Assets

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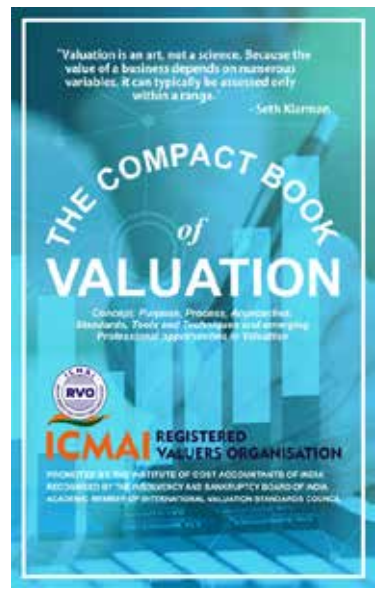
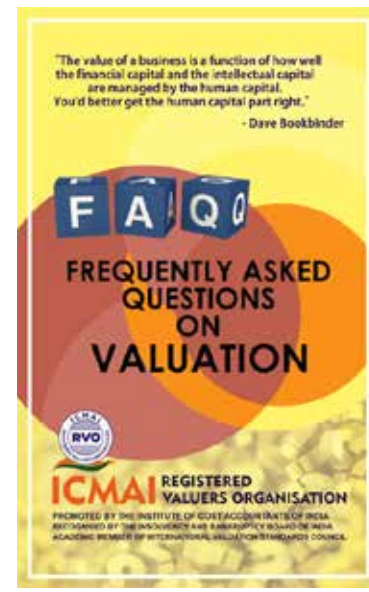
PUBLICATIONS

International Valuation Standards



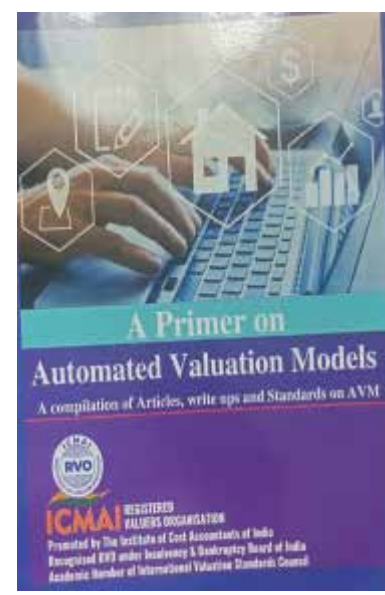
The Compact Book of Valuation



FAQ
Frequently Asked Questions on Valuation

Compendium of Perspective Papers

Compendium of Articles



Automated Valuation Models

Link:- https://www.rvoicmai.in/publication/

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36	VISHESH UNNI RAGHUNATHAN	visheshunni@gmail.com	CHENNAI , TAMILNADU	Securities or Financial Assets	CMA,CA
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38	YOGESH PRABHUDAS PATHAK	yogpath99@gmail.com	AHMEDABAD , GUJARAT	Land and Building	Engineer

GLOSSARY IN TERMS OF VALUATION

D

Discount for Lack of Control—an amount or percentage deducted from the pro rata share of value of 100% of an equity interest in a business to reflect the absence of some or all of the powers of control.

Discount for Lack of Marketability—an amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.

Discount for Lack of Voting Rights—an amount or percentage deducted from the per share value of a minority interest voting share to reflect the absence of voting rights.

Discount Rate—a rate of return used to convert a future monetary sum into present value.

Discounted Cash Flow Method—a method within the income approach whereby the present value of future expected net cash flows is calculated using a discount rate.

Discounted Future Earnings Method—a method within the income approach whereby the present value of future expected economic benefits is calculated using a discount rate.

E

Economic Benefits—inflows such as revenues, net income, net cash flows, etc.

Economic Life—the period of time over which property may generate economic benefits.

Equity—the owner's interest in property after deduction of all liabilities.

Equity Net Cash Flows—those cash flows available to pay out to equity holders (in the form of dividends) after funding operations of the business enterprise, making necessary capital investments, and increasing or decreasing debt financing.

Equity Risk Premium—a rate of return added to a risk-free rate to reflect the additional risk of equity instruments over risk free instruments (a component of the cost of equity capital or equity discount rate).

Excess Earnings—that amount of anticipated economic benefits that exceeds an appropriate rate of return on the value of a selected asset base (often net tangible assets) used to generate those anticipated economic benefits.

Excess Earnings Method—a specific way of determining a value indication of a business, business ownership interest, or security determined as the sum of a) the value of the assets derived by capitalizing excess earnings and b) the value of the selected asset base. Also frequently used to value intangible assets.

