

AUGUST 2022

THE VALUATION PROFESSIONAL



YOUR INSIGHT JOURNAL



ICMAI REGISTERED VALUERS ORGANISATION

About ICAI 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 ICAI 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. ICAI Registered Valuers Organisation is an Academic Member of International Valuation Standards Council.

GOVERNING BOARD

CHAIRMAN

CS (Dr.) Shyam Agrawal

INDEPENDENT DIRECTORS

Mr. Rishabh Chand Lodha

Mr. Ajoy Kumar Deb

Mr. Arvind Kumar Jain

Mr. Manoj Misra

Mr. Vinod Somani

Mr. Deviinder Gupta

NOMINEE DIRECTORS

CMA P. Raju Iyer

CMA Vijender Sharma

CMA Biswarup Basu

CMA Balwinder Singh

CMA Chittaranjan Chattopadhyay

MANAGING DIRECTOR

Dr. S. K Gupta

CEO

CMA (Dr.) D. P. Nandy

EDITOR & PUBLISHER

Dr. S. K Gupta

Mr. Sanjay Suman

EDITORIAL BOARD

Mr. Manish Kaneria

CMA Shailendra Paliwal

Mr. Gagan Ghai

INDEX

About ICAI Registered Valuers Organisation

Governing Board of ICAI RVO 4

From the Chairman's Desk 5

From the President's Desk 6

From the MD's Desk 7

PROFESSIONAL DEVELOPMENT

PROGRAMS 9

ARTICLES

Incorporating ESG Considerations in Valuation 12

Valuation of On-Grid Solar PV Power System as per International Valuation Standards 16

Valuation Buy-Back of Shares 24

OTHER READINGS

Perspectives Paper

The Art of Valuing Personal Property with IVS 28

Asset Standards – IVS 230 Inventory 32

MULTIPLE CHOICE QUESTIONS 37

CASE LAWS 46

SNAPSHOTS 51

PUBLICATIONS 54

AMBASSADORS-ICMAI RVO 56

OPPORTUNITIES FOR REGISTERED

VALUERS 58

PROCESS FOR BECOMING

REGISTERED VALUER 59

FORMAT AND FREQUENCY OF

EXAMINATION 61

GOVERNING BOARD



CS (Dr.) Shyam Agrawal
Chairman



Mr. Rishabh Chand Lodha
Independent Director



Mr. Ajoy Kumar Deb
Independent Director



Mr. Arvind Kumar Jain
Independent Director



Mr. Manoj Misra
Independent Director



Mr. Vinod Somani
Independent Director



Mr. Deviinder Gupta
Independent Director



CMA P. Raju Iyer
Nominee Director



CMA Vijender Sharma
Nominee Director



CMA Biswarup Basu
Nominee Director



CMA Balwinder Singh
Nominee Director



CMA Chittaranjan Chattopadhyay
Nominee Director



Dr. S. K Gupta
Managing Director

FROM THE CHAIRMAN'S DESK

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

Valuations are starting to change. There was a time when a lot of these businesses would trade at low double digit multiples and that is now changing and valuations are moving up. It is not across the board but it is certainly moving up and this is probably even more so on the private sector side, where valuations have certainly moved up. One has to be a little bit careful because there can be hiccups along the way.

We have to keep in mind that we are in a general environment where there is going to be quantitative tightening and while that may ease towards the second half of next year, valuations have normalised and valuations are reasonable today. From an investor standpoint, we are not in an environment where valuations are expensive and hence returns could be compromised. But at the same time, we are not in an environment where valuations are cheap and hence returns are going to be outsized, being close to historical averages which means that one should have reasonable expectations of returns going forward.

There are a lot of uncertainties out there and while interest rates and inflation may have peaked out or may peak out sometime in the next sort of six-nine months, there is a lot of uncertainty still on the demand front. It is difficult at this point to gauge how much demand will compress, India is relatively better positioned but what is happening outside of India and the US and Europe, etc.

FROM THE PRESIDENT'S DESK

CMA P. Raju Iyer

Nominee Director

ICMAI Registered Valuers Organisation

President

The Institute of Cost Accountant of India

As businesses around the world continue to adapt to unprecedented challenges, there is a growing impetus for value creation over valuation. As of last year, quick research on nearly 70 unicorns in India revealed that over half of them had a valuation/amount of equity raised multiple of less than 4 and a third of them had the same ratio of less than 3 and about 15% had a ratio of less than 2. In a business where a lot of companies are written off, it is obvious that most of these unicorns did not become dragons for the average investors.

Making unicorns a primary barometer of success for founders incentivizes raising more and more capital and higher and higher spending. As a consequence, initial investors and founders are diluted significantly. This undoubtedly crashes the time to becoming a unicorn, but in the process, capital efficiency is sacrificed. Almost all other asset classes penalise the excessive deployment of capital. In a world full of tweets, it is easier to capture attention and imagination by talking about valuation (unicorns) than talking about the rate of returns and dragons which require a more detailed engagement and discussion. Just as valuation is often said to be in the “eyes of the beholder”, capital efficiency is a mindset that requires discipline and a lot of conviction and thought.

FROM THE MD'S DESK

Dr. S. K. Gupta

Managing Director

ICMAI Registered Valuers Organisation

While we would continue to see interest rate hikes and monetary tightening in response to inflation and policy stance correction, a lot of the proposed policy action may be in the price. Bond yields at the long end may already be pricing in the proposed increase in regulated rates and the economic slowdown. If the rate increase cycle has been priced in, then it stands to reason that the volatility associated with each rate increase in the equity market should also be lower going forward and equity markets themselves may have overshoot on the way down.

As yet the growth momentum of the Indian economy is strong. All indicators such as E-Way bills, traffic, power demand, etc are pointing to robust growth. Capex as a percentage of GDP is now at a 30-month high. Government capex, corporate capex, and individual capex are all increasing, providing further visibility to sustained growth. However, the Indian economy has had a K-shaped recovery. While overall the economy is doing very well, the high contact services part is still recovering. Our economy is not at full employment like that of the US and a relatively more growth-oriented policy is needed. As we have noted, we would probably get that. Valuations are now approaching 15-year average levels. Index composition has also changed in the interim and Index PE should sustain at higher levels vs earlier. This clearly points to index now offering better than long period compounding save for a damage to earnings outlook itself



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

June '2022 to August '2022	
Date	PD Programs
1st -2nd June 2022	Practical Aspects of Valuation
04th -5th June 2022	Certificate Course on Financial Modelling for Registered Valuers
04th-18th June 2022	Online Summer Bootcamp Certificate Course on Valuation from (Saturday-Sunday)
08th June 2022	Case Studies on Business Valuation
11th -12th June 2022	Master Class on Valuation
19th June 2022	National Conclave on Valuation of Start-Ups
22nd -23rd June 2022	Certificate course on Up Skilling for Professional Excellence
26th June 2022	National Conclave on MSMEs
29th -30th June & 1st July 2022	Professional Opportunities for Valuation Professionals
6th -7th -8th July 2022	Workshop on Valuation
09th - 10th July 2022	Master Class - Achieving a Cutting Edge in Valuation
25th July 2022	17th Online Mandatory COP Program by ICAI RVO
27th-28th July 2022	Master Class Imbibing RVs with Multiple Skills
30th & 31st July 2022	Short Learning Program - Valuation Practice
29th July 2022	Curating Future Ready Registered Valuers
30th- 31st July 2022	Crash Course Preparation for Valuation Examination
03rd-04th August 2022	Workshop on Valuation
11th-12th August 2022	Learning Program on Valuation
13th August 2022	Workshop on Valuation
13th-14th August 2022	Skill Development Program for RVs
17th-18th August 2022	Master Class Achieving excellence in Valuation
23rd-24th August 2022	Experiential Learning Session on Live Case Studies on Valuation



PROFESSIONAL DEVELOPMENT PROGRAMS

50 Hours Training Programs

June '2022 to August '2022	
Date	Programs
3rd to 5th & 9th -12th June 2022	50 hours Valuation Course on Securities or Financial Assets
3rd to 5th & 9th -12th June 2022	50 hours Valuation Course on Land & Building and Plant & Machinery
15th -17th July 2022 & 21st -24th July 2022	50 hours Valuation Course on Land & Building and Plant & Machinery
29th July to 31st July & 04th August to 07th August 2022	50 hours Valuation Course on Securities or Financial Assets
20th August 2022	18th Online Mandatory COP Program by ICAI RVO for RVs

Upcoming Professional Development Programs

Date	PD Programs
27th- 28th August 2022	Crash Course Preparation for Valuation Examination
From 26th Aug to 28th Aug & 01st Sept to 04th Sept 2022 (Seven Days Program)	50 Hrs. Educational Course on Valuation (Plant & Machinery, Land & Building & Securities or Financial Assets)
02nd Sept to 04th Sept & 07th Sept to 11th Sept 2022 (Seven Days Program)	Asset class Securities or Financial Assets.

Articles



INCORPORATING ESG CONSIDERATIONS IN VALUATION

Dr. S. K. Gupta

*Managing Director
ICMAI Registered Valuers Organization*

Synopsis

Business value is a function of the future expected cash flows from the business and the risk attached to those cash flows. The recent pandemic reinforced the importance of developing an ESG framework reaching beyond basic corporate social responsibility criteria, its incorporation into the financial performance, and its consideration in the valuation process. Unless we meaningfully and proactively identify the value impact of ESG, we risk depriving decision makers of the very information they need to prioritise investment, accelerate change and deliver truly sustainable value.

The Perspective

With the proliferation of sustainable and responsible investing (SRI) in recent years, Environmental, Social and Governance (ESG) considerations and factors have become one of the central tenets of investment and capital allocation, corporate finance and the stewardship and management of corporations. Since its first appearance in a 2004 report by the UN Global Compact, the use of the term environmental, social and governance (ESG) has spread rapidly, driven by pressure from the capital markets (e.g. the financial industry and institutional investors). This rapid spread is based on the understanding that ESG is not merely a superficial

slogan, but a social and environmental risk factor that is connected to daily lives. ESG is more than ticking boxes. It's about making a difference - for your business and our world. Creating sustained outcomes that drive value and fuel growth, whilst strengthening our environment and societies.

Briefly, the individual components of ESG are defined as follows :



Environment ("E")
Concerns how a company uses its resources and manages its emissions.



Social ("S")
Concerns how a company manages its relationship with its stakeholders, including the wider community.



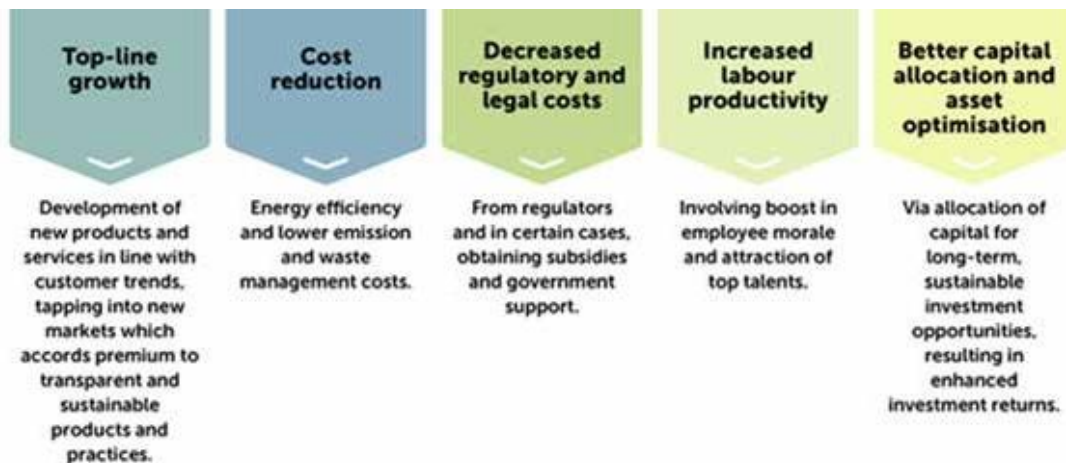
Governance ("G")
Covers matters of corporate behaviour; it incorporates the management of "E" and "S" factors.

ESG can therefore be viewed as a set of intertwined, qualitative, and non-financial factors which are used by the markets to understand the impact and sustainability of a

company's actions.

As awareness of the importance of ESG issues has grown, attention has turned to how to measure and evaluate their impact on companies.

Based on various publicly available sources, there are five (5) principal ways in which good ESG practices, in aggregate, affect economic performance and valuation:



The International Valuation Standards Council (IVSC) and its ESG Working Group are actively involved in creating a favourable framework for the incorporation of ESG related factors into the valuation process. In its efforts to address valuation challenges driven by the COVID-19 pandemic and assessment of ESG factors into the valuation analysis, the IVSC has issued a perspective paper “ESG and Business Valuation” in March 2021.\

According to the IVSC, there is a common misconception that ESG disclosures are typically non-financial by nature and hence, do not have a financial impact. It added that this ignores the fact that ESG represents a myriad of factors which evaluates the long-term financial viability and sustainability of an enterprise. When assessing such factors, analysis will therefore need to shift away from the traditional detailed “price x quantity” into an examination of how it allows enterprises to create value in the medium to long-term

In order to successfully invest for the future, companies need to fully understand the impact of ESG on the value of their business. Empowered with quantitative information, decision makers can accelerate change and prioritise investment with the confidence they are both leading in their market place and

creating sustainable value. While traditional valuation approaches are still valid, they need to be robustly applied to capture how a company is perceived by its employees, regulators, customers and investors and the potential consequences on cash flow.

When integrating ESG factors into investment analysis, they are examined alongside other valuation drivers. It has been more common to process ESG factors through qualitative analysis, but investors are increasingly also quantifying and integrating ESG factors into financial forecasting and company valuation models, in alignment with other financial factors.

Business valuation outcomes are a reflection of the story line of the financial figures that serve as input for these valuations. Given the new and expanding view on risks and opportunities associated with businesses, viewing the development of industry and market forces not just with a financial lens but also with an ESG-lens, and incorporating them in the cash flows and discount-rate analysis, is a need of the hour.

Incorporating ESG Risk in Business Valuation

Valuation models are typically based on the most commonly used

valuation method – the discounted cash flow (DCF) method. Under this method the free cash flows (FCF) of a company are often forecasted until perpetuity. These cash flows are discounted with a rate equivalent to the expected cost of capital (reflective of the risk related to these cash flows) consisting of both a cost of equity and cost of debt taking into account a target capital structure. Cash flow drivers analysed to perform business valuations typically are expected sales growth, development of profitability and capital investments. Historically, these cash flow drivers are often determined only from a direct financial/economic point of view. For example, sales growth was assessed in relation to expected industry growth, development of product/services line, market penetration, market share, etc. Profitability margins were also considered based on various factors such as forecasts based on expected development of cost of production, supply chain relations and exchange rate fluctuations.

A common approach used by investors to understand the impact of ESG factors on the fair value of a company is to conduct a scenario analysis, where an ESG-integrated company valuation is calculated and compared to a baseline valuation. The differences between the two scenarios very clearly depict the materiality and

magnitude of ESG factors affecting a company.

Over time, management of companies are changing their perceptions regarding risks and opportunities. Particularly those associated with ESG factors. For example, due to the recent visible impact of climate change, it is observed that management of companies are keen to incorporate the impact of climate change in their budgeting and valuation process. Furthermore, the Task Force on Climate-related Financial Disclosures (TCFD) has provided recommendations for companies to conduct and include climate change related scenario analyses in their financial disclosures, among other recommendations. These measures have been recommended by TCFD in an effort to ensure that management of companies consider risks and opportunities associated with not just market and industry forces but also in relation to climate change and its impact on market and industry forces.

Incorporating ESG factors in cash flows

Below are some examples of how cash flow drivers could be determined by incorporating an ESG perspective:

- With regard to the E of the ESG lens, one of the recommendations of the TCFD is to incorporate the '2 degree' scenario analysis. This would be one way of reflecting additional risk associated with climate change in future
- With regard to the S of the ESG lens, the impact on revenues and cost-related cash flows due to employee unrest in industries such as the garment industry known for poor labour conditions and or safety-related concerns of

the workforce or product sales of companies could plummet due to the damaging impact of these kinds of news.

- With regard to the G of the ESG lens, the impact on cash flows in the form of fines/increased taxation imposed by regulatory authorities due to weak governance policies of companies, could be an example of internalising the likelihood of governance-related factors. Thus, while valuing tech companies, the imposition of fines or higher taxes could be considered as a negative cash flow impact in case it is concluded that not enough measures have been taken by tech companies to mitigate the concerns of regulatory authorities.

While applying ESG adjustments to cash flows, care should also be taken that there is no double-counting of the risks (and opportunities) in the discount rate. For example, if a company belongs to an industry which in general is impacted by ESG factors such as the automotive industry (due to the influx of hybrid and electric vehicle competitors), it could be argued that the industry beta (a measure of risk) partly includes this (E)SG risk. In this case, one would need to be careful while applying additional downward adjustments to the cash flows due to the negative E impact as it could be partly captured in the industry beta. Accordingly, incorporating additional premia or discounts in the discount rate should be carefully considered in conjunction with industry- and company-specific characteristics and the ESG adjustments in the cash flows.

How to attempt to circumvent the subjectivity of ESG?

Given the potential subjective nature of the assessment of the materiality and application of ESG-related adjustments on the cash flows and the discount rate, these adjustments could also be applied in varying degrees under different scenarios, wherein each scenario would reflect the impact of a particular material ESG factor on the business. The final valuation outcome could be a weighted-scenario outcome wherein probabilities and weightings (based on materiality) are attached to the various ESG scenarios based on materiality. Materiality of ESG factors can be determined not only based on internal assessments of companies, but also based on looking into the social media feeds of companies, to understand the market sentiment of ESG risks and opportunities associated with companies. The assessment of the weighted average valuation outcomes could be enhanced by the usage of new technological tools such as big data, artificial intelligence and predictive forecasting tools using smart algorithms.

Challenges to, and aims of, ESG impact measurement and valuation

All these valuation adjustments related to ESG factors measurement will raise the complexity of valuation analyses and give new perspectives of seizing a qualitative factor into a quantitative analysis. Continuous integration of ESG criteria into valuation practice, will ultimately lead to more effective and transparent interaction between stakeholders, investors, and management. Although converting the ESG impact into monetary terms has significant advantages and potential, there are many issues to be resolved. Conversion requires the collection

of more data (on corporate activities/value chains, many correlation coefficients, market information, statistics, monetisation coefficients, etc.) compared to typical quantitative indicators, and this in turn requires more time and cost. Moreover, a standardised method and underlying theories must be developed for the measurement results to be compared between companies much like the ESG ratings. These must be addressed through numerous discussions. In conclusion, businesses need to endeavour to engage in various discussions to resolve issues in the ESG impact measurement and valuation and to develop more appropriate methods of measuring impact under the ESG impact measurement and valuation method and contribute to the opening of a true ESG era.

Conclusions

ESG is likely to have increasing significance in the years to come. Continuous efforts are required to achieve consensus on a standardised approach to incorporate ESG into valuation. Effort is already underway – regulations are rapidly evolving towards a more homogenous ESG measurement and reporting framework which would aid practitioners to better capture and quantify ESG considerations into the valuation process. ESG criteria should be seen as “Pre-financial” rather than “Non-financial” information. This assessment would form a first step in integrating the ESG criteria into financial information and ultimately into valuation analysis.

