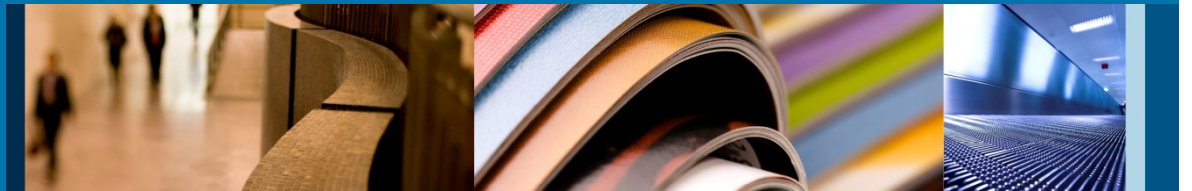


Asset Valuation Policy



AMP Capital Holdings Limited

22 OCTOBER 2019

Document Control

Revision History

Author	Date	Version	Change Details
Jim Dawson, Finance Director	April 2009	v.1.0	<ul style="list-style-type: none"> AMPC Asset Valuation Policy
Sharleen Evans, ERM Manager	August 2012	v.1.1	<ul style="list-style-type: none"> Incorporate NMFM unit trust portion of AXA Unit Pricing Policy into Asset Valuation policy Update policy with new AMP Capital organisational structure
Preetha Manoharan, ERM Business Partner	December 2013	v.2.0	<ul style="list-style-type: none"> Incorporate subsidiary valuation policies, and the New Zealand asset valuation policy.
Maree Mordue. Manager – Data Management, Andrew Oliver, Head of Fund Advice	June 2015	v.3.0	<ul style="list-style-type: none"> Annual review to include Amendment to Business Circulation List, addition of AMP Investment Management (N.Z.) Ltd as RE and ad hoc formatting changes Revision of 5 - Clarification of valuation principles; definition of fair value; Revision of 6.2 – Valuation of non-exchange traded assets Revision of 9 – Valuation of Illiquid Debt Revision of 10 – Valuation of Direct Property Revision of 11 – Valuation of Infrastructure Deletion of 12 – Valuation of Private Equity
Maree Mordue. Manager – Static Data & Asset Valuation	August 2016	v.4.0	<ul style="list-style-type: none"> Annual review to include Amendment to Business Circulation List Revision of 5.3 – Governance of valuation process Revision of 6.2.5, 6.2.5 and 6.2.9 Revision of Section 10 – Valuation of Direct Property
Maree Mordue. Manager – Static Data & Asset Valuation Damon Mumford – Valuation Manager, Property Andrew Oliver, Head of Fund Advice	August 2017	v.5.0	<ul style="list-style-type: none"> Annual review to include Amendment to Business Circulation List Section 10 Renamed from Valuation of Property to Valuation of Real Estate Revisions of 10.1 to 10.5 Valuation of Real Estate Minor revision of 9.2.1 Valuation Investment Committees Revisions of 9.3 Valuation Methodologies – 9.3.2, 9.3.11 and 9.3.14
Mark Croft – Global Head of Investment Operations and Control Nicle Yang – Team Leader, Static Data & Asset Valuation Greg Gill - Head of Finance & Operations, Infrastructure Debt Damon Mumford - Valuation Manager, Real Estate Andrew Oliver – Head of Fund Advice, Investment Finance David Allen - Global Chief Investment Officer, Equities	August 2018	v.6.0	<ul style="list-style-type: none"> Annual review to include Amendment to Business Circulation List Revision of 5.3 - Governance of valuation process Revisions of 6.1 and 6.2 – reference to Equity Investment Committee Addition of 9.3.22 – Illiquid Debt - Expected credit losses (ECL) impairment model Revision of 10.5 - Real estate assets classified as inventory
Mark Croft – Global Head of Investment Operations and Control	September 2019	v.7.0	<ul style="list-style-type: none"> Annual review to include Amendment to Business Circulation List
Damon Mumford - Valuation Manager, Real Estate Andrew Oliver – Head of Fund Advice, Investment Finance			<ul style="list-style-type: none"> Minor revision of 6. Valuation of assets Minor revision of 10.2 Real Estate valuation process

Owner

Name	Position and Department	Version	Approval Date
Stephen Dunne	Chief Executive Officer – AMP Capital	v.2.0	4 February 2014
	Chief Executive Officer – AMP Capital	v.3.0	28 July 2015
AMP Capital Investment Committee		v.2.0	4 February 2014
		v.3.0	21 September 2015
Adam Tindall	Chief Executive Officer – AMP Capital	v.4.0	17 October 2016
	Chief Executive Officer – AMP Capital	v.5.0	16 October 2017
	Chief Executive Officer – AMP Capital	v.6.0	16 October 2018
	Chief Executive Officer – AMP Capital	v.7.0	22 October 2019

Business Circulation List

Name	Job Title / Role and Department	Action
Edwina Maloney	Global Head of Product	Review
Nicle Yang	Team Leader, Static Data & Asset Valuation – Global Investment Operations & Control	Review
Andrew Oliver	Head of Fund Advice, Investment Finance	Review
Mark Croft	Global Head of Investment Operations and Control	Review
Joseph Tam	Head of Investment Reporting & Analytics	Review
Simon Warner	Global Head of Public Markets	Review
David Allen	Global Chief Investment Officer, Equities	Review
Greg Gill	Head of Finance & Operations, Infrastructure Debt	Review
Damon Mumford	Valuation Manager, Real Estate	Review
Nick Cobham	Portfolio Manager, PSP NZ Portfolio	Review
Grant Hassel	Global Head of Fixed Income	Review
Vicky Hyde-Smith	Head of Fixed Income (NZ)	Review
Deborah Archibald	Manager, Investment Operations (NZ)	Review
Oliver Stiles	Head of Finance, Real Estate	Review
Lydia Serafim	Head of Market Solutions	Review
Ashley Lee	Senior Associate, Infrastructure Equity	Review

