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Project	**Fair Value Measurement: Unit of Account**
Paper topic	Research of the proposed measurements in the Exposure Draft—Academic literature review

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Introduction

1. The objective of this academic literature review ('review') is to understand the extent to which quoted prices are considered by academics to be a good representation of the value of interests in quoted entities that are within the scope of the Exposure Draft ('ED') *Measuring Quoted Investments in Subsidiaries, Joint Ventures and Associates at Fair Value*.

2. The academic literature on business valuation is wide. Because of this, we have focussed our analysis on key references that capture the current trends or thoughts in valuation. Valuation practices constitute a field that is constantly evolving. This explains why some of the matters that are the subject of this review are currently being debated.

3. We have focussed the review on how the business valuation literature presents premiums and discounts within the context of business valuations and whether any thoughts or views have been developed in their use within the context of valuing investments in quoted entities. As part of this review, we have also considered current guidelines on the measurement of the recoverable amounts of cash-generating units (CGUs) that correspond to quoted entities (quoted CGUs) on the basis of fair value less costs of disposal.

4. This review does not, however, focus on the methods most frequently used to compute the premiums and discounts identified in the following sections. The review focusses instead in the facts and circumstances that are most commonly considered by valuation specialists when deciding whether any premiums or discounts should be included as part of the measurements.

5. This paper is structured as follows:

   (a) Categories of premiums and discounts (see paragraphs 7–11);

   (b) Degree of control (see paragraphs 12–27);

   (c) Degree of marketability (see paragraphs 28–31);

   (d) Comparison of external fair value indicators and fair value measurements when measuring the recoverable amount of quoted CGUs (see paragraphs 32–35); and

   (e) Conclusion (paragraphs 36–40).

6. The references used in this review are listed in Appendix A of this paper.

Categories of premiums and discounts

7. Within the context of business valuations, the literature typically distinguishes two types of categories in which premiums and discounts typically fall into: 'entity level premiums or discounts' and 'shareholder level premiums or discounts'.

8. 'Entity level premiums or discounts' are those that affect all shareholders (ie they affect the value of the entity as a whole). An example of an entity level discount could be related to an environmental issue. 'Shareholder level premiums or discounts' are those that affect one or a specific group of shareholders, for example, a minority interest shareholder.

9. Considering the matter subject of our ED (ie the fair value measurement of investments in quoted subsidiaries, joint ventures and associates), we are particularly interested in the second type of premiums or discounts, ie shareholder level premiums or discounts. This is because the premiums or discounts affecting the characteristics of ownership are directly linked to an entity's level of control or influence in an investee.

10. The most frequently encountered premiums or discounts reflecting characteristics of ownership fall broadly into two major categories:

(a) degree of control (see paragraphs 12–27); and

(b) degree of marketability (see paragraphs 28–31).[1]

11. The paragraphs that follow describe the current trends and common considerations that valuation specialists take into account when dealing with control and marketability premiums and discounts.

Degree of control

12. The documents reviewed show consensus about the concept that 'control' is not absolute and that it should instead be assessed along a continuum extending from investments in minority interests to complete ownership of all equity shares. There is also a common understanding that the degree of control vested in an interest is a relevant characteristic that would be considered by market participants and that should, consequently, be reflected when measuring the fair value of the investments.

13. Some valuation specialists think, however, that 'control premium' is a misleading term and instead prefer the term 'acquisition premium'. For these valuation specialists, 'acquisition premiums' include both the 'value of control' (ie control premium) and the 'value of synergies' between investors and investees. 'Control premium' is defined in the *International Glossary of Business Valuation Terms* as 'An amount (expressed in either dollar or percentage form) by which the pro rata value of a controlling interest exceeds the pro rata value of a non controlling interest in a business enterprise that reflects the power of control.'

