INTERNATIONAL VALUATION STANDARDS COUNCIL

IVSC Invitation to Comment

Issued: 15th May 2017
Comments Due: 15th August 2017

IVS Agenda Consultation 2017

Notice to Recipients of This Invitation to Comment

The IVSC Standards Review Board invites feedback on all matters in this Invitation to Comment. We request comments by the 15th of August 2017 by one of the following methods:

- Emailing comments to aaronsohn@ivsc.org or kprall@ivsc.org, File Reference IVSC Agenda Consultation 2017

  or

- Respond using the IVSC Agenda Consultation 2017 Feedback form and send to aaronsohn@ivsc.org or kprall@ivsc.org.

All comments received are part of the IVSC's public file and are available at www.ivsc.org.

A copy of this Invitation to Comment is also available at www.ivsc.org.

Letter from Mark Zyla
Chairman, IVSC Standards Review Board

MARK ZYLA
CHAIRMAN, IVSC STANDARDS REVIEW BOARD

Dear All

Further to the publication of IVS 2017 the Standards Review Board together with the Business Valuation Board and the Tangible Assets Board have decided to publish an Agenda Consultation Paper to consult with stakeholders and other interested parties on future topics to be included in any revisions to the IVS.

The IVSC is planning to publish an agenda consultation on an annual basis as part of an open consultative standard setting process and future editions will be limited to the proposed revisions and additional chapters to be included in IVS. However, in this instance the Board felt that it was important to include introductory chapters providing an overview of the new board structure and standard setting process.

The consultation process for this IVS agenda consultation is now open. Accordingly, the Standards Review Board encourages participation within the 90 day consultation period ending the 15th of August 2017 from all individuals and organisations. The IVSC is committed to a fully open and collaborative consultation process. Thus, all comments received as part of the consultation process will be published on the IVSC website.

We look forward to your participation in the IVSC Agenda Consultation and incorporating the views and recommendations from practitioners, valuation professional organisations, academics, corporations and regulators, among others.

Kind Regards

Mark Zyla, Chair
Standards Review Board of the IVSC

INTERNATIONAL VALUATION STANDARDS COUNCIL

Contents

Introduction

Purpose of the Invitation to Comment

The purpose of this Invitation to Comment (ITC) is to solicit feedback about:

1. The valuation topics that the IVSC should address as part of its current agenda, and
2. Additional valuation topics that stakeholders feel should be prioritised or added to IVSC's agenda.

Stakeholders are invited to comment on all matters in this ITC. Questions related to each specific valuation topic are included at the end of each chapter. In addition to the questions included within each chapter, the IVSC welcomes general feedback from respondents which may include among the following:

1. Are the valuation topics described in this ITC areas for which there is potential for significant improvement as compared to IVS 2017?
2. What is the priority of addressing each topic?
3. What should be IVSC's next step to address each topic? For example, should IVSC issue a discussion paper, an exposure draft, or take some other action?
4. Are there other major valuation topics not described in this ITC that the IVSC should consider adding to its agenda?

Background

IVSC recently issued IVS 2017, which represented its efforts to harmonise and improve the entirety of IVS. In February 2017, the IVSC published IVS 2017 Bases of Conclusions, which represents the culmination of these existing efforts. As such, with the completion of these major projects, the IVSC has begun to consider other major projects and additional targeted improvements to IVS. On the basis of IVSC's "Gap Analysis" (as discussed in additional detail in the Gap Analysis section below) and other input from stakeholders submitted as part of the IVS 2017 consultation process, IVSC has identified the following major valuation topics to include in this ITC:

1. Non-Financial Liabilities
2. Discount Rates
3. Early Stage Valuation
4. Biological Assets
5. Extractive Industries
6. Inventory

In addition to the above topics explicitly covered in this ITC, IVSC intends to make targeted improvements to certain areas of IVS 2017, including:

1. Control Premium and Discount for Lack of Control (IVS 200 para 90)
2. Capital Structure Considerations (IVS 200 para 130)
3. Development Value

The Boards[1] determined that such updates do not warrant inclusion in this ITC as the scope of such projects is limited. Rather such projects will be included in future IVSC exposure drafts.

The Boards also identified certain topics for potential future projects. Such projects represent medium to longer terms goals of the IVSC, and have not been prioritised based on the Boards' view that such topics have more limited application or diversity in practice. Future projects for topics may include the issuance of exposure drafts, discussion papers, or guidance notes[2] and are discussed in additional detail in the Gap Analysis section below. These topics include:

1. Analysis of Commercial Lease Transactions
2. Specialised Public Service Assets
3. Sustainability and renewable energy
4. Automated valuation models and data analytics
5. Valuation of Personal Property including Art and Antiques
6. Recovery and Resolution
7. Price vs value
8. Distressed situations
9. Valuation in markets susceptible to change
10. Privatisation
11. Alternative Financing Arrangements

The Boards acknowledge that the above topics are unlikely to represent an exhaustive list of topics that are relevant to IVSC's stakeholders. As such, as part of this ITC, stakeholders are encouraged to provide feedback on other valuation issues not described in this ITC that IVSC should consider adding to its agenda.

[1] The Boards collectively refers to the Standards Review Board, the Business Valuation Board, and the Tangible Asset Board as discussed in more detail in the sections below.
[2] As discussed in more detail below, guidance notes will not be issued by the IVSC. Rather, the IVSC will coordinate such efforts through the Advisory Forum Working Group for Guidance Notes to be issued by respective VPOs.

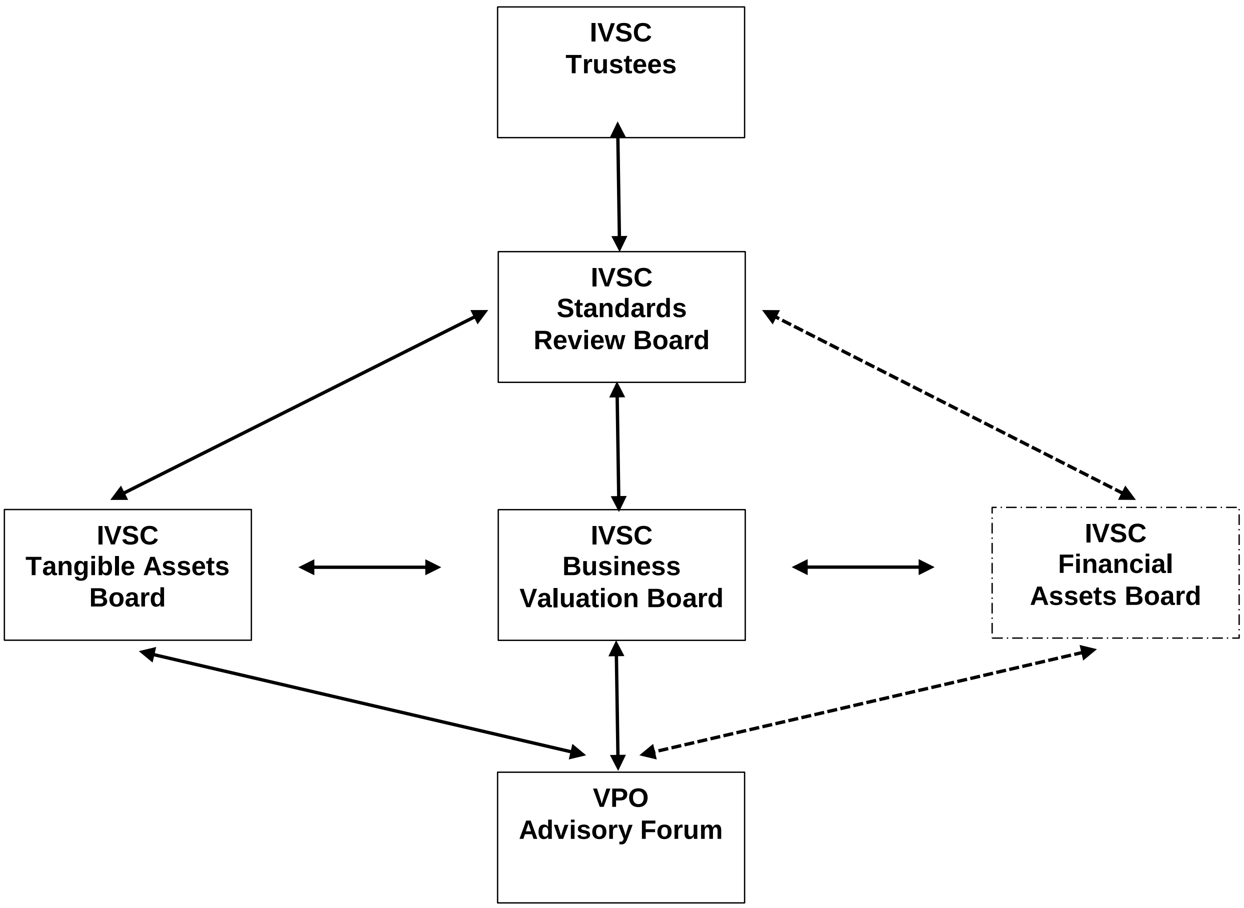
Structure of this ITC

This ITC includes a chapter for each of the six major valuation topics identified by the Boards. Each chapter includes:

1. A summary of the valuation topic including relevant context and history, discussion of stakeholder concerns related to the topic, and the Boards' rationale on why Standards related to the topic are necessary;
2. Potential standard setting alternatives including possible approaches the IVSC could take to develop standards related to the topic, and discussion of methodologies where relevant; and
3. Specific questions for the respondents to address to aid the IVSC in its next steps related to each topic.