F

Fair Market Value—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. {NOTE: In Canada, the term "price" should be replaced with the term "highest price".}

Fairness Opinion—an opinion as to whether or not the consideration in a transaction is fair from a financial point of view.

Financial Risk—the degree of uncertainty of realizing expected future returns of the business resulting from

Forced Liquidation Value—liquidation value, at which the asset or assets are sold as quickly as possible, such as at an auction

G

Going Concern—an ongoing operating business enterprise.

Going Concern Value—the value of a business enterprise that is expected to continue to operate into the future. The intangible elements of Going Concern Value result from factors such as having a trained work force, an operational plant, and the necessary licenses, systems, and procedures in place.

Goodwill—that intangible asset arising as a result of name, reputation, customer loyalty, location, products, and similar factors not separately identified.

Goodwill Value—the value attributable to goodwill.

Guideline Public Company Method—a method within the market approach whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business, and that are actively traded on a free and open market.

I

Income (Income-Based) Approach—a general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount.

Intangible Assets—non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities and contracts (as distinguished from physical assets) that grant rights and privileges, and have value for the owner.

Internal Rate of Return—a discount rate at which the present value of the future cash flows of the investment equals the cost of the investment.

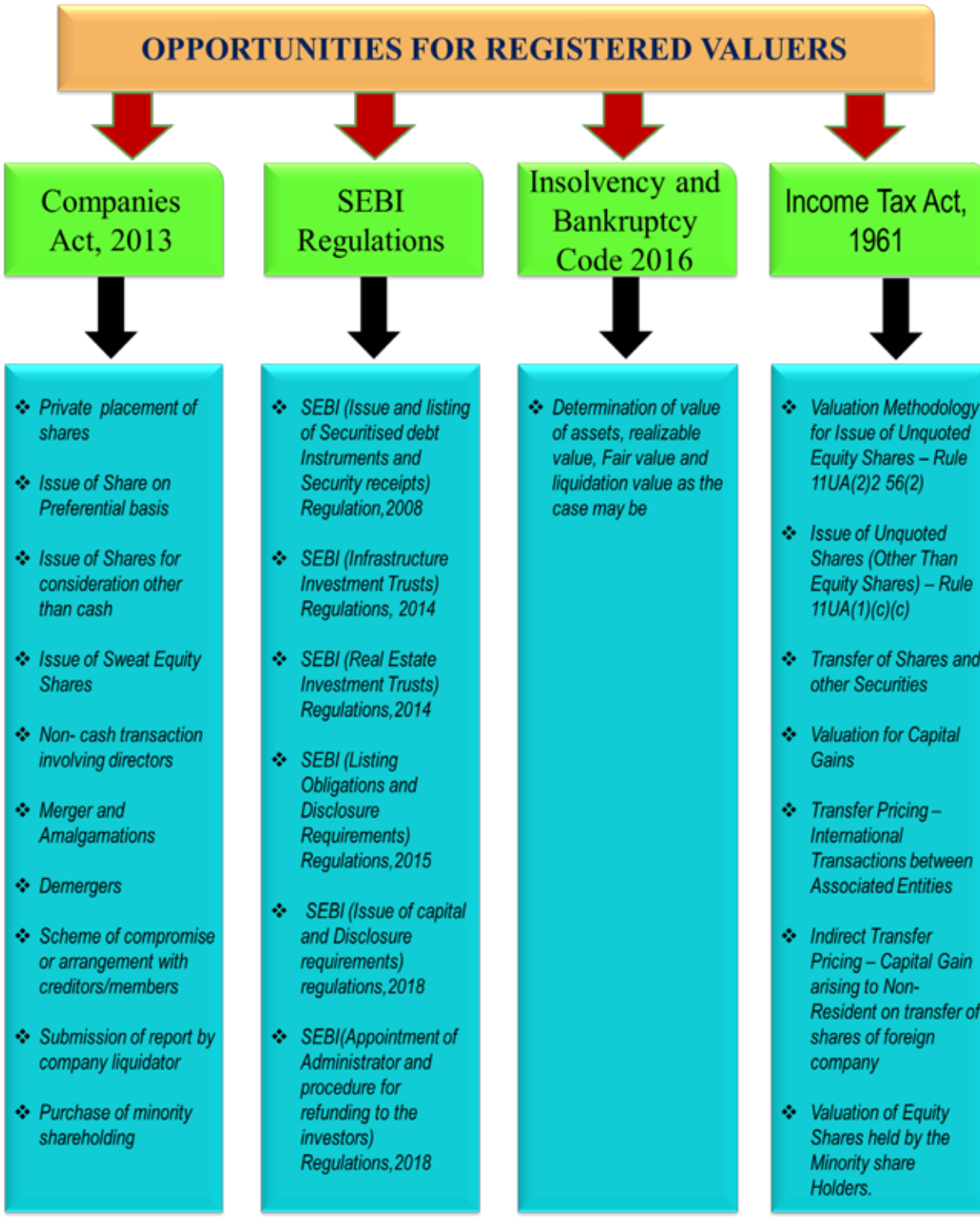
Intrinsic Value—the value that an investor considers, on the basis of an evaluation or available facts, to be the "true" or "real" value that will become the market value when other investors reach the same conclusion. When the term applies to options, it is the difference between the exercise price or strike price of an option and the market value of the underlying security.