Table of Contents

1.	INTRODUCTION	4
2.	DEFINITIONS	4
3.	PURPOSE	4
4.	SCOPE	5
5.	PRINCIPLES	5
6.	VALUATION OF ASSETS.....	7
7.	FREQUENCY OF ASSET VALUATIONS	9
8.	SUSPENSION OF VALUATION OF ASSETS	9
9.	VALUATION OF ILLIQUID DEBT	10
10.	VALUATION OF REAL ESTATE	14
11.	VALUATION OF INFRASTRUCTURE	20
12.	MONITORING	23
13.	RECORD KEEPING	23
14.	CONSEQUENCES OF NON-COMPLIANCE	23
15.	OWNER OF POLICY	23
16.	REVIEW AND ASSESSMENT	23
17.	REFERENCES AND OTHER RELEVANT POLICIES	23

1. INTRODUCTION

AMP Capital manages assets in accordance with the AMP Capital asset management framework, which includes the AMP Capital Asset Valuation Policy and Unit Pricing Discretions Policy.

This document is known as the AMP Capital Asset Valuation Policy (Policy) and it sets out the principles, processes and methodologies used by any Responsible Entity (RE) or trustee and/or its appointed agents to value the assets for those managed investment Schemes and trusts for which AMP Capital Holdings Limited (AMP Capital – defined in Section 2 of this Policy) has governance, management and/or operational responsibilities.

This Policy does not cover obligations for the preparation of financial statements as detailed in either Australian Accounting Standards (AASB), International Financial Reporting Standards (IFRS) or New Zealand International Financial Reporting Standards (NZ IFRS).

2. DEFINITIONS

Term	Definition
Responsible Entity (RE)	<p>refers to:</p> <ul style="list-style-type: none"> any Responsible Entity or trustee within the AMP Capital Holdings Limited group including but not limited to: AMP Capital Funds Management Limited, AMP Capital Investors (New Zealand) Limited, AMP Investment Management (N.Z.) Limited, AMP Investment Services Pty Limited and AMP Capital Investors Limited. National Mutual Funds Management Limited (NMFM); and Ipac Asset Management Limited (ipac)
AMP Capital	refers to AMP Capital Holdings Limited and any of its subsidiaries, including the REs and AMP Capital Investors Limited which acts as the investment manager for the Schemes covered by this Policy. For the avoidance of doubt this includes NMFM and ipac.
Custodian	refers to BNP Paribas Fund Services Australasia Pty Ltd (ACN 002 655 674) trading as BNP Paribas Securities Services (BNP) or any other entity appointed by the RE to administer and provide custodial, accounting and unit pricing services for scheme assets (appointed Custodian).
Scheme	refers to a managed investment scheme registered with ASIC, any fund, asset or group of assets under management or an unregistered trust for which a RE or trustee has governance, management and operational responsibility.

3. PURPOSE

The valuation of assets is a key determinant in the calculation of a Scheme's Net Asset Value (NAV). The primary purpose of deriving a Scheme's NAV is to determine the appropriate prices at which unit holder or investors' entitlements may be transacted on, as well as to determine the RE's and AMP Capital's entitlements and other entitlements under the constituent documents of the Scheme.

A consistent valuation methodology enables an accurate reflection of asset and Scheme returns to assist in investment management decisions and performance calculations. In the context of this document, a Scheme can consist of a single asset or a number of assets grouped together for reporting and/or unit pricing purposes.

4. SCOPE

This Policy applies to AMP Capital, including its international offices and joint ventures, subject to local laws or other applicable accounting standards in those jurisdictions.

The RE calculates unit prices and NAVs of some Schemes itself and has outsourced unit pricing for some Schemes to a Custodian which obtains valuations from independent third-party providers. The Custodian will value the assets of the Scheme in accordance with its Securities Pricing Policy (or equivalent) and the Price Source Agreement (as relevant) as agreed between AMP Capital and the Custodian.

The RE has implemented control processes which monitor the adherence to this Policy by its business units and appointed agents, including appointed Custodians.

5. PRINCIPLES

This Policy seeks to ensure that:

- valuations are calculated and applied consistently and equitably;
- valuations include all assets of a Scheme at the point of valuation;
- valuations are unbiased and are not subject to undue influence;
- valuation processes are documented and transparent to ensure they are independently verifiable;
- assets are valued on a basis that assumes the Scheme is a 'going concern', unless this assumption is inappropriate for a particular Scheme;
- the methodologies used are appropriate for the nature of the assets;
- the formulae or methods used are reviewed at appropriate periods; and
- the RE satisfies its regulatory obligations.

5.1 General

5.1.1 Under each Scheme constitution, investment management agreement or other governing document, the RE may determine the NAV at any time, including the timing (which may be more than once a day) and may determine valuation processes and methodologies for each category of assets. This Policy has been developed in accordance with relevant industry standards, such as:

- ASIC/APRA Unit pricing: Guide to good practice (RG94);
- Financial Services Council Standard No.9: Valuation of Scheme Assets and Liabilities (FSC Standard No. 9);
- Financial Services Council Guidance Note No.26: Asset Valuation and Unit Pricing for Infrequently Valued Assets (FSC Guidance Note No. 26); and
- Accounting Professional & Ethical Standard (APES) 225: Valuation Services

The Policy may change from time to time.

