

40 Arden Close
Bradley Stoke
BRISTOL
BS32 8AX

Mr M Bolton
Financial Conduct Authority
12 Endeavour Square
London
E20 1JN
by email

22 October 2018

Dear Mr Bolton

CP18/27 - Illiquid Assets and Open-Ended Funds

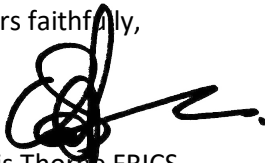
We thank you for your invitation to comment on the above proposals. A copy of our response to the Consultation Paper is attached.

Our specific interest concerns the proposal to require funds holding immovables to suspend trading if the Standing Independent Valuer advises that there is significant “valuation uncertainty” affecting the valuation of a significant part of the scheme property. We support this idea in principle but have some concerns about its practical application which are detailed in our response.

Valuology is a consultancy formed by two former directors of the International Valuation Standards Council (IVSC). The writer was chairman of the RICS Red Book Editorial Board at the time the first guidance on identifying and disclosing valuation uncertainty was introduced. This was in response to one of the recommendations in a 2002 report by Sir Bryan Carsberg that examined valuations undertaken for property funds in the UK. In the writer’s subsequent role as Technical Director of the IVSC he had responsibility for the project that resulted in the IVSC’s guidance on valuation uncertainty issued in 2013. This latter project involved active discussions with a wide range of organisations concerned with the inappropriate reliance that was placed on some valuations, which the FSB had identified as contributing to the 2007/08 Financial Crisis. He, therefore, has considerable experience of the concerns about valuation uncertainty in different markets, the responses developed by regulators and standard setters and how these are applied in practice by valuation professionals.

If you have any questions in respect of our response or feel that we can assist you in any way please do not hesitate to contact us.

Yours faithfully,



Chris Thorne FRICS
Director
Valuology Ltd
cthorne@valuology.org
+44 (0)7718807326

Response to CP18/27 - Illiquid Assets and Open-Ended Funds

Introduction

We support the overall objective of the FCA's proposals. Having a mechanism whereby funds are not forced into selling illiquid assets in the immediate aftermath of an unexpected event that causes unusual market volatility will help prevent the procyclical magnification of the event's impact. This has to be beneficial for investors looking for sustainable income or growth over the medium to long term. Providing investors in funds investing in inherently illiquid assets (FIAs) are notified at the time of investment that trading may be temporarily suspended when unusual market volatility is causing material valuation uncertainty we believe this to be perfectly equitable.

We do have some reservations with regard to the detail, in particular the extent of the Standing Independent Valuer's (SIV's) responsibility for triggering a suspension, having regard to the responsibilities of the fund manager under the AIFMD, and the need for better promulgation of guidance on the identification and reporting on material valuation uncertainty. We elaborate on these reservations in our response.

In Part One of this Response we answer a few of the questions that are relevant to our concerns. In Part Two we provide additional comments reflecting our experience of how valuation uncertainty is reported and the potential problems that could arise unless valuers and fund managers alike are clear about the nature of material valuation uncertainty and when it is appropriate to caveat a valuation because of it.

Part One – Responses to Selected Questions

In this section we have only responded to those questions which pertain to the responsibilities of the Standing Independent Valuer (SIV), the determination of “material valuation uncertainty” and the type of assets to which the proposals apply.

Q5: Do the proposed new rule and guidance adequately define existing and potential future assets that are inherently illiquid?

We agree with the style and content of the definition in Annex A of the proposed new instrument. Illiquidity is a relative concept between different asset types and also one that fluctuates according to market conditions. Accordingly, any definition of “inherently illiquid” will of necessity be conceptual rather than definitive and be illustrated by non-exclusive examples.

Q12: Do you agree that fund managers should be required to resume dealing in units in a fund, with the approval of the depositary, as soon as reasonably practicable after the material uncertainty assessment applies to less than 20% of the scheme property?

From a valuation perspective, yes. Any caveat that a valuation is subject to material valuation uncertainty should only be applied for a limited period until market prices have adjusted to the event that caused the uncertainty. The proposal to resume dealing when less than 20% of the portfolio is affected by an uncertainty statement is consistent with current guidance to valuers on the transitory nature of such caveats.

Q16: Do you think that the proposed new guidance, clarifying the mechanism for reducing the price of an immovable to allow it to be sold more quickly to meet redemption demand, is helpful?

No. Although we note the proposed new COLL 6.3.6 G (1) (7B) is only applicable if the fund has not had to suspend withdrawals because the SIV has applied a caveat of material valuation uncertainty to more than 20% of the fund’s assets, we have concerns about wording of subclause 7B(a) and we consider the proposed 7B(b) to be conceptually flawed and inoperable in practice.

The problem with 7B(a) is that only the fund manager will be aware of the financial profile of the fund, the volume of redemptions requests received or anticipated and the consequences of having insufficient cash to meet those redemptions. These are not matters for which the SIV has any responsibility, nor the appropriate professional expertise to be party to the decision to dispose of an asset at a specific price.