Given the implications of ESG factors on the long-term sustainability and financial viability of a company, there should be a paradigm shift among practitioners to take into account the long-term benefits of having businesses operate in a sustainable manner, while balancing the need to achieve short-term financial goals. Valuation has a pivotal role to play in quantifying and realising the benefits of sustainable practices. We can’t afford to wait for the ESG information gap to close.

The momentum in favor of ESG integration has increased substantially in recent years, a trend that is likely to continue in the years to come. In practice, ESG factors can be integrated in a company’s valuation in several different ways. Consensus about the best practice for using ESG factors remains a work in progress.

References

1. <https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2021/06/incorporating-an-esg-lens-in-business-valuations.pdf>
2. <https://www.cfainstitute.org/-/media/documents/article/cfa-magazine/2014/cfm-v25-n6-5.aspx>
3. <https://www.ivsc.org/esg-survey/>
4. <https://www.iflr.com/article/2a647zame68p5fovnsov/measuring-the-esg-impact-and-valuation-in-south-korea>
5. <https://www.pwc.co.uk/issues/value-creation/why-you-need-to-price-esg-into-valuations-and-how-to-get-started.html>
6. <https://www.unpri.org/listed-equity/esg-integration-in-fundamental-strategies/12.article>
7. <https://www.at-mia.my/2022/06/24/considering-esg-in-business-valuation/>
8. https://www.researchgate.net/publication/346519376_Valuing_ESG_Doing_Good_or_Sounding_Good
9. [Guidance-case-studies-esg-integration.pdf \(cfainstitute.org\)](#)
10. [Perspectivespaper-ESGinBusinessValuation.pdf \(ivsc.org\)](#)

VALUATION OF ON-GRID SOLAR PV POWER SYSTEM AS PER INTERNATIONAL VALUATION STANDARDS

Vr Pranav Hemant Ambaselkar

BE (Power), PGDBM, CMA (Inter), BEE Certified Energy Auditor, CE (IEI), IISLA, P&M Valuer

IBBI Regn: IBBI/RV/02/2019/11944

Nagpur, Maharashtra

T

he Sun is the main source of energy (renewable) for the Earth. Solar energy comes to us in the form of light and heat. But the modern world, we need electricity apart from than Light & Heat. The Semiconductor technology has seen immense growth in recent years & commercial scale Solar PV power systems have been developed to generate electricity from Solar radiations. This article focuses on the valuation of Solar PV Power Plants which we are seeing rapidly increasing around us.

1. Solar PV Power System – Basic Concepts & Components

ELECTRICITY GENERATION IN SOLAR PV CELL

The components of a Solar PV Panel are shown in adjoining figure. The Solar Cell is sandwiched between adhesive films, glass, backsheet & is held together by frame. Junction Box is installed for the electrical connections.

When certain materials are exposed to light, they absorb photons and release free electrons. This phenomenon is called as the photoelectric effect & such material is called Photovoltaic (PV).

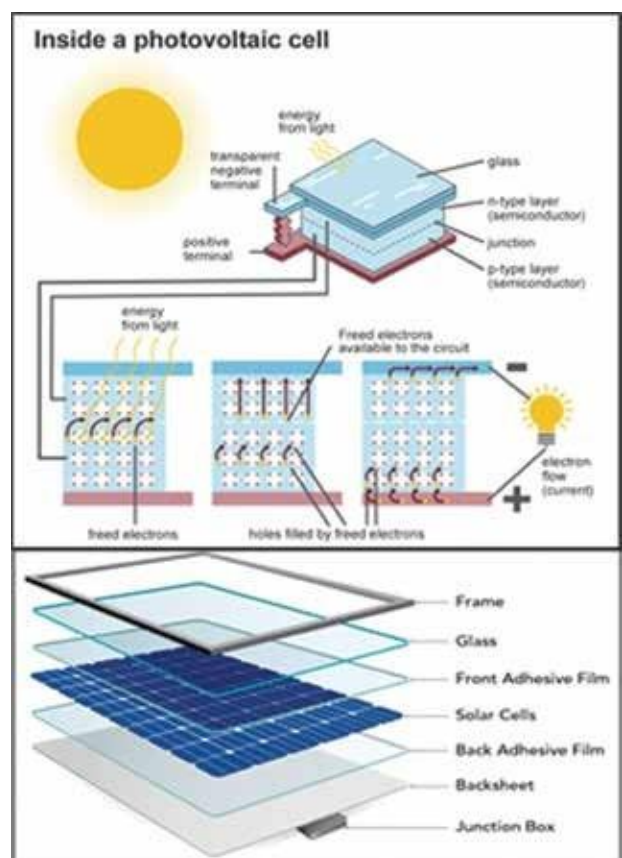
When solar energy (photons) is incident on the photovoltaic material (n-type & p-type semiconductors), the energy from photons excites the electron which results in formation of free electron & hole (vacant space due to

movement of electron). The Electrons move to the negative terminal & hence DC Voltage is generated at the terminals. Solar Cells are made based on this principle. They convert sunlight into direct current (DC) electricity. A number of photovoltaic cells are mounted on a supporting frame and are electrically connected to each other to form a photovoltaic module or solar panel. Solar panels are designed to supply electric power at a certain voltage, but the current they produce is directly dependent on the incident light.

The Solar PV Panels are available in different types, sizes and different price ranges. Mono-Crystalline (high efficiency, high cost), Poly-Crystalline (low cost, commonly used), Thin-Film (latest tech, different materials, low efficiency) type panels are available

SOLAR PV PANEL

Solar PV Panel sizes & prices may vary, but their basic concepts remain the same. Panels will generate certain DC voltage across the terminals & when connected to a load, they will deliver current. Depending on the number of cells,



the wattage of the solar PV panel varies. The adjoining figures illustrates a 325Wp solar PV panel nameplate. It is a polycrystalline type of solar panel & has dimensions of 1960mm x 990mm (roughly 2m x 1m). The solar panel weighs 22.5kg & is designed to generate maximum 325 Watts DC Power (i.e. 37.8Volts x 8.6Amperes). The Panel will generate 325W at standard test conditions, which is 25Deg C cell temperature & 1000Watts/m² solar incidence & AM 1.5 (mass of air – indicating 90 deg incidence of sun rays). Mostly we do not get these conditions & hence this 325Watts is called peak generation & Solar PV plant's capacity is measure in Watt-peak or W_p.

TYPES OF SOLAR PV POWER PLANTS:

There are two types of Solar PV Power systems, which are as follows:

- Solar Power Plant with Battery (Off Grid Solar System)
- Solar Power Plant without Battery (On Grid Solar System)

This article is focused on valuation of Solar PV Power Plant without Battery (On Grid Solar System).

COMPONENTS:

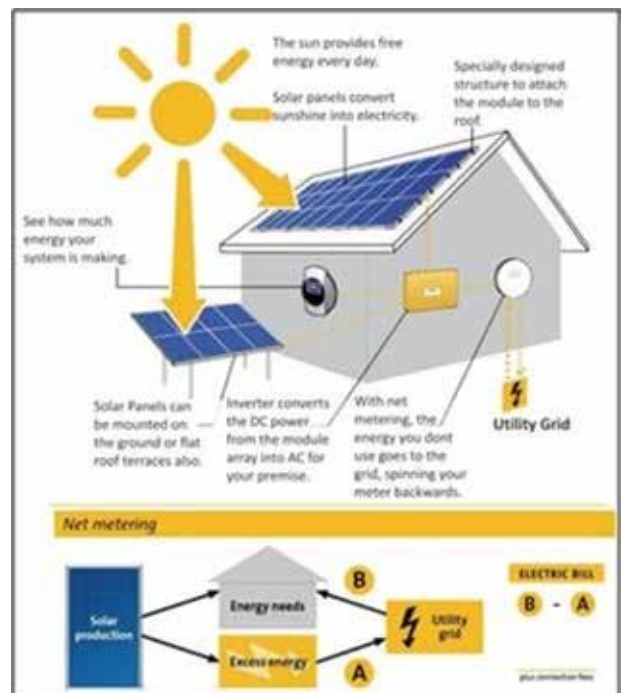
Solar PV power plant consists of the following components:

- Solar PV Panels: Generate DC Power
- Solar Inverter: Converts DC Power to AC power
- Panel structures & civil work: Structure is designed to hold the Solar Panels in outdoor conditions to enable optimum solar radiations absorption.
- Battery Storage (Optional) – Not present in case of On-Grid Solar Power System. In case of a standalone system, solar Panels can charge batteries during the day & batteries can supply electricity during night.
- Electrical Accessories like cables, meters, connectors, MCBs, ACDB, DCDB, Lighting Arrestor, Earthing: These accessories are essential for metering the solar generation & for other safety measures.

EFFECT OF SHADOW ON GENERATION

Solar Panels are connected in series to generate high voltage & small current. Power Generation & current flow in solar PV panels is analogous to water flow in a pipeline. Shadow (due to dust/trees/buildings/other panels) on a solar panel (Shading) is similar to introducing a clog in a pipe of water. The clog in the pipe restricts the flow of water through the entire pipe. Similarly, when a solar cell is shaded, the current through the entire string is reduced.

It is important for a valuer to check if the solar PV panels are properly installed & shading is avoided. A shaded solar power panel will have high functional obsolescence.



2. VALUATION OF SOLAR PV POWER PLANTS

COST BREAKUP OF SOLAR PV POWER PLANT

Components	Description	Cost ₹/W _p (Range)	Life (Yrs)
Solar Panels	<ul style="list-style-type: none"> Solar Panels each of 325-330-335 Wp. Dimensions: ~2m x 1m x 40mm Operating Volt / Current: 36-38V, 9Amp Max system voltage - 1500 V Temperature range -40°C to + 85°C Weight: 23kg each Module efficiency – 16% - 17% Temp Coeff - Power -0.40% /°C 	₹20-24/Watt	25 Yrs
Solar Inverter	<ul style="list-style-type: none"> Inverters each capacity 3kW to 250kW. Say base case: 125kW Inverter Dimensions: 900mm x 663mm x 334mm Weight: 80kg each Efficiency – 98.6% Operating DC Voltage- 860~1500V 	₹4-8/Watt	10yrs
Structures & Civil work	Hot Dip Galvanized/ Aluminum Structures custom made	₹3-7/Watt	25Yrs
Electrical Accessories	DCDB, ACDB, MCBs, DC Cable, MC4 Connector, Earth Pit, AC Cable, Lightening Arrestor	₹4-6/Watt	25Yrs
Installation	Engineering, Design, Procurement, Transportation, Erection, Commissioning, Liasioning, etc.	₹5-7/Watt	-
Total		₹36-52/Watt	

FINANCIAL MODELS OF SOLAR PV POWER PLANTS

SN	Parameter	OPEX Solar (BOOT)	CAPEX Solar
1	Ownership of the Solar Power Plant	Developer	Customer
2	Investment for System cost, installation	Developer	Customer
3	Annual Payment	Customer pays for the electricity generated by the power plant installed	Operation & Maintenance charges
4	Savings	25-45% cheaper electricity tariff than grid tariff	Capital invested is repaid through electricity generated
5	Operation & Maintenance	Developer	Customer has to manage
6	Payback time	Savings start from day 1 as no initial investment	4-5 years

7	Tax Benefit	No tax benefit	Can claim tax benefit through accelerated depreciation
8	Regulatory Approvals & Risks	Taken by the Developer	Customer
9	Performance of the Power plant	Assured by the Developer	Customer has to cover the risks by issuing AMC for timely maintenance of the plant.

CONSIDERATIONS FOR VALUATION OF SOLAR PV SYSTEM AS PER IVS

- **Asset-related Considerations:** Technical specification, remaining useful life, Asset's condition, Estimation of functional, physical and technological obsolescence, cost of decommissioning / re-commissioning
- **Environment-related Considerations:** location in relation to the source of raw material and market for the product., impact of any environmental or other legislation (40% of transformer load), Licences to operate certain machines
- **Economic-related Considerations:** The actual or potential profitability of the *asset* , The demand for the product manufactured by the plant with regard to both macro- and micro-economic factors, The potential for the asset to be put to a more valuable use than the current use.

VALUATION APPROACHES FOR SOLAR PV POWER SYSTEM

- **Market Approach:** For homogenous P&M assets like motor vehicles, the market approach is commonly used as there may be sufficient data of recent sales of similar assets.

However, Solar PV power systems are specialised, where direct sales evidence is not be available. It is appropriate to adopt either income approach or cost approach

- **Income Approach:** The income approach to the valuation of plant and equipment can be used where specific cash flows can be identified for the asset producing a marketable product. Use of the income approach is not normally practical for many individual items of plant or equipment. When an income approach is used to value plant and equipment, the valuation must consider the cash flows expected to be generated over the life of the asset(s) as well as the value of the asset at the end of its life.
- **Cost Approach:** The cost approach is commonly adopted for plant and equipment, particularly in the case of individual assets that are specialised or special-use facilities. The first step is to estimate the cost to a market participant of replacing the subject asset by its **replacement cost**. The replacement cost is the cost of obtaining an alternative asset of equivalent utility. Having established the replacement cost, deductions *must* be made to reflect the physical,

functional, technological and economic obsolescence as applicable

- **Obsolescence Factors**
 - **Physical Obsolescence:** It is defined as any loss of utility due to the physical deterioration of the asset or its components resulting from its age and usage.
 - **Functional Obsolescence:** It is defined as any loss of utility resulting from inefficiencies in the subject asset compared to its replacement such as its design, specification or technology being outdated. It is depicted by the net savings possible if the machinery is replaced with new / best technology unit
 - **Economic Obsolescence:** Any loss of utility caused by economic or locational factors external to the asset. This type of obsolescence can be temporary or permanent.

3. CASE STUDY: Valuation of 500kWp Solar Power Plant installed at Nagpur



STANDARD SOLAR PV GENERATION DATA AT NAGPUR & ACTUAL GENERATION OBSERVED

As per data from National Renewable Energy Laboratory (NREL), a 500kWp Solar Plant if designed as per standards should generate around 6,91,679 kWh/yr (roughly 1383kWh/kWp/yr). As per actual generation data available at site, there is a deviation of -14% in the power generation in 1 year. This comparison is essential for valuation.

Month	Incident Radiation (kWh/m ² /day)	AC Energy (kWh)	Value (₹)
January	5.01	35,455	7,100
February	5.27	36,820	7,364
March	5.46	37,939	7,588
April	5.58	38,700	7,740
May	5.54	38,424	7,685
June	4.99	35,366	7,073
July	4.99	35,366	7,073
August	5.06	35,936	7,187
September	5.15	36,708	7,342
October	5.26	37,350	7,470
November	5.22	36,971	7,394
December	5.18	36,612	7,323
Annual	5.22	391,479	7,829

691,679 kWh/Year*

RESULTS

Location and Station Identification

Requested Location: Nagpur
 Weather Data Source: LAR, LAR2 (21.12, 76.1, 4.9 km)
 Latitude: 21.12° N
 Longitude: 76.12° E

PV System Specifications (Continued)

DC System Size: 500 kW
 Module Type: Monocrystalline
 Array Type: Fixed-tilt (azimuth)
 Array Tilt: 18°
 Array Azimuth: 0°
 System Losses: 15.75%
 Module Efficiency: 16%
 DC to AC Rate: 1.8

Month	Actual Generation	Standard Generation	%Deviation
Jan-21	43122kWh	59485kWh	-28%
Feb-21	53261kWh	56000kWh	-5%
Mar-21	61616kWh	67938kWh	-9%
Apr-21	56923kWh	69785kWh	-18%
May-21	61789kWh	69431kWh	-11%
Jun-21	49264kWh	51954kWh	-5%
Jul-21	36738kWh	46058kWh	-20%
Aug-21	48734kWh	42030kWh	16%
Sep-21	44086kWh	51158kWh	-14%
Oct-21	57216kWh	59150kWh	-3%
Nov-21	43909kWh	60277kWh	-27%
Dec-21	36234kWh	58412kWh	-38%
Total	592892kWh	691679kWh	-14%

There are many reasons for this deviation like improper design, direction alignment, inadequate cleaning, high temperatures & other seasonal factors. This deviation leads to quantification of the functional obsolescence.

COST APPROACH: STEP1: VALUATION CALCULATIONS - ESTIMATION OF RCN (MARKET DATA)

This are the actual rates taken from Solar PV Plant Integrator in Mar 2022. The RCN has been established based on

market data & the approx. scrap value of the plant is some % of the purchase value. Using these figures, the depreciable amount is estimated = RCN – Scrap Value

SN	Particulars of Assets	Rs/Watt	Purchase Value	Yr	Present Cost	Replacement Cost New	Scrap Value	Depreciable amt
1	Solar Panels - 335 Wp x 1500nos	₹16.08/W	₹80,40,000	2020	₹22.40/W	₹1,12,56,000	₹4,02,000 (5%)	₹1,08,54,000
2	Inverters - 125kW x 4nos	₹5.00/W	₹25,00,000	2020	₹5.50/W	₹27,50,000	₹1,25,000 (5%)	₹26,25,000
3	DCDB, ACDB, Cables, Panels, Electrical Meter	₹2.50/W	₹12,50,000	2020	₹2.63/W	₹13,12,500	₹62,500 (5%)	₹12,50,000
4	Panel Mounting Structures	₹4.00/W	₹20,00,000	2020	₹4.80/W	₹24,00,000	₹2,00,000 (10%)	₹22,00,000
5	Installation, Commissioning	₹2.42/W	₹12,10,000	2020	₹2.54/W	₹12,70,500	₹-	₹12,70,500
		₹30.00/W	₹150.00 Lakhs		₹37.87/W	₹189.89 Lakhs	₹7.90 Lakhs	₹182.00 Lakhs

COST APPROACH: STEP2: VALUATION CALCULATIONS - ESTIMATION OF PHYSICAL OBSOLESCENCE

It is estimated based on the age of the equipment & its useful life

SN	Particulars of Assets	RCN	Depreciable amt	Yr	Life	Resi Life	Phy Obs	Phy Dep
1	Solar Panels - 335 Wp x 1500nos	₹1,12,56,000	₹1,08,54,000	2020	25	23	8%	₹8,68,320
2	Inverters - 125kW x 4nos	₹27,50,000	₹26,25,000	2020	10	8	20%	₹5,25,000
3	DCDB, ACDB, Cables, Panels, Electrical Meter	₹13,12,500	₹12,50,000	2020	25	23	8%	₹1,00,000
4	Panel Mounting Structures	₹24,00,000	₹22,00,000	2020	25	23	8%	₹1,76,000
5	Installation, Commissioning	₹12,70,500	₹12,70,500	2020	25	23	8%	₹1,01,640
		₹189.89 Lakhs	₹182.00 Lakhs					₹17.71 Lakhs

COST APPROACH: STEP3: VALUATION CALCULATIONS - ESTIMATION OF FUNCTIONAL OBSOLESCENCE

STEP 3.1: Estimate Standard IRR based on standard generation & projections.

Assumptions:

- Deterioration in Power Generation per yr: 1%
- Tariff & projected growth: ₹12.50/kWh (commercial tariff) & growth @ 2%
- O&M Expenses: 1.5% of capex. Growth @ 4%
- Cost of Installation = ₹1.5 Cr for 500kWp in 2020.