As there is no specific equivalent in New Zealand, the guidance provided under ASIC RG94 is utilised. Specifically, the guidance under Section 5 of RG94 provides direction on the following:

- Valuation of non-exchange traded assets;
- Frequency of transacting and frequency of unit pricing;
- Frequency of unit pricing and frequency of asset valuation; and
- Assets valued periodically using recognised methodologies.

5.1.2 The NAV for a given business day is generally determined by valuing all of the assets of a Scheme and subtracting the value of liabilities of the Scheme at a valuation point associated with the cut off time for the relevant Scheme.

Accruals for assets and liabilities are provided for within the NAV when they have a known value or a value that can be reasonably estimated. Liabilities are generally defined as all present liabilities of the Scheme including any provision which the RE decides should be taken into account in determining the liabilities of the Scheme.

Liabilities generally include but are not limited to borrowings, derivative financial instruments, management fees, performance fees and other expenses, and will be accrued when they have a known value or can be reliably estimated.

- 5.1.3 Asset accruals, such as income receivable for dividends, rent and interest may also be subject to estimation based on the latest available information.
- 5.1.4 In Schemes where there is more than one class of units offered to unitholders, the allocation of the Scheme assets, liabilities, revenue and expenses for each class is generally calculated based on the proportion of the NAV of the Scheme to which the class relates. Where a particular expense (for example management fees or performance fees) is exclusive to a particular class, the RE will usually determine the expense applicable to each class of units independently.
- 5.1.5 The RE may exercise discretion in assigning a value to certain Scheme liabilities for the purpose of determining the NAV.

5.2 Fair value

- 5.2.1 The international accounting standard for fair value measurement (IFRS 13) defines fair value as “the price that would be received to sell an asset...in an orderly transaction between market participants at the measurement date.” This price should reflect “an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions, regardless of whether that price is directly observable or estimated using another valuation technique.” The fair value should be measured “using the assumptions that market participants would use when pricing the asset” and for non-financial assets (for example Investment Property) should reflect the “highest and best use” of each asset.
- 5.2.2 Fair value is the approach used by the RE to determine a value for those assets (either exchange traded assets or non-exchange traded assets) for which current market prices are not readily available. The determination of fair value is intended to provide, on a reasonable effort basis, the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm’s length transaction.
- 5.2.3 When the RE believes that an external value or values provided by a valuer or price source is not available for an asset or does not accurately reflect the market value of an asset (for example the valuation is outdated or is unreliable) then the RE may determine the fair value of the asset based on valuation principles, processes and methodologies set out in this Policy, including the use of a more recent independent external valuation.
- 5.2.4 Further details on the processes and methodologies used to determine Fair Value for certain non-exchange traded assets is contained in Sections 6.2, 9, 10 and 11 of this Policy.

5.3 Governance of valuation process

Approval

- 5.3.1 When fair value is adopted the RE will ensure that the fair value is determined in good faith and is documented at the time of its calculation. Any value adjusted or overridden to reflect fair value will be documented at the time of change and approved by the Global Head of Investment Operations and Control or at the direction of the Equity Investment Committee (EIC) for exchange traded assets or the relevant valuation investment committee for certain non-exchange traded assets (see paragraph 5.3.2).

For Schemes governed by trustees in New Zealand, approval is sought from the Global Head of Investment Operations and Control or at the direction of the Equity Investment Committee (EIC). AMP Capital Managing Director, NZ and the NZ Scheme Trustee if required by the Trust Deed.

Valuation Investment Committees – non-exchange traded assets

5.3.2 The following AMP Capital Investment Committees are responsible for reviewing and approving asset valuations for non-exchange traded assets which may include investments in unlisted investment structures, illiquid debt, direct real estate and infrastructure:

- Multi Asset Group Alternatives Investment Committee (MAGAIC);
- Multi Asset Group Single Sector Funds Investment Committee;
- Management Accounts Committee (MAC);
- Fixed Income Investment Committee (FIIC);
- Infrastructure Debt Investment Committee (IDIC);
- Real Estate Investment Committee (REIC); and
- Infrastructure Valuation Committee (IVC).

Training Requirements

5.3.3 The Global Head of Investment Operations and Control, AMP Capital Managing Director, NZ and each Valuation Investment Committee must ensure that the current version of this Policy is made available to all staff directly involved in the valuation process and that all new employees are appropriately briefed on the Policy as part of their induction process when joining AMP Capital.

6. VALUATION OF ASSETS

6.1 Valuation of exchange traded assets

- 6.1.1 Exchange traded assets may include equities, listed unit trusts, fixed interest securities, futures and placements and are generally traded more frequently than non-exchange traded assets.
- 6.1.2 The Custodian will value the assets of the Scheme in accordance with its Securities Pricing Policy (and, as applicable, the Price Source Agreement as agreed between AMP Capital and the Custodian). The Custodian's Pricing Policy is reviewed by the Global Head of Investment Operations and Control on an annual basis. The Custodian will notify AMP Capital of any material changes to its policy before such changes are implemented including change of price source.
- 6.1.3 There may be circumstances when a market price or value may be unavailable or thought to be unreliable. The RE, at the direction of the Equity Investment Committee (EIC) will consider the use of an adjusted fair value price, determined in accordance with the fair value methodology that is relevant to the asset.
- 6.1.4 The Global Head of Investment Operations and Control will ensure the Custodian maintains appropriate processes to identify zero movement or stale securities. Once a stale price is identified, the Global Head of Investment Operations and Control will endeavour to locate the most recent available price to apply at the next valuation point or consider the use of an adjusted fair value price, working with the EIC as appropriate.
- 6.1.5 In the event that an asset has been suspended from a recognised exchange, the EIC will review the particular asset to determine if the last price is appropriate and when the EIC believes otherwise, then all relevant factors will be considered to determine fair value.
- 6.1.6 In the event that an asset has been delisted from a recognised exchange, including those companies in liquidation, under appointed or voluntary administration, receivership or bankruptcy, the EIC will review the particular asset to determine if the last sale price is appropriate and when it believes otherwise, then all relevant factors will be considered to determine fair value.