A further practical consideration is that because Article 19 of the AIFMD imposes unlimited liability on the external valuer, something which no valuation firm can insure against or accept for a fee that is economically acceptable for the fund, most AIFMs undertake the fund valuations in accordance with Art19 4(b). SIVs are appointed on terms which make it clear that they are not acting as “external valuer” as defined under the AIFMD but in an advisory capacity to the fund manager who remains responsible for the valuation function.

For the above reasons we consider it inappropriate that the fund manager and SIV should agree on the price that should be accepted in a rapid sale. Although it is desirable that the FM consults with the valuer, the decision to accept a price for a rapid sale should be the FM's alone.

We also consider it inappropriate to refer to "fair and reasonable value" in this context. Although a recent decision of the English Court of Appeal (*LBI EHF v Raiffeisen Bank*) held that "fair" in the context of value does not mean that any illiquidity or distress in the market must be disregarded, to many investors the adjectives "fair" and "reasonable" still carry the connotation that unusual circumstances will be disregarded. "Price" is also preferable to "value" as the latter can imply a price that may be achievable between any buyer and seller in the market rather than a figure that is reasonable for this specific seller to accept having regard to its particular circumstances.

We therefore recommend the following amendment to the proposed wording:

7B (a) Where the *authorised fund manager* decides that an immovable must be sold quickly to meet *redemption* requests as they fall due, it should consult ~~and agree~~ with the *standing independent valuer* ~~a fair and~~ on the price that it would be reasonable value to accept for the immovable to reflect a rapid sale, unless *COLL 7.2.-1R* applies.

Our suggested revisions also help distinguish the proposed clause from 7A which is concerned with changes in the "fair and reasonable value" caused by changes in the market generally. Our revised wording for 7B (a) emphasises that this option is concerned with establishing a price that it is reasonable to accept taking into account the circumstances of the seller. This may differ from the aforementioned fair and reasonable value for reasons unrelated to the value of the asset in question.

The proposed COLL 6.3.6 G (1) (7B) (b) is poorly conceived and we recommend it be deleted. There are a number of misconceptions apparent from the proposal:

-) The first misconception is that there is a direct relationship between the time available to complete a sale and the price that can be achieved. The internationally recognised definition of market value assumes only that there has been sufficient time before a sale for "proper marketing". The definition of "fair value" in IFRS 13 refers only to an "orderly sale". In either case the value is not directly linked to a defined period for the sale to take place. While an asset offered at less than its true value will sell more quickly, and less quickly (if at all) if it is overpriced, it is equally true that there can be considerable variation in the time between first exposure to the market and a sale being completed for assets that are fairly and equally priced. This is especially true for relatively illiquid assets such as real estate. This misconception is reflected in the suggestion that there can be a "sliding scale of discounts" that reflects the speed at which an immovable must be sold.
-) The second is the idea that a "methodology" or "guidelines" can be agreed in advance for arriving at a "valuation" when a rapid sale is required. The price which it would be reasonable to accept is not something that can be determined in advance of the circumstances giving rise to the need for a rapid sale. This is widely recognised and why the International Valuation Standards provide that unless the nature of and reason for the constraints on the seller are known the price obtainable on a forced sale cannot be realistically estimated. The RICS Red Book includes this provision and also indicates that a special assumption which simply refers to a time limit for disposal without stating the reasons for that limit would not pass the test of reasonableness.

-) Thirdly, while a valuer can provide input to assist the decision on whether to accept a price discounted from the most recent valuation or the “fair and reasonable value” ascertained in accordance with 7A, this is not a valuation. It is advice on the current market to assist a commercial decision by the fund manager to accept a price for an asset that may differ from its value under other circumstances. Whether that decision is reasonable depends upon the financial consequences of failing to sell within the time specified, which may depend on matters unconnected with the value of the asset.

For these reasons we recommend that the proposed COLL 6.3.6 G (1) (7B) (b) is deleted. We consider that (7A) and (7B) (a) are sufficient to cover the alternative scenarios where the proposed COLL 7.2- 1R (suspension of dealing) does not apply and there has been either a change in the market since the last regular valuation or the circumstances of the fund have changed. There is no purpose in trying to speculate on the discount that might be appropriate, or a method for calculating this, in advance of the details of an event that could justify a discount being known.

Q17: Do you agree that fund managers wanting to use this tool should be required to disclose their intention in the fund prospectus?

If the “tool” referred to are the options to sell at less than the most recent regular valuation provided by COLL 6.3.6 G (1) (7A) or the fair and reasonable value in (7B) (a), we agree. As indicated above we do not consider the proposed (7B) (b) to be either valid or deliverable.

Q23: Do you agree that that the risk warning would contribute to better understanding of the risks by investors in FIAs?

Yes. We believe that making investors aware that there may be circumstances when reliable valuation is impossible will help them better understand the nature of valuation and that while investing in immovable or other illiquid assets through a fund reduces the liquidity risk, it does not eliminate it.

PART TWO – OTHER COMMENTS

References to RICS Red Book.

The current version of the “Red Book” is the **RICS Valuation – Global Standards 2017**. A UK supplement to these standards is in the course of preparation and should be published before the end of 2018, replacing the current RICS Valuation – Professional Standards UK January 2014 (revised March 2015).