14. The distinction made in paragraph 13 between 'acquisition premium' and 'control premium' is relevant in the fair value measurement of controlling interests. This is because the fair value measurements of controlling interests should consider the

[1] In many instances 'marketability' and 'liquidity' are used in the business valuation literature interchangeably. We have also used these two terms interchangeably as there currently no consensus on the use of these terms. A feature that differs 'marketability' from 'liquidity' is that 'marketability' relates to the right to sell an item, whereas 'liquidity' refers to the speed with which an asset may be converted to cash without diminishing its value.

need of including ‘control premiums’; however, those measurements should not include premiums related to synergies that reflect value to a particular buyer (see paragraph 15). Consequently, this paper also uses this term (‘acquisition premium’) when referring to the premium that an investor has paid for control, the premium that it has paid for having access to synergies and, in addition, any amount paid that represents an overpayment. We will use the term ‘control premium’ when referring only to the value of control that an investor would pay as part of the acquisition premium when acquiring a controlling interest in an entity.

15. A controlling interest is typically considered to have greater value than a minority interest, because of the buyer’s ability to effect changes in the overall business structure and to influence business policies. The reading of the documents selected has indicated, however, that the valuation profession is currently aiming to strengthen the discipline concerning the use and measurement of ‘control premiums’, because it is an area in which considerable diversity has been identified in practice. In that respect, the message that ‘control premiums’ need appropriate support and evidence is present in many of the documents reviewed. For example, including control premiums to the measurements of controlling interests on the basis of average premiums observed in other transactions may lead to inaccurate fair value measurements, because those premiums may include not only premiums paid for control but may also include premiums paid for synergies between the investor and the investee.

16. Another matter in which there seems to be consensus among the authors of the documents that we have reviewed is that the ‘principal market’ concerning controlling interests is the mergers and acquisitions (M&A) market rather than the stock exchanges where the shares are listed.[2] The view that the M&A market is the principal market for a controlling interest and that care should be exercised when considering acquisition premiums in those measurements is captured in the following extract from Mark Lee, a business valuation specialist:

> ‘The stock market is a market for minority interests in common stock. The principal buyers and sellers are individuals, mutual funds, and financial institutions. The market is highly liquid, individual investment horizons may be short, and risk

[2] IFRS 13 defines ‘principal market’ as ‘The market with the greatest volume and level of activity for the asset or liability.’

tolerances can be greater than in illiquid markets. Financing is often readily available from banks and brokers at short-term money rates. Investors are generally passive. Individual investments are usually purchased as part of diversified portfolios, which leads to greater tolerance for risk.

The M&A market is a market for whole companies. The principal buyers and sellers are controlling stockholders, corporations, and [leveraged buyout] houses. The market is illiquid; as a result, individual investment horizons tend to be longer. Risk tolerances in the short term tend to be lower than in a liquid market. Transactions are financed using long-term debt from banks, insurance companies, mezzanine funds, equity of large corporations, and private equity funds. M&A investors take an active role in managing their companies.

The relationship of the two markets is not linear. Linearity presupposes that acquisition premiums apply in all situations; and acquisition premiums are roughly the same amount generally or in each industry. […]. Clearly, the existence of an acquisition premium and its magnitude is a 'facts and circumstances' test for each valuation.'

17. Related to the issue of appropriately including and valuing control premiums, there is an open debate concerning whether listed share prices reflect control value. We think that this debate is relevant for the purpose of measuring the fair value of quoted investments in subsidiaries and, because control, as stated in some of the documents reviewed, needs to be understood as a continuum, it is also relevant when discussing the fair value measurement of investments in quoted joint ventures and associates.

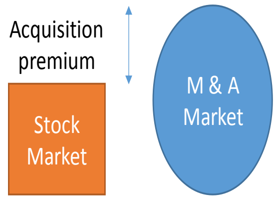
18. Through the 1990s, it was generally accepted that the listed price of the shares of an entity represented the value of a minority interest and that, if the goal was to value a controlling interest, a 'premium for control' would need to be added to the value of equity indicated by the listed price of the shares. That premium was generally derived from market evidence in which the price paid to acquire an entire entity was compared to the listed price of the shares of that same entity prior to the acquisition.