6.2 Valuation of non-exchange traded assets

Unlisted Investment Structures

- 6.2.1 The Custodian will value the assets of the Scheme in accordance with its Securities Pricing Policy (or, as applicable, the Price Source Agreement as agreed between AMP Capital and the Custodian).
- 6.2.2 The relevant AMP Capital Investment Committee may engage an independent valuer or internal valuer to carry out the valuation as considered appropriate for any given type of unlisted investment structure. The method used by the valuer, whether internal or external, should be drawn from this Policy. The relevant AMP Capital Investment

Committee is responsible for determining the appropriate valuation methodology to be applied if any uncertainty or potential conflict exists.

The relevant AMP Capital Investment Committees may include, but are not limited to:

- Multi Asset Group Alternatives Investment Committee;
- Multi Asset Group Single Sector Funds Investment Committee; and
- Management Accounts Committee (MAC).

Unlisted internal unit trusts

6.2.3 When the assets in a Scheme are units in another RE-operated Scheme, the units held by the investing Scheme will be valued using the latest available redemption or NAV price, as applicable, for the valuation point.

Unlisted external investment structures (including unit trusts)

6.2.4 When the assets of a Scheme include an interest in an externally managed Scheme, the investment held by the investing Scheme will be valued using the latest available redemption or NAV price, as applicable, for the valuation point as provided by the external fund manager or their appointed agents, third parties or counterparties.

Prior to investment in external Schemes, the RE reviews the pricing and valuation policies of the Scheme.

6.2.5 Valuation adjustments may be required to either internally or externally calculated net asset values when a redemption or NAV price:

- is not available (for example when there is a known delay in NAV reporting);
- is thought to be an unreliable representation of fair value (for example NAV of infrequently traded Schemes, the Scheme is known to trade at a significant premium or discount to its NAV or there has been significant changes in the investment environment since the NAV of the Scheme was last reported); and
- does not reflect cash contributions, distributions and other transactions since the date that the NAV of the Scheme was last reported.

In these cases, AMP Capital (in agreement with the RE, where applicable) will consider the use of indexing to the relevant market indices or apply a premium or discount adjustment based on observable market transactions to ensure a fair value of the asset is represented.

Controlled entities held by "investment entities"

6.2.6 Certain Schemes are "investment entities" as defined in accounting standards. For financial reporting purposes, an investment by an investment entity in its controlled entity will be valued using the latest available underlying NAV of the controlled entity. In adopting NAV as the valuation basis, the RE will consider whether the carrying values of underlying assets and liabilities reflect fair value and whether any adjustment is required to NAV to determine fair value of the controlled entity (for example: underlying investments and working capital held at cost or some other non-fair value pricing basis, tax risk, timing differences arising from delayed NAV reporting). The MAC is the relevant committee that is responsible for reviewing and approving valuations of controlled entities.

Direct assets

6.2.7 Non-exchange traded assets may include investments in illiquid debt, direct real estate and infrastructure. AMP Capital has in place appropriate asset valuation processes and methodologies for all such assets which are detailed in Sections 9, 10 and 11 of this Policy.

6.2.8 Non-exchange traded assets are typically valued by a qualified independent external expert (the independent valuer) on behalf of the RE (unless the Scheme/mandate's governing documents do not require an independent valuer). The independent valuer providing the valuation service must do so in accordance with the Accounting Professional & Ethical Standard (APES) 225: Valuation Services or the relevant industry or international standard.

Non-exchange traded derivatives

6.2.9 Non-exchange traded assets can also include some over-the-counter (OTC) derivatives.

- The Custodian values OTC derivatives in accordance with the Custodian's Securities Pricing Policy and the Price Source Agreement as agreed between the RE and the Custodian as applicable. The Custodian in conjunction with the RE will attempt to source asset or liability prices from independent third-party vendors in respect to OTC derivatives.
- When appropriate, OTC derivatives may be valued using RE-approved models or counterparty valuations.

7. FREQUENCY OF ASSET VALUATIONS

- 7.1 The RE will ensure that Scheme assets are valued at least as frequently as interests in the Scheme may be traded (eg daily, monthly, quarterly), except for certain non-exchange traded assets, such as direct real estate or infrastructure, where the RE considers it impractical or not in the best interest of unit holders to value assets in this manner.
- 7.2 Where the formal valuation of certain assets is at extended or infrequent intervals (for example when asset valuations occur less frequently than Scheme prices are calculated), the RE will ensure the following principles are adhered to in order to maintain equity across intergenerational investors.
- Formal valuations are sought at least annually or more frequently if required;
 - To avoid sudden significant changes in the NAV, when circumstances permit, formal valuations will be staggered throughout the year;
 - When a Scheme consists of a number of similar assets with similar valuation drivers, such as direct real estate assets, each asset is valued at predetermined, regular intervals staggered evenly across the year to avoid concentrated changes to the NAV. When a Scheme consists of a number of assets when the valuation drivers may differ, such as an infrastructure asset, bi-annual valuations may be more appropriate; and
 - When the RE forms the view that there has been a significant movement in the underlying asset between formal valuation periods, the RE will consider reflecting this movement in the valuation used for unit pricing purposes.