We note that in para 4.15 of the CP it indicates that references to the Red Book in sections 5.6.20 and 8.4.13 will be updated to refer to the latest version. While both these sections have been updated in the Annex to refer to the current UK version, this will be superseded by the new UK supplement before the end of the Consultation Paper. However, the consultation draft of the new UK supplement contained only some brief extracts from the COLL to provide guidance to RICS members on its valuation requirements, and this is unlikely to change in the final version. Including references to the UK Supplement in the COLL would be circular and serve little purpose.

The more appropriate document to reference throughout the COLL would be the RICS Valuation - Global Standards 2017 which contain all the mandatory requirements for RICS valuers relating to the conduct and reporting of valuations, including the provision to report material valuation uncertainty. For example, the reference to the commentary on valuation uncertainty that appears in footnote 5 (p17) of the CP is actually to VPS 3 2.2 (o) in the Global Standards. Also relevant to the reporting on material valuation uncertainty is the guidance in VPGA 10 *Matters that may give rise to material valuation uncertainty*, which again is part of the global standards.

Current reporting of Valuation Uncertainty in the UK

Valuology provides risk management advice to valuation firms, mostly RICS Registered property valuers. This includes reviewing their report templates, operating procedures and auditing completed valuation reports for compliance with professional standards. This gives us insight into how RICS requirements and guidance are being applied in practice.

We are seeing many examples of uncertainty caveats being included by default in reports. A significant proportion of UK valuers undoubtedly see the opportunity to include a statement that their valuation is subject to material uncertainty as providing added protection against being sued if the figure advised cannot be realised at a future date.

Although the current RICS guidance in VPGA 10 is clear that a standard uncertainty caveat is not acceptable, there is still a significant level of misunderstanding among the profession. A topical example concerns Brexit. It is fair to say that the 2016 referendum result was a shock to the market, and RICS quickly recommended that an uncertainty caveat be included in valuations. However, if members had followed the guidance properly they should have removed this caveat from valuation once sufficient post referendum transactions had taken place to measure the effect on prices. Too few did, and some are still including the caveat two years later, muddling uncertainty about what will happen in the future, which the market is reflecting, with uncertainty caused by having insufficient price data to produce a reliable valuation. Unfortunately, part of this problem does lie with RICS since an earlier iteration of what is now VPGA 10 did include uncertainty about future market direction (otherwise known as market risk) as a potential cause of valuation uncertainty. While now corrected this has not percolated the valuation community as thoroughly as might be hoped.

While we support the Proposals in the CP, there is a danger that it could be compromised in operation unless both valuers and the fund manager instructing them follow appropriate guidance on the nature of valuation uncertainty, when this is material and when it should be disclosed, otherwise investors could be unduly affected by suspensions in trading and lose confidence in FIAs.

Other Guidance on Valuation Uncertainty

One step the FCA could take to proactively discourage inappropriate valuation uncertainty disclosures is to extend the guidance referenced in 7.2-1 R (1)(a). The requirement for the SIV to follow the Red Book in terms of their acceptance, conduct and execution of valuations is important as this provides robust professional regulation of the process - see our earlier recommendations in relation to 5.6.20 and 8.4.13. However, 7.2-1 R (1) (a) could usefully include reference to the guidance issued by the IVSC on Valuation Uncertainty which is rather more comprehensive than that provided by RICS in VPGA 10.

The IVSC *TIP 4 Valuation Uncertainty* was the result of a four year project that was commenced following encouragement from the FSB in the wake of the financial crisis. This followed a report by the FSB's predecessor body (the FSF), in 2008 entitled "*Enhancing Market and Institutional Resilience*" which included the recommendation that finding ways to highlight uncertainty in valuations was important to avoid giving management and market participants a false impression of precision. The project involved issuing a preliminary discussion paper and two Exposure Drafts, and active liaison with other standard setters and regulators concerned at the lack of transparency around valuation uncertainty within their area of responsibility.

This cross-discipline liaison included the IASB and the FASB in the USA who were finalising their fair value accounting standards at the time. It also included banking regulators concerned with valuations to support capital adequacy such as the BCBS, EBA and UK FSA, along with IOSCO and industry groups such as AFME and AIMA. This led to a better understanding of the issues that concerned different actors in the financial markets and reduced inconsistencies between the definitions and approaches adopted to address uncertainty disclosure. For example, the EBA accepted following discussion with professional valuers and other interested groups that their proposed statistical approach to defining valuation uncertainty when measuring the prudential value of a financial institution's capital assets would be not possible when conditions giving rise to uncertainty arose.

We attach a copy of the IVSC Paper for reference. In summary it defines valuation uncertainty, distinguishes it from market risk, discusses how materiality should be determined and ways in which uncertainty should be disclosed. Although RICS adopts and includes the International Valuation Standards in the Red Book, they do not include any of the supporting guidance issued by the IVSC, including this paper. This means that it is not as well known among the valuation profession in the UK as it should be, but is easily obtainable if it is signposted in the COLL.