19. In 1990 E. Nath stated that most listed entities tend typically to trade at or near their acquisition or controlling interest values. Nath concluded that the existence of liquidity in the market would tend to eliminate concerns about lack of control for public shareholders, thereby allowing value to equilibrate at essentially a control level of value for a given entity as long as the entity was well-managed and management was communicating effectively with investors. Opposing Nath,

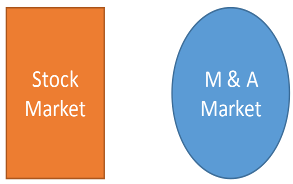
Bolotsky argued that the fact that the listed minority price also happens to be the price that a typical buyer of a 100 per cent controlling interest would be willing to offer does not change their status as minority interests, which lack prerogatives of control.[3] Bolotsky argued that a listed minority interest and a 100 per cent controlling interest clearly have different shareholder level attributes.

20. The relationship between the prices arising from the two markets (ie the stock market and the mergers and acquisition (M&A) market) is illustrated in the figures below. The orange square or rectangle represents the stock market and the blue oval represents the M&A market. We have noted that most of the documents reviewed perceive the three situations pictured by the graphs that follow as being possible. However we note that the views of Nath as described above or those of Damodaran (see paragraph 26) tend to be closer to the second case below.

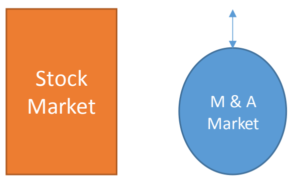
Case 1—The acquisition value exceeds an entity's market value when an acquirer believes that it can create sufficient added economic benefits.



Case 2—Generally there is no market available that can create benefits large enough to justify payment of the premium required for the acquisition of many listed entities. In those cases, there is little or no acquisition premium. This is the general case for most entities.



Case 3—In situations in which entities are viewed as very attractive for investment but at the same time are perceived as very risky, the value of those entities as a whole is less than the aggregate market value of their shares trading as minority interests. Individuals and institutional investors will pay more for minority interests as part of diversified portfolio than acquirers will pay for the



[3] According to the Exposure Draft *The Measurement of Control Premia, Minority Discounts and Voting Share Differentials* issued by the Appraisal Foundation, the prerogatives of control do not have inherent value but are instead the means through which market participants implement strategies designed to generate economic benefits. Those economic benefits (for example, achieving a lower cost of sales) could have inherent value and will potentially influence the acquisition premium.

entire entities. An example cited for this particular case are entities in emerging industries, such as it was the internet industry in the late 1990s.

21. An argument used by those that think the listed share prices already include control value is the fact that the larger population of listed entities that are not acquired each year supports the theory that control premiums for most publicly traded entities either do not exist or are too small to justify the costs and uncertainties associated with an attempted acquisition.

22. The discussion concerning whether the shares' listed prices represent control value is also included in the Exposure Draft published by the Appraisal Foundation in September 2015 (see Appendix A). In that document the Appraisal Foundation states that it has become widely accepted that the difference between an entity's acquisition price and its previously traded price does not represent a premium for control but, instead, represents a premium linked to actual changes that can be made by exercising that control. A price higher than the listed price might be reasonable if the new management and/or combined entity expect(s) improved cash flow or growth; or reduced risk. If no improvements or risk reduction could reasonably be expected, there may be little ability for an acquirer to pay a price higher than the listed share price and still generate a reasonable return on its investment. Consequently, in such cases, the control value may approximate the listed share price. In other words, control premiums may be justified by the expected improvements to the cash flow or reductions in risk that acquirers expect to achieve, or both.

23. That Exposure Draft also states that a well-supported fair value measurement of a controlling interest should include consideration of the incremental economic benefits of control, taking into account market participants' assumptions. However, in many instances, such benefits will not be reliably identifiable, resulting in such cases in either no, or only a small, premium. In addition, market participants will not always incorporate all economic benefits of control into the price paid for a controlling interest in an entity, even if such benefits exist. How much of the upside is included in the transaction price depends, in part, on the competitive dynamics of the sale process.

24. In any case, according to the Exposure Draft published by the Appraisal Foundation, the relevance of the control premiums appears to depend on a number of factors that would need to be considered when measuring the fair value of a controlling interest. For example:

(a) the frequency of acquisitions in a given industry may indicate that market participants perceive greater opportunities to generate economic benefits by exercising the prerogatives of control. However, in those instances the fair value of non-controlling interests in the target entities may increase, because investors expect that a change of control transaction on favourable terms to be imminent. In such a case, the value of control may be reduced as the difference between the fair value of the controlling and non-controlling interest is compressed.