8. SUSPENSION OF VALUATION OF ASSETS

- 8.1 There may be circumstances when the RE forms the view that the valuation of Scheme assets or liabilities cannot be reasonably calculated or obtained and may produce an inequitable outcome for investors.
- 8.2 The RE maintains a Unit Pricing Discretions Policy which outlines the circumstances in which the RE may exercise its discretion to suspend unit pricing and/or processing of applications and redemptions, to ensure an equitable outcome for investors. The suspension of unit pricing or the processing of investor transactions is a last resort and where possible other potential solutions may take precedence.

9. VALUATION OF ILLIQUID DEBT

This Section should be read in conjunction with Sections 1-8 and 12-17 of this Policy.

9.1 General

9.1.1 If the price of a debt asset is not readily and practically available from third party sources, then AMP Capital regards the asset as “Illiquid” (“Illiquid Debt”). In accordance with FSC Standard No. 9 (or NZ equivalent), when the market price of Illiquid Debt is unreliable or unavailable, the valuation must be determined in good faith by the RE or AMP Capital either by an independent valuer or otherwise by an internal valuer based upon sound and justified policies.

9.2 Valuation process

9.2.1 The relevant AMP Capital investment committee (for example, Fixed Income Investment Committee) may engage an independent valuer or internal valuer to carry out the valuation as considered appropriate for any given type of Illiquid Debt. The method used by the valuer, whether internal or external, should be drawn from this Policy. The relevant AMP Capital investment committee is responsible for determining the appropriate valuation methodology to be applied if any uncertainty or potential conflict exists.

The relevant AMP Capital investment committees may include, but are not limited to:

- Fixed Income Investment Committee (FIIC); and
- Infrastructure Debt Investment Committee (IDIC)

Frequency of valuation

9.2.2 Illiquid Debt valuations are determined by valuers bi-annually or more frequently to comply with certain scheme mandates as required.

9.2.3 When the RE forms the view that there has been a significant movement in the market affecting the underlying Illiquid Debt between formal valuation periods, the relevant investment committee will consider ad hoc valuations to check any market impact.

9.3 Valuation methodologies

9.3.1 The valuation method to be applied to Illiquid Debt shall be determined in accordance with the two valuation methodologies described below: either fair value or amortised cost.

Fair Value Method

9.3.2 Schemes holding Illiquid Debt for trading purposes and offering short term liquidity shall apply the fair value method to value that debt. The fair value method may also be required for disclosing the fair value of debt assets to investors.

9.3.3 This method addresses the fair value of the credit risk component of the asset's valuation. Where the valuation is determined by a combination of other factors such as interest rates and currency rates, current values (available from usual sources) for those factors should be used.

Methodologies and Guidelines

9.3.4 Illiquid Debt is valued by applying one of several fair value methodologies. The valuer should select the valuation methodology that is the most appropriate for a particular investment and one that represents a fair and equitable outcome for all investors in the Scheme.

9.3.5 Where the preferred method used by a valuer no longer reasonably estimates fair value, then the valuer should use the next best method in which event the valuer should provide an explanation as to why the valuation methodology was changed.

- 9.3.6 The valuer should consider whether any legal or other regulations apply to the context in which the valuation is intended to be used.

The relevant valuation methodologies in order of application are:

1. The average of actual mid-price quotes from market price and evaluation services not typically used by AMP Capital;
 2. The average of actual mid-price quotes from recognised brokers;
 3. The present value of all known future cash flows (i.e. including all future coupon payments and par value of the debt at maturity) discounted using a risk adjusted yield percentage. The risk adjusted yield percentage can be sourced via one of the following methods:
 - a) The average of actual mid-price quotes from recognised price provider for a similar debt instrument of the same issuer adjusted according to original issue spread differences and maturity, to generate the risk adjusted yield percentage which is used to calculate a price for the instrument (for example derive subordinated spreads from senior spreads); or
 - b) The average of actual mid-price quotes from recognised price providers (for example Interactive data or Markit, or recognised brokers for a pre-approved peer group, matched by region, credit quality, industry and maturity), to generate the risk adjusted yield percentage which is used to calculate a price for the instrument; or
 - c) If no peers can be established, the average of actual mid-price quotes from recognised price providers (for example Interactive data or Markit, or recognised brokers for a pre-approved index defined by region, credit quality, industry or maturity), to generate the risk adjusted yield percentage which is used to calculate a price for the instrument.
 4. A valuation of the sum of the parts on refinance, (some valuers may value the debt by first valuing the enterprise value of the business, then calculating the appropriate discount rate for the debt if the existing debt were to be refinanced);
 5. The present value of all known future cash flows (i.e. including all future coupon payments and par value of the debt at maturity) discounted using a risk adjusted yield percentage on acquisition adjusted for any known changes in the risk profile of debt asset or changes in the market risk;
 6. Acquisition cost plus accrued interest. It is recommended that this methodology only be used within 1 month of the date of acquisition of the Illiquid Debt by the Scheme;
 7. Issue Price plus accrued interest.
- 9.3.7 The valuer should take into account any known trading in the debt. The valuer is not required to ensure that their valuation conforms with the current valuation to the known market price but should justify any difference before confirming the valuation.