Valuology
23 October 2018

Technical Information Paper 4

Valuation Uncertainty



International Valuation Standards Council

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1 King Street, LONDON EC2V 8AU, United Kingdom, Email: ivsc@ivsc.org,
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Technical Information Papers

Technical Information Papers (TIPs) support the application of the requirements in other standards. A TIP will do one or more of the following:

- provide information on the characteristics of different types of asset that are relevant to value,
- provide information on appropriate valuation methods and their application,
- provide additional detail on matters identified in another standard,
- provide information to support the judgement required in reaching a valuation conclusion in different situations.

A TIP may provide guidance on approaches that may be suitable, but will not prescribe or mandate the use of a particular approach in any specific situation. The intent is to provide information to assist an experienced valuer in deciding which is the most appropriate course of action to take.

A TIP is not intended to provide training or instruction for readers unfamiliar with the subject and will be primarily focused on practical applications. A TIP is not a textbook or an academic discussion on its subject, and neither will it endorse or reference such texts.

The guidance in this paper presumes that the reader is familiar with the International Valuation Standards (IVSs). This TIP is of particular relevance to the application of the IVS *Framework* and IVS 103 *Reporting*.

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Technical Information Paper 4

Introduction and Scope

1. IVS 103 *Reporting* requires the valuation report to disclose a number of matters, including any material uncertainty. This TIP provides guidance on the nature and identification of material *valuation uncertainty* in the context of this requirement and appropriate ways in which it can be disclosed. The discussion on how materiality may be determined is confined to matters within the scope of this TIP and has no relevance to establishing materiality in other contexts.
2. The discussion in this TIP is confined to *valuation uncertainty* arising in valuations on the basis of *market value* as defined in the IVS *Framework*, or similar market-based bases of value such as *Fair Value* as defined in IFRS 13. The objective of this TIP is to provide guidance on factors that may have given rise to material *valuation uncertainty* in the reported valuation figure in a way that is useful to those who will be relying on the valuation.
3. The guidance in this TIP is intended to assist in the preparation and reporting of all valuations where uncertainty needs to be disclosed to comply with the principle that the report should not be misleading and should provide the intended reader with a clear understanding of the valuation provided.
4. Uncertainty caused by limitations imposed under the terms of engagement on the extent of investigations or information on which the valuation is based is not addressed in this TIP. The focus of this paper is *valuation uncertainty* that is unavoidable, regardless of the terms under which the assignment is undertaken. Though the effects of limiting conditions or restrictions that affect the investigations undertaken in preparing a valuation estimate are outside the definition of *valuation uncertainty* in this TIP, they should be separately disclosed under IVS 103 *Reporting*.
5. While valuations prepared for financial reporting are included within the scope of this TIP, financial reporting standards

frequently have disclosure requirements relating to *valuation uncertainty* which will take precedence over the guidance on disclosures given in this TIP. Reference is made to some of the current disclosure requirements that relate to *valuation uncertainty* in the International Financial Reporting Standards, but other financial reporting standards may have different requirements.

6. Adjustments to reflect “valuation uncertainty” that are required to a financial institution’s balance sheet values by financial regulators under capital adequacy regulations are outside the scope of this paper. Different definitions and disclosure requirements may apply for this purpose.

Definitions

7. The definitions that apply in the context of this TIP are listed below. Similar words and terms may have alternative meanings in a different context. The IVSC’s *International Glossary of Valuation Terms* provides a comprehensive list of defined words and terms commonly used in valuation, together with any alternative meanings.

<i>IFRS fair value</i> ¹	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
<i>Market value</i>	The estimated amount for which an asset or liability should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.
<i>Valuation date</i>	The date on which the opinion of value applies. The <i>valuation date</i> shall also include the time at which it applies if the value of the type of asset can change materially in the course of a single day.
<i>Valuation uncertainty</i>	The possibility that the estimated value may differ from the price that could be obtained in a transfer of the subject asset or liability taking place on the <i>valuation date</i> on the same terms and in the same market.

¹ © IFRS Foundation – IFRS 13

The Nature of Valuation Uncertainty

8. A valuation is not a fact; it is an estimate of the most probable of a range of possible outcomes based on the assumptions made in the valuation process. Market valuations are estimates of the most probable price that would be paid in a transaction on the *valuation date*. However, even where assets are identical and exchanged in contemporaneous transactions, fluctuations in the prices agreed between different transactions can often be observed. These fluctuations can be caused by factors such as differences in the objectives, knowledge or motivation of the parties. Consequently, an element of uncertainty is inherent in most market valuations as there is rarely a single price with which the valuation can be compared.
9. In some cases, the degree of uncertainty is clearly negligible, for example where the valuation is made by reference to concurrent prices for identical assets in the same market, as in the case of publicly listed and frequently traded securities. In others, uncertainty may be immaterial in the context of the market for a particular asset or the valuation assignment because it falls within the range, or margin of error, that would be expected, and accepted, by most market participants. Such uncertainty as exists should not be a source of concern to users and does not require specific disclosure under IVS 103.
10. This paper examines the nature of *valuation uncertainty* and discusses its common causes, when it may be considered material, and the types of disclosure that may be appropriate.