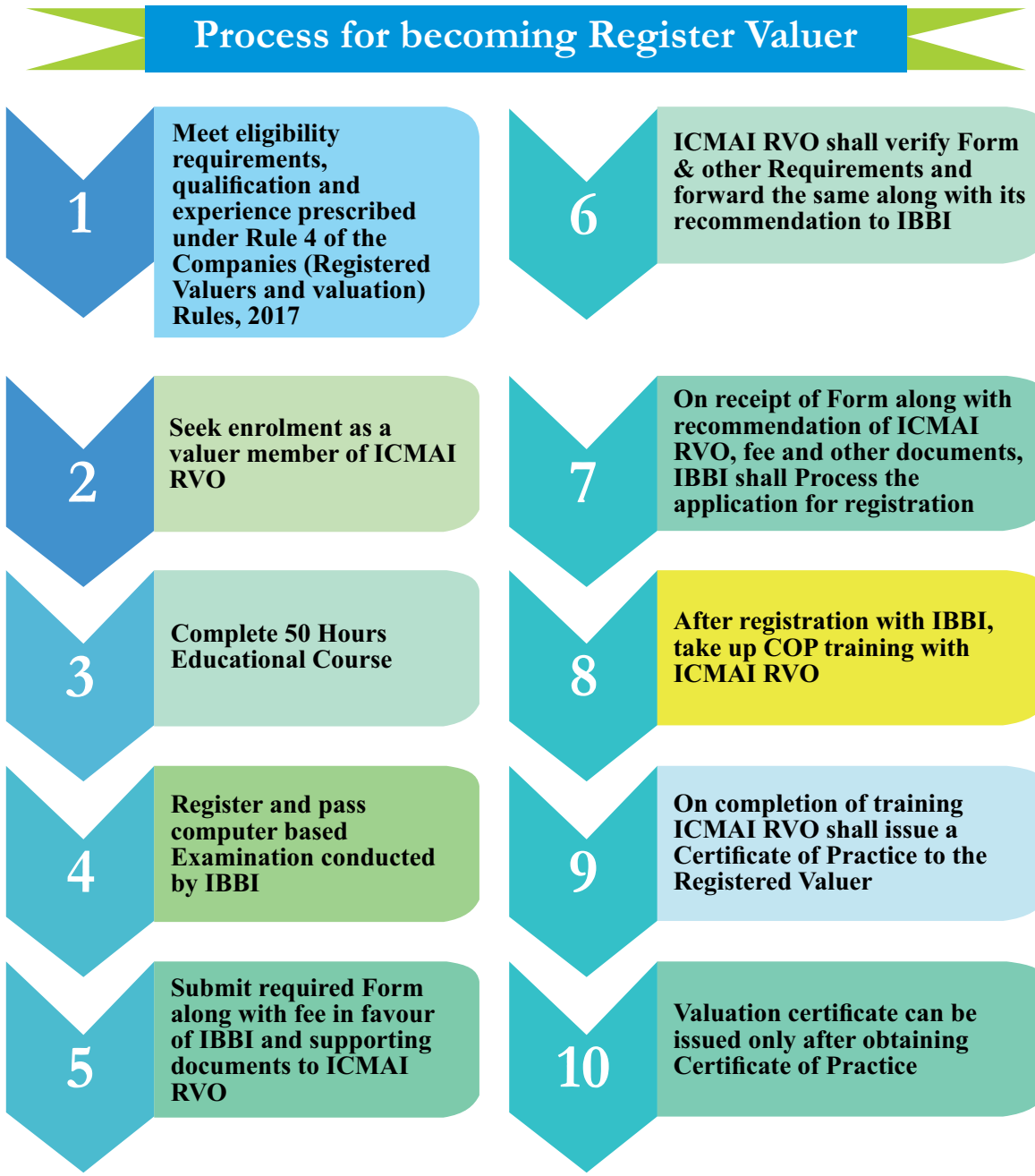
Invested Capital—the sum of equity and debt in a business enterprise. Debt is typically a) all interest-bearing debt or b) long-term interest-bearing debt. When the term is used, it should be supplemented by a specific definition in the given valuation context.