Parameters	Standard	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Term Value
Ideal Generation (kWh)	6,91,679						Terminal Value is Estimated on the concept of perpetuity.
Deterioration % per yr	0%	1%	1%	1%	1%	1%	
Practical Generation kWh	6,91,679	6,84,762	6,77,845	6,70,928	6,64,012	6,57,095	
Projected Tariff (₹/kWh) growth @ 2%	₹12.50	₹12.75	₹13.01	₹13.27	₹13.53	₹13.80	
Annual Savings (₹)	₹86,45,984	₹87,30,714	₹88,15,376	₹88,99,931	₹89,84,343	₹90,68,571	
O&M Expenses 1.5% of Capex (growth 4%)	₹2,25,000	₹2,34,000	₹2,43,360	₹2,53,094	₹2,63,218	₹2,73,747	
Finance Cost-Interest @ 12% & Depreciation@10%	₹27,60,000	₹27,60,000	₹27,60,000	₹27,60,000	₹27,60,000	₹27,60,000	
Net Savings (₹/Yr)	₹56,60,984	₹57,36,714	₹58,12,016	₹58,86,837	₹59,61,125	₹60,34,824	₹1,69,92,449
IRR: 37.26%		1.34%	1.31%	1.29%	1.26%	1.24%	
Present value: ₹1,50,00,000				Avg Growth%=		1.29%	

STEP 3.2: Estimate Net Present Value based on actual generation, projections using Standard IRR.

Parameters	Actual	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Term Value
Projected Actual Generation	5,92,892	5,86,963	5,81,034	5,75,105	5,69,176	5,63,247	Estimated on the concept of perpetuity
Actual Annual Savings (₹/kWh)	₹74,11,144	₹74,83,773	₹75,56,343	₹76,28,822	₹77,01,178	₹77,73,376	
Actual Net Savings (₹/Yr)	₹44,26,144	₹44,89,773	₹45,52,983	₹46,15,728	₹46,77,960	₹47,39,630	₹1,33,91,303
IRR: 37.26%		1.44%	1.41%	1.38%	1.35%	1.32%	
Present value: ₹ 1,17,65,863					AvgG%=		1.38%

FUNCTIONAL OBSOLESCENCE = ₹1,50,00,000 - ₹ 1,17,65,863 = ₹32,34,137

COST APPROACH: STEP4: VALUATION CALCULATIONS - ESTIMATION OF ECONOMIC OBSOLESCENCE

SN	Economic obsolescence factors	Range	Unfavourable Wt: 20%	Neutral Wt: 5%	Favourable Wt: 0%	Total ECONOMIC OBSOLESCENCE
1	Government policy / Licensing / Pollution	Min: 0% Max: 20%		✓		5%
2	Raw Material / Fuel availability				✓	0%
3	Finished Goods demand / Oversupply / cheap imported material				✓	0%
4	Techno-commercial viability / Low Profit Margins				✓	0%
5	Force majeure / External Risks				✓	0%
	Total	0%-100%	0 x 20%	1 x 5%	4 x 0%	5%

Justification of Economic Obsolescence %

- State / Central Solar Policy keeps on changing irrationally
- Dependent on a favorable Net metering policy of the DISCOM.
- In case power generated by solar panels is not used by the hospital within a specific timeframe, the generation is not counted in net metering.

COST APPROACH: STEP5: VALUATION CALCULATIONS - ESTIMATION OF FAIR MARKET VALUE

SN	Particulars of Assets	Purchase Value	Replacement Cost New	Depreciable amt	Yr	Life	Resi Life	Phy Obs	Phy Dep	Fun Dep	Eco Dep	Fair Market Value
1	Solar Panels - 335 Wp x 1500nos	₹80,40,000	₹1,12,56,000	₹1,08,54,000	2020	25	23	8%	₹8,68,320	₹19,17,081	₹4,03,430	₹80,67,000
2	Inverters - 125kW x 4nos	₹25,00,000	₹27,50,000	₹26,25,000	2020	10	8	20%	₹5,25,000	₹4,68,370	₹81,581	₹16,75,000
3	DCDB, ACDB, Cables, Panels, Electrical Meter	₹12,50,000	₹13,12,500	₹12,50,000	2020	25	23	8%	₹1,00,000	₹2,23,540	₹46,323	₹9,43,000
4	Panel Mounting Structures	₹20,00,000	₹24,00,000	₹22,00,000	2020	25	23	8%	₹1,76,000	₹4,08,759	₹80,762	₹17,34,000
5	Installation, Commissioning	₹12,10,000	₹12,70,500	₹12,70,500	2020	25	23	8%	₹1,01,640	₹2,16,387	₹47,624	₹9,05,000
		₹150.00Lakhs	₹189.89Lakhs	₹182.00Lakhs					₹17.71Lakhs	₹32.34Lakhs	₹6.60Lakhs	₹133.24Lakhs

The Fair Market Value of the Solar PV Power System is **₹133.24 Lakhs** using Replacement Cost method of the Cost Approach as per IVS

INCOME APPROACH: VALUATION CALCULATIONS

Parameter	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Terminal
Installed Capacity	500kWp		Annual Generation		1383 kWh/Wp		O&M Expenses		1.5%		
Capital Cost	₹38 /W		Annual Depreciation in Generation		1%		% Increase in O&M Exp		4%		
Cost Saving/kWh	₹6.0/kWh		% Increase in saving		2%		Cost of Capital		10%		
Annual Generation	592892kWh	580963kWh	581093kWh	575283kWh	569530kWh	563834kWh	558190kWh	552614kWh	547088kWh	541617kWh	
Saving / kWh	₹6.0/kWh	₹6.1/kWh	₹6.2/kWh	₹6.4/kWh	₹6.5/kWh	₹6.6/kWh	₹6.8/kWh	₹6.9/kWh	₹7.0/kWh	₹7.2/kWh	
Total Savings	₹ 35,57,352	₹ 35,92,214	₹ 36,27,418	₹ 36,62,966	₹ 36,98,864	₹ 37,35,112	₹ 37,71,716	₹ 38,08,679	₹ 38,46,004	₹ 38,83,695	Estimated on the concept of perpetuity
O&M Cost	₹ 3,75,000	₹ 3,90,000	₹ 4,05,600	₹ 4,21,824	₹ 4,38,697	₹ 4,56,245	₹ 4,74,495	₹ 4,93,474	₹ 5,13,213	₹ 5,33,742	
Finance Cost	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	₹ 39,02,704	
Net Saving	₹ -7,20,352	₹ -7,00,490	₹ -6,80,887	₹ -6,61,562	₹ -6,42,538	₹ -6,23,837	₹ -6,05,483	₹ -5,87,405	₹ -5,69,591	₹ -5,52,047	
Valuation	₹ 1,39,82,589										
Value/W	₹28 /W										

VALUATION BUY-BACK OF SHARES

Ashwani Rastogi

(FCA., ACS., IP., RV., FAFD)

1. Why Buy-Back of Shares:-

A Company having excess fund and does not have any good investment solution and considering it that unused Cash is costly for the Company therefore by using that Cash Company can Buy back its shares from the Market, though Companies do buybacks for various reasons, including company consolidation, equity value increase, and to look more financially attractive.

In India, a company can only buyback upto 25% of its paid-up equity capital, and can finance this share buyback using the company's

free reserves, securities premium account, proceeds of an issue of shares or other specified securities. After the share buyback, the company cannot issue the same kind of shares for a prescribed period.

Instead of getting lured by the company's premium price, one should consider factors like the need for a buyback, the company's growth prospects and future performance, and one's own individual investment goals, holding capacity, and appetite for risk.

Once you've thought through all these options, only then you must

decide whether you want to keep holding your shares or sell them to the company in the buyback.

2. Whether valuation report is required form Registered Valuer:-

Unlisted company must get a valuation report from Registered Valuer SFA to rely upon basis for Buy-back price. Based upon analysis of Rule 17 of Company (share Capital and Debentures) Rules and International Valuation Standard (IVS) :-

Basis of arriving at the buy-back price can be based upon by getting a valuation report by the Registered Valuer SFA.

- ✓ Rule suggested to apply Net Assets Method (NAV) based upon:-
NAV workout from:-
-Audited account which is not more than 6-month-old from the date of offer document; or
-Unaudited account not older than 6 months from offer document subject to limited review by Auditor of the Company.
- ✓ However, valuer can depart from the law subject to if he follows International Valuation Standard (IVS para 60.1). A valuer may still issue valuation report based upon DCF method, under Income approach basis when there are departures in circumstances only if valuation performed in accordance with IVS.

3. Whether Buy-back is better than Dividend payment to shareholders: - Ans. is YES

1	Buy-Back Scenario	Amount	Section Interplay
	Cash Available for distribution (inclusive of tax)	100	
	Less: Buy-Back Tax @ 23.3%#	18.9	115QA
A	Cash received by shareholders @ Effective rate of 23.296% (20%+12% SC+4% H&EC)	81.1	Exempt u/s 10(34A)
2	Dividend Scenario	Amount	
	Cash Available for distribution	100	
	Less: Tax in the hand of resident individual shareholders @35.88% #	35.88	115O Abolished
B	Net Cash in the hand of resident individual shareholders # Effective rate of 35.88% (30%+15% SC+4% H&EC) [Dividend is taxed at slab rate in individual hand, here we assume highest slab rate with 15% SC]	64.1	
C	Net Impact - BuyBack vs. Dividend (A-B)	17.0	

As above in short taxability of BuyBack in the hand of Company and Shareholder as under:-

Company:- Buy-Back Tax has to be paid by the company on the distributed income which is nothing but the consideration paid by the company on buyback of shares, as reduced by the amount received by the company on the issue of such shares, determined in the manner prescribed under Rule 40BB of the Income Tax Rules, 1962 (ITR). Also, such Buy Back Tax has to be paid by the company over and above the tax paid by it, if any, on its total income.

Shareholder:- Buy Back Tax is levied at the level of the company, the consequential income arising in the hands of shareholders is exempt from tax, as per Section 10(34A) of the ITA.

4. In case of Listed Company, SEBI (Buy-Back of Securities) Regulation 2018 has to follow. Promoter cannot participate in BuyBack.

Methods for buyback of shares

SEBI buyback regulations prescribe

three methods of buyback of shares in India:

- **Through tender offer (Fixed price e.g. TCS) :** Here, a company buys back shares from existing shareholders at a fixed price on a proportionate basis within a given timeframe by issuing a letter of offer and tender form to all the eligible shareholders.
- **Through open market (At Maximum Price):** A company uses the stock exchange or the book-building process to buy back shares through the open market. Under the stock exchange method, a company only buys back shares present on the stock exchanges through nationwide trading terminals. Promoters aren't allowed to participate in the open market offers through the stock exchange. All other shareholders can participate in this offer. Under the book-building process, the buyback is routed through bidding centres. A merchant banker

handles the procedure, and the company determines the buyback price based on the response received.

- **From odd-lot holders:** Here, the company buys directly from the odd-lot shareholders by approaching them. An odd-lot shareholder is someone with fewer shares than the marketable lots specified by the stock exchange.

In India, in case of a tender offer for the buyback of shares, the proposal has to be first approved by the board, in a meeting following a public announcement.

Next, the company files a letter of offer with SEBI, after which interested shareholders tender their shares for the buyback. After being verified by the registrar, the tender form of the shareholders is either accepted or rejected for the buyback. If accepted, the shareholder receives the money. The shares remain intact if the tender document of the shareholder is denied. Finally, the securities purchased in the buyback by the company are extinguished.

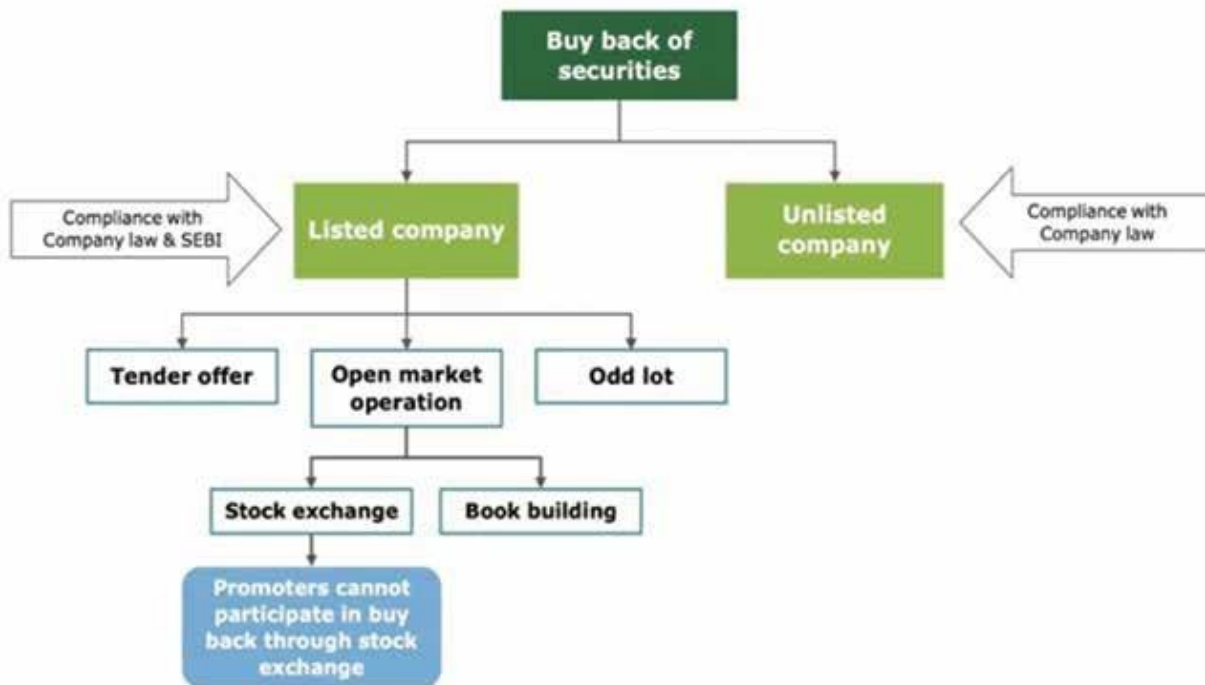
5. Recently Listed company BuyBack in India:

Company Name	Offer Amount (In Crore)	Buyback # of Shares (Lakhs)	Buyback Price	Approx Buy Price	Record Date
TCS	18,000	400	4500	3900	23-02-22
GAIL Limited	1,083	569	190	155	22-04-22
Zydus Lifesciences Limited	750	115	650	370	02-06-22
MOIL Limited	694	338	205	170	31-12-21
Birlasoft	390	8	500	350	15-07-22
Ajanta Pharma	286	11	2550	2200	14-01-22
KPR Mill Limited	180	22	805	659	19-02-22

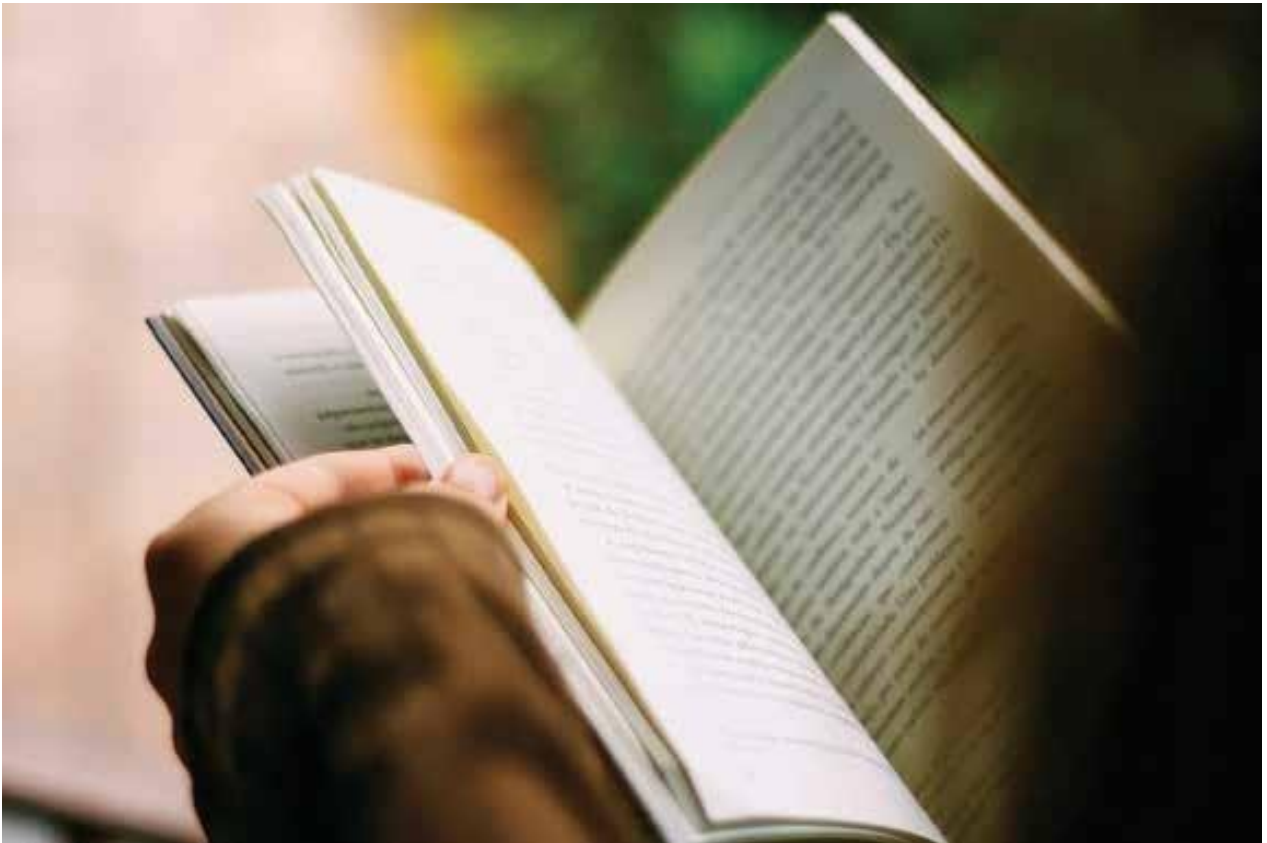
Conclusion: -

Unlisted company must get valuation report from registered valuer, before buy-back to form basis for buy-back, However, listed company has to follow SEBI (Buy-Back of Securities) Regulation 2018.

For companies, buying back shares is a tax-effective way of rewarding the shareholders. During the process, the company pays a tax of 20% on the buyback amount. Additionally, the investors have to pay no capital gains tax on the money received through the buyback of shares.



OTHER READINGS



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

PERSPECTIVES PAPER

THE ART OF VALUING PERSONAL PROPERTY WITH IVS

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: [Alexander Aronsohn](#), IVSC Tangible Assets Valuation Technical Director with contributions from the Tangible Assets Board

The IVSC has issued this Perspectives Paper to initiate discussion and debate on the topic of ESG in tangible assets valuation. Share your thoughts and perspectives with us [through LinkedIn](#)

Overview and Definition

This perspective paper has been drafted by the IVSC Tangible Assets Board to focus on issues in relation to the valuation of art and antiques (defined here as fine and decorative arts, antiques, paintings) and to encourage personal property valuers to comply with IVS when undertaking art and antique valuations. The IVSC Tangible Assets Board may issue future perspectives paper reviewing other aspects of personal property valuation such as classic cars and jewellery.