Uncertainty versus Risk

11. *Valuation uncertainty* should not be confused with risk. Risk is the exposure that the owner of an asset has to potential future losses. Risk can be caused by various factors affecting either the asset itself or the market in which it trades. Examples include:
 - a reduction in market prices after the date of acquisition or valuation,
 - a deterioration in the security of projected future income,
 - a loss of liquidity compared with other assets,
 - costs for maintaining or developing an asset being higher than currently anticipated,
 - the rate of an asset's technical or physical obsolescence being higher than currently anticipated.
12. Such risks are taken into account by informed buyers when

considering a bid for an asset and are balanced against the perceived advantages of ownership. Risk is therefore normally reflected in market prices.

13. Risk can often be quantified. For example, market risk can be measured by applying statistical techniques to previous patterns of price fluctuation, or by assuming different market scenarios to model different outcomes. Techniques for identifying risks and quantifying them are central to the various methods used to determine discount rates used in valuation. Further discussion on risk and the methods of calculating it is outside the scope of this TIP.
14. While risk may be thought of as a measure of future uncertainties that may result in a fall in the price or value of an asset, *valuation uncertainty* is concerned only with uncertainties that arise as part of the process of estimating value on a specific date.
15. Valuation certainty and market risk are independent of each other. For example, a valuation of a highly liquid quoted stock has little uncertainty, but that stock may still be seen as carrying a high market risk. In contrast, the valuation of an illiquid fixed income bond may be uncertain because of a lack of recent price data but may carry a low market risk.
16. *Valuation uncertainty* should not be confused with stress testing, ie measuring the impact on a current price or value of a specified event or series of events.

Causes of Valuation Uncertainty

17. *Valuation uncertainty* can be caused by various factors. These can be broadly divided into the following categories:
 - market disruption,
 - input availability,
 - choice of method of model.
18. These causes of *valuation uncertainty* are not mutually exclusive. For example, market disruption may affect the availability of relevant data which, in turn, may create uncertainty as to the most appropriate method or model to use. Interdependence and correlation between the causes of uncertainty are therefore likely to exist and account should be taken of this during the valuation process.

Market Disruption

19. *Valuation uncertainty* can arise when a market is disrupted at the *valuation date* by current or very recent events, such as sudden economic or political crises. The disruption can manifest itself in a number of ways, for example through panic buying or selling, or a loss of liquidity due to a disinclination of market participants to trade. An outbreak of sudden trading activity in response to an unforeseen event may cause rapid price changes that are not necessarily representative of those that would be agreed between parties acting “knowledgeably and prudently”. Conversely, a loss of liquidity will mean fewer contemporaneous or relevant recent transactions, which may impact on the reliability of the valuation.
20. The events causing market disruption may be macroeconomic (eg the terrorist attacks of September 11th 2001 or the Lehman Brothers insolvency in 2008) or microeconomic (eg an unexpected change in the law or a natural disaster disrupting a sector of the market or causing disruption to the supply chain of an industry).
21. If the *valuation date* coincides with or immediately follows such an event, *valuation uncertainty* arises because the only inputs and metrics available for the valuation are likely to relate to the market before the event occurred and therefore have limited relevance to the situation on the *valuation date*. The impact of the event on the attitude of market participants, and therefore prices, will not be known during its immediate aftermath. Because of this, uncertainty caused by market disruption is rarely quantifiable.

Input Availability

22. A lack of relevant input data will cause *valuation uncertainty*. This may be due to market disruption as described above, but may also be due to the asset being unique or because the market for the asset is normally illiquid. Where there is a lack of relevant market data, there may be a need to extrapolate inputs from directly observable prices for similar assets or to rely on unobservable inputs. These are inputs for which market data are not available but that can be developed using the best information available about the assumptions that market participants would use when pricing the asset.
23. The use of extrapolation or unobservable inputs is a common source of uncertainty because of the difficulty of finding objective evidence to support either the adjustments or the assumptions made.
24. Where market data is available, uncertainty can still arise if there is a large range of prices or other conflicts in the data. While statistical analysis can be used in some cases to narrow the range

of data to that falling within a given confidence interval or above a specified confidence level, either the amount of data available or its distribution may frustrate such analysis or make it unreliable.

25. The valuation method used may adjust for input uncertainty. For example, in a discounted cash flow model the cash flow inputs are based on current expectations of future performance and are therefore uncertain. However, market participants' views of the potential risk or reward implied by the expected cash flows differing from those that actually occur in the future can often be reflected in the discount rate applied.² Consequently, inputs based on current expectations of future performance are not automatically a source of material *valuation uncertainty*.
26. In some cases, the *valuation uncertainty* resulting from inconsistent or conflicting data can be estimated by the effect on the valuation of using reasonably possible alternative inputs. A key consideration is the distribution pattern and spread of potential alternative inputs. If the data follows a normal pattern of distribution, or bell curve, data in the tails could be usually be safely disregarded as falling outside the range of being reasonably possible. However, other distribution patterns may mean that greater weight needs to be given to certain outliers.

Choice of Method or Model

27. For many asset types, more than one method or model may be commonly used to estimate value. However, those methods or models may not always produce the same outcome and therefore the selection of the most appropriate method may itself be a source of *valuation uncertainty*.
28. IVS 102 *Implementation*, para 7 provides that more than one valuation approach or method may be used to arrive at an indication of value, and encourages this where there are insufficient factual or observable inputs for a single method to produce a reliable conclusion. Where more than one valuation approach or method is used, the resulting indications of value should be analysed and reconciled. This is a heuristic process to improve understanding of why the methods or models produce different results. Although it may not lead to a mathematical reconciliation of the results, it should help indicate which method provides the result that is most relevant and representative of the value under current market conditions. However, if there is no clear reason to prefer one method over another but each produces a different result, the choice of which to use may be a source of *valuation uncertainty*.