IVSC Overview and Background

IVSC New Standard Setting Board Structure



IVSC Standards Review Board and IVSC Board Structure

The Standards Review Board is the overarching IVS Standards Board comprising a Chair and eight other members including the Chair of each subject matter expertise board (collectively, the “Boards”), which are as follows;

- IVSC Tangible Assets Board
- IVSC Business Valuation Board
- IVS Financial Assets Board (still being assessed with Financial Instruments market participants)

IVSC Standards Review Board Purpose

- Setting strategy through the issuance of Discussion Papers and market engagement
- Identification of new market issues
- Prioritisation of work for IVS
- Providing technical input to ensure the quality, level and appropriateness of all IVS Asset Standards Exposure Drafts and future IVS
- Monitoring the standard setting and consultation process
- Communicating with the Trustees and providing final approval for IVS
- Helping achieve stakeholder recognition of IVS
- Input on technical matters that transcend the scope of the individual boards such as the IVS General Standards
- Collaborating with the AFWG and National Standard Setters to agree implementation and effective dates for future IVS
- Advising AFWG on the need for future Guidance Notes to be issued by VPO's
- Helping achieve stakeholder recognition of IVS through presentations and market engagement
- Collaborate with the IASB and other standard setters on fair value measurements

IVSC Business Valuation Board Purpose

The Business Valuation Board covers businesses and intangible assets including intellectual property and comprises a Chair and six other members. The general purpose of the Board is as follows:

- Communicating with the Standards Review Board and agreeing the agenda for future Business Valuation Standards (BVS)
- Identification of new market issues
- Prioritisation of future Business Valuation Standards through market engagement
- Setting up and leading Business Valuation Standards working groups if required
- Working with IVSC staff to provide technical input to ensure the quality, level and appropriateness of all future Business Valuation Exposure Drafts
- Leading and monitoring a transparent and inclusive Business Valuation Exposure Draft consultation process
- Finalising IVS Business Valuation standards post consultation
- Providing market feedback through publication of Basis for Conclusions and post implementation review

- Collaborating with the Advisory Forum Working Group (AFWG) and National Standard Setters to agree implementation and effective dates for future IVS

IVSC Tangible Assets Board Structure and Purpose

The Tangible Assets Board covers all tangible assets including real estate, plant and machinery and comprises a Chair and seven other members. The general purpose of the Board is as follows;

- Communicating with the Standards Review Board and agreeing the agenda for future Tangible Assets Standards
- Prioritisation of future Tangible Assets Standards through market engagement
- Setting up and leading Tangible Assets Standards working groups if required
- Drafting and providing technical input to ensure the quality, level and appropriateness of all future Tangible Assets Exposure Drafts
- Leading and monitoring a transparent and inclusive Tangible Assets Exposure Draft consultation process
- Finalising IVS Tangible Assets standards post consultation
- Providing market feedback through publication of Basis for Conclusions and post implementation review
- Collaborating with the AFWG and National Standard Setters to agree implementation and effective dates for future IVS

IVSC Financial Assets Board Structure and Purpose

The IVSC is still in the process of engaging with stakeholders to:

- Ascertain the market issues in relation to Financial Asset Standards
- Agree the market need for International Financial Asset Standards that are more comprehensive than what is currently in IVS.

If this market need is established, then the Financial Assets Board is likely to cover all financial instruments including derivatives, and will comprise a Chair and up to six other members. The general purpose of the Board is as follows:

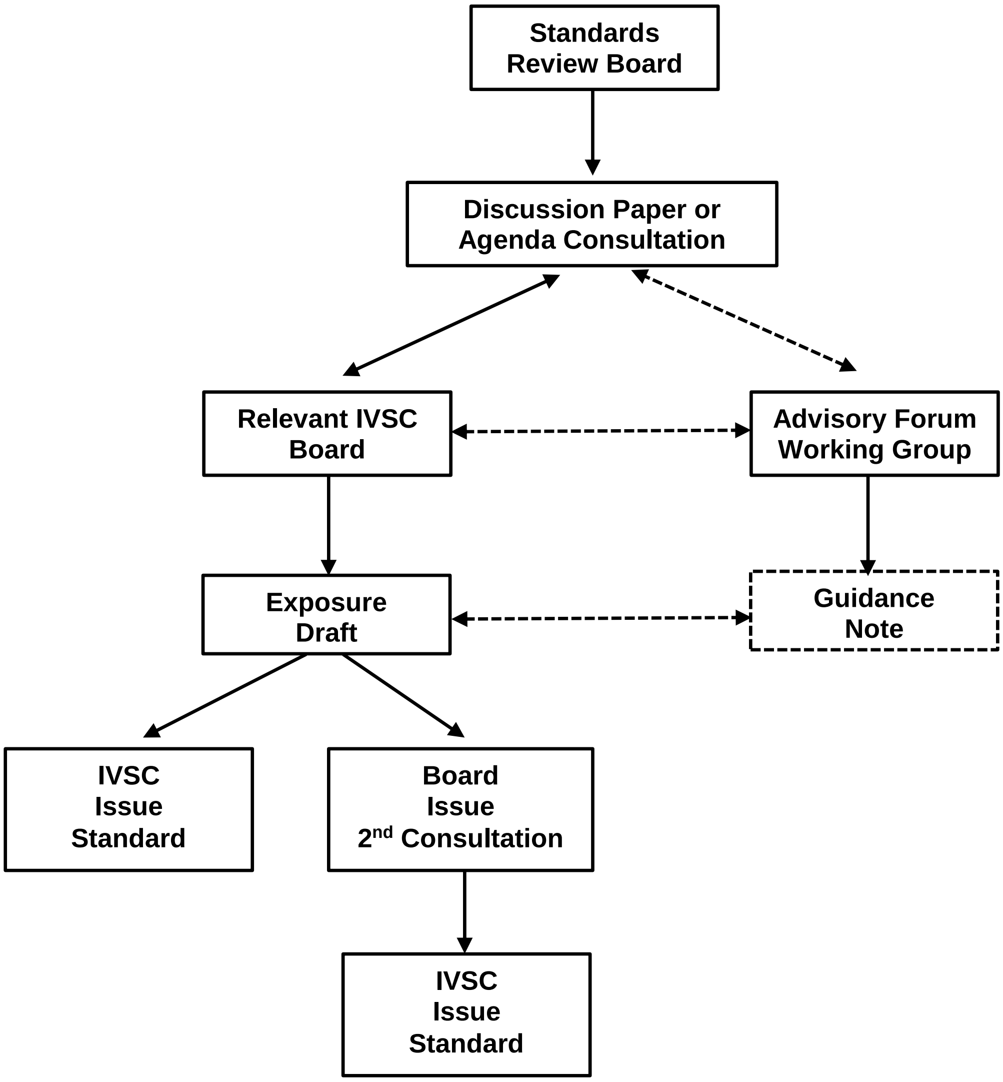
- Communicating with the Standards Review Board and agreeing the agenda for future Financial Assets Standards
- Prioritisation of future Financial Assets Standards through market engagement
- Setting up and leading Financial Assets Standards working groups if required
- Drafting and providing technical input to ensure the quality, level and appropriateness of all future Financial Assets Exposure Drafts

- Leading and monitoring a transparent and inclusive Financial Assets Exposure Draft consultation process
- Finalising IVS Financial Assets standards post consultation
- Providing market feedback through publication of Basis for Conclusions and post implementation review
- Collaborating with the AFWG and National Standard Setters to agree implementation and effective dates for future IVS

IVSC Standard Setting Process

The IVSC Standards Review Board have identified the following structure for creating IVS, which are shown in the flow chart below. The provisional hierarchy of the standard setting process is;

- Discussion Paper or Agenda Consultation
- Exposure Draft
- IVS Issued Standard
- Guidance Notes



Discussion Papers

Discussion Papers are preliminary exploratory papers issued by the Standards Review Board to assist in stakeholder engagement and to establish whether there is a market need for a valuation standard to be issued and to assist in the gap analysis and future prioritisation for IVS. Discussion Papers are issued by the IVSC Standards Review Board and are subject to a three-month consultation process to allow sufficient time for market engagement. Discussion Papers will either be drafted by the Boards or with the assistance of a technical writer/specialist, who has a particular expertise in the topic for discussion. Post consultation the Standards Review Board, and Business Valuation and Tangible Asset Boards (collectively the "Technical Boards"), will either determine if future guidance is required in this area or will advise the AFWG that there is a market need for additional guidance to be issued.

Exposure Drafts

Exposure Drafts are issued by the relevant IVSC Board and are subject to a three-month consultation process to allow sufficient time for market engagement. IVS General Standards (*IVS 100 series*) are the responsibility of the Standards Review Board, whereas IVS Asset Standards (*IVS 200, IVS 300, IVS 400 and IVS 500 series*) are the responsibility of the relevant IVS Technical Board, but are subject to IVS Standards Review Board approval. All the IVS Boards are empowered to set up Working Groups for specialisms and these working groups will comprise a mix of IVSC Board members and international topic related technical specialists. Post consultation the Exposure Draft will either be finalised, go into secondary consultation or be passed to the IVSC Advisory Forum Working Group as a potential topic for a Guidance Note (see below). This will largely depend on the responses received as part of the consultation process and partly depend on the degree of change to the original Exposure Draft post consultation.

Second Consultation Documents

Second Consultation Documents are issued by the relevant IVSC Board and are subject to a two-month consultation process to allow sufficient time for market engagement. The need for a secondary consultation will be established based on responses received through the consultation process and the degree of change needed prior to issuing the final standard. Secondary consultation papers will either be drafted by the Standards Review Board (*IVS 100 series*) or by the relevant Technical Board (*IVS 200, IVS 300, IVS 400 and IVS 500 series*).

International Valuation Standards

IVS are mandatory, except where explicitly noted, and the mandatory nature of the standard is shown by the use of '*must'*, '*should'* and '*may'* as defined in IVS 2017. The only acceptable '*Departures*' from IVS are specific legislative, regulatory or other authoritative requirements, which must be followed and differ from some of the requirements within IVS. There are two main types of IVS comprising IVS General Standards and IVS Asset Standards and the general details of these standards are shown below;

IVS General Standards (IVS 100 series)

These set forth requirements for the conduct of all valuation assignments including establishing the terms of a valuation engagement, bases of value, valuation approaches and methods, and reporting. They are designed to be applicable to valuations of all types of assets and for any valuation purpose.