Illiquid Debt assets which have valuations derived from inputs other than credit yield spreads should be valued by incorporating or using market prices for those inputs.

- 9.3.8 All valuations plus inputs proposed by the valuer such as the setting of the appropriate peers or other benchmarks should be documented and approved by the respective investment committee before their use.

Pricing observations of Illiquid Debt

- 9.3.9 Assets categorised as Illiquid Debt may trade in debt markets or between investors. The valuer will become aware of these trades through the prices provided by valuation services and broker quotes. In any case, fund managers should report to the relevant investment committee as soon as practicable, any known trading in Illiquid Debt, that is at prices materially different from current valuations.

Amortised Cost – Illiquid Infrastructure Debt Funds

- 9.3.10 Illiquid Debt Funds managed by the Infrastructure Debt team - debt assets are valued at amortised cost plus any accrued interest up to the valuation date.

Guidelines

- 9.3.11 Amortised cost of a debt asset is its initial fair value minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between the initial amount and the maturity amount, adjusted for impairment / 'material risk of loss'.
- 9.3.12 Material risk of loss is defined as an expectation that there is likely to be an event of default (it is probable) under the senior or junior loan obligations of the borrower leading to a potential loss for senior and junior (subordinated) lenders to the business, based on the projected performance of the business involved.
- 9.3.13 When the Infrastructure Debt team determines that a significant impairment is likely to exist and/or there is a material risk of loss, the Infrastructure Debt team obtains an independent valuation by a qualified independent external valuer. Based on this valuation, the value at which the debt asset is carried within the Scheme is adjusted accordingly and may be reduced.

Assets for sale

- 9.3.14 The above guidelines shall apply at all times including when an asset is offered for sale, is conditionally sold or is partially sold in response to situations when liquidity needs were not anticipated.
- 9.3.15 Assets which are unconditionally contracted for sale shall be held in the portfolio at that sale price from the date of the unconditional sale agreement until they are sold. It is also appropriate to accrue for estimated selling costs for such assets.
- 9.3.16 The Scheme's NAV will continue to reflect the carrying value of the debt assets at amortised cost less impairment until the date that they are sold (unconditionally exchanged or settled). Debt assets sold for less than their carrying value will crystallise a loss for the Scheme (and be reflected in the Scheme's NAV) at the date of their sale.

Methodology

- 9.3.17 Assets shall be valued at amortised cost if both the following conditions are met:
- the objective of the Scheme's business model is to hold the assets to collect contractual cash flows; and
 - the contractual terms of the asset give rise on specified dates to cash flows that represent solely payments of principal and interest.

Effective interest method

- 9.3.18 The effective interest method is a method of calculating the amortised cost of a financial asset (or group of financial assets) and of allocating the interest income over the relevant period.
- 9.3.19 The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset.
- 9.3.20 When calculating the effective interest rate, an entity shall estimate cash flows considering all contractual terms of the financial instrument (for example prepayment, call and similar options) but shall not consider future credit losses. The calculation includes all fees and basis points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts.
- 9.3.21 There is a presumption that the cash flows and the expected life of a group of similar financial instruments can be estimated reliably. However, in those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a financial instrument (or group of financial instruments), the entity shall use the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Expected credit losses (ECL) impairment model

- 9.3.22 For financial reporting purposes, following the introduction of IFRS 9 Financial Instruments from 1 January 2018, financial assets measured at amortised cost must be assessed for impairment using the expected credit losses (ECL) impairment model. The ECL model has a three-stage approach to impairment assessments, whereby all assets are categorised (Stage 1, Stage 2 or Stage 3) based on the Infrastructure Debt team's assessment of the current credit risks/ratings. Provisions for expected credit losses are based on each asset's probability of default over either 12 months (Stage 1) or its lifetime (Stage 2 or Stage 3).

Stage 1 Performing loans – assets with no significant increase in credit risk since inception.

A 12-month ECL provision will be applied to all financial assets measured at amortised cost. When assessing ECL, assets can be categorised based on their 'shared credit risk characteristics'.

The ECL provision will be calculated using: an appropriate 12-month probability of default (PD or default rate/loss ratio, such as Moody's or S&P credit ratings); an appropriate loss given default rate (LGD, being 100% minus the assumed recovery rate, based on relevant considerations such as the internal track record); and exposure at default (EAD, being the loan principal plus/minus any undrawn commitments and/or prepayments that could occur within 12 months, where applicable).

Stage 2 Underperforming loans – assets with a significant increase in credit risk (SICR) since inception.

A credit deterioration testing procedure is in place for all Stage 1 assets. Testing occurs on a semi-annual basis, at 30 June and 31 December each year with the latter being the financial reporting date.

As part of the six-monthly assessment, any Stage 1 asset that fails the SICR test will be transferred to Stage 2. The basis for determining the asset's impairment provision will change from 12 months expected credit losses to lifetime expected credit losses. If the Infrastructure Debt team observes significant development(s) with an asset, the consideration of a SICR will occur promptly. This may occur earlier than the assessment process performed at 30 June or 31 December each year.

The SICR test incorporates elements of;

- quantitative analysis (for example financial info, covenants);
- qualitative analysis (for example counterparty risk);
- macro considerations (for example interest, CPI);
- current data (for example EBITDA, covenants); and
- forward looking information (for example interest rate curve, budgets).