² See also para 13.

29. Uncertainty caused by the choice of one method or model over another can normally be quantified by comparing the outcomes.

Materiality

30. As indicated in para 8, most valuations contain an element of uncertainty but IVS 103 only requires this to be disclosed when it is “material”. A requirement to disclose uncertainty when it is of no or limited consequence would be an unnecessary complication in the reporting of many valuations and could breach the principle that reports should provide the intended reader with a clear understanding of the valuation. It could also potentially increase costs and raise unwarranted concern as to the reliability of many valuation opinions, which would not be helpful to users.
31. It is therefore necessary to consider when *valuation uncertainty* is material. Materiality should be considered from two interrelated aspects: first, whether the potential impact on the valuation figure is significant; and second, whether it is of relevance to an intended user of the valuation. Whereas insignificant uncertainty is very unlikely to be relevant, significant uncertainty may or may not be relevant.
32. Consideration of whether the impact of identified uncertainty on the valuation figure is significant involves the potential magnitude of any “margin of error”. However, this cannot be defined in absolute terms, eg whether the valuation could fall outside of a stated range or be more than a stated percentage away from the reported valuation. As discussed earlier, in many cases the very conditions that give rise to *valuation uncertainty* will impede quantification of that uncertainty.
33. Even if the uncertainty can be quantified and appears to be significant, either as an absolute amount or as a percentage, whether it is also material depends on its relevance, which has to be judged in the context of the purpose for which the valuation is required and the potential impact on all intended users of the valuation subsequently being shown to have been incorrect on the date it was provided. For example, if a single asset owned by a business is being valued as security for a loan, the possibility that the value might be, say, 15% higher or lower than the reported value is going to be of greater significance to a lender than if this was the only asset affected by the uncertainty in a valuation of the total assets of the business.
34. Factors that it may be helpful to consider in order to determine whether *valuation uncertainty* is material include:
- whether the valuation is required for internal purposes by the commissioning party or whether it will be disclosed to and relied

upon by third parties (the threshold of materiality is likely to be lower if the valuation is to be relied on by third parties);

- the extent to which the value of a total portfolio is affected if the *valuation uncertainty* affects only certain assets within the portfolio (this may also involve considering correlation and interdependence between the individual assets);
 - whether the cause of the uncertainty was known to the commissioning party or to a third party relying on it when the valuation was commissioned;
 - whether the effect of the uncertainty could expose the commissioning party or a third party relying on the valuation to significant risk of loss.
35. A useful test for considering whether *valuation uncertainty* is material is to consider whether failure to disclose the uncertainty in the report would lead a reasonable person to take action that relies on the reported valuation that they may not have taken if the uncertainty had been disclosed.

Nature of Disclosure

36. If *valuation uncertainty* can be identified and is considered to be material, the next question to be addressed is whether the disclosure in the valuation report should be only qualitative (ie descriptive), or whether a quantitative (ie numeric) estimate of the uncertainty should also be provided.
37. The general principle in IVS 103 is that the valuation report should communicate the information necessary for proper understanding of the valuation. A qualitative description of *valuation uncertainty* should therefore always be provided where the identified uncertainty meets the materiality criteria.
38. A qualitative description of *valuation uncertainty* should explain the source of the uncertainty and the effect it has on the market, the valuation process, or both. In the case of market disruption, it may be possible to comment on any consensus view on how long it may be until the effect of the event can be assimilated and stability returns to the market. In the case of model or input uncertainty, a description of the reason why the selected models or inputs were preferred can be provided
39. The question of whether a numeric estimate of the effect of the uncertainty should be also provided is more problematic. In the discussion of the different causes of uncertainty (paras 17-29) an indication is provided as to whether and how uncertainty may be quantified. However, where there is sufficient numerical

data to quantify uncertainty, in many cases that data could have been used in the valuation process to keep any uncertainty to an insignificant level, thus not triggering the need for disclosure.

40. If a quantitative measure of uncertainty is provided in addition to the required qualitative disclosure, caution is required to avoid implying a false precision. If uncertainty exists in the reported valuation because of limitations on the available data, this also affects any quantification of the uncertainty.
41. The reported value should be the best estimate that can be made based on the data available and users should be discouraged from using any quantification of the uncertainty to adjust the reported valuation as this could lead to inappropriate reliance on a figure that is significantly over- or understated.
42. It is customary for some valuation purposes to provide a range of values, eg where advice is provided on what would be a reasonable outcome of current or anticipated negotiations. However, quoting a range is not generally recommended as a satisfactory way of disclosing or quantifying material *valuation uncertainty* when it has been identified, for the following reasons:
 - For many valuation purposes, a single valuation figure is required and a range would not be acceptable.
 - Determining the limits of the range may also be unrealistic because the very factor that created the uncertainty in the first place is likely to mean that previously observed price fluctuations will no longer be relevant.
 - Users may assume that an equal probability attaches to any outcome within the range, when this might not be the case.
 - Users may assume that there is no possibility of a valuation falling outside of the indicated range.
43. Caution is also required to avoid giving a quantitative estimate of *valuation uncertainty* which is in fact an indication of risk, eg the effect on the value of an asset based on different prospective future inputs or outcomes, see para 14.