IVS Asset Standards (IVS 200 to 500 series)

The Asset Standards include requirements related to specific types of assets. These requirements must be followed in conjunction with the General Standards when performing a valuation of a specific asset type. The Asset Standards include certain background information on the characteristics of each asset type that influence value and additional asset-specific requirements on common valuation approaches and methods used.

Guidance Notes

Guidance Notes are not issued by IVSC, but rather are issued by Valuation Professional Organisations (VPO's) and National Standard Setters, many of whom are members of the IVSC Advisory Form Working Group. Guidance Notes provide further information on the practical implementation of IVS and are set at a more detailed level and often incorporate local legislation and mandatory practices. Guidance Notes incorporate material and information on good practice appropriate for particular circumstances.

IVS Gap Analysis

Summary

Background
Further to discussions with the former Standards Board and other stakeholders, the technical writers have carried out a preliminary alphabetised gap analysis on IVS 2013 and initially agreed the following alphabetised gap analysis for further prioritisation for inclusion within future editions of the IVS;

- Analysis of Commercial Lease Transactions
- *Art and Antiques*
- *Commercial Forests*
- *Contracts*
- *Credit/Debit Valuation*
- *Adjustments*
- *Deferred Revenue*
- *Depreciated Replacement Cost Method of Valuation for Financial Reporting*
- *Derivative Valuations*
- *Discount Rates*
- *Discounts and Premia*
- *Early Stage/Development Stage Valuations*
- *Expected Cash Flow*
- *Extractive Industries*
- *Funding Valuation Adjustments*
- *Inspections and Material Considerations*
- *International/Multinational Valuations*
- Inventory
- Liabilities
- Preferred Stock
- Valuation of Residential Properties
- Valuations for Taxation purposes including taxes and tax flow-through Entities
- Recovery and Resolution
- Specialised Public Service Assets
- Stock Options
- Trade Related Property
- Valuation of Individual Trade-Related Properties
- Valuation in Markets Susceptible to Change: Certainty and Uncertainty
- Valuation of Personal Property including Art and Antiques.
- Valuation of Portfolios, Collections, and Groups of Properties/Assemblage Value

Scope

The IVSC Standards Review Board, IVSC Business Valuation Board and IVSC Tangible Assets Board held the first meeting of the newly constituted Boards between the 8th and 10th March. One of the main agenda items was to agree the scope and prioritisation of the IVS Gap Analysis. The Boards agree that the scope of the gap analysis should include all relevant IVSC specialisms comprising business valuation and intangible assets, financial instruments and tangible assets (i.e. land, personal property, plant and machinery and real estate).

Perceived Issues and Stakeholder Concerns

Further to discussion amongst stakeholders the Boards revised the previous gap analysis identifying and revising potential IVS topics either according to specialism or in some instances highlighting that these topics were relevant across specialisms. The Boards further divided these topics into Discussion papers, International Valuation Standards to be issued by the relevant IVSC Board and Guidance Notes to be issued by the member organisations of the IVSC Advisory Forum Working Group. The Boards also agreed the following categorisation and prioritisations for these topics;

Critical	*0 to 2 years*
Medium Term	*2 to 5 years*
Long Term	*5 years plus*

The revised suggested IVSC gap analysis comprising topics where the Boards perceived there is a potential market need for future discussion papers to further understand the issues or future standards or guidance is as follows:

Timeframe	Board	Standard	Discussion Paper	Guidance Note
Critical				
Automated Valuation Models and Data Analytics in Valuation	TA		X	
Biological Assets	TA	X		
Discount Rates	BV	X		
Early Stage/Development Stage Valuations	BV	X	X	
Extractive Industries	TA	X		
Implementation Guidance	BV/TA			X
Inventory	BV	X		
Non-Financial Liabilities	BV	X		
Price vs. Value	BV/TA		X	
Review of Existing Development Value	TA	X		
Complex Capital Structures	BV	X	X	
Medium Term				
Analysis of Commercial Lease Transactions including Incentives	TA			X
Alternative Financing Arrangements	BV/TA		X	
Discounts and Premiums	BV			X
Infrastructure	TA			X
Privitisation	BV/TA		X	
Recovery and Resolution	BV/TA	X		
Specialised Public Service Assets	TA			X
Sustainability focusing on the Valuation of Renewable Energy	TA		X	
Trade Related Property	BV/TA		X	
Valuation in Markets Susceptible to Change: Certainty and Uncertainty	BV/TA	X		
Long Term				
Sustainability (other than renewable energy)	BV/TA		X	
Valuation of Personal Property including Art, Antiques, and Trophy Assets	TA	X		

The Boards note that Critical items categorized as either Discussion Paper or Guidance Note are not specifically addressed in this ITC, but are intended to be addressed in separate future publications. Additionally, as noted above, Complex Capital Structures and Development Value are not included as the scope of such projects is limited.

Potential Standard Alternatives

An IVSC priority is to expand the depth of International Valuations Standards and ensure they are fit for purpose and meet market needs. In instances where there are existing national standards which may have international application, IVSC would endeavour to work with the appropriate organisations to incorporate these existing national standards within IVS.

Questions for Respondents

Question 1: Do you agree with the current categorisation and timings of the topics contained in the gap analysis and if not why?

Question 2: Are there any other topics which you believe should be included or deleted from the IVS gap analysis and if so why? (Please state the relevant specialism, categorisation and timing for any proposed additional topics).

Chapter 1 – Non-Financial Liabilities

Summary

Background

On February 1, 2013, the IVSC issued a discussion paper related to the valuation of liabilities, aimed at obtaining views on the scope of the project and the nature of the issues identified. IVSC received 16 responses from this initial consultation process. The previous Standards Board was in the process of updating IVS necessary to make them more applicable to liabilities prior to the publication of the IVSC Purpose, Structure and Strategy paper, where it was decided that the primary focus for the next two years was to revise and publish IVS 2017.

IVS' definition of Asset or Assets states that it includes assets, groups of assets, liabilities and groups of liabilities. Additionally, the IVS Framework also specifically states that the standards can be applied to the valuation of both assets and liabilities. Finally, IVS' definition of Market Value, among others, specifically applies to the valuation of both assets and liabilities. However, there is no definition of what constitutes a liability, little consideration of any characteristics or attributes that are specific to liabilities as opposed to assets, or standards specific to the valuation of liabilities. Additionally, preliminary investigations by the Boards have established a lack of guidance in the broader marketplace relating to the valuation of non-financial liabilities. Such factors, combined with the unique issues faced when valuing non-financial liabilities and significant divergence in practice, suggests that standards would be helpful toward improving consistency and quality in the marketplace.

The lack of standards related to non-financial liabilities represents a convergence of stakeholder feedback and the Boards' perceived need for new standards, and as such represents a critical priority topic for the IVSC. The Boards have therefore agreed that a dedicated project is required to determine appropriate valuation practice for non-financial liabilities and develop as necessary dedicated standards related to the valuation of non-financial liabilities.

Scope

The International Accounting Standards Board (IASB) framework states that a liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits. The Financial Accounting Standards Board (FASB) defines liabilities as the probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events. The focus of this ITC is specifically non-financial liabilities.

The Boards note that certain non-financial, or operating, liabilities have distinct characteristics or regulatory environments that would likely require separate agenda topics, and therefore the Boards have proposed that such liabilities be outside the scope of this ITC and any resulting standards. Such liabilities include: financial instruments, pension liabilities, and insurance liabilities. Additionally, the Boards propose that any initial liabilities standards not focus on financial liabilities such as notes payable, bonds payable, trust preferred securities, and deposit liabilities.

The Boards acknowledge that insurance companies price risk in the ordinary course of business as it's central to their operations. While the Boards propose excluding insurance specific liabilities from the scope, the Boards also note that methodologies and best practices utilised by the insurance industry may be informative to any future standards related to non-financial liabilities. As such, the Boards request any feedback from stakeholders on the applicability of methodologies and best practices utilised by the insurance industry, while also planning to conduct additional research in this area.

As a result of such considerations, the Boards propose that this topic focus on the following commonly occurring non-financial liabilities:

- Contractual liabilities to repair or restore an asset,
- Deferred revenue,
- Product warranties,
- Asset retirement obligations,
- Litigation contingencies,
- Guarantees,
- Indemnifications, and
- Contingent consideration.

Perceived Issues and Stakeholder Concerns

Both the Boards and IVS stakeholders have observed a number of issues related to the valuation of non-financial liabilities. These unique issues and concerns related to the valuation of liabilities include the following:

Lack of Observable Market Inputs:

1. The lack of observable market information to measure the fair value of a non-financial liability as liabilities are rarely traded in the marketplace. In many cases, an entity would extinguish a non-financial liability by settling the obligation directly with the counterparty (through performance) rather than by paying another entity to assume the existing obligation.
2. In the limited circumstances when an existing non-financial liability may legally be transferred to a new obligor, the transferee may not have the same non-performance risk as the transferor.
3. The need to consider a hypothetical transaction when a restriction exists that explicitly prevents such a transfer.

4. Whether the prices of certain non-financial liabilities traded as assets represent the fair value of that instrument for the issuer.

5. Certain Bases of Value require consideration of *market participant* assumptions (e.g., Fair Value for IFRS and US GAAP); however, given the lack of market transactions for non-financial liabilities there is often uncertainly with how to define market participants, as well as to determine how market participants' assumptions may vary from that of the company recording the non-financial liability.

Methodology:

1. Due to the unique and varying nature of non-financial liabilities, as well as a perceived propensity to reflect risk through adjustments to cash flows, the methods used in practice to value non-financial liabilities are widely divergent and in many cases unique to that liability. This stands in contrast to intangible assets for instance, for which IVS 210 outlines various common approaches that can in many instances be used interchangeably to value different intangible assets.

Discount Rates and Accounting for Risk:

1. When valuing a non-financial liability, the systematic and market risks that are associated with a corresponding asset may be of less relevance when valuing non-financial liabilities. The Boards note that whereas an increased risk to an investor in an asset is rewarded by an increase in the required return and a corresponding reduction in the asset value, an increase in the risk associated with a non-financial liability should, all else equal, increase the negative value of the liability, not decrease it.