Introduction

Global sales of art and antiques reached an estimated \$64.1 billion with the three major art hubs, the US, the UK, and China accounting for 82% of global sales¹. The US was the largest market worldwide and accounted for \$28.3 billion (44%) of global sales by value. The art market can be further divided into a resale market and new art works market and both of these can be further subdivided into a primary and secondary art market.

The primary art market largely comprises galleries, producer galleries and arts fairs and can be both physical and online. If an artwork comes straight out of an artist's studio, by way of a gallery or a contemporary art fair, it's most likely being offered for sale for the first time. This is deemed to be the primary art market as the price for the piece is established for the first time but it should be noted that the manner, promotion and other such matters

are influential in establishing the 'tone' of the price it might fetch and of crystallising levels of demand. However, it should be noted that in some instances the identity of the creator of the art work may have led to potential values already having been established from market demand before an initial sale takes place.

The secondary art market largely comprises galleries, auctions, private sales and art fairs, physical and online. Once a piece has been acquired on the primary market and is being resold, it becomes part of the secondary market. Often prices in the secondary market may be more stable than those of emerging or mid-career artists but there is no guarantee of this as artists can go in and out of fashion. However, the objective of those involved in the sale is to try and achieve a continuous and sustainable development of the artist.

Furthermore, as long as an artist is still alive the stock/supply of their art may grow, whereas once the artist has died the stock/supply will normally be static unless previously unknown works come to light. Although due to the role of private collections and the undoubted issues, such as wars when work was 'taken' this can sometimes happen as some old master's work thought lost does surface from time to time. Moreover, once an artist has died, their work may be lost or have gone out of fashion and it is only a small minority of artists that are remembered for posterity.

Purposes of Art and Antiques Valuation

For valuation of art and antiques the following are a list of some of the common purposes for which art and antiques valuation is required:

- Advice on the acquisition or disposition of property for investment or personal consumption
- Auction estimation
- Business Transactions
- Buying or selling art
- Collection Management
- Damage or loss due to fire, water or other reason
- Dissolution of business
- Dissolution of marriage
- Divorce
- Estate planning, equitable distribution, and probate
- Financial Reporting
- Inheritance (only applicable in some countries)
- Insurance coverage
- Inventory valuation
- Litigation, including claims of fraud
- Loan Collateral

¹ The Art Market 2020, An Art Basel & UBS Report: https://d2u3kfw92fzu7.cloudfront.net/The_Art_Market_2020-1.pdf

- Mortgage / Pawn
- Pre-nuptial agreements
- Taxation (charitable contribution, gift tax, estate tax, casualty loss)

Basis of Value

However, the main challenges in relation to the art and antique valuers adopting IVS lies not in the valuation approach adopted but with the basis of value used. As with other tangible assets valuations the basis of value used will vary according to the purpose.

IVS 104 Basis of Value states that “compliance with this mandatory standard requires a valuer to select the appropriate basis (or bases) of value and follow all applicable requirements associated with that basis of value, whether those requirements are included as part of this standard (for IVS-defined bases of value) or not (for non-IVS-defined bases of value).”

Within IVS a basis of value describes the fundamental premises on which the reported values will be based and “it is critical that the basis (or bases) of value be appropriate to the terms and purpose of the valuation assignment, as a basis of value may influence or dictate a valuer’s selection of methods, inputs and assumptions, and the ultimate opinion of value.”

The bases of valuation used in art and antiques valuations do not cause any issues as IVS recognises that “a valuer may be required to use bases of value that are defined by statute, regulation, private contract or other document.”

However, art and antiques valuers sometimes use the United States Internal Revenue Service (US IRS) definition of Fair Market Value, which is defined as “the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts.”, which is in effect Market Value.

However, in many markets such as Germany the Fair Market Value is usually not estimated as there is limited to no data available on this and the relationship of trust between buyer and seller (as in the gallery trade) cannot be assessed in monetary terms. As a result, many art and antique valuers in Europe adopt a more formulaic approach.

Even though this does not cause an issue with IVS compliance the IVSC Tangible Assets Board would recommend that it may be preferable for art and antique valuers to adopt the IVS definition of Market Value for secured lending or reporting purposes rather than Fair Market Value (FMV). FMV is a basis of value that largely relates to US valuations for tax purposes and has many requirements which sit below it that may not be fully understood by valuers operating outside the US such as the inclusion of special purchasers.

The definition of Market Value within IVS 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.”

The advantage of adopting the IVS definition of Market Value is that though the valuation figure will not necessarily be the same as FMV it is a globally understood and adopted basis of value for the valuation of both tangible and intangible assets and would enable direct comparison across different assets. In relation to these two bases of value there are the following differences.

Fair Market Value includes the economic principles of free and open market activity whereas Market Value simply refers to the estimated amount for an asset within a marketplace. Furthermore, as decided in a recent Washington Supreme Court Decisions, Fair Market value includes sales tax whereas Market Value represents “the estimated exchange price of an asset without regard to the seller’s costs of sale or the buyer’s costs of purchase and without adjustment for any taxes payable by either party as a direct result of the transaction.”

Even though the estimated exchange price can be difficult to confirm in the market and insurance, replacement or auction value are often used to provide Market Value in these circumstances, this does not preclude the adoption of Market Value as the main basis of value for the valuation.

Market Value is an internationally used definition that is universally applicable and would bring art and antiques valuers in line with other valuers of tangible asset valuations. This could be seen as particularly important not only for benchmarking across other markets where different definitions may be used but would also ensure that all tangible assets are valued on the same basis for secured lending purposes.

In respect of Insurance Estimation for Art and Antiques this differs from the IRS definition of Fair Market Value as not only would the buyer’s premium or elements of for an auction acquisition not be included as in this instance the buyer would be seen as a special purchaser but also an assumption is made that the insured item needs to be replaced in a timely manner. As a result, a retail replacement is often considered which is usually at a higher figure than the original valuation. However, in reality this is no different from providing an Estimated Reinstatement Cost for a property valuation, which will provide a different figure from a Market Value due to both the differing purpose of the valuation and the assumptions made. Therefore, there would be no issue with Insurance Estimation under IVS.

Other purposes of value commonly used within art and antiques valuations are for inheritance and tax calculation and auction estimation. Valuations for these purposes are also commonly undertaken for other tangible assets and there would be no issue with these valuations coming under IVS. In fact, IVS defines the word purpose as “the reason(s) a valuation is performed. Common purposes include (but are not limited to) financial reporting, tax reporting, litigation support, transaction support, and to

support secured lending decisions.” The other basis of value commonly used in IVS is an Auction Estimation and insurance, which should be no different from providing an auction estimate for a tangible asset.

1. What IVS bases of value should be considered for valuation for art and antiques? If the basis of value suggested is an IVS non-defined basis of value, please provide the definition used together with the purpose of valuation. Please send your responses to the questions to: comments@ivsc.org

Valuation Approach

However, despite the size and sophistication of the global art market the valuation approach and the basis of value used is inconsistent in many instances for the valuation of personal property, not only across countries but also within countries. In many jurisdictions art and antique valuations are undertaken by art experts who have great specialist knowledge and expertise on the assets in question but in some cases may lack awareness of the International Valuation Standards and the approaches contained within.

Art valuation can be seen as the process of estimating the market value of works of fine art and as such art valuation can be seen as more of a financial rather than an aesthetic concern, although it is recognised that as with other asset classes the valuer must factor in subjective variables. In the case of art these variables include “authenticity, artist, school, signature and dating, genre, technique, dimensions, motif, innovation, (hype), condition, market freshness, art- and cultural-historical significance, quality, provenance, restitution freedom, rarity, period of creation, characteristic and performance. The so-called “eco system” of an artist – the environment that protects, promotes and markets him – is also considered.”

In addition, within the art market not only are special purchasers prevalent, but also its quite common for a portfolio/collection effect to be applied. For example, if an artist issues a collection of paintings and a collector is missing one item to complete his collection then the collector would in principle act as a special purchaser as he may be willing to pay more than other collectors to complete his collection.

IVSC do not favour a formulaic approach to valuation, although one approach which relates value in terms of the commercial, social and artistic merit compounded by the reputation and standing of the artist does capture some of the influences between price determination in the market. These separate elements are now considered

The impact of the artist’s brand: When using this formula, the largest determinant of value is the “brand” of the artist which can vary during and after the artist’s lifetime and is often subject to the fashion and mores of the time of valuation.

Artistic value is a standalone value embedded in the artwork and includes its quality and significance as a

standalone work irrespective of its attribution. For example, many works executed by ‘followers’ or pupils of masters may have very large artistic value in their own right; but to underscore the relevance of the artist’s brand to establish that a work is capable of attribution to the ‘master’ will transform the value of the object. It is in the area of attribution of work that the skill and expertise of the valuer is paramount.

Social value is inherent in all artworks as art is a physical representation of the temporal, spatial and human context within which it was produced. In turn this may resonate with prevailing mores, standards and cultural issues all of which determine the level of influence the artwork has created in the minds of the populace.

Commercial value is largely determined by views of valuers as their assessment of likely interest in purchasing the object by investors and others as to the ongoing value prospects for the work, including the level of probability that the artist will change in terms of their brand value and of change in the overall demand for such objects and the wider art market.

Benchmark Value

When valuing personal property, it is necessary to determine a “Benchmark Value” and/or an “Appraisal Value”. A Benchmark Value can be described as an approach that determines the current market price of an artwork, by benchmarking it with the value of a comparable artwork. The valuer makes an effort to ensure that the comparable artwork is as similar as possible to the artwork being valued in terms of size, medium, age and subject, and necessary adjustments are made to account for the differences. The valuation carried out under this approach is based on artwork images and available data and does not include examination of the original artwork and is often used for insurance value. For accounting purposes book value is also sometimes considered.

In IVS terms the Benchmark Value is akin to a desktop or book valuation in real estate as the level of due diligence in relation to inspection and investigation is limited and the valuation is reliant on data provided by the commissioning client and on market pricing for similar comparables in terms of style, age and subject. However, when adopting this approach, the valuer is arriving at figure without regard to proven provenance and there this approach only provides an indicative value, which depends on the accuracy of the assumptions made, particular those in relation to provenance. Whether this approach provides an IVS compliant valuation is questionable as the level of due diligence such as the verification of information supplied is in most cases too limited for a Benchmark Value to be IVS compliant and could give rise to negligence claims.

Appraisal Value

The Appraisal Value incorporates the Benchmark Value but is seen as a more sophisticated approach to art valuation as unlike the benchmark mark valuation the valuer will not

take the provenance at face value but will investigate the provenance and will require the owner to provide as much of the following information as practicable;

- Colour prints of photographs of the asset,
- All available documentation for the asset and its provenance,
- References of the asset in any publication (auction catalogue etc.)
- Details and reports of any previous restoration work

When carrying out an Appraisal Value the valuer must inspect the artwork and carry out a detailed analysis (historic, stylistic, forensic, scientific etc.) to establish the authenticity and provenance of the artwork before undertaking a valuation in accordance with the parameters stated above. However even when adopting this approach, the level of due diligence and investigation undertaken to establish the condition and provenance is critical.

However, both these approaches would come under the market approach within IVS as “the market approach provides an indication of value by comparing the asset with identical or comparable (that is similar) assets for which price information is available.”

Furthermore, IVS also states that “the market approach should be applied and afforded significant weight under the following circumstances:

- (a) the subject asset has recently been sold in a transaction appropriate for consideration under the basis of value,
- (b) the subject asset or substantially similar assets are actively publicly traded, and/or
- (c) there are frequent and/or recent observable transactions in substantially similar.”

Once again, all these circumstances are applicable to the valuation of art and antiques as much as real estate and, just as many the large surveying firms have their own data on recent and historic transactions, so do all the main auction houses and other participants in the art market. As with other tangible asset valuations there are also other databases publicly available such as the art price, art net and art info databases. However, the art market lacks full transparency and finding direct full comparable transactions may prove more challenging than in real estate markets.

Moreover, just as the real estate valuer is required to weight the comparable evidence using his professional judgement when using the market approach, an art and antiques valuer is also required to weight the comparable information and sometimes use the data of a comparable artist to estimate the possible market resonance of the artwork. In both instances the heterogeneous nature of many assets means that it is “often not possible to find market evidence of transactions involving identical or similar assets”.

Therefore, IVS also states that “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.”

However, although both a Benchmark Value (Desktop Valuation) and an Appraisal Value (Market Value) would come under the Market Approach though the requirements for documentation are stronger under IVS than those commonly used by an art and antiques valuer as under IVS “valuers must document the reasons for the adjustments and how they were quantified5.”

Even though both of the art and antiques valuation approaches would generally meet the requirements of IVS, when undertaking a Benchmark Value IVS requires the valuer to specify the extent of their investigations and any limits would have to be noted in the terms of engagement.

Furthermore, IVS requires “valuers to perform sufficient analysis to evaluate all inputs and assumptions and their appropriateness for the valuation purpose” and where the “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 IVS6.”

2. Do you believe that both the Benchmark Value and Appraisal Value would come under the Market approach within IVS? If not, please provide your reasoning.

3. Under what circumstances and for what purpose would you use another valuation approach or method? Please provide details of the approach or method adopted.

Please send your responses to the questions to: comments@ivsc.org

Conclusion

In summary the valuation of art and antiques is equivalent to the valuation of other tangible assets valued using the market approach and the valuation of art and antiques and other forms of personal property valuation is already part of IVS. Therefore, the IVS would encourage the use of IVS by all art and antiques valuers in order to provide global consistency across their valuations and to bring their profession, professionals and valuations in line with the increasingly globally adopted international valuation standards.

4. Are there any additional issues in relation to the global valuation of art and antiques that the IVSC should consider?

5. Do you think that art and antiques valuers should fully adopt IVS, and if not why?

Please send your responses to the questions to: comments@ivsc.org

ASSET STANDARDS – IVS 230 INVENTORY

10. Overview

10.1. The principles contained in the General Standards apply to valuations of inventory and valuations with an inventory component. This standard contains additional requirements for valuations of inventory.

20. Introduction

20.1. Inventory broadly includes goods which will be used in future production processes (ie, raw materials, parts, supplies), goods used in the production process (ie, work-in-process), and goods awaiting sale (ie, finished goods).

20.2. This standard focuses on valuation of inventory of physical goods that are not real property, as the numerous and varied aspects of real property inventory were not considered or contemplated in the preparation of this standard. The valuation of real property is covered in IVS 400 Real Property Interests.

20.3. While the book value of inventory only includes historical costs, the profits earned in the production process, which reflect returns on the assets utilized in manufacturing (including working capital, property, plant, and equipment, and intangible assets), are not capitalised into book value. As a result, the market value of inventory typically differs from, and is usually higher than, the book value of inventory.

20.4. As inventory is seldom transacted at an interim stage (eg, work-in-process) or may not be frequently sold to a third party to conduct the selling effort (eg, finished goods sold via distributor networks), the valuation techniques and considerations for inventory frequently vary from those of other assets.

20.5. Inventory valuations are performed for a variety of purposes. It is the valuer's responsibility to understand the purpose of a valuation and whether the inventory should be valued, whether separately or grouped with other assets. A non-exhaustive list of examples of circumstances that commonly

include an inventory valuation component is provided below:

(a) For financial reporting purposes, valuations of inventory are often required in connection with accounting for business combinations, asset acquisitions and sales, and impairment analysis.

(b) For tax reporting purposes, inventory valuations are frequently needed for transfer pricing analyses, estate and gift tax planning and reporting, and ad valorem taxation analyses.

(c) Inventory valuation may be the subject of litigation, requiring valuation analysis in certain circumstances.

(d) Valuers are sometimes asked to value inventory as part of general consulting, collateral lending, transactional support engagements and insolvency.

30. Bases of Value

30.1. In accordance with IVS 104 Bases of Value, a valuer must select the appropriate basis(es) of value when valuing inventory.

30.2. Often, inventory valuations are performed using bases of value defined by entities/organisations other than the IVSC (some examples of which are mentioned in IVS 104 Bases of Value) and the valuer must understand and follow the regulation, case law, and other interpretive guidance related to those bases of value as of the valuation date.

40. Valuation Approaches and Methods

40.1. The three valuation approaches described in IVS 105 Valuation Approaches can all be applied to the valuation of inventory. The methods described below simultaneously exhibit elements of the cost approach, market approach, and income approach. If necessary for the valuer to classify a method under one of the three approaches, the valuer should use judgement in making the determination and not necessarily rely on the classification below.

40.2. When selecting an approach and method, in addition to the requirements of this standard, a valuer must follow the requirements of IVS 105 Valuation Approaches, including para 10.3.

50. Market Approach

50.1. The market approach, ie, reference to market activity involving identical or similar goods, has only narrow direct application for the valuation of inventory. Such applications typically include 1) inventory of commoditized products, or 2) inventory in which a market exists for the inventory at an interim stage in the production process. For non-commodity traded products or products that a market exists at an interim production stage, such selling prices must be adjusted downward to account for the disposal effort and related profit.

50.2. While the market approach is not directly applicable in most instances, valuers should consider market-based indications to determine the selling price as an input for other methods.

50.3. Other observable markets may provide insights on the returns attributable to the manufacturing and disposition of assets that can also be leveraged for inputs into other methods. Such returns are typically considered to exclude

returns attributable to intellectual property. For example:

(a) Distributor profit margins represent a meaningful market proxy for returns on the disposition process, if an appropriate base of comparable companies is identified.

(b) Contract manufacturers, to the extent available, may provide a proxy for margins earned through the manufacturing process.

50.4. Valuers must comply with paras 20.2 and 20.3 of IVS 105 Valuation Approaches and Methods when determining whether to apply the market approach to the valuation of inventory. In addition, valuers should only apply the market approach to value inventory if both of the following criteria are met:

(a) information is available on arm's length transactions involving identical or similar inventory on or near the valuation date, and

(b) sufficient information is available to allow the valuer to adjust for all significant differences between the subject inventory and those involved in the transactions.

50.5. Where evidence of market prices is available, valuers should make adjustments to these to reflect differences between the subject inventory and those involved in the transactions. These adjustments are necessary to reflect the differentiating characteristics of the subject inventory and those involved in the transactions. Such adjustments may only be determinable at a qualitative, rather than quantitative, level. However, the need for significant qualitative adjustments may indicate that another approach would be more appropriate for the valuation (see IVS 105 Valuation Approaches and Methods, paras 10.1-10.10).

60. Income Approach

60.1. The valuation of inventory using the income approach requires the allocation of profit (value) contributed pre-valuation date versus the profit (value) contributed post-valuation date.

60.2. Valuers must comply with paras 40.2 and 40.3 of IVS 105 Valuation Approaches and Methods when determining whether to apply the income approach to the valuation of inventory. Top-Down Method

60.3. The top-down method is a residual method that begins with the estimated selling price and deducts remaining costs and estimated profit.

60.4. The top-down method attempts to bifurcate the efforts, and related value, that were completed before the measurement date versus those efforts that are to be completed after the measurement date.

60.5. The key steps in applying the top-down method are to:

(a) Estimate the selling price. The valuer should rely on direct observations of selling prices when the information is available. However, such data is often not available

and the selling price is often estimated by applying an appropriate gross profit margin to the net book value of finished goods at the product level or aggregate level. Typically, the projected gross profit margin in the period the inventory will be sold is used.