Invested Capital Net Cash Flows—those cash flows available to pay out to equity holders (in the form of dividends) and debt investors (in the form of principal and interest) after funding operations of the business enterprise and making necessary capital investments.

Investment Risk—the degree of uncertainty as to the realization of expected returns.

Investment Value—the value to a particular investor based on individual investment requirements and expectations. {NOTE: in Canada, the term used is "Value to the Owner"}.


OPPORTUNITIES FOR REGISTERED VALUERS
Companies Act, 2013
SEBI Regulations
Insolvency and Bankruptcy Code 2016
Income Tax Act, 1961
Private placement of shares
Issue of Share on Preferential basis
Issue of Shares for consideration other than cash
Issue of Sweat Equity Shares
Non- cash transaction involving directors
Merger and Amalgamations
Demergers
Scheme of compromise or arrangement with creditors/members
Submission of report by company liquidator
Purchase of minority shareholding
SEBI (Issue and listing of Securitised debt Instruments and Security receipts) Regulation,2008
SEBI (Infrastructure Investment Trusts) Regulations, 2014
SEBI (Real Estate Investment Trusts) Regulations,2014
SEBI (Listing Obligations and Disclosure Requirements) Regulations,2015
SEBI (Issue of capital and Disclosure requirements) regulations,2018
SEBI(Appointment of Administrator and procedure for refunding to the investors) Regulations,2018
Determination of value of assets, realizable value, Fair value and liquidation value as the case may be
Valuation Methodology for Issue of Unquoted Equity Shares – Rule 11UA(2)2 56(2)
Issue of Unquoted Shares (Other Than Equity Shares) – Rule 11UA(1)(c)(c)
Transfer of Shares and other Securities
Valuation for Capital Gains
Transfer Pricing – International Transactions between Associated Entities
Indirect Transfer Pricing – Capital Gain arising to Non-Resident on transfer of shares of foreign company
Valuation of Equity Shares held by the Minority share Holders.


Process for becoming Register Valuer
1
Meet eligibility requirements, qualification and experience prescribed under Rule 4 of the Companies (Registered Valuers and valuation) Rules, 2017
2
Seek enrolment as a valuer member of ICMAI RVO
3
Complete 50 Hours Educational Course
4
Register and pass computer based Examination conducted by IBBI
5
Submit required Form along with fee in favour of IBBI and supporting documents to ICMAI RVO
6
ICMAI RVO shall verify Form & other Requirements and forward the same along with its recommendation to IBBI
7
On receipt of Form along with recommendation of ICMAI RVO, fee and other documents, IBBI shall Process the application for registration
8
After registration with IBBI, take up COP training with ICMAI RVO
9
On completion of training ICMAI RVO shall issue a Certificate of Practice to the Registered Valuer
10
Valuation certificate can be issued only after obtaining Certificate of Practice

EDUCATIONAL QUALIFICATION & EXPERIENCE

FOR 50 HOURS EDUCATIONAL COURSE

Asset Class	Eligibility/ Qualification	Experience in specified discipline.
Plant and Machinery	(I} Graduate in Mechanical, Electrical, Electronic and Communication, Electronic and Instrumentation, Production, Chemical, Textiles, Leather, Metallurgy, or Aeronautical Engineering, or Graduate in Valuation of Plant and Machinery or equivalent; (ii) Post Graduate on above courses.	(i) Five years (ii) Three years
Land and Building	(i) Graduate in Civil Engineering, Architecture, or Town Planning or equivalent; (ii) Post Graduate on above courses and also in valuation of land and building or Real Estate Valuation (a two-year full time post-graduation course).	(i) Five years (ii) Three years
Securities or Financial Assets	(i) Member of Institute of Chartered Accountants of India, Member of Institute of Company Secretaries of India, Member of the Institute of Cost Accountants of India, Master of Business Administration or Post Graduate Diploma in Business Management (specialisation in finance). (ii) Post Graduate in Finance	Three years
Any other asset class along with corresponding qualifications and experience in accordance with rule 4 as may be specified by the Central Government. *Note: The eligibility qualification means qualification obtained from a recognized Indian University or equivalent Institute whether in I ndia or abroad.".*		

PROCESS FOR IBBI EXAMINITION

a. The candidate may enroll for the examination on payment of the fee as prescribed by IBBI
b. Online examination with objective multiple-choice questions
c. The duration of the examination is 2 hours
d. Wrong answer attracts a negative mark of 25% of the assigned for the question
e. A candidate needs to secure 60% of marks for passing.