2. Some non-financial liabilities exhibit a non-linear risk profile. For instance, the Boards note that certain non-financial liabilities may be subject to milestone events. Similarly, non-financial liability outcomes may also be path dependent, meaning a payment (cash flow) in one period may be dependent on the outcomes in other periods. For these reasons, the Boards notes that in practice adjustments for risks associated with a non-financial liability are often reflected in the cash flows through probability/scenario based methods, Monte Carlo simulations, and option pricing methods, rather than in the discount rate.

3. Furthermore, whereas the WACC is appropriate for valuing businesses, the Boards note that WACC has numerous flaws when applied to the valuation of non-financial liabilities, including:

    a. The WACC may not directly reflect the entity's credit risk

    b. WACC is applied to net cash flow; the performance metrics used in determining the non-financial liability value may not correlate to net cash flow and may have a differing risk profile;

    c. WACC does not reflect optionality risk (e.g., the non-linear payoff structure);

d. WACC does not account for unsystematic risks that are often associated with non-financial liabilities (e.g., milestone events);

e. WACC is applied to long term cash flow whereas non-financial liabilities are often short term in nature; and

f. WACC is a post-tax rate whereas the valuation of non-financial liabilities is typically pre-tax.

Potential Standard Alternatives

The IVS Framework identifies the three principal valuation approaches, the Market Approach, the Income Approach and the Cost Approach. Within each approach, there are various methods that have evolved and that are used to a greater or lesser extent for different types of assets and liabilities.

Approaches

When valuing non-financial liabilities, the Boards observe that both the Market Approach and the Cost Approach have limited application in practice. In respect to the Market Approach:

1. For many non-financial liabilities there is no market for identical or similar liabilities.
2. Similar to intangible assets, transactions involving non-financial liabilities frequently also include other assets such as in a business combination, and therefore do not provide price transparency related to specific liabilities included in the transfer.
3. The heterogeneous nature of non-financial liabilities adds to the difficultly in identifying market transactions for identical or similar assets.

Therefore, in these situations meaningful methods that are predicated on transaction data have no relevance. Furthermore, as financial instruments, pension liabilities, and insurance liabilities are excluded from this ITC, there are few liabilities for which an active market exists and for which pricing information is readily available. As such, the Boards would recommend little additional guidance as it relates to the Market Approach, but rather point to paras 20.2 and 20.3 of IVS 105 when determining whether to apply the Market Approach in the valuation of non-financial liabilities.

Under the Cost Approach, the value of non-financial liabilities is determined based on the cost to provide services or fulfil obligations. The Cost Approach is most commonly used to value assets (liabilities) when the cost incurred is determined to be highly correlated with the benefit to be received (sacrificed). As liabilities often are nonlinear in nature, the likely costs to fulfil are often of limited relevance (with the exception of certain liabilities such as deferred revenue and certain warranty obligations) when determining the value of a liability. Similar to the Market Approach, the Boards would recommend little additional guidance as it relates to the Cost Approach, but rather point to paras 60.2 and 60.3 of IVS 105 when determining whether to apply the Cost Approach in the valuation of non-financial liabilities.

Due to the unique and varying nature of liabilities, as well as the propensity to reflect risk through the adjustment of cash flows, the Income Approach methods used in practice to value non-financial liabilities are widely divergent and in many cases unique to that particular liability. This stands in contrast to intangible assets for instance, for which IVS 2017 Section 210 outlines various common approaches that can in many instances be used interchangeably with only slight modification to value different intangible assets. As such, the Boards see three discrete alternatives for future standards related to the valuation of non-financial liabilities.

<u>Alternative A – Broad Methodology Approach</u>

Consistent with IVS 210 Intangible Assets, future standards could outline broad methodologies under the Income Approach that could be applied to many non-financial liabilities. In particular, despite the aforementioned uniqueness to the valuation of certain non-financial liabilities, the Boards have observed that the majority of such methodologies reside within a continuum that bifurcates risk in varying degrees between the discount rate versus in the cash flows. More specifically, the Boards see three forms of the Discounted Cash Flow method that differ with respect to whether risk is defined in both the numerator and/or the denominator of the calculation.

1. The Bond Yield Method defines the numerator as a promised payment and the denominator is a percentage yield that adjusts for the time value of money (i.e. risk free rate), expected losses from non-payment (i.e., credit risk), and the risk premium that adjusts for rewarded (i.e., systematic) risk.
    a. Payments that are contractually fixed are often valued using a Bond Yield Method. The usual way to determine the appropriate yield is to reference market data for similar contracts. Because the payments are contractually defined, the key valuation input is the yield, which is often determined using matrix pricing.
2. The Required (expected) Rate of Return Method (a.k.a. Scenario Based Method) defines the numerator as the expected value of future payments (the probability-adjusted value of future payments, including an adjustment for non-payment), and the discount rate in the denominator includes adjustments for the time value of money and rewarded risk.
    a. This approach is commonly used when future payments are not contractually defined but rather vary depending upon future events. In this method cash flows are estimated as the expected value of the probability distribution (i.e. scenario based) or what is commonly referred to as the average outcome.
3. The risk-neutral method adjusts the numerator for the probability of non-payment and for rewarded risk, and the denominator adjusts for only the time value of money.
    a. The third method adjusts the numerator for all sources of risk and discounts the resulting values by the risk-free rate of interest, as is done

in option pricing. This method can be used when valuing both a fixed promised payment (e.g., Risk-Neutral Default Method) or when valuing various possible outcomes (e.g., Risk-Neutral Option Pricing Method). The Boards note that the Risk-Neutral Option Pricing Method is the preferred methodology to quantify additional risks associated with a liability's payoff structure, for example, liabilities that may have a non-linear payoff structure such as contingent consideration.

Alternative B – Liability Centric Methodology Approach

Given the various differences noted above between non-financial liabilities and intangible assets, the Boards recognise a possible need to identify commonly valued non-financial liabilities and detail specific considerations and methodologies that apply for each. However, the Boards acknowledge that such an approach would be divergent from current standards and move away from a more traditional principle based approach.

Alternative C – Hybrid Approach

The Boards also acknowledge the possibility of a hybrid approach in which broad methodologies are outlined similar to Alternative A, but recognise that the valuation of certain non-financial liabilities may not be appropriately valued through these methodologies. For instance, the valuation of deferred revenue within a business combination is often valued through consideration of fulfilment costs plus the addition of an appropriate fulfilment margin. This methodology is unique to the valuation of deferred revenue and is not easily addressed through the discussion of broad methodologies.

Questions for Respondents

Question 1.1: Is the valuation of non-financial liabilities a critical area that should be addressed by the IVSC? Please explain why.

Question 1.2: Should IVS provide a separate definition of liabilities? If yes, do you agree with the definitions provided by the FASB and IASB, please explain why?

Question 1.3: What non-financial liabilities do you observe in practice? For each liability, what valuation methods do you most commonly see used? Which of the non-financial liabilities you listed have the greatest diversity of valuation in practice?

Question 1.4: Do you agree with the decision to exclude financial liabilities from this ITC? If yes, do you think IVSC should add financial liabilities as a possible project(s) in the future?

Question 1.5: Do you think IVSC should add financial instruments, pension liabilities, and insurance liabilities as a possible project(s) in the future?

Question 1.6: Of the potential Standard Alternatives outlined above (A, B, C), which do you prefer and why?

Question 1.7: Are there methodologies and best practices utilised by the insurance industry that the Boards should consider for inclusion in future standards? If so, please discuss.

Chapter 2 – Discount Rates

Summary

Background

The assessment of an appropriate discount rate is a significant and highly subjective assumption often required to be made by Valuers. The Boards and Stakeholders have noted significant diversity in practice and the absence of sufficient documentation supporting the rationale for discount rate assumptions.

IVS 105 Valuation Approaches and Methods, paragraph 50.29 through paragraph 50.31, outlines various methods Valuers may use and certain items a Valuer should consider; however, stakeholder feedback has noted a relative lack of specificity within the current Standards. Such factors suggest that additional standards related to discount rate derivation would be helpful toward improving consistency and quality in the marketplace. The Boards have therefore agreed that a dedicated project is required to further explore diversity in practice for the derivation of discount rates and develop, as necessary, additional standards.

Scope

Stakeholder feedback has included multiple comments concerning more prescriptive guidance on the specific application of the methods outlined in IVS 105 paragraph 50.30 as well as guidance on when to apply each method. The Boards feel that the level of detail requested extends beyond the scope of these standards and would be challenging to write in a way that applies to all valuation purposes and markets globally. Second, the Boards believe there is sufficient technical guidance in the marketplace on the application of various discount rate methods. Finally, the Boards contend that such an approach would be divergent from current standards and move away from a principle-based approach to IVS. Rather the Boards feel that any additional standards should focus more broadly on a performance framework consistent with the *must, should, and may* criteria, targeted at the areas within discount rate derivation with the most diversity in practice.

As the Capital Asset Pricing Model (CAPM) is the most widely used model for the derivation of the cost of equity for business enterprise valuation, the below discussion first outlines the various inputs into the CAPM model and the observed diversity in practice for each input. Within the CAPM, the Boards believe that the derivation of country risk premiums and Company Specific Risk Premium (CSRP) have both the greatest diversity in practice and require the greatest degree of Valuer judgment.

Perceived Issues and Stakeholder Concerns

Both the Boards and stakeholders have observed a number of issues related to the derivation of discount rates using the CAPM. In particular, the Boards note that the CAPM is the most widely used methodology to derive the cost of equity and related weighted average cost of capital (WACC); however, there is significant diversity in practice for the calculation of each input to the cost of equity using the CAPM. Each input, and the observed practices are outlined below:

1. Risk Free Rate

   a. The Boards observe the term for sovereign debt rates used as the risk free benchmark ranges from 10 years to 30 years. There is diversity as it relates to jurisdictions in which there is either limited trading in sovereign debt, or there are other market distortions (hyper-inflation, capital controls etc.).

   b. Given the current low interest rates environment, the Boards note the occasional use of historical or average rates rather than current spot rates.