(b) Estimate the costs to complete (for work-in-process only). Completion costs should include all of the expenditures directly or indirectly remaining to be incurred post-valuation date in bringing the work in progress inventory to its finished condition. Costs to complete should be adjusted to remove expenses benefitting future periods.

(c) Subtract the costs of disposal. Costs of disposal represent costs that would be incurred post-valuation date in order to deliver the finished goods to the end customer. Costs of disposal should be adjusted to remove expenses benefitting future periods. Disposal costs generally include selling and marketing expenses while procurement and manufacturing expenses have typically already been incurred for finished goods inventory. In order to properly determine costs of disposal, each expense in the inventory cycle (including indirect overhead) should be categorised as having been incurred and, therefore, contributed to the value of the finished goods inventory or remaining to be incurred during the disposal process.

(d) Subtract the profit allowance on the completion effort (for work-in-process only) and the disposal process. An initial starting point may be to utilise the operating profit of the company. However, this methodology assumes the profit margin would be proportional to the costs incurred. In most circumstances there is rationale to assume profit margins which are not proportional to costs (see section 90).

(e) Consider any necessary holding costs. Holding costs may need to be estimated in order to account for the opportunity cost associated with the time required to sell the inventory. Additionally, the valuer should consider the risk born during the holding period when determining the required rate of return. Risks may be a function of the length of inventory life cycle and the contractual arrangements with end customers (eg, manufacturer bears the risk of fluctuation in costs of completion and disposal). Holding costs may be immaterial if the inventory turnover is high and/or the borrowing rate is low.

60.6. When determining the cost to complete, costs of disposal and profit allowance, the valuer should identify and exclude any expenses that are intended to provide future economic benefit and are not necessary to generate the current period revenue. Examples of future-benefit expenses may include research and development (R&D) related to new product development; marketing for a new product; recruiting to increase the size of the workforce; expansion into a new territory; depreciation of an R&D facility dedicated to future research; or restructuring costs.

60.7. Internally developed intangible assets should either be modelled as 1) a cost as if they were hypothetically

licensed, and therefore included in either the cost of production or disposal, or 2) considered as part of a functional apportionment when determining the appropriate profit allowance.

60.8. When utilising the top-down method, valuers should consider whether sufficient data are available to appropriately apply the key steps. If sufficient data is not available, it may be appropriate to apply other methods or techniques.

60.9. The valuer may use the bottom-up method (see para 60.10) to corroborate the value derived from the top-down method (see paras 60.3 to 60.9). Bottom-Up Method

60.10. The key steps in applying the bottom-up method are to:

(a) Determine the book value of the subject inventory. The book value may need to be adjusted for multiple considerations (see para 70.4 and section 110).

(b) Add any cost of buying and holding already incurred.

(c) Add any cost toward completion already incurred. Such costs typically include procurement and manufacturing expenses

(d) Add profit on total costs already incurred. An initial starting point may be to utilise the operating profit of the company. However, this methodology assumes the profit margin would be proportional to the costs incurred. In most circumstances there is rationale to assume profit margins which are not proportional to costs (see section 90).

60.11. When determining the costs already incurred, valuers should consider internally developed intangible assets that have contributed toward the completion effort.

70. Cost Approach

70.1. The primary method to value inventory is the replacement cost method. Raw materials inventory is typically valued using the current replacement cost method.

70.2. Valuers must comply with paras 60.2 and 60.3 of IVS 105 Valuation Approaches and Methods when determining whether to apply the cost approach to the valuation of inventory. Current Replacement Cost Method

70.3. The current replacement cost method (CRCM) may provide a good indication of market value if inventory is readily replaceable in a wholesale or retail business (eg, raw materials inventory).

70.4. The market value of raw materials and other inventory may be similar to the net book value as of the valuation date but certain adjustments should be considered.

(a) The book value may need to be adjusted to FIFO basis.

(b) If raw material prices fluctuate and/or the inventory turnover is slow the book value may need to be adjusted for changes in market prices.

(c) The book value of raw materials may also be decreased

to account for obsolete and defective goods. (d) The book value may also need to be decreased for shrinkage, which is the difference between inventory listed in the accounting records and the actual inventory due to theft, damage, miscounting, incorrect units of measure, evaporation, etc.

(e) The book value may need to be increased for any costs incurred in connection with raw material preparation (eg, purchasing, storage and handling).

80. Special Considerations for Inventory

80.1. The following sections address a non-exhaustive list of topics relevant to the valuation of inventory.

(a) Identification of value-added processes and returns on intangible assets

(Section 90).

(b) Relationship to other acquired assets (section 100).

(c) Obsolete inventory – reserves (section 110).

(d) Unit of account (section 120)

90. Identification of Value-Added Processes and Returns on Intangible Assets

90.1. The valuation of inventory involves an allocation of profit between the profit earned pre-measurement date and the profit earned post-measurement date. In practice, profit earned may not be proportional to expenses. In most cases the risks assumed, value added, or intangibles contributed to the inventory pre-measurement date are not the same as those contributed post-measurement date.

90.2. Valuers typically should not simply allocate profit in proportion to disposition and manufacturing costs. This assumption can misallocate profit, as it presupposes that a company's production process earns profit on a pro-rata basis based on costs incurred. For manufacturers, this method is inappropriate if the costs of materials represent an initial outflow without significant efforts. Such an assumption also fails to recognize the contribution of internally-generated intangible assets with minimal associated costs.

90.3. Valuers should distinguish between value-added costs and those that are not value-added. The materials portion of COGS may not be a value-added cost because it does not contribute any of the profit to the inventory.

90.4. For a company that owns internally developed intangible assets that contribute to an increase in the level of profitability, the return on and of those intangible assets would be included in the total profit margin of the business. However, whether intangible assets are owned or licensed, the market value of the inventory should be the same.

90.5. The valuer should determine the extent to which the technology, trademarks, and customer relationships support the manufacturing and distribution processes and whether the returns are applicable to the entire base of revenue. If the

intangible asset has been utilised to create the inventory (eg, a manufacturing process intangible), then the value of the inventory would be increased. Conversely, if the intangible asset is expected to be utilized in the future, at the time of disposal, the value of the inventory would be decreased.

90.6. For marketing intangibles, the determination of whether the intangible is an attribute of the inventory may be difficult. To assist with the determination, the valuer may consider how the inventory would be marketed by a market participant to its customers – pull vs push model. A push model requires significant disposal efforts for inventory and is less reliant on marketing intangibles, while a pull model depends on strong brand development and recognition to pull customers to the product.

90.7. A non-exhaustive list of other considerations for evaluating when intangible assets are contributed may include the amount of marketing spend, whether products are sold through a distributor, level of attrition for customer relationships, and any legal rights associated with the intangible assets.

90.8. In some cases, the intangible asset may consist of several elements that contribute to various aspects of the value creation, such as a pharmaceutical product intangible asset that is comprised of technology and tradename. This requires an assessment of how the overall profit related to each element of the intangible asset should be apportioned to manufacturing the inventory versus in the disposal effort.

90.9. Similarly, although a single intangible asset may only contribute to either the manufacturing or disposal effort, it is possible for a portion of the intangible to be contributed pre-measurement date and a portion contributed post-measurement date. For example, when assessing the contribution of symbolic IP for finished goods, although the product bears the respective branding associated with the symbolic IP, the related right to sell the branded product may not be conveyed with the transfer of inventory. As such, it may be appropriate to consider such rights in the costs of disposal.

100. Relationship to Other Acquired Assets

100.1. The valuer should maintain consistency, as appropriate, between assumptions used in the inventory valuation relative to valuation of other assets or liabilities.

110. Obsolete Inventory Reserves

110.1. The valuer should account for obsolete inventory reserve balances. The inventory reserve balances should be applied to the inventory in which the reserve applies, rather than netted against the entire inventory balance.

110.2. Typically, the obsolete inventory adjusted for the inventory reserve would not be valued as it has been adjusted to net realisable value. However, the valuer may need to consider further write-downs if market value is lower than net realisable value.

120. Unit of Account

120.1. For purposes of inventory valuation, it is often appropriate to assume inventory is one homogenous set of assets. However, it is possible for the profit margins, risk, and intangible asset contributions to vary by product or product group.

120.2. If the profit margins, risk, and intangible asset contributions vary by product or product group, and the relative mix of inventory being valued does not match the assumed sales mix used to develop the assumptions for the valuation, the valuer should assess the different groups of inventory separately.

MULTIPLE CHOICE QUESTIONS



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

MULTIPLE CHOICE QUESTIONS

MCQ FOR SFA

1. If we include it, national income will be over-estimated:

- a) Transfer payment
- b) Income from abroad
- c) Illegal income
- d) Exports

Ans) Transfer payment

2. It is NOT a method to measure national income:

- a) Adding all expenditure
- b) Adding all incomes
- c) Adding value of goods and services
- d) Adding all taxes

Ans) Adding all taxes

3. Which statement is true?

- a) National Expenditure = National income + National production
- b) National Expenditure = National income
- c) National Expenditure = National income + National Taxes
- d) National Expenditure = National income - Taxes

Ans) National Expenditure = National income

4. The term “capital structure” refers to mix of

- a) long-term debt, preferred stock, and common stock equity
- b) current assets and current liabilities.
- c) total assets minus liabilities.
- d) shareholders' equity.

Ans) long-term debt, preferred stock, and common stock equity

5. Which of the following term is used to represent the proportionate relationship between debt and equity?

- a) Cost of capital
- b) Capital Budgeting
- c) Assets Structure
- d) Capital structure

Ans) Capital structure

6. If compounding is done quarterly in year, the effective rate of interest is equal to

- a) $4 \times$ nominal rate of interest
- b) $(1 + \text{nominal rate of interest} / 4)^4$
- c) $(1 + \text{nominal rate of interest}) / 4$
- d) $\text{nominal rate of interest} / 4$

Ans) $(1 + \text{nominal rate of interest} / 4)^4$

7. Which of the following statement(s) regarding IRR is true?

- a) If IRR is less than the firm's cost of capital, the project should be rejected.
- b) A project can have multiple IRRs depending on the cash flow streams.
- c) A project can have only one IRR.
- d) Both (A and B)

Ans) Both (A) and (B)

8. In which case will an investor receive the most interest:

- a) 10%, compounded annually.
- b) 10%, compounded monthly.
- c) 10%, compounded quarterly
- d) 10%, compounded daily

Ans). 10%, compounded daily

9. This type of risk is avoidable through proper diversification.

- a) portfolio risk
- b) systematic risk
- c) unsystematic risk
- d) total risk

Ans) unsystematic risk

10. Finance is defined as the management of money and includes activities like:

- a) Investing
- b) Borrowing
- c) Lending
- d) All of the above

Ans) All of the above

11. A balance sheet is a form of:

- a) Activity reports
- b) Static financial reports
- c) Dynamic financial reports
- d) None of the above

Ans) Static financial reports

12. Projected financial statement may not include:

- a) Income Statement
- b) Trial Balance
- c) Balance Sheet
- d) Cash Flow Statement

Ans) Trial Balance

13. Information about a company's objectives, strategies, and significant risks would most likely be found in the:

MULTIPLE CHOICE QUESTIONS

- a) Auditor's Report
- b) Management commentary
- c) Notes to the financial statements
- d) None of the above

Ans) Management commentary

14. Rent free accommodation is an example for

- a) Allowance
- b) Compensation
- c) Perquisite
- d) Profit in lieu of salary

Ans) Perquisite

15. The TDS Certificate issued by an employer to his employees in case of salary income is

- a) Form 16
- b) Form 26
- c) Form 26A
- d) Form 26Q

Ans) Form 16

16. The apex body of Income Tax Department is

- a) Finance Ministry of Central Govt.
- b) Central Govt. of India.
- c) CBDT
- d) Dept. of Revenue

Ans) CBDT

17. If both parents are earning then income of a minor child will be clubbed with

- a) Income of parent having higher income
- b) Proportionately with both parent's income
- c) Income of parent having lower income
- d) Income of either parent

Ans) Income of parent having higher income

18. Salary Under Section 17(1) does not include

- a) Wages
- b) Pension
- c) Interest
- d) Gratuity

Ans) Interest

19. Long Term Capital Assets (Shares) is held for

- a) More than 36 months
- b) More than 12 months
- c) More than 24 months
- d) Not more than 36 months

Ans) More than 12 months

20. Interest on Public Provident Fund Investment is _____

- a) Taxable under the Head : Income from Other Sources
- b) Taxable under the Head : Income from Other Sources
- c) Allowed as Deduction
- d) Exempt from Income

Ans) Exempt from Income

21. What is MAT?

- a) Maximum Alternate Tax
 - b) Maximum Advance Tax
 - c) Minimum Advance Tax
 - d) Minimum Alternate Tax
- Ans)** Minimum Alternate Tax

22. Directors Sitting Fees will be Chargeable Under which Head?

- a) Income From House Property
- b) Income From Business & Profession
- c) Income From Capital Gain

d) Income From Other Sources

Ans) Income From Other Sources

23. Loss under the head income from house property can be carried forward

- a) Only if the return is furnished before the due date mentioned u/s 139(1)
- b) Even if the return is not furnished
- c) Even if the return is furnished after the due date
- d) not furnished the return of loss

Ans) Even if the return is furnished after the due date

24. Loss from a speculation Business of a particular A. Yr. can be set off in the same A. Yr. from:

- a) Profit And gains from any business
- b) Profit and gains from any business other than speculation business
- c) Income of speculation business
- d) Income of any head

Ans) Income of speculation business

25. Which of the following could give rise to a capital gain (or allowable loss)

- a) A gift of an asset to a charity
- b) A transfer of an asset between a husband and wife who live together during the tax year in which the transfer occurs
- c) A disposal caused by the death of the taxpayer
- d) The receipt of compensation on the destruction of an asset

Ans) The receipt of compensation on the destruction of an asset

MULTIPLE CHOICE QUESTIONS

26. The income from sale of household furniture is:

- a) taxable income
- b) exempted income
- c) capital gain
- d) revenue gain

Ans) exempted income

27. The exemption under section 54 ,shall be available

- a) To the extent of capital gain invested in the HP
- b) Proportionate to the net consideration price invested
- c) To the extent of amount actually invested
- d) To the extent of net consideration

Ans) To the extent of capital gain invested in the HP

28. Under which concept it is assumed that the enterprises has neither the intention nor the necessity of liquidation or of curtailing materiality the scale of operation_

- a) Revenue realization concept
- b) Matching cost concept
- c) Going concern concept
- d) Realization concept

Ans) Going concern concept

29. Fixed assets and current assets are categorized as per concept of:

- a) Separate entity
- b) Going concern
- c) Consistency
- d) Time period

Ans) Time period

30. A firm is expected not to curtail its present scale and

continue to operate at least at the existing level under, which of the following:

- a) Accounting Period
- b) Money Measuring Entity
- c) Going Concern Entity
- d) Accounting Entity

Ans) Going Concern Entity

31. Distinction between an expenditure whose benefit will be for a long period and whose benefit for a short period of say up to one year, is made under which of the following.

- a) Accounting Entity
- b) Going concern Entity
- c) Money Measuring Entity
- d) Accounting Period

Ans) Going concern Entity

32. Which of the following defines the term 'fair value'?

- a) The price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the reporting date under current market conditions
- b) The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date
- c) The weighted average price at which orderly transactions to sell assets or to transfer liabilities are taking place between market participants at the reporting date in the relevant market
- d) The entry price at the measurement date from the perspective of a market participant that holds the asset or owes the liability

Ans) a

33. The definition of fair value focuses on _____ because they are a primary subject of accounting measurement.

- a) Assets and liabilities
- b) Rights and obligations
- c) Observable and unobservable inputs
- d) Entry price and exit price

Ans) a

34. On which of the following Ind AS113 does not apply?

- a) Ind AS 102 (Share-based Payments)
- b) Ind AS 36 (Impairment of Assets)
- c) Ind AS 2 (Inventories)
- d) All of the above

Ans) d

35. In order to perform a fair value measurement, an entity needs to undertake an in-depth search of all possible markets to identify the principal market or, in the absence of a principal market, the most advantageous market.

- a) TRUE
- b) FALSE
- c) May be True or False
- d) None of the above

Ans) b

36. What is the definition of the most advantageous market in Ind AS 113?

- a) The one with the highest value activity for the asset or liability that can be accessed by the entity
- b) The one maximises the amount that would be received for the asset or paid to extinguish the liability after transport and transaction costs

MULTIPLE CHOICE QUESTIONS

c) The one with the greatest volume and level of activity for the asset or liability that can be accessed by the entity

d) The one with the highest and best price for the asset or liability that can be accessed by the entity

Ans) b

37. In measuring value, which of the following 'approach', would you use?

- a) Cost & Income
- b) Cost & Market
- c) Market & Income
- d) Cost ,Market & Income

Ans) Cost ,Market & Income

38. Which of the following date is appropriate relating to valuation?

- a) The date the report is signed
- b) The date the analysis is finished
- c) The effective date of the valuation
- d) The date the report is sent to the client

Ans) c) The effective date of the valuation

39. Which of the following method is included in Income based approach?

- a) Underlying Asset Method
- b) Realizable Value Method
- c) Market Price Method
- d) Discounted Cash Flow Method

Ans) d) Discounted Cash Flow Method

40. Which of the following is a suitable method for valuation of knowledge based companies?

- a) Knowledge

b) Earnings

c) Market

d) Market & Earning

Ans) Market & Earning

41. Which of the following is not one of the three fundamental methods of firm valuation?

- a) Discounted cash flow.
- b) Income or earnings - where the firm is valued on some multiple of accounting income or earnings.
- c) Balance sheet - where the firm is valued in terms of its assets.
- d) Market share.

Ans) Market share.

42. Which of the following represents the correct formula for valuing a share with a growing dividend?

- a) $P_t = d_0 \times (1 - g)/(r - g)$
- b) $P_t = d_0 \times (1 + g)/(r + g)$
- c) $P_t = d_0 \times (1 + g)/(r - g)$
- d) $P_t = d_1 \times (1 + g)/(r - g)$

Ans) $P_t = d_0 \times (1 + g)/(r - g)$

43. What is the value of the firm usually based on?

- a) The value of debt and equity.
- b) The value of equity.
- c) The value of debt.
- d) The value of assets plus liabilities.

Ans) The value of equity.

44. According to Black Scholes model, stocks with call option pays the_

- a) dividends
- b) no dividends

c) current price

d) past price

Ans) no dividends

45. According to Black Scholes model, purchaser can borrow fraction of security at risk free interest rate which is_

- a) short term
- b) long term
- c) transaction cost
- d) no transaction cost

Ans) short term

46. According to Black Scholes model, rate which is constant and known is classified as_

- a) short term return rate
- b) long term return rate
- c) risk free interest rate
- d) risky rate of return

Ans) risk free interest rate

47. In the Black-Scholes Option Pricing Model, what is the minimum and maximum value of $N(d_1)$?

- a) minus infinity to plus infinity
- b) minus infinity to zero
- c) minus one to zero
- d) zero to plus infinity

Ans) minus infinity to plus infinity

48. In the Black-Scholes Option Pricing Model, if interest rates rise, the price of a call option will_

- a) decline.
- b) remain unchanged.
- c) increase.
- d) decline, then increase.