Underperforming loans categorised as Stage 2 may have experienced significant impairment. In this case, the Infrastructure Debt team will closely monitor the loan and consider obtaining an independent valuation (see paragraph 9.3.13). Where an independent valuation has not been obtained, the ECL provision will be calculated on the same basis as Stage 1 loans, except the probability of default and exposure at default will reference lifetime data.

Stage 3 Non-performing loans

Stage 3 Non-performing loans will have experienced significant impairment. In this case the Infrastructure Debt team will obtain an independent valuation of the relevant asset (see paragraph 9.3.13).

10. VALUATION OF REAL ESTATE

This Section should be read in conjunction with Sections 1-8 and 12-17 of this Policy.

10.1 General

10.1.1 AMP Capital values Real Estate in accordance with:

- Requirements of the Australian Accounting Standards, International Financial Reporting Standards or New Zealand Accounting Standards for accounting of real estate assets, including AASB 140: Investment Property and NZ IFRS: IAS 40; and
- International Valuation Standards (IVS) issued by the International Valuation Standards Council (IVSC).

10.1.2 The definition of market value below has been adopted by the Australian Property Institute and Property Institute of New Zealand, and is used by AMP Capital to determine market value:

“Market Value is the estimated amount for which a property 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.”

10.1.3 The fundamental principle of the valuation process is to produce a “fair value” of the investments. As set out in Section 5.2, the international accounting standard for fair value measurement (IFRS 13) defines fair value as “the price that would be received to sell an asset...in an orderly transaction between market participants at the measurement date.” This price should reflect “an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions, regardless of whether that price is directly observable or estimated using another valuation technique.” The fair value should be measured “using the assumptions that market participants would use when pricing the asset or liability” and for non-financial assets should reflect the “highest and best use” of each asset.

The adopted definition of market value is consistent with the principle of fair value and takes into account the “highest and best use” of the asset, which is defined by the IVSC as “highest and best use is the use of an asset that maximises its potential and that is possible, legally permissible and financially feasible”.

10.2 Valuation process

Valuation Frequency and Program

10.2.1 Real Estate valuations are determined by independent real estate valuers annually or more frequently to comply with certain scheme mandates as required. Annually, the AMP Capital Valuation Manager (Australia) meets with fund managers to agree a valuation program for the properties within each Scheme. The annual program is presented to and approved by the Real Estate Investment Committee (REIC). The fund managers or the REIC can also recommend additional real estate valuations outside of the program, if the market indicates the potential for a material change in value of particular properties to have occurred. In New Zealand, the Fund Analysts meet with the respective Fund Managers to agree a valuation program for the properties within each Scheme. The Fund Managers and their respective governing bodies, or the REIC can also recommend additional valuations outside of the regular program if the market indicates the potential for a material change in value of particular properties to have occurred.

10.2.2 Valuations may be staggered throughout the year to avoid concentrating the effect of any changes in valuation that may cause price discontinuity. Additional valuations may be undertaken between the valuation periods to take into account any abnormal or major events that may affect the valuation significantly. For this purpose, a ‘major event’ occurs where:

- AMP Capital has reason to believe that market conditions or asset-specific matters have caused a property’s value to change significantly, which could result in the value of the related portfolio increasing or decreasing by a material amount. Indicative events include:
 - Loss of a major tenant that effects rental income by 50% or more;
 - Rezoning; and
 - Significant variances in recent AMP Capital portfolio valuations of similar properties.

- A force majeure event has occurred, causing the most recent valuation to no longer be a reliable estimate of the value of the property, which could result in the value of the related portfolio increasing or decreasing by a material amount.
- The matter is mitigated by the regular valuation frequency (generally quarterly).

Where a property is under significant construction as part of a major redevelopment AMP Capital will value the property annually in accordance with the International Valuation Standards IVS410 and IVS 233, however the valuation maybe undertaken more frequently if required by the relevant Fund Manager or the investment mandate. It is the responsibility of the Valuation Manager to identify whether an asset is under major development and therefore should change to an annual valuation cycle. In identifying such assets the Valuation Manager should consider the following:

- The scale of the development in comparison to the asset value (generally if development costs are more than 25% of the existing “as is” valuation the Valuation Manager should consider changing to an annual valuation)
- Timeframe to undertake the works (generally if the works are to take longer than 12 months the Valuation Manager should consider changing to an annual valuation); and
- Whether the appointed valuer will be undertaking an “as if complete less cost to complete” valuation whilst the works are being undertaken (if this is the case the Valuation Manager should consider changing to an annual valuation)

10.2.3 The Valuation Manager must obtain approval from the REIC for a property that is reclassified as under major development and valued under a 12-month cycle.

Valuation Panel

10.2.4 The Valuation Manager (Fund Analyst and Fund Manager for NZ) identifies the valuers who will sit on the Valuation Panel. Generally, there will be at least four valuers (NZ: three) on a panel. Valuers included on the panels will be licensed (as required), reputable and have appropriate professional indemnity insurance. The valuation panels will be reviewed on a periodic basis (at least annually), with approval of any changes to the valuation panels occurring through the REIC.

10.2.5 To undertake a valuation for AMP Capital a valuer must:

- Be suitably qualified to carry out such valuations and have at least five years appropriate experience;
- Be authorised to practice as a valuer in the jurisdiction in which the asset being valued is located;
- Have no pecuniary interest that could reasonably be regarded as being capable of affecting that person’s ability to give an unbiased opinion of the value, or that could conflict with a proper valuation of the property; and
- Accept instructions to value the property only from the Responsible Entity/Trustee/Valuation Manager/Investment Manager /Fund Analyst/Fund Manager (as applicable).