2. Equity Risk Premium (ERP)

   a. The Boards observe a multitude of sources and methodologies used to determine the ERP (historic v forward looking approaches, arithmetic verses geometric means, etc.).

   b. In certain cases the application of an ERP which is inconsistent with the chosen risk free rate benchmark (e.g., a mismatch of selected risk free rate and the risk free rate utilised to derive the selected ERP measure).

3. Beta

   a. The Boards observe a significant diversity in the selection of betas, with no clear consensus on what approach is most commonly used. For instance the Boards observe the use of:

      i. Both 5-year and 2-year betas.

      ii. Both monthly and weekly betas.

      iii. Both adjusted and raw betas.

      iv. Different approaches to calculating beta related to the indices used, adjustments for dividends, and currency.

4. Size Premium

   a. The Boards observe that size premiums are commonly applied, but there is significant diversity in the cited source.

   b. There is also varying practice in the reference point used to determine '*size*' including: the subject company, the target in a business combination context, the acquirer in a business combination context, and the comparable companies used to derive the WACC inputs.

5. Country Risk Premium

   a. The Boards believe that when valuing businesses in less developed capital markets, one must account for incremental political, economic, legal, liquidity, currency, and other risks. The Boards noted various methods and sources for the quantification of country risk premiums (CRP), including:

i. Sovereign-Spread Model,

ii. Damodaran Model,

iii. Country Risk Ratings Models (CRRM) such as the model published by Ibbotson, and

iv. Premiums based on subjective judgement.

b. Additionally, the Boards note diversity in practice in the following factors related to international cost of capital calculations:

i. The currency framework:

— The Boards note failure of some Valuers to understand the currency framework of the analysis (i.e., the currency of the cash flows and the currency in which the discount rate is denominated).

ii. Adjustments for relative country risk exposure (Lambda):

— The degree of a company's risk exposure to a country is dependent on 1) its sources of operating profit; and 2) the location of its operating assets. The Boards note diversity in practice in the application of Lambda, and methodology used to derive Lambda.

iii. Adjustments for interplay between country risk and industry:

— The Boards observe diversity in practice as to whether the Beta is applied to the CRP. The pivotal consideration is whether the spread in riskiness for various industries is also influenced by operation in the foreign country.

6. Company Specific Risk Premium (CSRP)

a. The Boards note significant diversity in practice and the absence of sufficient documentation in relation to the assessment of the CSRP.

b. The Boards observe consideration of some or all of the below factors in practice when deriving the CSRP:

i. Identification of the key components of the projected financial information (PFI)[3] and the risks of the underlying assumptions that have not been captured in the other components of the discount rate.

ii. Comparison of the PFI key components to:

— Historical results of the subject company,

[3] Key PFI components may include revenue and revenue growth rates, gross margins, EBITDA margins and EBITDA growth rates, EBIT margins and EBIT growth rates, effective tax rate, capital expenditures and asset turnover, and working capital.

- Historical and expected results for the broader industry,
- Financial analyst estimates for comparable companies, and
- Expected near term and long term growth rates of the country and/or region in which the company primarily operates.

iii. Comparison of prior forecasts to actual results to assess the accuracy and reliability of managements' estimates

iv. Reconciliation to other discount rate models including Internal Rate of Return and Weighted Average Return on Assets.

v. Consideration of qualitative factors

7. Capital Structure

a. The Boards observe varying practices including:

i. Use of the subject company's current or target capital structure,

ii. Use of comparable company average or median capital structure, and

iii. Use of leverage ratios commonly cited by lenders.

8. Cost of debt

a. The Boards observe varying practice including:

i. Use of high level rules of thumb or indices for corporate debt rates (e.g., Moody's Baa),

ii. Specific consideration of the credit rating and corresponding cost of debt for comparable companies,

iii. Use of the Company's current or expected cost of debt, and

iv. Use of various term lengths.

Potential Standard Alternatives

As noted above, the Boards feel that any additional standards should focus more broadly on a performance framework consistent with the *must, should, and may* criteria targeted at the derivation of the WACC, including use of the CAPM.

Alternative A – Performance Framework for CAPM

Rather than provide prescriptive guidance on the application of the CAPM, Alternative A would set out minimum thresholds for the extent of investigation, analysis, and documentation related to each input into the CAPM.

Alternative B – Performance Framework for Multiple Methods

Although the Boards observe the CAPM utilised in nearly all business enterprise free cash flow valuations, Alternative B would set forth a performance framework for multiple methods of deriving the discount rate, such as those listed in IVS 105 Valuation Approaches and Methods, paragraph 50.29.

Alternative C – Performance Framework and Reference to Prescriptive Guidance

As noted above, IVSC has historically been of the opinion that this level of detail is too in-depth for IVS and would be difficult to write in a way that applies to all valuation purposes and markets globally. However, certain stakeholders have recommended that IVS identify and refer to best practice technical guidance. In the Boards opinion, any such guidance would be combined with a performance framework outlined in Alternative A or Alternative B above.

Questions for Respondents

Question 2.1: Are additional standards related to the derivation of discount rates a critical area that should be addressed by the IVSC? Please explain why.

Question 2.2: Given the extensive use of the CAPM for derivation of discount rates used in business enterprise and asset valuations, do you agree with the Boards proposal to issue new standards to target diversity in practice related to discount rate derivation? Please explain why.

Question 2.3: Which inputs have you observed to have diversity in practice that would benefit from additional guidance in IVS and why?

Question 2.4: What other methods of deriving discount rates for business enterprise valuation do you commonly observe in practice? For each method, do you commonly observe diversity in practice in its application?

Question 2.5: Of the potential Standard Alternatives outlined above (A, B, C), which do you prefer and why?

Chapter 3 – Early Stage Company Valuation

Summary

Background

The Boards and stakeholders note significant diversity in practice for the valuation of early-stage companies. Both the BV Board and stakeholder feedback indicate that there are certain issues that arise in the valuation of early stage companies that are unique, and therefore may not be covered in current IVS. Additionally, preliminary investigations by the BV Board has established a lack of guidance specifically relating to the valuation of early stage companies. Such factors suggest that standards specific to the valuation of early-stage companies would be helpful toward improving consistency and quality in the marketplace. The Boards have therefore agreed that a dedicated project is required to determine appropriate valuation practice for early stage companies. Depending on feedback obtained from this ITC, the Boards may decide to develop an in depth discussion paper or move forward with an exposure draft related to the valuation of early-stage companies.

Additionally, we understand the AICPA has formed a Task Force, which is entitled *Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies*. The Task Force is in the process of drafting a practice guide which is expected to have significant guidance on the valuation of early stage companies within the context of PE/VC portfolio investment valuations. An exposure draft of the AICPA handbook is expected in the summer of 2017. IVS plans to monitor the AICPA process, and where applicable and appropriate, harmonise IVS with the AIPCA handbook as it relates to early-stage company valuation.

Scope

The most noteworthy guidance regarding the valuation of early stage companies comes from the AICPA Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation,* issued in 2013 (the “Valuation Guide”). The Valuation Guide lays out various stages of enterprise development including:

- Stage 1 – Enterprise has no product revenue to date and limited expense history and, typically, an incomplete management team with an idea, a plan, and possibly some initial product development.
- Stage 2 – Enterprise has no product revenue but substantive expense history because product development is under way, and business challenges are thought to be understood.
- Stage 3 – Enterprise has made significant progress in product development; key development milestones have been met (for example, hiring of a management team); and development is near completion (for example, CSRP and beta testing), but generally, there is no product revenue.

- Stage 4 – Enterprise has met additional key development milestones (for example, first customer orders or first revenue shipments) and has some product revenue, but it is still operating at a loss.
- Stage 5 – Enterprise has product revenue and has recently achieved breakthrough measures of financial success, such as operating profitability or break-even or positive cash flows.
- Stage 6 – Enterprise has an established financial history of profitable operations or generation of positive cash flows

The BV Board finds these definitions helpful for defining the scope of this ITC and intentions of any potential future standards. In general, the BV Board believes that early-stage companies can be defined as demonstrating any or all of the below factors:

- Yet to meet key technological or commercial milestones;
- No revenue or little revenue in comparison to market potential;
- Negative profitability and cash flows, or low in comparison to market potential; or
- Little certainty as to future revenue and profitability projections.

As such, for purposes of this ITC the BV Board believes that stages 1 through 5 as defined by the Valuation Guide are relevant.

Perceived Issues and Stakeholder Concerns

Both the BV Board and stakeholders have observed a number of issues related to the valuation of early-stage companies. These unique issues and concerns related to the valuation of early-stage companies include the following:

Limitation of Typical Valuation Methods:

The typical methods used for business enterprise valuation are often of little relevance and/or are difficult to reliably apply when valuing business in the early stages of their life cycles. Examples include:

1. Discounted Cash Flow Method – As noted above there is little certainty as to future revenue and profitability projections. Additionally, achievement of a normalised state at which to apply a perpetuity calculation may be far into the future, well beyond the period in which reliable forecasts could be derived.
2. Guideline Publicly-traded Comparable Method – Rarely are companies in these stages of development publically traded. As such, the identification of meaningful comparable companies is difficult or impossible.
3. Comparable Transactions Method – Although transaction data (including purchase price and multiples) for similar companies may exist, multiple factors limit their usefulness.

a. In many instances such companies are not profitable, thus forcing the Valuer to rely on revenue or book multiples.

b. Multiples often have little relevance to current performance of the target, but rather are more often a function of the acquirer's expectations of future performance which is not known to the Valuer.

c. Transaction prices are often a function of acquirer specific motivations, which can drive a large divergence between the fundamentals of the target and the price paid.

d. Given the relatively small size of the targets as compared to the buyers, such acquisitions are often below the buyer's financial disclosure requirements and therefore the terms are often not known to the public.