MULTIPLE CHOICE QUESTIONS

Ans) increase.

49. All of the following are assumptions of the Black-Scholes Option Pricing Model except_

- a) markets are efficient
- b) no dividends
- c) interest rates are constant.
- d) investors are generally bullish

Ans) investors are generally bullish

50. The expected volatility of the underlying asset is known as_

- a) sigma
- b) delta.
- c) gamma
- d) theta.

Ans) sigma

51. According to Black Scholes model, trading of securities and stock prices moves respectively_

- a) constant and randomly
- b) randomly and constant
- c) randomly and continuously
- d) continuously and randomly

Ans) continuously and randomly

52. refers to an external force that have a bearing on the functioning of the business:

- a) System
- b) Culture
- c) Environment
- d) Society

Ans) Environment

53. Environment is within the control of the business:

- a) Internal
- b) External

- c) Micro
- d) Macro

Ans) Internal

54. Which of the following is correct order of process of business environment analysis?

- (i). Scanning the environment to detect warning signals
 - (ii). Forecasting the direction of future environmental change
 - (iii). Assessment of current and future environment
- a) i, ii, iii, iv
 - b) i, iv, ii, iii
 - c) ii, i, iv, iii
 - d) iii, ii, i, iv

Ans) i, iv, ii, iii

55. Macro environment is also called as:

- a) General environment
- b) Operating environment
- c) Economic environment
- d) Internal environment

Ans) Economic environment

56. External environment of business is:

- a) Physical
- b) Demographical
- c) Economic
- d) All of these

Ans) All of these

57. Which of the strategic tool is most commonly used for analyzing the macro environment?

- a) SWOT Analysis
- b) PESTLE Analysis
- c) Factor Analysis

- d) All of the above

Ans) PESTLE Analysis

58. PESTLE stands for:

- a) Public, Economic, Social, Technological, Legal, Environmental factors
- b) Political, Environmental, Social, Transferable, Legal, Economic factors
- c) Political, Economic, Science, Technological, Legal, Environmental factors
- d) Political, Economic, Social, Technological, Legal, Environmental factors

Ans) Political, Economic, Social, Technological, Legal, Environmental factors

59. PESTLE Analysis helps:

- a) The managers and strategy builders to find where their market currently
- b) Foresee where the organization will be in future
- c) Both (a) and (b)
- d) None of the above

Ans) Both (a) and (b)

60. Micro environment is also called as:

- a) General environment
- b) Operating environment
- c) Economics environment
- d) Political environment

Ans) Operating environment

61. Which of the following is benefit of business environment analysis?

- a) It helps organization to identify

MULTIPLE CHOICE QUESTIONS

the present and future threats and opportunities

- b) Helps to understand the transformation of the industry environment
- c) Contributes to identification of risk
- d) All of the above

Ans) All of the above

62. is a statement which derives the role that an organization plays in a society:

- a) Goals
- b) Mission
- c) Objective
- d) Success

Ans) Mission

63. Michael Porter's five forces model includes:

- a) New entrants
- b) Suppliers
- c) Buyers
- d) All of the above

Ans) All of the above

64. PEST stands for:

- a) Public, Economic, Social, and Technological factors
- b) Political, environmental, social and technological factors
- c) Political, economic, science and technological factors
- d) Political, economic, social and technological factors

Ans) Political, economic, social and technological factors

65. is a set of activities that a firm operating in a specific industry performs in order to

deliver a valuable product or service for the market:

- a) Value chain
- b) Swot
- c) Pest
- d) None of the above

Ans) Value chain

66. Secondary or support activities include:

- a) Firm Infrastructure
- b) Human Resource Management
- c) Technology
- d) All of the above

Ans) All of the above

67. Introducing new product or adding new features to existing products, is an example of strategy in an entity:

- a) Product differentiation
- b) Globalization
- c) Growth
- d) Retrenchment or sticking to major expertise of the entity

Ans) Growth

68. strategy of an entity attracts quick competition:

- a) Price skimming
- b) Globalization
- c) Retrenchment or sticking to major expertise of the entity
- d) Product differentiation

Ans) Product differentiation

69. A business consists of inputs and processes applied to those inputs that have the ability to create:

- a) Goodwill
- b) Value

- c) Outputs
- d) None

Ans) Outputs

70. refers to a situation when two or more existing firms combine together and form a new entity:

- a) Acquisition
- b) Restructure
- c) Demerger
- d) Merger

Ans) Merger

71. When the profit-making company is merged with companies having accumulated losses is called:

- a) Horizontal merger
- b) Vertical merger
- c) Reverse merger
- d) Conglomerate merger

Ans) Reverse merger

72. When the firms engaged in unrelated type of business operations merged with each other is called:

- a) Horizontal merger
- b) Vertical merger
- c) Reverse merger
- d) Conglomerate merger

Ans) Conglomerate merger

73. The share exchange ratio in case of acquisition can be obtained by which of the following formulas:

- a) $\text{EPS of target firm} / \text{EPS of acquiring firm}$
- b) $\text{MP of target firm's share} / \text{MP of acquiring firm}$

MULTIPLE CHOICE QUESTIONS

- c) BV of share of target firm/BV of share of acquiring firm
d) Any of the above

Ans) Any of the above

74. Sun Ltd and Surya Ltd go to liquidation a new company ABC Ltd is formed. It is a case of:

- a) Amalgamation
b) Acquisition
c) Internal reconstruction
d) External reconstruction

Ans) Amalgamation

75. Which of the Indian Accounting Standard (IND AS) deal with business combination:

- a) IND AS 202
b) IND AS 103
c) IND AS 109
d) IND AS 117

Ans) IND AS 103

76. Who shall identify the acquisition date:

- a) The acquiree
b) The acquirer
c) The valuer
d) The proposer

Ans) The acquirer

77. Which of the following are commonly cited reasons for M&A?

- a) Synergy
b) Market Power
c) Strategic realignment
d) All of the above

Ans) All of the above

78. Vertical mergers are those in which the participants are:

- a) In the same industry
b) In different industries

- c) In different phases of the value chain
d) None of the above

Ans) In different phases of the value chain

79. In the matter of Hindustan Lever Employee's Union (Supra) (1995) Supp (1) SCC 499, the Supreme Court dealt with the following issue of:

- a) What method should be adopted for arriving at a proper exchange ratio
b) Discussed the problem of valuation in the case of amalgamation of two companies
c) Both (a) and (b)
d) None of the above

Ans) Both (a) and (b)

80. In the matter of Hindustan Lever Employee's Union (Supra) (1995) Supp (1) SCC 499, the Supreme Court mentioned that how many factors will have to be taken into account in determining the final share exchange ratio:

- a) 5
b) 4
c) 8
d) 7

Ans) 8

The following information relates to Questions 81-84

Satish is an equity analyst with a regional investment bank. Satish reviews the growth prospects and quality of earnings for Phoenix Enterprises, one of the companies he follows. He has developed a stock valuation model for this firm based on its forecasted fundamentals. His revenue growth rate estimate is less than that implied by the market price. Phoenix's financial statements over the past five years show strong performance, with above average growth. Satish has decided to use a lower forecasted growth rate in his models, reflecting the effect of "regression to the mean" over time. He notes two reasons for his lower growth rate forecast:

Reason 1- Successful companies tend to draw more competition, putting their high profits under pressure.

Reason 2- Phoenix's intellectual property and franchise agreements will be weakening over time.

Satish meets with Harish, a newly hired associate in

MULTIPLE CHOICE QUESTIONS

his department. In their conversation, Harish states, “Security analysts forecast company performance using both top- down and bottom- up analysis.

I can think of three examples:

1. A restaurant chain forecasts its sales to be its market share times forecast industry sales.
2. An electric utility company forecasts that its sales will grow proportional to increases in GDP.
3. A retail furniture company forecasts next year’s sales by assuming that the sales in its newly built stores will have similar sales per square meter to that of its existing stores.”

Harish is reviewing some possible trades for three stocks in the health care industry based on a pairs- trading strategy. Harish’s evaluations are as follows:

- HG Health is 15% overvalued.
- Corgent Cell Sciences is 10% overvalued.
- Johnson Labs is 15% undervalued.

81. Based on Satish’s revenue growth rate estimate, the shares of Phoenix are most likely:

- a) undervalued.
- b) fairly valued.
- c) overvalued.
- d) need more information to answer

Ans) overvalued.

82. Which of the reasons given by Satish most likely justifies a reduction in Phoenix’s forecasted growth rate?

- a) Reason 1 only
- b) Reason 2 only
- c) Both Reason 1 and Reason 2
- d) need more information to answer

Ans) Both Reason 1 and Reason 2

83. Which of Harish’s examples of company performance forecasting best describes an example of bottom- up forecasting?

- a) Restaurant chain
- b) Electric utility company
- c) Retail furniture company
- d) none of the above

Ans) Retail furniture company

84. Based on his trading strategy, which of the following should Harish recommend?

- a) Short HG Health and Corgent Cell Sciences
- b) Buy Johnson Labs and Corgent Cell Sciences
- c) Buy Johnson Labs and short Corgent Cell Sciences
- d) none of the above

Ans) Buy Johnson Labs and short Corgent Cell Sciences

The following information relates to Questions 85-87
Manish, is analyzing the financials of Royal Enterprises. He intends to use a free cash flow to the firm (FCFF) model to value Royal’s common stock. In the 2016 financial statements and footnotes he has identified the following items:

- Item #1: Royal reported depreciation and software amortization of \$23 million in 2016.
- Item #2: The deferred tax liability increased by \$17 million in 2016.
- Item #3: Royal reported income of \$6 million in 2016 from the reversal of previous restructuring charges related to store closings in 2015.
- Item #4: Net income totaled \$173 million in 2016.
- Item #5: The net increase in noncash net working capital accounts was \$47 million in 2016.
- Item #6: Net capital spending totaled \$86 million in 2016.
- Item #7: Royal reported interest expense of \$19 million.

Manish estimated Royal’s marginal tax rate to be 35%. He also expects Royal to be profitable for the foreseeable future, so he does not expect the deferred tax liability to reverse. As the base-year projection for his FCFF valuation, Manish calculates FCFF for 2016 as:

$$\text{FCFF}_{2016} = \$173 + \$23 + \$6 + \$17 + [\$19(1 - 0.35)] - \$86 - \$47 = \$98.35 \text{ million}$$

85. In implementing the FCFF model to value Royal, did Manish correctly treat Items #1 and #2?

- a) Both items were treated correctly.
- b) One item was treated correctly and the other incorrectly.

MULTIPLE CHOICE QUESTIONS

- c) Neither item was treated correctly.
d) none of the above

Ans) Both items were treated correctly.

86. In implementing the FCFF model to value Royl, did Manish correctly treat Items #3 and #4?

- a) Both items were treated correctly.
b) One item was treated correctly and the other incorrectly.
c) Neither item was treated correctly.
d) none of the above

Ans) One item was treated correctly and the other incorrectly.

87. In implementing the FCFF model to value Royal, did Manish correctly treat Items #5 and #7?

- a) Both items were treated correctly.
B) One item was treated correctly and the other incorrectly.
c) Neither item was treated correctly.

- d) none of the above

Ans) Both items were treated correctly.

The following information relates to Questions 88-90

The Sanford Software Ltd. earned \$20 million before interest and taxes on revenues of \$60 million last year. Investment in fixed capital was \$12 million, and depreciation was \$8 million.

Working capital investment was \$3 million. Sanford expects earnings before interest and taxes

(EBIT), investment in fixed and working capital, depreciation, and sales to grow at 12% per year

for the next five years. After five years, the growth in sales, EBIT, and working capital investment will decline to a stable 4% per year, and investments in fixed capital and depreciation will offset each other. Sanford's tax rate is 40%. Suppose that the weighted average cost of capital (WACC) is 11% during the high growth stage and 8% during the stable stage. The calculation of FCFF in years 1 through 5 is shown in the following table:

Year	0	1	2	3	4	5
Sales	60.00	67.20	75.26	84.30	94.41	105.74
EBIT	20.00	22.40	25.09	28.10	31.47	35.25
EBIT (1 - T)	12.00	13.44	15.05	16.86	18.88	21.15
Dep	8.00	8.96	10.04	11.24	12.59	14.10
FCInv	12.00	13.44	15.05	16.86	18.88	21.15
WCIInv	3.00	3.36	3.76	4.21	4.72	5.29
FCFF	5.00	5.60	6.28	7.03	7.87	8.81

88. Free cash flow to the firm (FCFF) in Year 6 is closest to:

- a) \$14.14.
b) \$16.49.
c) \$18.26.
d) none of the above

Ans) \$16.49.

89. The terminal value in Year 5 is closest to:

- a) \$206.12.
b) \$220.25.
c) \$412.25.

- d) none of the above

Ans) \$412.25.

90. The value of the firm using a FCFF model is closest to:

- a) \$149.04.
b) \$265.17.
c) \$270.35
d) none of the above

Ans) \$270.35

Case No. 1
Cushman and Wakefield India Private Limited and Ors. Vs
Union of India and Ors.
(DEL HC)(2019)

IN THE HIGH COURT OF DELHI

Appellants: Cushman and Wakefield India Private
 Limited and Ors.

Vs.

Respondent: Union of India and Ors.

W.P.(C) 9883/2018, CM No. 38508/2018

Decided On: 31.01.2019

1. Brief Facts of the Case

The petitioners were engaged in the business of real estate consultancy services including provision of real estate valuation services. Being a subsidiary of a reputed body corporate they were universally recognized as a lauded leader in providing valuation service.

On October 18, 2017, Section 247 of the Companies Act, 2013 was notified along with the Companies (Registered Valuers and Valuation) Rules, 2017 (herein after referred to as Registered Valuers Rules, 2017), which provided that where a valuation is required to be made in respect of any property, stocks, shares, debentures, securities or goodwill or any other assets or net worth of a company or its liabilities under the provision of the Companies Act, 2013 it must be valued by a Registered Valuer.

Rule 3(2) of the Registered Valuers Rules, 2017 and in particular the rule 3(2)(a) of the said Rules explicitly provides that a company shall not be eligible to be a Registered Valuer, if it is a subsidiary, joint venture or associate of another company or body corporate.

Hence, it ousts the petitioner from being a Registered Valuer on the ground of it being a subsidiary of a body corporate.

Petition was filed to declare Rule 3(2) of the Companies (Registered Valuers and Valuation) Rules, 2017 as unconstitutional for violating Article 14, Article 19(1) (g) and Article 301 of the Constitution of India. The aforementioned rule 3(2) is reproduced as under:

“(2) No partnership entity or company shall be eligible to be a Registered Valuer if-

(a) it has been set up for objects other than for rendering professional or financial services, including valuation services and that in the case of a company, it is a subsidiary, joint venture or associate or another company or body corporate.”

2. Issues raised by the Petitioner

- i. The petitioner held that it has over the years been instrumental in setting benchmark for high standards, transparency and fairness with respect to valuation services in India. Further, the petitioner had invested time, money and experience in creating a pool of resources to carry out quality valuation services in India.
- ii. The subsidiaries or joint ventures or associates of foreign and Indian companies will continue to impart more professionalism, quality, high standards and transparency in valuation industry.
- iii. The advent of Section 247 of the Companies Act, 2013, has impaired the right of the petitioners to carry on trade and business, which is guaranteed by the Constitution of India and it imposes unreasonable restriction on the petitioner's right to carry on trade and business.
- iv. The petitioner is not only discriminated against individuals and partnership entities but also such companies which are not subsidiaries, joint ventures or associates of other companies/body corporates.

3. Submission of the Respondent

- i. Explanation to Rule 1(3) of the Companies (Registered Valuers and Valuation) Rules, 2017 clearly stipulates that the conduct of valuation under any other law other than the Companies Act, 2013 shall not be affected by the coming into the effect of the Rules in question.
- ii. Valuers had been adopting divergent methodologies resulting in vast differences in their conclusions. Due to divergent valuation outcomes and criteria, asset valuation in India was not considered credibly. Credible valuation of assets is critical to the efficient working of the financial market. Till the commencement of the Act and the Rules, there had not been any generally accepted and uniform standards in asset valuation system in India.
- iii. It is in order to regulate valuation profession under a regulatory regime and to guide and develop the same, the Parliament decided to bring in uniformly acceptable norms and generally accepted global valuation practices in India by incorporating a separate Chapter in the Companies Act, 2013 to set regulatory norms for various classes of asset valuation for the purposes of Companies Act, 2013.
- iv. Given the importance of valuation in fairness of business transactions, every effort has been made by the respondents to avoid situation of conflict of interest with an entity conducting the valuation. The

endeavour of the Rules is to introduce a class of professionals where the focus is on the professional skills of the individuals rather than a business venture.

- v. There is a rational nexus to the object of disqualifying all entities with interest in other professions or business/enterprises so that the integrity of the profession be maintained and there is no conflict of interest. Hence, the Rules do not suffer from the vices of excessive delegation.
- vi. If a Registered Valuer Company is a subsidiary, joint venture or associate of another company, the said entity may not be able to stand out as an independent professional body. Hence, if valuation is allowed to be undertaken as a business by such entities, independence and credibility cannot be ensured.

4. Decision

The objective and intention behind laying down the impugned Rule is clearly to introduce higher standards of professionalism in valuation industry, specifically in relation to valuations undertaken for the purpose of Companies Act, 2013 and IBC, 2016. The impugned Rule obviates the possibility of conflict of interest on account of divergent interests of constituent/associate entities which resultantly shall undermine the very process of valuation, being one of the most essential elements of the proceedings before NCLT.

The court also relied upon the judgment of the Supreme Court in the case of **Dr. Haniraj L. Chulani** and held that the exclusion of a subsidiary company, joint venture or associate of other company, for purpose of eligibility for registration as a Valuer is reasonable.

Case No. 2

Sanction to the Scheme of Amalgamation - Reliance Petroleum Ltd. with Reliance Industries Limited (BOMHC) (2009)

IN THE HIGH COURT OF BOMBAY

Sanction to the scheme of Amalgamation of

Reliance Petroleum Ltd. (Transferor Company) with Reliance Industries Limited (Transferee Company)

Company Petition No. 296 of 2009 and Company Application No. 288 of 2009

Decided On: 29.06.2009

1. Brief Facts of the Case

- The Petition was moved by Reliance-Industries Ltd.

to obtain sanction to the scheme of Amalgamation of Reliance Petroleum Ltd. (Transferor company) with Reliance Industries Limited (Transferee Company). The Transferor Company was 75 per cent subsidiary of the Transferee Company.