Measuring Valuation Uncertainty

44. Notwithstanding the general caution required in presenting any quantitative estimate of uncertainty, there may be valuation purposes where it is required. As discussed in paras 26 and 29, uncertainty stemming either from the choice of model or method or from a lack or inconsistency of input data may be estimated by observing the effect on the valuation of using an alternative model or input.

45. Quantification of *valuation uncertainty* can be more relevant for some classes of asset than others. The value of financial instruments is dependent upon the amount, timing and security of future cash flows between the counterparties. The probability of fluctuations in these numeric inputs over a fixed time horizon is normally measureable using statistical techniques. If the value of a financial instrument is uncertain because there is a lack of market data available for an identical or similar instrument, an estimate can often be made of the numeric inputs into the valuation based on the assumptions that a market participant might make.
46. Where two or more alternative figures could reasonably be chosen for a key input into the valuation, it is recommended that the reported valuation is based on the most likely of these outcomes, but a sensitivity analysis can be provided showing the effect of the range of possible outcomes on the reported value.
47. The principle of quantifying uncertainty by the use of a sensitivity analysis can also be applied to assets other than financial instruments where there are a sufficient number of reasonably possible alternative numeric inputs that could have been selected on the *valuation date*. However, such analysis is usually harder to apply to non-financial assets because the volume of transactions and related data is normally much lower. Where non-financial assets are subject to material *valuation uncertainty*, it is more likely that there will have been reliance on unobservable inputs that cannot be easily or accurately quantified and to which statistical analysis cannot be reliably applied. Providing a quantitative estimate of *valuation uncertainty* in such circumstances runs the risk of implying a false precision that could be misleading to those relying on the valuation.
48. If a quantitative measure of *valuation uncertainty* is to be provided, the following principles should be considered and applied as appropriate:
 - A quantitative measure should always be accompanied with a narrative describing the cause and nature of the uncertainty. A purely numeric illustration will only confirm uncertainty, not explain it. There is no useful purpose served by providing such a quantitative expression of uncertainty if this will not result in a better understanding of the valuation conclusion by the user.
 - Quantifying *valuation uncertainty* does not involve forecasting a worst case scenario. The objective is not to stress test a valuation to an extreme case. Any test of *valuation uncertainty* should address the impact on the reported value of reasonable and likely alternative assumptions. When choosing alternative assumptions to measure uncertainty, a selection needs to be made among possibilities that are not located in the tail of the

distributions (where events are very unlikely to happen) but rather in their central areas (where events are likely to occur).

- The objective of any uncertainty analysis is not to provide a forecast of possible fluctuations in the reported value at future dates, but to provide information about the variability of the value at the specific *valuation date*.
 - When quantifying the impact of uncertainty, the interdependence or correlation between significant inputs needs to be considered when it is practical to do so. Incorporating correlation analysis is technically and operationally challenging and potentially costly, but an analysis that does not consider interdependence provides less relevant information to users. When uncertainty is measured without proper correlation of interdependent inputs, the degree of uncertainty may be overestimated.
49. Illustrative examples of qualitative and quantitative disclosures are included in the Appendix to this TIP.

Valuations for Financial Reporting

50. Some accounting standards have stipulations on the disclosure of *valuation uncertainty*. In this TIP reference is made to requirements in IFRS, but other financial reporting standards may apply and have differing requirements. IVS 300 *Valuations for Financial Reporting* requires valuations prepared for inclusion in a financial statement to be provided in accordance with the requirements of the financial reporting standards that are applicable, including any required disclosures about the valuation.
51. IFRS 13 *Fair Value Measurements* has extensive disclosure requirements. The most relevant to *valuation uncertainty*, although the term is not actually used, are in section 93:

IFRS 13 93 (h)

for recurring *fair value* measurements categorised within Level 3 of the *fair value* hierarchy:

- (i) for all such measurements, a narrative description of the sensitivity of the *fair value* measurement to changes in unobservable inputs if a change in those inputs to a different amount might result in a significantly higher or lower *fair value* measurement. If there are interrelationships between those inputs and other unobservable inputs used in the *fair value* measurement, an entity shall also provide a description of those

interrelationships and of how they might magnify or mitigate the effect of changes in the unobservable inputs on the *fair value* measurement. To comply with that disclosure requirement, the narrative description of the sensitivity to changes in unobservable inputs shall include, at a minimum, the unobservable inputs disclosed when complying with (d).

- (ii) for financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change *fair value* significantly, an entity shall state that fact and disclose the effect of those changes. The entity shall disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated. For that purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in *fair value* are recognised in other comprehensive income, total equity.