(b) the stage of the life cycle in which entities are can also affect the relevance of their control premium. For example, mature entities would probably offer investors fewer opportunities for enhanced cash flows or lower cost of capital, resulting in lower control premiums for those entities.

(c) Information asymmetry. At the measurement date there may be relevant information regarding the results of operations or other factors that are disclosed to controlling interest investors but that may not yet have been publicly disseminated. If there is non-public favourable information, this may support a larger control premium; if the non-public information is unfavourable, then this may indicate a lower control premium.

(d) Regulatory factors might affect the relevance of control premiums. For example, regulations that protect the non-controlling investors or rights that give them the ability to block the controlling investor's ability to unilaterally exercise certain of the prerogatives of control may increase the fair value of those non-controlling investors and reduce the control premium.

(e) Quality of management. Poor quality of management results in higher control premiums (see paragraphs 25–26).

25. The author of one of the documents that we have reviewed (Damodaran) assigns the value of control entirely to the quality of management. Damodaran in his paper *The Value of Control: Implications for Control Premia, Minority Discounts and Voting Share Differentials* defines the value of controlling a business as the difference between the value of the entity run by the current management (status quo value) and the value of the entity with a hypothetical optimal management (ie optimal value). According to Damadoran, sub-optimal management can manifest itself in different ways for different entities:

    (a) In entities for which existing assets are poorly managed, the increase in value will arise primarily from managing those assets more efficiently;

    (b) In entities in which the investment policy is sound but the financing policy is not, the increase in value will come from changing the mix of debt and equity and a lower cost of capital.

26. These two different ways in paragraph 25 in which a sub-optimal management can manifest resulting in a higher control value resemble the items in which, according to the Exposure Draft of the Appraisal Foundation, the value of control should be supported (ie by reference to either enhanced cash flows or a lower required rate of return, considered from a market participant perspective). The difference lies in that according to that Exposure Draft, the relevance of the value of control would be dependent on a higher number of factors, while Damodaran attributes the entire value of control to the quality of management. In connection with the question of whether the listed share prices include already control value, Damodaran's view is that the expected value of control is already included in the listed share prices. According to his view, in markets in which the listed share prices already reflect a high value for expected control, the acquisition premiums should be smaller.

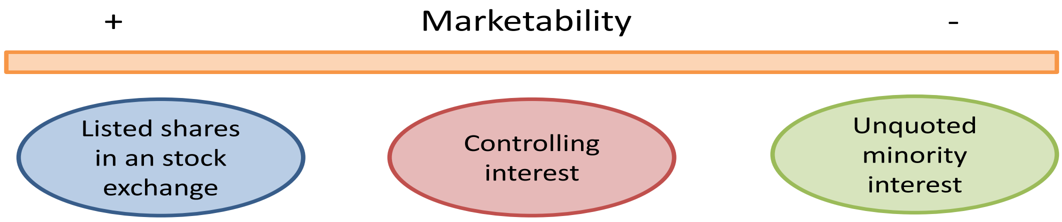
27. Concerning the degree of control, another item that some of the documents have touched on is the existence of voting and non-voting shares. For example, one of the considerations that the business valuation literature points out when measuring the fair value of a controlling interest is whether the controlling interest being measured has any voting or other legal rights that are not available to the other shareholders of the entity or whether, instead, the controlling investors' rights are limited by other provisions in the entity's articles of incorporations, shareholders

agreements or other regulations. The overall conclusion on this matter is that the relevance of the premiums of voting shares when compared to non-voting shares will depend in many instances on the features of the market in which those shares trade, in particular, on the legal environment of the particular jurisdiction. In general, the voting premium is smaller in countries with better legal protection for minority and non-voting shareholders and larger for jurisdictions without such protection.