- The Board of Directors of both the Transferor as well as Transferee Company in their respective Board Meetings approved the proposed scheme, keeping in mind the exchange ratio suggested by two well-known valuation firms. The said swap ratio was approved by two other reputed consultants appointed to give their fairness report.
- The Scheme was duly approved by overwhelming majority of the Equity shareholders and unanimously by the secured and unsecured Creditors.
- The Petition was moved by the Transferee Company for sanction of the scheme of amalgamation under Section 391/394 of the Companies Act, 1956 (now substituted by the Companies Act, 2013) on 6-4-2009.
- After publication of notice, three objectors came forward to oppose the Scheme.
- The Court noted from the record that the Petitioner company has complied with all the statutory formalities and the Scheme was approved with overwhelming majority of the Equity Shareholders and unanimously by the Secured Creditors, the Regional Director and the Registrar of Companies have also consented for approving the proposed Scheme. Ordinarily, in this backdrop, the Court would readily accord approval to the proposed scheme keeping in mind, the well-established position restated in the case of **Mafatlal Industries Ltd., In re [1996] 87 Comp. Cas. 792 (Guj): [1995] 3 SCL 69 (Guj.)**
 - ▲ It is well established that the Court cannot undertake the exercise of scrutinising the scheme placed for its sanction with a view to find out whether a better scheme could have been adopted by the parties. In the same decision, the Apex Court has observed that such exercise remains only for the parties and is in the realm of commercial democracy permeating the activities of the concerned creditors and members of the company who in their best commercial and economic interest of majority agree to give green signal to such a compromise or arrangement.
- The objectors vehemently argued that the Court should decline to exercise its discretion according to approval to the proposed scheme.

2. Contentions & Allegations raised by the Objectors and Observations of the Ld. High Court for same.

i) Contention no. 1

Firstly, it was contended that the act of the Petitioner Company smacks of undue haste, as can be seen from the admitted dates. In that, the Board Meeting of the Transferee Company was held on 27-2-2009, in which decision to amalgamate two companies was taken. It was a Friday. It is intriguing that in a short interval of only two days during the weekend, Valuation Report was prepared on Monday 2-3-2009. Not only that, the fairness report of other two experts were obtained on the same day on 2-3-2009 and the Board of Directors proceeded to pass resolution at 10.15 a.m. on the same day on 2-3-2009. These circumstances clearly indicate that the matter was hastened by the Petitioner Company for reasons best known to them and it is a clear case of non-application of mind - not only of the Board of Directors, but also by the Valuers appointed by the Petitioner Company.

Observation of the Court

If, the meeting of the transferee company was held on 27-2-2009 and the report of the experts were made ready on 2-3-2009 coupled with the fact that the Board of Directors approved the proposed scheme on the same day on 2-3-2009, that, by itself does not mean that it is a case of non-application of mind. The fact that the entire process was completed in short spell, may at best indicate that the Experts gave their opinion on urgent basis. We cannot be oblivious to the developments in computer technology where the working of calculations can be programmed.

The report of the Valuer and the Fairness Report prepared by subsequent Valuers if read as a whole, takes into account all the relevant factors which ought to be kept in mind to form an opinion about the swap ratio.

The valuers have indicated the approach and the basis of the amalgamation. It has referred to four possible methods that could be borne in mind for arrival of the decision. Each method has been analysed in the Report. As far as **Net Asset Value Methodology** is concerned, it was mentioned that the Valuers have computed Net Asset Value of equity shares of both the companies. They have used the provisional consolidated balance sheet as at 31-12-2008 of RIL, and provisional balance sheet as at 31-12-2008 of RPL to make suitable adjustments as deemed appropriate. The valuers have adverted to the **Comparable Companies' Multiple (CCM) Method**. It is noted in the Report that the Valuers have used Enterprises Value (EV) to EBITDA valuation multiple of comparable listed companies for the purpose of the valuation analysis. They have then considered **Historical and Current Market Price Method** which is with reference to the equity shares

quoted on a Stock Exchange. in the present case shares of RIL and RPL are listed on BSE and NSE and there are regular transactions in their equity shares with reasonable volumes. Keeping that in mind, the volume weighted average share price of RIL over an appropriate period was considered for determining the value of RIL and RPL under the market price methodology. It is clearly mentioned that **Discounted Cash Flows (DCF)** Method was not applied in the facts of the present case.

Decision of the Court

The objectors had not substantiated in plea as to why the swap ratio determined by the Experts is wrong. No other Expert Report is relied upon by the Objectors to make good that argument. Nor any legal basis is pointed out to discard the said Valuation/Fairness Reports. If so, this Court cannot sit over the decision of the Board of Directors and of the class of stakeholders as Court of Appeal and scrutinise the criticism pressed into service by the Objectors disregarding the commercial wisdom of the overwhelming majority of the Equity Shareholders as a class.

It is not the case of the objector that necessary material indicated under Section 393 of the Companies Act, 1956 was not placed before the voters at the concerned meeting, as was required to be held in terms of Section 391 of the said Act and directions given by this Court.

ii) Contention no. 2

The next criticism was in relation to the contents of the Valuation Report. It was pointed out that the Valuers' Report if read clause by clause or as a whole clearly indicated that no details are forthcoming. Forecast was not given, nor the valuation of the shares of the Transferee Company and the basis on which the same is done could be discerned and the experts have given their opinion without analysing the relevant matter. Further, it was submitted that the report clearly admits the fact that due diligence had not been carried out and gives conflicting opinions, without disclosing any logic.

Observation of the Court

On reading the reports clause by clause and as a whole, no fault could be found with the ultimate opinion reached by the experts regarding share swap ratio, which is founded on tangible material and basis. The fact that the language of the report would give an impression that the Expert does not take the responsibility of the accuracy of the figures furnished to them by the Company or that they have not made any independent valuation of the assets and liabilities of the companies on their own, does not mean that the relevant factors for determination of swap ratio have not been considered by the experts. Obviously, the opinion

of the Experts is based on the information provided by the Company. There is nothing to show that the figures available in the Books of Account provided to the Experts were incorrect or otherwise. Thus, there is nothing in the said Reports to indicate that the consideration weighed with the Experts in arriving at the opinion is impermissible or unacceptable.

Decision of the Court

The Court relied upon the judgement of the Madras High Court in the case of Kamala Sugar Mills Ltd and of the Apex Court in the case of Miheer H. Mafatlal

v. Mafatlal Industries Ltd. and held that no one has doubted the integrity and honesty of the Valuers, who have given their Share Valuation Report or Fairness Report, as the case may be. Nor the objectors have been able to point out that the method adopted by the Valuers was impermissible or absurd. Therefore, there was no reason to discard the valuation of shares or the swap ratio determined by the Experts.

iii) Contention no. 3

A crucial fact that there are some proceedings pending regarding Gas Supply Agreement between the Petitioner Company and M/s. Reliance Natural Resources Ltd. had not been taken into account. For, the impact due to the outcome of the said proceedings qua the Petitioner Company had not been reckoned at all; though relevant. Indeed, the reply filed by the Petitioner Company records that the same has been duly considered, which fact, however, cannot be substantiated from the reports.

Observation and Decision of the Court

The Petitioner in the reply filed before the Court has stated that the facts relating to the said proceedings have been in the public domain. The valuers and advisors were aware of and took the same into account as is normally done in similar circumstances. Even if this statement appearing in the affidavit was to be ignored as it is not supported by the contents of the Reports it would make no difference. Inasmuch as, once the Valuation Report is accepted, the impact due to the outcome of the pending legal proceedings cannot be the basis to reject the scheme propounded by the Company, especially when the same has been approved by overwhelming majority of shareholders and unanimously by the secured and unsecured creditors.

iv) Contention no. 4

It was argued that 41 percent shares of the Petitioner Company had been acquired by group companies and the swap ratio determined was unfair to the Shareholders of the Petitioner Company. Counsel for the said objectors in the

alternative submitted that the Court may direct revaluation and invite fresh report from an Independent Valuer.

Observation and Decision of the Court

There is force in the submission made on behalf of the Petitioner that at best there is a grievance concerning mis-utilisation of funds of the group company, which cannot be reckoned while considering the issue of approval of the scheme submitted under Section 391 of the Act by the transferee-company.

v) Contention no. 5

It was argued that the two companies ought to prepare separate books of account which alone would facilitate the true valuation of the shares of the respective companies. Relying on the averments in the affidavit filed by the Regional Director that all intercompany transactions between the Transferor Company and Petitioner Company will be eliminated in the Books of Account, it was argued that even Regional Director had taken exception to grant of approval to the proposed scheme.

Observation and Decision of the Court

For, elimination of all transactions between the transferor and transferee- company would be the natural consequence of merger. In as much as, the transaction of transferor-company would naturally be adjusted after the merger and would not continue to remain in the books of account of the transferee- company. Even the argument of the objectors that separate accounts of the two companies ought to be prepared is an argument of desperation.

vi) Contention no. 6

It was also argued that there were certain proceedings and investigations pending against the Petitioner Company before the Regulatory Authority. The attempt of propounding the present scheme was to frustrate the said pending action. For all these reasons, it was argued that the Court may reject the present Petition. These are the broad arguments that were canvassed across the bar.

Observation and Decision of the Court

As far as the apprehension of the objectors that consequent to merger, the petitioner-company would be extricated from all pending proceedings and investigations pending before the Regulatory authority, the same is also misplaced. There is no such provision in the present Scheme. On the other hand, the pending proceedings and investigations will have to be continued and carried to its logical end irrespective of the approval to the present scheme of merger.

3) Key Learnings for Valuers from the above Case

i. The scope of intervention by the Company Judge while considering the scheme of amalgamation such as the present one, is no more *res integra*.

If the company has complied with all the statutory requirements and formalities and the Regional Director as well as Registrar of Companies including the concerned Stock Exchanges have given their approval/consent to the proposed scheme and the scheme not being prejudicial to any stakeholders of the petitioner-company or public, the Petition deserves to be allowed.

If all the requisite material envisaged under Section 391(2) of the Companies Act, 1956 have been placed before the court, then it is not possible for the Court to take a view that the scheme is prejudicial either to the shareholders or the public. It is not the case of the objector that necessary material indicated under Section 393 of the said Act was not placed before the voters at the concerned meeting, as was required to be held in terms of Section 391 of the said Act and directions given by this Court.

- ii. The Court will have no jurisdiction to sit over the commercial wisdom of the majority of the class of persons, who with their open eyes have given approval to the scheme. Merely because some other method of valuation could be resorted to and would be a bit favourable to the shareholders; that alone cannot militate against granting approval to the scheme propounded by the Company. The Court expounded that what is imperative is that the determination should not be contrary to law and/or unfair for the Shareholders of the Company which was being merged. The Court's obligation is to be satisfied that valuation was in accordance with law and it was carried out by an independent body.
- iii. Valuation though backed by research and analysis involves significant amount of judgment and hence, the Valuer needs to select the most appropriate approach or method very responsibly as there is no single approach or method that is best suited in every situation. In the given case too, the Valuer has used three different approaches in arriving at the swap ratio.
- iv. The valuation approaches and methods shall be selected in a manner which would maximize the use of relevant observable inputs and minimise the use of unobservable inputs.

In the given case shares of RIL and RPL were listed on BSE and NSE and there were regular transactions in their equity shares with reasonable volumes.

Keeping that in mind the Valuer considered the volume weighted average share price of RIL over an appropriate period for determining the value of RIL and RPL under the Market Price methodology and clearly mentioned that Discounted Cash Flow (DCF) Method was not applied in the facts of the present case.

- v. The valuation methodology adopted by the Valuer, which includes various methods under the Income, Market and Cost Approaches has to be disclosed. The rationale and appropriateness for the adoption of a particular valuation methodology or combination of methods in the context of the valuation of a business or asset should be clearly justified. The Report should disclose the rationale for exclusion of a valuation methodology.
- vi. In the case of **German Remedies Ltd.**, the Hon'ble Bombay High Court held that
"It is to be kept in mind that the exchange ratio is in the realm of commercial wisdom of well-informed equity shareholders. It is not for the court to sit in appeal over the valued judgment of the equity shareholders who are supposed to be commercial men...."
"The limited jurisdiction of the Court is only to see whether the ratio is so wrong or the error is so gross as would make the scheme unfair or unjust or oppressive to the majority of the members or any class of them "
- vii. Key material factors include inter alia the size or number of the corporate assets or shares, their materiality or significance, minority or majority holding and changes on account of the transaction, any impacts on controlling interest, diminution, or augmentation therein and marketability or lack thereof; prevailing market conditions and government policy in the specified industry should be described in the report. Here it will be relevant to mention that disclosure of projected financial information should be done taking into consideration aspects of confidentiality, regulatory requirements, purpose of valuation, and potential of misuse by users and competitors.

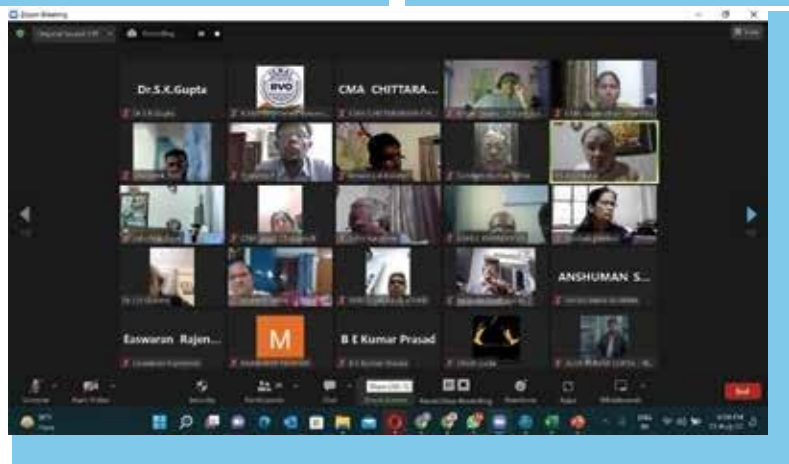
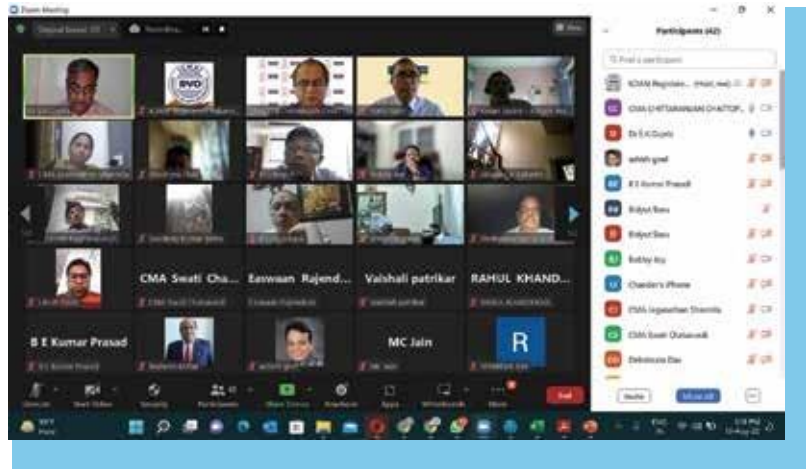
Celebration of Independence Day at Noida Office



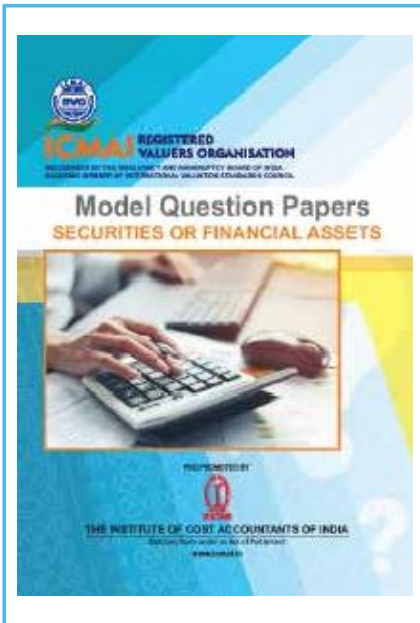
Curating Future Ready Registered Valuers On 29th July 2022 (Friday)



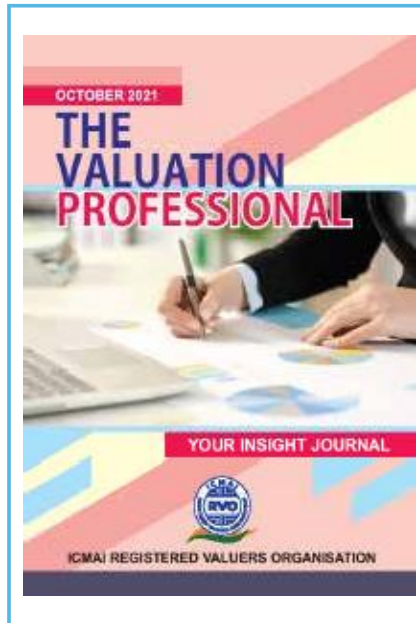
Workshop on Valuation on 13th August 2022, Saturday



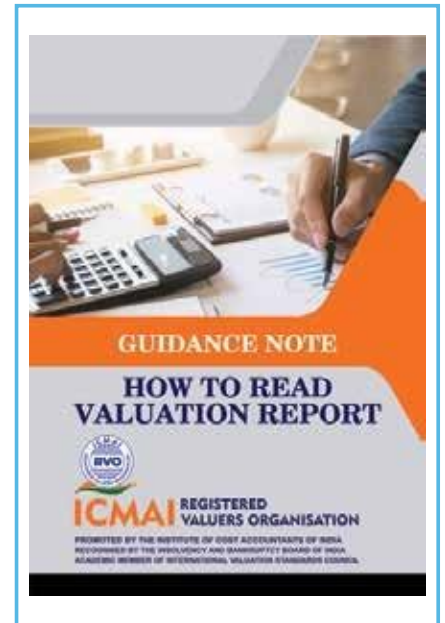
PUBLICATIONS



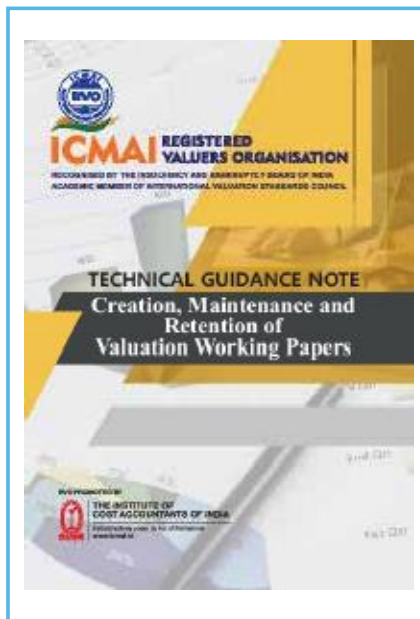
Model Question Papers
Securities or Financial Assets



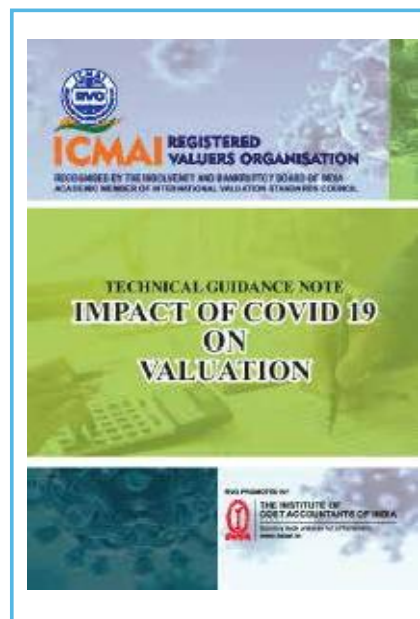
The Valuation Professional



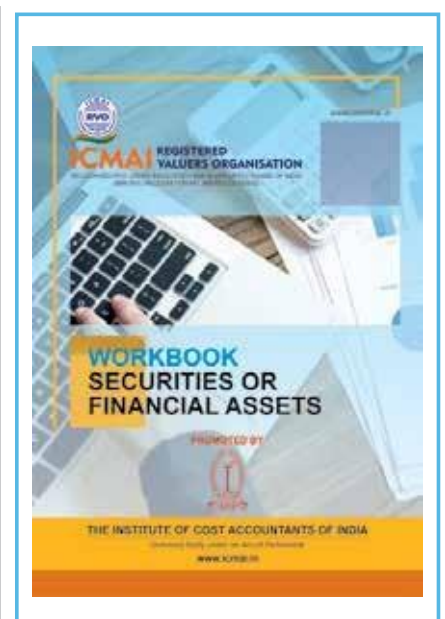
Guidance Note
How to Read Valuation Report