Accounting for Risk:

Typical methods for estimating a discount rate (e.g., CAPM) are of less relevance. For instance:

1. For many early-stage companies, economic or industry conditions are not directly relevant because many early-stage enterprises are years away from commercialisation of their particular product or service.

2. The risk profile of many early stage companies are largely impacted by certain discrete events, such as achievement of a technological milestone. As such, companies may display a non-linear risk profile. Similarly, when estimating PFI, outcomes may also be path dependent. For these reasons, adjustments for risks are sometimes reflected in the cash flows through probability/scenario based methods, rather than in the discount rate.

3. Given the frequent need for early stage companies to conduct financing rounds, the going concern premise inherent in traditional models may not be appropriate.

4. Research has been conducted to estimate the required rates of returns of investors at various development stages; however, such research provides broad ranges that are difficult to apply in practice.

Complex Capital Structures:

Many (if not most) venture capital-backed and private equity-backed enterprises are financed by a combination of different equity securities, each of which provides its holders with unique rights, privileges, and preferences. Given such complex capital structures often associated with early-stage companies, there are added complexities when trying to derive the value of a certain class of security. In practice, the Boards note the following commonly used methods:

1. Probability-weighted expected return method,

2. Option pricing method,

3. Real options analysis, and
4. Current value method.

While the BV Board notes significant guidance on the application of these methods, in practice the BV Board observes a multitude of special considerations and unique circumstances that result in varying applications in practice.

Calibration:

Given the relative frequency in which early stage companies conduct financing, as well as the limitations of more traditional methodologies noted above, calibration of methods and assumptions at the time of the transaction date to a subsequent valuation date is often used in the valuation of early-stage companies. Calibration is helpful in assessing the reasonableness of valuations across time. Additionally, a calibration methodology can eliminate the need to consider possible control and marketability adjustments in the valuation process. However, the Boards note various issues in practice including:

1. Appropriately accounting for differences between the pre-money and post-money value as of the transaction to calculate the implied financial metrics (e.g., implied multiples) that are the basis for the calibration. Additionally, whether any changes in the risk profile or financial prospects of the company resulted from its ability to obtain financing;
2. Determining for how long and under what circumstances is a transaction a reliable indication of fair value;
3. Difficulties in applying a calibration method when using the income approach;
4. Determining what factors should be considered in assessing the relevance of a transaction that took place prior to the measurement date;
5. How control and marketability features are embedded in the transaction; and
6. How to reconcile calibration to other methodologies.

Market Participant Framework:

When valuing early-stage companies, many PE/VC investors frequently use transaction-specific assumptions, which are not always transparent to market participants. However, many bases of value rely on a market participant framework. Such divergent perspectives often make it conceptually challenging to reconcile market participant assumptions and investment objectives. Some issues that arise include:

1. What would market participants take into account when pricing an asset,
2. How should investor specific exit strategies be incorporated in a value measurement,
3. How should illiquidity and control be priced, and
4. What observable transactions are typically available to market participants.

Potential Standard Alternatives

Alternative A – No Additional Standards Needed

The Boards acknowledge that although the valuation of early-stage companies often require consideration of unique issues, many of the principles under which such valuations are prepared are no different than mature operating businesses. As such, there is a perspective that the valuation of early-stage companies is already addressed by current IVS.

Alternative B – Discussion Paper

Given the relative lack of existing guidance, diversity of methodologies and special considerations, and lack of clear consensus related to best practice, the Boards note that a more in depth project may be needed to research best practices and potential standards alternatives. Based on feedback from this ITC, the Boards may commission a more in depth discussion paper to further explore this topic.

Alternative C – Performance Framework Addressing Problem Areas

The Boards note certain aspects of the valuation of early-stage companies are specifically addressed in current IVS. As such, the Boards note that additional standards could address certain problems areas related to the valuation of early-stage companies including: discount rate considerations, complex capital structure considerations, and calibration. Consistent with current IVS, any such standards should focus more broadly on a performance framework consistent with the must, should, and may criteria targeted at these specific areas.

Questions for Respondents

Question 3.1: Are additional standards for the valuation of early-stage companies a critical area that should be addressed by the IVSC? Please explain why.

Question 3.2: In which areas of the valuation of early-stage companies do you see the greatest diversity in practice? Are there additional areas of concern not noted above in this ITC? If so, please discuss.

Question 3.3: Of the potential Standard Alternatives outlined above (A, B, C), which do you prefer and why?

Chapter 4 – Biological Assets

Summary

Background

IVSC initially published an Exposure Draft on “The Valuation of Forests” in November 2012, as Forestry enterprises were increasingly attracting interest both due to the increasing demand for forest products as well as from investors looking for long term stable investments. The previous IVSC Standards Board was made aware of differences in the valuation approach being adopted in different countries including practices inconsistent with the requirements of the IVS and agreed a project to address this. Another consideration at this time was that an ever-increasing number of entities involved in forestry are required to account for their interest under International Accounting Standard (IAS) 41 Agriculture, which requires the “fair value” of the “biological asset”, represented by the tree crop, to be estimated.

IVSC received 18 responses from this initial consultation process, many of which were inconsistent both in terms of valuation approach and perceived level of due diligence required. The previous Standards Board was in the process of revising the Exposure Draft for a second consultation prior to the publication of the IVSC Purpose, Structure and Strategy paper, where it was decided that the primary focus for the next two years was to revise and publish IVS 2017.

Since the publication of IVS 2017, the Tangible Assets Board has reviewed the previous gap analysis and recognised that there was a significant market need for further guidance in this area.

Scope

The scope of this document would be the same as IAS 41, which subdivides Biological Assets into the following two categories;

- Biological Assets such as living plants and animal
- Agricultural produce such as the harvested product of the entity’s biological assets.

IAS 41 Agriculture with the exception of bearer plants provides guidance on the accounting for agricultural activity from initial recognition up to the point of harvest and requires the measurement of biological assets at fair value less costs to sell. IAS 41 uses a single treatment for both bearer biological assets and consumable biological assets. Bearer biological assets include grape vines, oil palms, dairy cows, etc. Consumable biological assets include wheat, trees for wood pulp in a plantation forest, beef cattle, etc.

From previous market feedback received, the Board felt that there was a need for international valuation standards to assist both professional valuers and users in understanding the application of those principles to the valuation of Biological Assets.

Furthermore, the Board was also alerted to some practices used to estimate the market value of Biological Assets that were inconsistent with the requirements of the IVS.

Perceived Issues and Stakeholder Concerns

Both the Boards and IVS stakeholders have observed a number of issues related to the valuation of Biological Assets. These unique issues and concerns related to the valuation of Biological Assets include the following:

Limitation of Typical Valuation Methods

Some valuations of Biological Assets are being presented in financial statements prepared for statutory purposes that show significant changes from those previously submitted solely due to the adopted valuation method changing. The Board considers that this is contrary to the IVSs, in particular the definition and conceptual framework for market value contained within IVS 104 Section 30, or where prepared under IAS 41, the requirements of IFRS 13 Fair Value Measurements. The method adopted should be that appropriate to achieve the required basis of value, it should not dictate or change the basis of value. This is further shown in IVS 105 10.4, which states that; "Where more than one approach and method is used, or even multiple methods within a single approach, the conclusion of value based on those multiple approaches and/or methods should be reasonable and the process of analysing and reconciling the differing values into a single conclusion, without averaging, should be described by the valuer in the report." Some of the issues in relation to the valuation of biological assets are shown below;

1. Fair Value: There is a conceptual Issue in allocating components of Fair Value. An ever increasing number of entities involved in forestry and other biological assets are required to account for their interest under IAS 41 Agriculture, which requires the "fair value" of the "biological asset", represented by the tree crop, to be estimated. Because the trees cannot exist without the land on which they are growing this can create some conceptual difficulties in allocating the value of the complete forest to its different components.

2. Variance in valuation: IAS 41 suggests the value of the "raw land" be deducted from the value of the combined asset, with the residual representing the value of the biological asset. However, it is argued by some that this is over simplistic as the value of "raw land" is not the same as the value of land supporting a biological asset and the evidence the price of bare land ready for planting is of limited relevance. Proponents of this view argue that the interdependence of the crop and the land mean that the land makes a significant contribution to the value of the crop, and therefore deducting only the value of the bare land from the value of the biological asset overstates the value of the biological asset.

3. Alternative Uses: A difficulty in the valuation of biological assets arises if the land is worth more for an alternative use. Some valuers think that a potential alternative use might suggest that the biological asset has a negative or zero value, if the biological asset generates income to the entity when it is harvested then the biological asset will have a positive value and should be recognised as an asset regardless of the value of the land. Some disagree and argue that if the

biological assets are preventing a more valuable alternative use then they can have no value.

4. Sampling and Measurement techniques

    a. Sampling: The four basic techniques for sampling data in a Biological Asset valuation are shown below;

        i. Random sample unstratified

        ii. Random sample stratified by biological asset cover type

        iii. Systematic sample unstratified

        iv. Systematic sample stratified

    However, these sample techniques are used inconsistently across markets with varying degrees of sampling precision and the inclusion of information on generally accepted sampling and measurement techniques would substantially reduce diversity of valuation practice.

Potential Standard Alternatives

Alternative A – No Additional Standards Needed

The Boards acknowledge that although the valuation of biological assets often require consideration of unique issues, many of the principles under which such valuations are prepared are no different than other assets. As such, there is a perspective that the valuation of biological assets is already addressed by current IVS.

Alternative B – Discussion Paper

Given the relative lack of existing guidance, diversity of methodologies and special considerations, and lack of clear consensus related to best practice, the Boards note that a more in depth project may be needed to research best practices and potential standards alternatives. The Board further notes that the Foresight Land Use Futures Report (2010) commented on the need or a better appreciation of value in land use governance: *"How we value land, and the services it provides, is at the heart of decisions on land use change. However, as priorities for land use and land management shift, these need to be reflected in how we govern land use today." The report calls for "A more sophisticated approach to valuing land … to be embedded into policy cycles and into the governance mechanisms, including future incentives and regulation" and sees the appropriate concept of value as "a broad one, encompassing the full range of ecosystem services, whether they are marketed."* Based on feedback from this invitation to comment, the Boards may commission a more in depth discussion paper to further explore this topic.