Degree of marketability

28. The valuation literature also places marketability as a concept that needs to be understood as a continuum ranging from typically highly marketable shares in a stock exchange to an unquoted minority interest. In that sense, lack of marketability detracts from an interest's value when compared to an interest that is otherwise comparable but readily marketable. For two given investments identical in all other respects, market participants will apply a downward adjustment to the value of the one that cannot be readily converted into cash versus the one that can be readily converted into cash.

29. A controlling interest in an entity is considered as being harder to sell than a share listed on an exchange, but it is considered to be easier to sell than a minority interest in an unquoted entity. In the case of controlling investors, the business valuation literature portray them as typically having access to information that would allow them to take potential acquirers through a due diligence process, making it possible for them to access an exit market for their interest. The following figure illustrates this statement.



30. However, the issue of marketability for controlling interests is a source of diversity in practice, because some valuation specialists apply discounts for lack of marketability to derive the fair value of controlling interests in privately held

entities, while others do not. The valuation specialists that would argue that those discounts should not be considered is because of the fact that in most cases the investors would have access to a market as a forum to transact. For controlling interests in entities, the usual and customary marketing activities may be time-consuming. Arguably, if the measurement of a controlling interest in an entity is being inferred from the prices of the free-floating shares of the same entity, a discount for lack of marketability would apply because controlling interests are typically far less liquid than actively traded shares and the associated marketing periods differ. At a minority interest level, the terms ‘marketable’ or ‘liquid’ reflect a share with an active public trading market that can be sold instantly, with cash proceeds received within just a few days. This is why, for some, the terms ‘control’ and ‘marketable’ is an oxymoron.

31. Marketability can also be compared between controlling interests in an entity and unquoted minority interests. In a simple capital structure, both controlling investors and minority interest investors have the same securities. Consequently, to the extent that these minority interest holders have the same rights and the same principal market, the value of the securities would be the same for both controlling investors and minority interest investors. However, if the minority interest investors have a different principal market or have additional restrictions on their interests that controlling investors do not, it may be appropriate to apply a discount for lack of marketability to the securities of those minority interest investors.

Comparison of external fair value indicators and fair value measurements when measuring the recoverable amount of quoted CGUs

32. The American Institute of Certified Public Accountants (AICPA) published a valuation guide concerning testing goodwill for impairment (see Appendix A). This valuation guide is focussed on measuring the fair value of a reporting unit for financial reporting purposes.[4] We think that this guide is relevant for the measurement proposals in the ED for the recoverable amount of quoted CGUs on the basis of fair value less costs of disposal.

[4] The term ‘reporting unit’ in US GAAP is equivalent to the term ‘cash-generating unit’ in IFRS.

33. The guide presents a comparison between the fair value measurements of the reporting units of an entity with an external fair value indication for the entire entity as best practice for evaluating the reasonableness of the fair value measurements of the entity's reporting units. The guide adds that when an entity is quoted, the comparison of the fair value measurements of the entity's reporting units is typically done with the market capitalisation of the entity. However, the guide adds a caveat to this comparison by stating that:

> 'In cases, in which trading volume of shares is suggestive of a thinly traded issue, the resulting share price may be argued as not possessing a high level of reliability as an indicator of market value. In this situation, the task force recommends conducting further enquiry as to the facts and circumstances surrounding the trading levels and the trades that have occurred to determine if a comparison to market capitalization is nevertheless possible. If not possible, comparison to an external fair value indication would need to be performed as if the entity were privately held.'

34. The guide states that for the purpose of undertaking this comparison, averaging the market capitalisation may in some circumstances be more appropriate than using a single day's market capitalisation. However, the guide highlights that averaging is not appropriate to mitigate increasing or decreasing trends in market capitalisation.

35. When differences between the fair value measurements and the market capitalisation are attributed to control premiums, the guide states that it is helpful to consider 'the potential of market participants to enhance future cash flows or lower the required return of the subject reporting unit, as well as observed transaction data and any additional external evidence supporting the conclusion.' We note that this message is aligned to the message on control premiums included in the Exposure Draft of the Appraisal Foundation. In addition, the guide recommends identifying and documenting significant differences between the aggregate fair value measurements and the observable capitalisation. In this respect, the guide presents the following items as factors that can help explain the differences between the market capitalisation and the fair value measurements:

    (a) Control synergies. This relates to synergies that market participants would likely be able to achieve. This item would exclude entity-specific synergies but would include those that market participants would achieve if they acquired the CGU or reporting unit.