Technical Guidance Note
Creation Maintenance and
Retention of Valuation Working
Papers



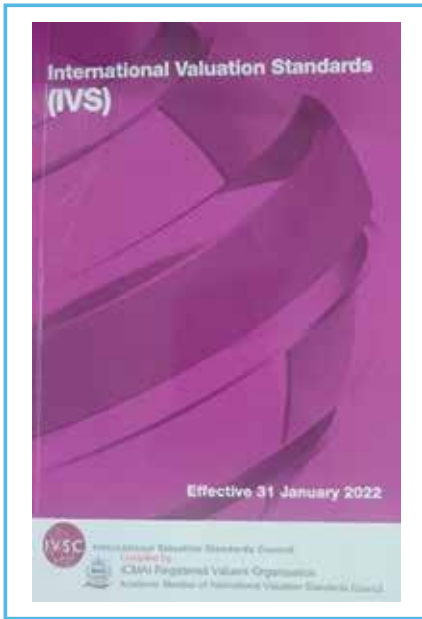
Technical Guidance Note
Impact of Covid 19
on Valuation



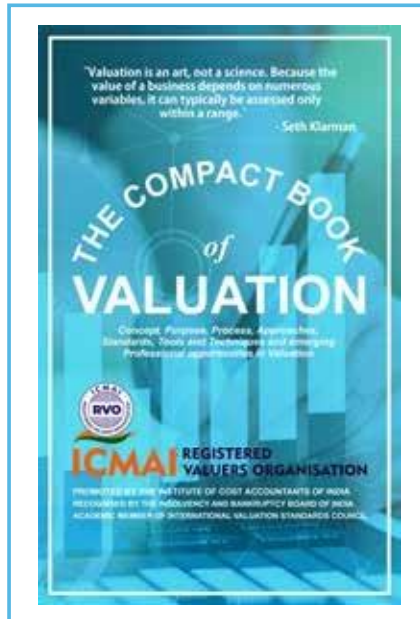
Work Book
Securities or Financial Assets

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

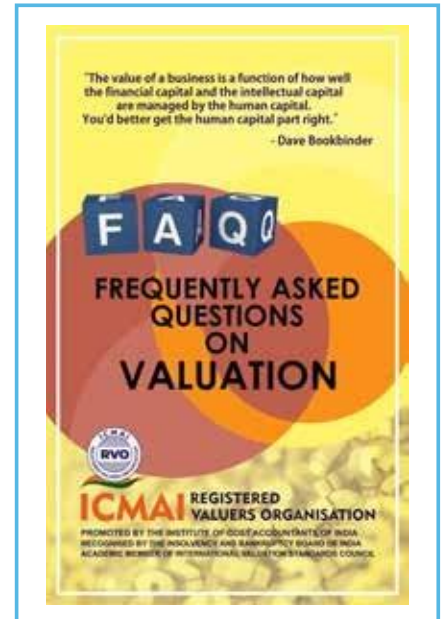
PUBLICATIONS



International Valuation Standards



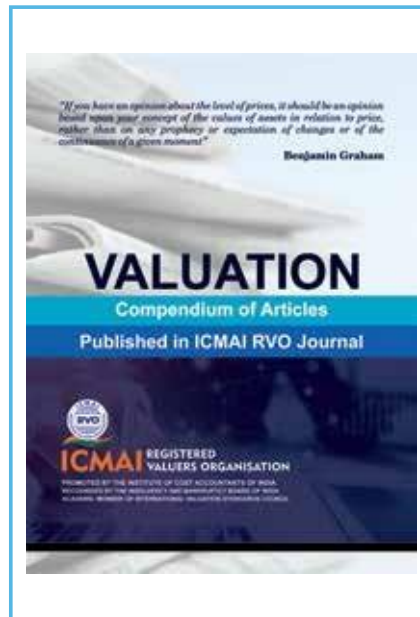
The Compact Book of Valuation



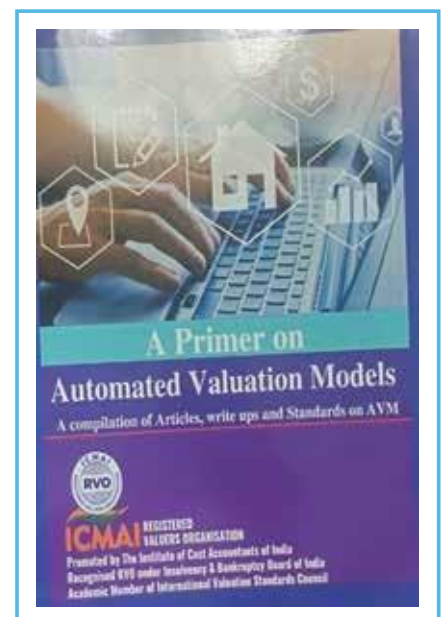
FAQ
Frequently Asked Questions on Valuation



Compendium of Perspective Papers



Compendium of Articles



Automated Valuation Models

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

Ambassadors - ICAI RVO

Sl. No.	Name of RV	E-mail	Place	Asset Class	CA/CMA/CS/MBA/ Engineer
1	AJEESH R S NAIR	ajeeshrsnair@gmail.com	THIRUVANANTHAPURAM , KERALA	Securities or Financial Assets	CMA
2	ALEKHA CHARAN ROUT	acrout.carv@gmail.com	PUNE , MAHARASHTRA	Securities or Financial Assets	MBA
3	AMISH SHASHIKANT MEHTA	mehta_amish@hotmail.com	MUMBAI , MAHARASHTRA	Securities or Financial Assets	CMA,CA
4	AMIT BHATIA	caamit02@hotmail.com	YAMUNANAGAR , HARYANA	Securities or Financial Assets	CA
5	AMIT BINDLISH	amitbindlish@gmail.com	GURUGRAM , HARYANA	Securities or Financial Assets	CMA
6	ANIL XAVIER	anilxavier.v@gmail.com	ERNAKULAM , KERALA	Securities or Financial Assets	CMA,CS
7	ANKIT GUPTA	gupta.ankit2002@gmail.com	MUKERIAN , PUNJAB	Securities or Financial Assets	CMA
8	ASUTOSH DEBATA	ashutosh_debata@rediffmail.com	BHUBANESWAR , ORISSA	Securities or Financial Assets	CMA
9	BABU LAL GURJAR	cmablgurjar@gmail.com	JAIPUR , RAJASTHAN	Securities or Financial Assets	CMA
10	DEBAYAN PATRA	patra.debayan@gmail.com	KOLKATA , WEST BENGAL	Securities or Financial Assets	CA
11	DEEPANKAR SHARMA	charteredengineerbaddi@gmail.com	SOLAN , HIMACHAL PRADESH	Plant and Machinery	Engineer
12	HARIKRISHNA R	harikrishnacvl@gmail.com	BANGALORE , KARNATAKA	Land and Building	Engineer
13	JATIN MEHRA	jatinmehraassociates@gmail.com	AMRITSAR , PUNJAB	Securities or Financial Assets	CA
14	KRIESHAN GROVER	ca.krieshan@gmail.com	RAJPURA , PUNJAB	Securities or Financial Assets	CMA,CA,CS
15	MAHESH BANSAL	emmbec.consulting@gmail.com	LUDHIANA , PUNJAB	Securities or Financial Assets	CA
16	MANEESH SRIVASTAVA	MANEESHCS1@gmail.com	NOIDA , UTTAR PRADESH	Securities or Financial Assets	CS
17	MANISHA SANJAY AGRAWAL	m_taiyal@yahoo.com	NAGPUR , MAHARASHTRA	Securities or Financial Assets	CMA
18	MOHAMED ABUBECKER SIDHICK M	masidhick.co@gmail.com	PALANI , TAMILNADU	Securities or Financial Assets	CMA,CA
19	KAPIL MAHESHWARI	maheshwarikapil@gmail.com	GHAZIABAD , UTTAR PRADESH	Securities or Financial Assets	MBA
20	KRISHNA KUMAR MITTAL	mittalkrishna53@gmail.com	AGRA , UTTAR PRADESH	Securities or Financial Assets	CA
21	NATARAJA NANJUNDAIAH	nnataraja491@gmail.com	BANGALORE , KARNATAKA	Securities or Financial Assets	CMA
22	NAVIN KHANDELWAL	navink25@yahoo.com	INDORE , MADHYA PRADESH	Securities or Financial Assets	CA
23	NITIN GOYAL	canitin94@gmail.com	RAIPUR , CHHATTISGARH	Securities or Financial Assets	CMA,CA,CS
24	PADMAKUMAR ACHUTHAN NAMBOOTHIRI	cma.padmakumar@gmail.com	KOTTAYAM , KERALA	Securities or Financial Assets	CMA
25	PRANAB KUMAR CHAKRABARTY	pranabchakrabartykpc@yahoo.com	HOWRAH , WEST BENGAL	Securities or Financial Assets	CMA

Ambassadors-ICMAI RVO

Sl. No.	Name of RV	E-mail	Place	Asset Class	CA/ CMA/ CS/ MBA/ Engineer
26	PRATIK KUMAR GUPTA	pratikcivil06@gmail.com	JABALPUR , MADHYA PRADESH	Land and Building	Engineer
27	PRIYANKA SATYNARAYAN MUNDRA	manihar8priyanka@gmail.com	SURAT , GUJARAT	Securities or Financial Assets	CMA,CA
28	RAMAKRISHNA KURRA	kurraramakrishna@gmail.com	GUNTUR , ANDHRA PRADESH	Securities or Financial Assets	CMA
29	SAURABH DASOT	skd.manu@gmail.com	KOTA , RAJASTHAN	Land and Building	Engineer
30	SHAILENDRA KUMAR PALIWAL	cmashailendra@hotmail.com	LUCKNOW , UTTAR PRADESH	Securities or Financial Assets	CMA
31	SHRIKANT RAJMOGALI IPPALPALLI	shrikant.cma@gmail.com	SOLAPUR , MAHARASHTRA	Securities or Financial Assets	CMA
32	SIDDHARTHA MUKHOPADHYAY	saptarshi2307@gmail.com	BILASPUR , CHHATTISGARH	Securities or Financial Assets	CMA
33	SONY AHUJA	cssonyahuja@gmail.com	COIMBATORE , TAMILNADU	Securities or Financial Assets	CS
34	SURESH KUMAR JAIN	sureshkumarjain.rv@gmail.com	VIJAYAWADA , ANDHRA PRADESH	Securities or Financial Assets	CA
35	SURESH KUMAR JOHAR	johar_128@yahoo.com	AHMEDABAD , GUJARAT	Securities or Financial Assets	CMA,CA,CS
36	VENKATA NAGA LAVANYA KANDALA	31069lavanya@icmail.in	HYDERABAD , TELANGANA	Securities or Financial Assets	CMA
37	VISHESH UNNI RAGHUNATHAN	visheshunni@gmail.com	CHENNAI , TAMILNADU	Securities or Financial Assets	CMA,CA
38	VISHNU UPADHYAY	vishnu.upadhyay@gmail.com	FARIDABAD , HARYANA	Securities or Financial Assets	CMA
39	YOGESH PRABHUDAS PATHAK	yogpath99@gmail.com	AHMEDABAD , GUJARAT	Land and Building	Engineer

OPPORTUNITIES FOR REGISTERED VALUERS

Companies Act, 2013

- ❖ 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 Regulations

- ❖ 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

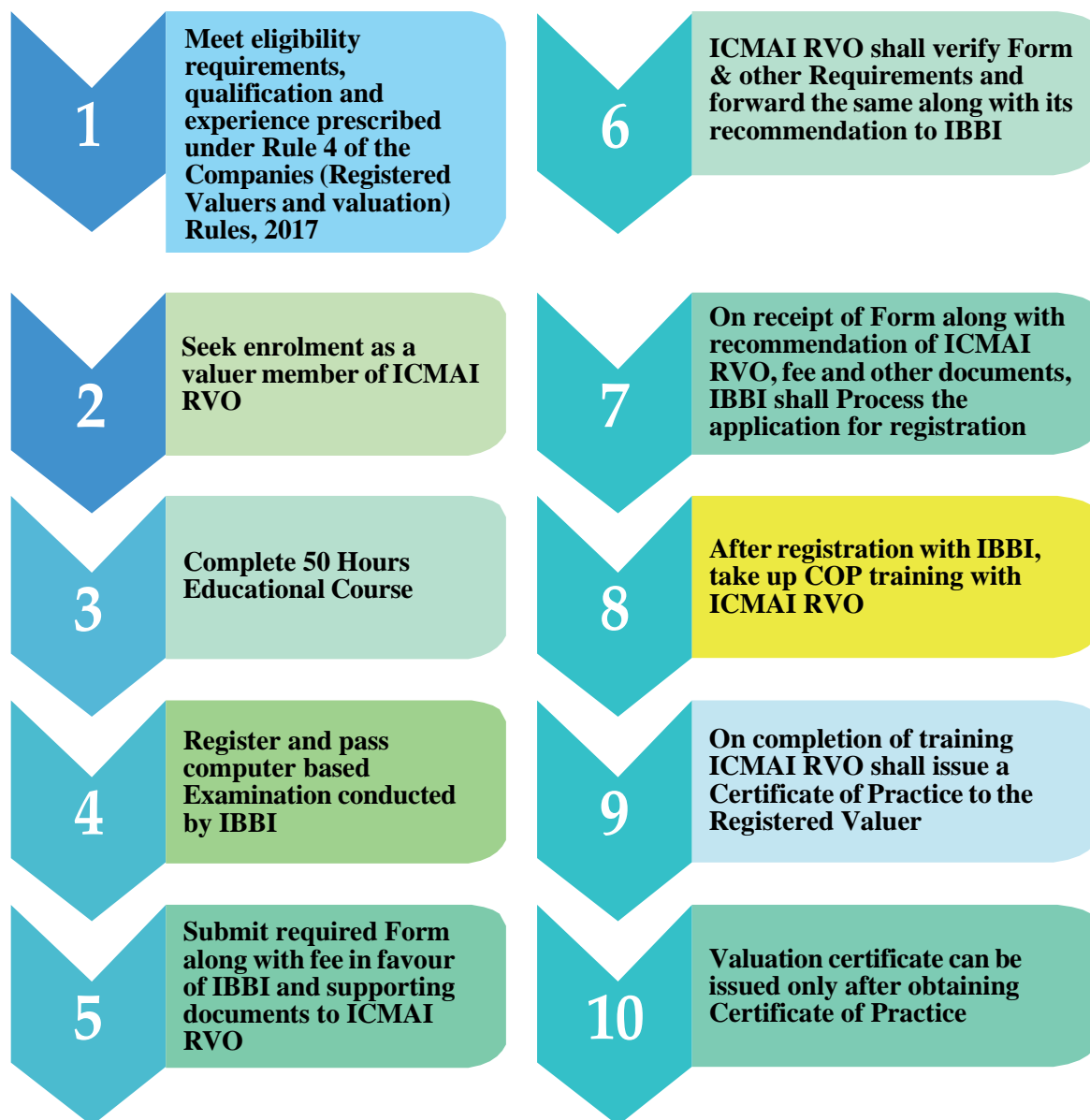
Insolvency and Bankruptcy Code 2016

- ❖ Determination of value of assets, realizable value, Fair value and liquidation value as the case may be

Income Tax Act, 1961

- ❖ 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



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;	(i) Five years
	(ii) Post Graduate on above courses.	(ii) Three years
Land and Building	(i) Graduate in Civil Engineering, Architecture, or Town Planning or equivalent;	(i) Five years
	(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).	(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).	Three years
	(ii) Post Graduate in Finance	
<p>Any other asset class along with corresponding qualifications and experience in accordance with rule 4 as may be specified by the Central Government.</p> <p><i>Note: The eligibility qualification means qualification obtained from a recognized Indian University or equivalent Institute whether in India or abroad.”.</i></p>		

PROCESS FOR IBBI EXAMINATION

- 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.1500 (One thousand five 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
Limited Insolvency Examination Division
Valuation Examinations Division**

No. EXAM-13016/1/2022-IBBI

Dated: 06th June 2022

CIRCULAR

To,
All Test Administrators
All Insolvency Professional Agencies
All Registered Valuer Organisations
All candidates registered in the examination system
(Through IBBI website)

Dear Sir/Madam

Subject: Improvement to the scheme of examinations - frequency of attempts in Limited Insolvency Examination/ Valuation Examinations

IBBI conducts the Limited Insolvency Examination (LIE) in pursuance to regulation 3 of the Insolvency and Bankruptcy Board of India (Insolvency Professionals) Regulations, 2016. The said Regulations *inter-alia* empowers IBBI to determine the syllabus, format and frequency of the examination, to be published at least three months before the examination.

2. IBBI, as the designated Authority, also conducts Valuation Examinations in terms of rule 5 of the Companies (Registered Valuers and Valuation) Rules, 2017(Valuation Rules). The said rule *inter-alia* empowers IBBI to determine the syllabus, format and frequency of the examination, to be published at least three months before the examination.

3. In order to bring in objectivity and improvements in the scheme of above examinations, it has been decided that frequency of attempt in an LIE or valuation examination, as the case may be, for every candidate, shall be determined after taking into account a cooling off period of 2-months between each consecutive attempts of such candidate, thereby making a total of 6 attempts in a period of 12 months.

4. You are, therefore, advised to implement/ follow the above requirements in LIE/ Valuation Examinations conducted/ attempted after expiry of the period of 3 months from the date of this circular.

5. This circular is being issued in exercise of the powers conferred under the provisions of section 196 of the Insolvency and Bankruptcy Code, 2016, Regulations made thereunder and the Valuation Rules.

Yours faithfully

Sd/-

Rajesh Tiwari

General Manager

Tel: 011 2346 2864

Email: rajesh.74@ibbi.gov.in



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.

Disclaimer:

The information contained in this document is intended for informational purposes only and does not constitute legal opinion, advice or any advertisement. This document is not intended to address the circumstances of any particular individual or corporate body. Readers should not act on the information provided herein without appropriate professional advice after a thorough examination of the facts and circumstances of a particular situation. There can be no assurance that the judicial/quasi-judicial authorities may not take a position contrary to the views mentioned herein.



ICMAI REGISTERED VALUERS ORGANISATION

RECOGNISED RVO UNDER INSOLVENCY AND BANKRUPTCY BOARD OF INDIA

PROMOTED BY: THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Registered Office

The Institute of Cost Accountants of India
4th Floor, CMA Bhawan 3, Institutional Area, Lodhi Road, New Delhi – 110003
www.rvoicmai.in

Contact us

Telephone No. 120 2975515, 120 2975516
Mobile No: 94114-69499 (Manager); 94579-54906 (Program Coordinator)
Email: manager@rvoicmai.in, coordinator.delhi@rvoicmai.in