Alternative C – Performance Framework Addressing Problem Areas

The Boards note certain aspects of the valuation of biological assets are specifically addressed in current IVS. As such, the Boards note that additional standards could address certain problems areas related to biological asset valuations including: limitations of typical valuation methods and sampling and measurement techniques. Consistent with current IVS, any such standards should focus more broadly on a performance framework consistent with the must, should, and may criteria targeted at these specific areas.

Questions for Respondents – Biological Assets

Question 4.1: Should IVS provide a standard of Biological Assets? If yes, do you agree with the title of this standard and the distinction provided by the FASB and IASB between Biological Assets and Agricultural Produce, please explain why?

Question 4.2: Do you observe a significant variation in valuation practice for Biological Assets? For each type of Biological Asset, what methods do you most commonly see used? Which type of the Biological Asset you listed have the greatest diversity in practice?

Question 4.3: Do you observe a significant variation in valuation practice for Agricultural produce? For each type of Agricultural Produce, what methods do you most commonly see used? Which type of the Agricultural Produce you listed have the greatest diversity in practice?

Question 4.4 Is the valuation of Biological Assets critical area that should be addressed by the IVSC? Please explain why.

Question 4.5: Does the separation of value between the agricultural produce and its bearer plants cause issues within your market? Please explain why.

Question 4.6: Do you feel that there is conceptual Issue in allocating components of Fair Value? Please explain why together with your recommendations for resolving these issues.

Question 4.7: Do you think that potential alternative uses should be considered when valuing land as part of a Biological Asset valuation? Please explain why.

Question 4.8: Do you think that there are four basic sampling and measurement techniques for the valuation of Biological Assets? If not, please explain what sampling techniques have seen used in practice.

Question 4.9: Do you think that there are four basic sampling and measurement techniques for the valuation of Biological Assets? Do you think that the inclusion of information on generally accepted sampling and measurement techniques would substantially reduce diversity of valuation practice and if so, how?

Chapter 5 – Extractive Industries

Summary

Background

In 2005 the IVSC issued Guidance Note 14 The Valuation of Properties in the Extractive Industries. It formed part of a suite of Standards, Applications and Guidance Notes that collectively made up the International Valuation Standards (IVSs). In 2008 the IVSC reviewed all its existing standards and removed the Guidance Note on Extractive Industries so IVS could incorporate additional guidance that was in the process of being developed by IASB. In July 2012, the IVSC issued a Discussion Paper on Extractive Industries as IASB staff had indicated to the IVSC that it would be helpful if some globally accepted valuation standards and guidance for the sector were developed as it would help them in any future deliberations as to the extent to which fair values are a relevant and useful measure in financial statements. Furthermore, the IVSC had also been encouraged to develop improved standards in this area by securities regulators, who were concerned at the diversity of valuation information on extractive activities presented by companies under their jurisdiction.

IVSC received 18 responses from this initial consultation process, many of which were inconsistent both in terms of valuation approach and perceived level of due diligence required. The previous standards Board was in the process of revising the Exposure Draft for a second consultation prior to the publication of the IVSC Purpose, Structure and Strategy paper, where it was decided that the primary focus for the next two year was to revise and publish IVS 2017.

Since the publication of IVS 2017 the Tangible Assets Board has reviewed it's previous gap analysis and recognised that there was a significant market need for further guidance in this area in relation to both established production operations or exploration and undeveloped and development operations.

Scope

The scope of this document would be both mining operations and the extraction of oil and gas. In its former GN14, the IVSC combined guidance on both, with the only specific exclusion being the extraction of water from the earth. The IASB adopted a similar approach in creating a single standard, IFRS 6 Exploration for and Evaluation of Mineral Resources.

This approach is supported by the fact that there is no clear distinction between the extraction methods employed, with some metals being recovered by fluid dynamics and in situ recovery techniques that are identical to those used in secondary oil recovery.

Even though Geothermal energy production is also an extractive industry, it was felt that this should not be included, as there are some variations in valuation methodology between these industry subsectors.

Furthermore, the mining and oil and gas industries are individually among the largest in the world and the major entities specialise in one sector or the other. The skills required in each are highly specialised and therefore to be meaningful the IVS must be specific to this sector.

Perceived Issues and Stakeholder Concerns
Both the BV and TAB Boards and stakeholders have observed several issues related to the valuation of extractive industries. In the Extractive Industries the appropriateness of each approach or method will depend on a number of factors including:

- Stage of project (exploration, development and production),
- Ability to identify and classify extent of reserves or resources,
- Ability to project production rate,
- Ability to project capital expenditure,
- Ability to project operating costs,
- Ability to forecast future prices for minerals/petroleum products,
- Existence of public information regarding comparable projects,
- Stage of regulatory approval, and ability to forecast risk in progressing to extraction (existence of environmental impact statements, etc),
- Certainty regarding title, and other legal considerations (non-regulatory),
- Availability of financing,
- Availability and financing of infrastructure,
- Marketing of resource considerations.

Limitation of Typical Valuation Methods
The typical methods used for extractive industries valuation are often of little relevance and/or are difficult to reliably apply when valuing extractive industries.

1. Market Approach: The market-based approach is widely used within the Extractive Industries and is also often used in conjunction with the Cost approach for early stage exploration properties. Though widely used they are often flawed because companies are not truly comparable as risks and opportunities can be very different between compared projects/companies and though appropriate for the majority of sectors within Extractive Industries there are the following exceptions;
    a. industrial minerals
    b. those entirely contingent on off-take agreements
    c. highly-illiquid/unusual sectors where there is no effective market
2. Income Based Approach: This approach is mainly used for reserves undergoing development. The Income-based approach may be supported by a cost- or

market-based approach, but are generally considered to be of secondary importance as they may not consider all the available technical information. Ore Reserves of all categories are most commonly valued using the DCF method. Other methods within the Income-based approach may be appropriate but are less common.

3. Cost Based Approach: This approach is mainly used for reserves or resources subject to exploration. The cost-based approach is one that is project specific as it largely relates to sunk or future costs that may have no relationship with other projects and therefore it is not appropriate to make sunk/future-cost comparisons with other projects. For projects requiring additional risk adjustment to reflect future exploration or evaluation, the cost-based approach (such as expected value) may take primary importance. The use of the cost approach varies according to whether users a looking at sunk costs or future costs with sunk costs looking at multiples of exploration expenditure and replacement cost and forward looking costs including expected values and in some instances using the “Kilburn Method”.

Accounting for Risk:

Extractive industries valuations separately consider and evaluate market (systematic) risk and asset specific risk.

1. Discount Rate: In order to calculate the discount rate many factors are considered including sovereign risk, systematic risk, project risk and inflation with sources likely to be derived from management and third party estimates. The typical methods for estimating a discount rates are as follows:
    a. Management estimates
    b. Capital Asset Pricing Model
    c. Weighted Average Cost of Capital
2. Country risk factors: These factors are considered by use of one of the following methods:
    a. Capital Asset Pricing Model
    b. Fraser Institute’s Annual Survey of Mining Companies, or similar publications
    c. OECD country risk ratings
    d. Transparency International’s corruption index
    e. Political risk insurance

Inconsistency in definitions and principle

There is currently an inconsistency in definitions and principles between Codes for Mineral Asset Valuation such as CRIRSCO, CIMVal, IMVAL, JORC, SAMREC and VALMIN), which leads to inconsistency in valuation approaches and methodologies. The recognition of these differences and similarities will create further transparency and assist in the harmonisation of valuation processes.

Potential Standard Alternatives

Alternative A – No Additional Standards Needed

The Boards acknowledge that although the valuation of extractive industries often require consideration of unique issues, many of the principles under which such valuations are prepared are no different than other assets. As such, there is a perspective that the valuation of extractive industries is already addressed by current IVS.

Alternative B – Discussion Paper

Given the relative lack of existing guidance, diversity of methodologies and special considerations, and lack of clear consensus related to best practice, the Boards note that a more in depth project may be needed to research best practices and potential standards alternatives. The Board further notes that there already a number of organisations providing standards in this area such as the International Mineral Valuation Committee (IMVAL), the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) and VALMIN and furthermore there is the United Nations Framework Classification (UNFC), which is a numerical classification system, independent of language, that is designed for use in both the minerals and petroleum sectors. Based on feedback from this invitation to comment, the Boards may commission a more in depth discussion paper to further explore this topic.

Alternative C – Performance Framework Addressing Problem Areas

The Boards note certain aspects of the valuation of extractive industries are specifically addressed in current IVS. As such, the Boards note that additional standards could address certain problems areas related to extractive industry valuations including: limitation of typical valuation methods, accounting for risk and inconsistency in definitions and principles. Consistent with current IVS, any such standards should focus more broadly on a performance framework consistent with the must, should, and may criteria targeted at these specific areas.

Questions for Respondents – Extractive Industries

Question 5.1: Should IVSC produce combined standards and guidance for Extractive Industries or produce separate pronouncements for mining and for oil and gas? If you believe the latter, please indicate the reasons why you consider separate guidance is appropriate.

Question 5.2: Should the standards focus just on the valuation of reserves and resources or should it extend to other assets employed in the industry and to entire businesses in the sector? Please provide reasons for your answer.

Question 5.3: Which classification code or codes are most commonly used in your industry / sector? Which code do you normally use or rely on? Are you aware of differences across your / industry sector on the classification codes used? If so please indicate whether these differences cause problems in undertaking or understanding valuations.

Question 5.4: When valuing with a discounted cashflow do you use internal production forecasts developed by the entity's own geological and engineering specialists, external forecasts, or a combination of both and you adjust the production forecasts for risk by reserve category?