FORMAT AND FREQUENCY OF EXAMINATION

a. The examination is conducted online (computer-based in a proctored environment) with objective multiple-choice questions;
b. The examination centers are available at various locations across the country;
c. The examination is available on every working day;
d. A candidate may choose the time, the date and the Examination Centre of his choice for taking the Examination. For this purpose, he needs to enroll and register at https://certifications.nism.ac.in/nismaol/
e. A fee of Rs. 5900/- (Five thousand nine hundred rupees) is applicable on every enrolment;
f. The duration of the examination is 2 hours;
g. A candidate is required to answer all questions;
h. A wrong answer attracts a negative mark of 25% of the marks assigned for the question;
i. A candidate needs to secure 60 % of marks for passing;
j. A successful candidate is awarded a certificate by the Authority;
k. A candidate is issued a temporary mark sheet on submission of answer paper;
l. No workbook or study material is allowed or provided;
m. No electronic devices including mobile phones and smart watches are allowed; and
n. Use of only a non-memory-based calculator is permitted. Scientific Calculators (memory based or otherwise) are not allowed.

INSOLVENCY AND BANKRUPTCY BOARD OF INDIA

New Delhi, the 30th September, 2022

THE INSOLVENCY AND BANKRUPTCY BOARD OF INDIA (ONLINE DELIVERY OF EDUCATIONAL COURSE AND CONTINUING PROFESSIONAL EDUCATION BY INSOLVENCY PROFESSIONAL AGENCIES AND REGISTERED VALUERS ORGANISATIONS) (AMENDMENT) GUIDELINES, 2022

In exercise of powers conferred by section 196(1)(aa) of the Insolvency and Bankruptcy Code read with regulation 5(b) and clause (ba) of sub-regulation (2) of regulation 7 of the IBBI (Insolvency Professionals) Regulations, 2016 and clauses (a) and (e) of sub-rule (2) of rule 12 of the Companies (Registered Valuers and Valuation) Rules, 2017, the Insolvency and Bankruptcy Board of India hereby makes the following amendments to the Insolvency and Bankruptcy Board of India (Online Delivery of Educational Course and Continuing Professional Education by Insolvency Professional Agencies and Registered Valuers Organisations) Guidelines, 2020, namely:-

1. (1) These amendments may be called the Insolvency and Bankruptcy Board of India (Online Delivery of Educational Course and Continuing Professional Education by Insolvency Professional Agencies and Registered Valuers Organisations) (Amendment) Guidelines, 2022.

(2) It shall come into force with immediate effect.

2. In the Insolvency and Bankruptcy Board of India (Online Delivery of Educational Course and Continuing Professional Education by Insolvency Professional Agencies and Registered Valuers Organisations) Guidelines, 2020 (hereinafter referred to as the principal guidelines), in Clause 9, in sub-clause (d), for the digit '100', the digit '200' shall be substituted.

3. In the principal guidelines, for Clause 11, the following shall be substituted, namely:-

"11. **Validity**
The Guidelines shall remain in force till further orders."

ICMAI REGISTERED VALUERS ORGANISATION

RECOGNISED RVO UNDER INSOLVENCY AND BANKRUPTCY BOARD OF INDIA

GUIDELINES FOR ARTICLES

The articles sent for publication in the journal "The Valuation Professional" should conform to the following parameters, which are crucial in selection of the article for publication:

- The article should be original, i.e. Not Published/ broadcasted/hosted elsewhere including any website.
- A declaration in this regard should be submitted to ICMAI-RVO in writing at the time of submission of article.
- The article should be topical and should discuss a matter of current interest to the professionals/readers.
- It should preferably expose the readers to new knowledge area and discuss a new or innovative idea that the professionals/readers should be aware of.
- The length of the article should not exceed 2500-3000 words.
- The article should also have an executive summary of around 100 words.
- The article should contain headings, which should be clear, short, catchy and interesting.
- The authors must provide the list of references, if any at the end of article.
- A brief profile of the author, e-mail ID, postal address and contact numbers and declaration regarding the originality of the article as mentioned above should be enclosed along with the article.
- In case the article is found not suitable for publication, the same shall be communicated to the members, by e-mail.

ICMAI REGISTERED VALUERS ORGANISATION

RECOGNISED RVO UNDER INSOLVENCY AND BANKRUPTCY BOARD OF INDIA

PROMOTED BY: THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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