(b) Asymmetric data. This relates to the fact that management may have access to data or information that is not known outside the entity as of the valuation date; for example, new revenue sources under development or cost saving initiatives to be implemented. Because this is not known, the share price would not reflect this information.

(c) Tax consequences. When fair value amounts are measured using a taxable basis reflective of additional tax benefits, this will be a factor that would not be reflected in the observed share price because the potential step-up would not be known in the absence of an announced transaction.

(d) Entity-specific versus market participant capital structures. Fair value measurements would make the same assumptions as market participants would do when determining the amount of leverage to develop the cost of capital used in a valuation technique such as the discounted cash flow method. In contrast, the quoted share price may reflect the risk of the investee's suboptimal leverage and, consequently, may differ from the fair value amount obtained from a valuation technique that uses an optimal capital structure.

(e) Excessive short positions against the shares. This factor can cause price volatility. A review of an entity's short interest position (increases or decreases) may need to be considered when contrasting the market capitalisation to the fair value measurements obtained.

(f) Controlling or large block interests. One would need to assess whether the observed market price used to obtain the entity's market capitalisation has been affected by major decisions influenced by controlling interests or large non-controlling interests in an abnormal manner (ie whether the listed share prices fluctuate because of reasons that do not explain the fundamental value of the investment).

Conclusion

36. The review of the documents selected has confirmed that the fair value measurements of investments in subsidiaries, joint ventures and associates should be constructed by taking into consideration the prices that market participants would offer to acquire those investments in the corresponding principal markets. In the case of controlling interests, the consensus is that the principal market is the M&A market.

37. We have found that the business valuation literature is focussed on either the measurement of controlling interests or unquoted minority interests without much focus on the measurements of investments that lie in between, such as investments in joint ventures or associates. We think that, however, the principles highlighted in this review can also be applied consistently to the measurement of those other types of investments depending on the facts and circumstances.

38. The review has revealed that the fair value measurement of a controlling interest on the basis of a listed share price would need to consider whether (the list is not exhaustive):

    (a) the listed price reflects a control base;

    (b) the fair value measurement of such a controlling interest would need to include any marketability discount when considering that controlling interests typically have a lower marketability than individual listed shares (ie when any marketability constraints are not captured in the listed price of the shares);

    (c) the price that market participants would pay in the M&A market would differ from the listed share price; and

    (d) different shares have been conferred with different rights.

39. Throughout this review we have noted that the valuation profession is trying to implement a degree of discipline in the considerations that lead to the inclusion of control premiums when a controlling interest is measured at fair value. In that sense, control only provides value to a controlling investor if it can be translated into economic benefits in the form of enhanced cash flows or reduced risks, or both.

40. In the case of the measurement of the recoverable amount of quoted CGUs, the relevant guidance presents the use of the market capitalisation of a CGU that coincides with a quoted entity as an external indication of fair value, which should be contrasted and reconciled with the fair value measurements obtained, rather than presenting it as the unique way in which the fair value measurements can be obtained. In addition, the guidance also envisages items that may explain why those values (ie market capitalisation and fair value measurements) may differ.

Appendix A: Bibliography

A1. The following references were used when undertaking the academic literature review.

- AICPA Accounting and Valuation Guide: *Testing Goodwill from Impairment*, 2013
- AICPA Accounting and Valuation Guide: *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, Chapter 7 *Control and Marketability*, 2013
- *Business Valuation Discounts and Premiums*, Second Edition, Shannon P. Pratt
- *Control premiums and minority discounts: the need for specific economic analysis*, Mark Lee, *Business Valuation*, **Vol. 7**, No. 8, August 2001, http://www.bvresources.com/pdfs/bvu0801.pdf
- Exposure Draft—*The measurement and Application of Market Participant Acquisition Premiums*, The Appraisal Foundation, September 1, 2015
- *The Value of Control: Implications for Control Premia*, *Minority Discounts and Voting Share Differentials*, Aswath Damodaran, Stern School of Business, June 2005.