Question 5.5: Please indicate what methods you use or are familiar with that fall under the Cost Approach and that are used in valuing assets in the Extractive Industries. Please indicate in your experience how the cost of an equivalent asset is determined and please indicate the three most common adjustments that are made in your experience to reflect physical, functional or economic obsolescence, and what metrics are used to determine these adjustments?

Question 5.6: Please identify any intangible assets that are normally separately identified and valued; i. In transactions between entities in the Extractive Industries and ii. When accounting for the acquisition of a business in the Extractive Industries.

Question 5.7: In your experience what, if any, value is attributed to components of goodwill, eg an assembled skilled workforce, in corporate transactions in the Extractive Industries. Please briefly indicate any valuation techniques used to establish the value of goodwill in such circumstances.

Question 5.8: Please provide any examples of which you are aware of significant differences between the value of otherwise similar resources arising solely from different Governmental policies. Please indicate how "country risk" factors are reflected in the way in which you price or value extractive assets.

Chapter 6 – Inventory

Summary

Background

IVS 2017 has no standards specific to the valuation of inventory. Additionally, preliminary investigations by the Boards have concluded that there is limited technical guidance specifically relating to the valuation of inventory. These factors, combined with the unique methodologies to value inventory, indicates that standards would be helpful toward improving consistency and quality in the marketplace. The Boards have therefore agreed that a dedicated project is required to determine appropriate valuation practice for inventory and develop as necessary dedicated standards.

The most significant guidance regarding the valuation of inventory comes from Statement of Financial Accounting Standards No. 141 (SFAS 141), *Business Combinations,* issued in June 2001, and superseded by ASC 805, which provides guidance regarding measurement methods for specific assets and liabilities assumed in business combinations, including inventory. While SFAS 141 has been superseded, its guidance remains consistent with best practices applied today. Paragraph 37 of SFAS 141 provided general guidance for assigning purchase consideration to inventory assets acquired as follows:

1. Finished goods and merchandise at estimated selling prices less the sum of (a) costs of disposal and (b) a reasonable profit allowance for the acquiring entity
2. Work in process at estimated selling prices of finished goods less the sum of (a) costs to complete, (b) costs of disposal, and (c) a reasonable profit allowance for the acquiring entity based on profit for similar finished goods
3. Raw materials at current replacement costs

Additionally, we understand the AICPA has formed a Business Combinations Task Force, which is in the process of drafting a handbook with a chapter on inventory valuation. An exposure draft of the AICPA handbook is expected in the near future. IVS plans to monitor the AICPA process, and where applicable and appropriate, harmonise IVS with the AIPCA handbook as it relates to inventory valuation.

Scope

The Business Valuation Board notes that the most common context for the valuation of inventory is financial reporting related to a business combination. In this context, the definition of inventory includes raw materials, work-in-process (WIP) and finished goods. Although the SFAS 141 has been superseded, current practice remains consistent with its guidance. Specifically, two primary methods may be used to determine the value of inventory: the Replacement Cost Method and the Comparative Sales Method.

1. The Replacement Cost Method, commonly used to value raw materials, estimates the cost that the buyer would have incurred in acquiring the same amount and type of inventory in the marketplace. The components of cost under

this method may include purchasing, handling, transporting, and storing the inventory. The cost basis is then adjusted for other relevant factors, such as obsolescence and compensation to the seller for a return on expenditures.

2. The Comparative Sales Method, commonly used to value WIP and finished goods, values inventory at a base cost equivalent to the actual or expected selling price to customers in the ordinary course of business. The base cost is then adjusted for various factors, such as expenses incurred in disposition, profit commensurate with the degree of risk and amount of investment, and the time / cost required to dispose of the inventory.

Although there is general consensus that the Comparative Sales Method is the most appropriate methodology for the valuation of WIP and finished goods, stakeholder feedback and Business Valuation Board observations indicate divergence in practice in the application of the Comparative Sales Method. The Boards note little divergence in practice related to the application of the Replacement Cost Method, and also note that the methodology as addressed in IVS would also apply to inventory. As such, the focus of this ITC topic is the application of the Comparative Sales Method.

Perceived Issues and Stakeholder Concerns

Both the Boards and stakeholders have observed a number of issues related to the application of the Comparative Sales Method. As discussed above, the Comparative Sales Method is a "Top-down Approach" that begins by estimating the selling price and then subtracts costs of disposal, holding costs, and a profit allowance. When determining the value of WIP, it is also necessary to include costs to complete the WIP. Each input, and the observed practices are noted below:

1. Determining the selling price

    a. If data is available, selling price may be estimated using product-level selling price based on the historic sales data taking into account the age of inventory on hand and expected mark-downs typically achieved, or gross profit margin using product-level data applied to the net book value of finished goods.

    b. In practice the Boards observe that the selling price is often estimated by applying an appropriate gross profit margin to the net book value of finished goods. The projected margin for the period in which the inventory is expected to be sold is most often used to determine selling price.

    c. The Boards note that consideration of historical margins of the target, the acquirer's margins, and margins of the comparable companies may also be considered.

    d. The Boards also note that in some instances market data is available to directly determine the selling price at the product level.

2. Cost of disposal

   a. The Boards note that in practice estimating the costs of disposal is based on a line-by-line analysis of the subject company's income statement. This analysis bifurcates those costs incurred pre-valuation date to buy and manufacture the inventory versus those that are incurred post-valuation date to sell the finished goods inventory. The costs of disposal typically include:

      i. Direct selling costs such as outbound transportation (e.g., freight, shipping and handling), packaging, off-site storage costs, certain marketing costs, and sales commissions or bonuses incurred pre-valuation date.

      ii. A portion of the overhead operating expenses of the business related to the selling effort (such as G&A and corporate overhead).

   b. Costs of disposal should exclude any expenses that are intended to provide future economic benefit and are not necessary to generate the current period revenue (e.g., R&D expenses).

3. Costs to complete WIP

   a. The Boards note that estimating the cost to complete WIP relies on a similar line-by-line analysis as the costs of disposal analysis. In practice the costs can be bifurcated into the completed portion that relates to the buying and manufacturing effort for the WIP already incurred pre-valuation date versus those costs that relate to the remaining incremental effort to be incurred for the WIP post-valuation date to bring it to the finished state. The percentage complete may be analysed individually for each expense line item: COGS, operating expenses, and the associated overhead.

   b. For COGS, the efforts remaining to complete is only applicable to the portion which is not related to materials. Since raw materials are usually added at the beginning of the manufacturing process, WIP typically includes the full amount of material cost related to the final product and, in this case, no additional purchases of materials would be required to complete the WIP. However, this assumption should be validated for accuracy and any costs associated with purchases or components should be added to the cost to complete as needed.

   c. For COGS, the percentage of complete assumption is often difficult to determine in practice. Given that portions of a manufacturing entity's WIP may be at various stages of completion at a given time, the Boards have observed that an assumption is sometimes made that on average WIP is 50 percent complete.

4. Reasonable profit allowance

    a. The Boards note that in practice the total company profit margin on costs is typically used (i.e., EBIT or operating profit). However, in certain circumstances there may be rationale to assume different profit margins for the efforts done pre valuation date versus the efforts post valuation date. For instance, in some cases the risks assumed, value added, or intangibles contributed to the inventory pre-valuation date may not be the same as those contributed post-valuation date, thus potentially warranting different margin assumptions.

    b. In particular, it is relevant to consider whether intellectual property (IP) has been contributed to the inventory pre or post valuation date.

5. Holding/Opportunity Costs

    a. The Boards note that holding costs may need to be estimated in order to account for the opportunity cost associated with the time required to sell the inventory. The Boards note there is divergence in practice on the inclusion of holding costs.

6. Other issues

    a. Pre-sold inventory – There is diversity in practice about whether pre-sold inventory should be valued higher than unsold inventory.

        i. The rationale for valuing pre-sold inventory *higher* is that certain selling and marketing costs have already been incurred pre-valuation date and therefore it is not necessary to incur these costs post-valuation date.

        ii. The rationale for valuing pre-sold inventory the *same* as unsold inventory is that pre-sold inventory should be valued assuming the same selling cost as unsold inventory, but the benefit of having pre-sold inventory should be captured in the backlog intangible asset when valued in a business combination.

    b. Benefits from IP – In cases where there is IP, such as a valuable brand or technology, which contributes to a higher inventory selling price than selling prices for similar inventory without the IP. There is diversity in practice on whether a charge (i.e., royalty expense) should be included in the costs to dispose and complete calculations, so as not to attribute intangible value to the inventory. Specifically, there has been diversity in practice whether the benefit of such IP should lead to a higher inventory fair value or whether this benefit should be captured in the value of the IP. Additionally, consideration should be taken to consider at what point in the production process the IP is contributed, in order to determine if the benefits of the IP should go to the target or if a charge should be taken in the costs to complete or of disposal.

c. Reconciliation with bottoms-up approach – While less commonly used in practice, the bottom-up approach considers the costs incurred to date when valuing WIP and finished goods, and assigns returns based on those efforts. The value derived based on the Bottom-up Approach should be the same as the valued derived using the Top-down Approach.

Potential Standard Alternatives

As noted above, as compared to other topics in this ITC the Boards see more limited diversity in practice with regard to the valuation of inventory. As such, the practical alternatives for Standards are more easily defined.

Alternative A – Performance Framework for Comparative Sales Method

Rather than provide prescriptive guidance on the application of the Comparative Sales Method, Alternative A would set out minimum thresholds for the extent of investigation, analysis, and documentation related to the inputs into Comparative Sales Method. Consistent with IVS 210 Intangible Assets, future standards could outline the Comparative Sales Method, identify the keep considerations and inputs, and develop a performance framework around such.

Alternative B – Unknown

At this point the Boards have not identified additional alternatives, pending comments and suggestions from this ITC.

Questions for Respondents

Question 6.1: Should IVS provide separate standards for valuing inventory? Please explain why.

Question 6.2: What methods for the valuation of inventory do you most commonly see used in practice?

Question 6.3: Do you agree with the decision to focus on the application of the Comparative Sales Method? If not, please discuss the other methods that should be included in the performance framework.