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- 52. IFRS 13 sets out a “fair value hierarchy” of Levels 1, 2 and 3 (see G4 and G5 of the Application Guidance to IAS 39). It will be noted that the disclosures required by IFRS 13 section 93 only apply where Level 3 inputs are used. These are “unobservable inputs” which are defined in the IFRS as inputs for which market data is not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.
- 53. Where Level 3 inputs have been used, the IFRS only requires a narrative description of the sensitivity of the valuation to changes in these inputs if this would result in a significantly higher or lower figure.
- 54. For financial instruments, slightly different criteria need to be considered. First, the alternative inputs considered must be “reasonably possible”. If it is decided that these alternatives are reasonably possible and that that they would result in a significant change to the value, then it is necessary to calculate and disclose the effect of that alternative input. Significance is judged by reference to total assets and liabilities or to total equity.

Annex

Uncertainty Examples

The following are examples of situations where material *valuation uncertainty* has been experienced in practice and where additional disclosures were made to comply with the requirement in IVS 103 to disclose material *valuation uncertainty*. In practice there will be many other scenarios which can give rise to material *valuation uncertainty*, which by their very nature are unpredictable and may give rise to difficulty during the valuation process.

Scenario 1

Type of asset:	Real property held in an investment fund.
Purpose of valuation:	An external valuation for inclusion in the fund's regular valuation statements.
Reason for <i>valuation uncertainty</i> :	<p>The <i>valuation date</i> is a few days after the collapse of a global financial firm that has resulted in rapid falls in stock and bond prices, which threatens general economic stability. All available transaction data relates to the period before the collapse. The valuer is aware that since the event, some agreed transactions for similar investment property have been cancelled because buyers have withdrawn</p> <p>It would be reasonable for a valuer to expect the event to have a negative impact on buyers' sentiment at the <i>valuation date</i>, and therefore on the values that had been prevailing prior to the event. Although the valuer should take this negative impact into account, there is no reliable information available to measure the extent of any fall in prices.</p>

Scenario 2

Type of asset:	A patent for a drug.
Purpose of valuation:	An external valuation for inclusion in a reporting entity's financial statements following its acquisition of another business that owned the patent.
Reason for <i>valuation uncertainty</i> :	<p>Between the date of the business combination and the balance sheet date, some safety concerns have arisen about the drug and a number of government agencies have announced investigations that may lead to its licence being withdrawn or its use curtailed in certain countries.</p> <p>Consequently the assumptions as to future cash flows from sales of the drug that were reflected in the price paid for the acquired business are no longer valid. However, until the result of the investigations is known, the long-term impact on the earnings from this patent is highly uncertain.</p>

Scenario 3

Type of asset:	Illiquid preferred stocks and subordinated debt.
Purpose of valuation:	Periodical external valuation to compute the NAV of the fund.
Reason for <i>valuation uncertainty</i> :	The assets are normally valued using a model that has credit spreads observed in the market as a key input. The 2008 financial crisis resulted in a collapse of the debt market and credit indicators. Such information as was available showed credit spreads increasing dramatically, but these were based on relatively few transactions where sellers were seeking to exit a position because of a genuine fear of the issuer becoming insolvent. They were not considered representative of the spreads that would be applicable for instruments issued by solvent companies. Accordingly, spreads had to be estimated by assessing the risk of default by analysing the financial statements of individual issuers. The lack of relevant market data meant that the <i>valuation uncertainty</i> was significantly increased.

Scenario 4

Type of asset:	Non-quoted equity in a bank.
Purpose of valuation:	External valuation to support exchange of preferred stocks for normal stocks.
Reason for <i>valuation uncertainty</i> :	There was considerable negative sentiment about the banking sector in the country in question. The bank in question had itself been the subject of government intervention to prevent insolvency. A valuation was prepared using a discounted cash flow (DCF) model based on a business plan approved by the banking regulator. The discount rate used in the DCF calculation was in line with evidence in the market for other unquoted businesses. However, because the market sentiment was poor, a valuation using price earnings ratios typical in the market indicated a much lower value. Because the valuation conclusion differed significantly depending on the method of valuation used, and that difference could not be reconciled, there was material uncertainty in the reported valuation.

Scenario 5

Type of asset:	Real property.
Purpose of valuation:	Financial reporting.
Reason for <i>valuation uncertainty</i> :	A few weeks before the balance sheet date, there had been a severe earthquake that destroyed large parts of the commercial centre of a city where an investment property belonging to the reporting entity is situated. Significant damage was caused not only to many buildings, but also to public infrastructure. For about six months following the earthquake there was effectively no market as funding and insurance was unavailable. Price information from before the earthquake was irrelevant as although seismic risk was known and reflected in the price of some major buildings, the scale of the damage and the time required to establish its true extent meant that the economic environment in the city on the <i>valuation date</i> was completely changed.

Where valuations were provided, there was full disclosure of the uncertainty and in many cases alternative valuations provided on the basis of alternative outcomes of engineering reviews, insurance availability and funding.

In each of the above cases, the valuation reports included specific disclosures as to the nature of the uncertainty surrounding the reported valuation. The precise form of disclosure that is appropriate will vary from case to case. The valuation provider should ensure that the disclosure is both adequate and appropriate having regard to the principles discussed in this TIP, in particular the guidance in paras 36-43, and to the facts of the particular assignment.