10.2.6 A non-panel valuer may be used for particular valuations where they are considered to be the most qualified for an appointment. In such instances the Valuation Manager/NZ Fund Analyst will detail the reason for selection to the REIC and obtain its authorisation prior to appointing the non-panel valuer. It is envisaged that a non-panel valuer may be used for ‘specialised’ real estate such as licensed premises, service stations, hotels, aged/health care facilities or residential development sites.

10.2.7 The process and criteria used to assess and evaluate the valuers included on the valuation panel is as follows:

- Annually the Valuation Manager obtains Capability Statements from the panel valuation firms detailing relevant experience of the team members. As part of this process the Valuation Manager will also consider the experience and quality of valuation firms not currently on the valuation panels, who may be suitable for appointment to a panel;
- Where a new valuer is to be appointed to the panel they must enter into a Valuation Services Agreement in the form approved by AMP Capital legal;
- Monitoring of the five-year appropriate experience requirement; and
- Valuation Manager/Fund Analyst to regularly report to the REIC regarding the performance of the panel valuers.

10.2.8 Valuers are rotated across assets to ensure each property is exposed to a variety of valuers over time. An asset may be valued by the same external independent valuer for a period not exceeding two years (NZ: three years). Quotations are requested on a two-year (NZ: three-year) appointment basis. Where a valuer has not performed to the required standard the Valuation Manager may (with the approval of the REIC) terminate the valuation engagement and commence the quotation process to appoint an alternate valuer

Where an asset is under major development that will extend beyond two years, the same valuer may be engaged on the asset for a period in excess of the standard two years (NZ: three years). These extended appointments for development assets are designed to reduce unnecessary valuation volatility that can result via change of valuer part way through a development. An extended valuation appointment must be approved by the REIC. In no circumstance can a valuer be appointed to an asset for a period longer than four years.

Valuation Governance

10.2.9 Valuations are conducted in accordance with the Valuation Services Agreement entered with each valuation panel member. A Work Order is issued for each valuation as well as a pack of property information including tenancy schedules, leases, outgoings, capital expenditure and details of current or pending leasing deals. To ensure independence of the valuation, AMP Capital's position on market value is withheld, as too are details of prior valuations.

10.2.10 All valuations are required to indicate the basis (minimum of two methods) upon which the value of the property has been assessed and fully disclose all valuation calculations. The draft valuation calculations are reviewed for data integrity by AMP Capital and then presented to the REIC, where the workings are discussed and assumptions reviewed, queried and, if necessary, challenged.

Real Estate Investment Committee

10.2.11 The membership and function of the REIC is set out in the Real Estate Investment Committee Terms of Reference, which is available upon request. When the REIC is satisfied that a given valuation reflects the fair value of the property, the approved value is supplied to the accounting team and recorded in the general ledger.

Internal Valuations

10.2.12 From time to time it may be necessary for AMP Capital to undertake an internal valuation to determine 'fair value' of an asset. These internal assessments are sometimes referred to as Directors' Valuations. If an internal valuation is to be undertaken, then prior to that valuation being approved, the draft valuation results will be presented to the REIC for review, discussion and approval. Only when the REIC is satisfied that a valuation reflects the fair value (in accordance with IFRS13 and AASB 140/NZ IFRS 140), will a Directors' Valuation be adopted.

10.3 Valuation methodologies

10.3.1 The valuation method to be applied to Real Estate shall be determined by the valuer and may include, but is not limited to, one or more of the following methodologies: discounted cash flows (DCF), capitalisation, direct comparison, hypothetical development or summation/cost approach.

The valuer should use his or her judgement to select the valuation methodology that is most appropriate for a particular asset and explain the methodology and assumptions and why they are reasonable and appropriate for the assets

Discounted cash flows

10.3.2 The DCF method calculates the value of the property via the application of a market derived discount rate to the property net cash flow (after capital expenditure) over an investment horizon (usually 10 years). The DCF approach takes into account the operating cash flows of the property and the proceeds from the assumed sale of the asset at the end of the investment horizon (terminal value).

The DCF method is commonly used as a primary valuation approach for investment properties.

10.3.3 The various cash flow items included in the DCF are summarised below:

- Acquisition costs (including stamp duty);
- Rentals reserved under current leases, including review provisions;
- Current market rental;
- Market rental growth profile;
- Leasing-up program for all current vacant space, including associated incentives, leasing fees and other lease-up costs;
- Letting up allowances at future lease expiries based upon a tenant retention profile and associated letting up period, incentives, leasing fees and other lease-up costs
- Property outgoings recovery from tenants;
- Other income (for example casual leasing etc.)
- Vacancy and bad debt allowances;
- Property Outgoings;
- Capital expenditure, including refurbishment/upgrade/redevelopment costs and timings and effect of these on rental; and
- Terminal value and associated disposal costs.

10.3.4 The Discount Rate applied in the DCF method reflects the time value of money and most importantly the risk associated with the future operations of the asset. The discount rate is market derived based upon analysis of comparable sales and consideration of returns from alternate forms of investment. The discount rate should, to the extent possible, apply to a cash flow stream that reflects the asset-related risks.

10.3.5 The Terminal Value is determined by assessing the value of the property at the end of the investment horizon, usually via the application of the capitalisation method. The terminal capitalisation rate is a key input and should reflect the long-term marketability of the building, forecast tenancy profile at the terminal date and capital expenditure assumptions applied throughout the cash flow. The terminal capitalisation rate is applied to the estimated market net income at the terminal date to arrive at a core value. The core value is specifically adjusted (as opposed to an arbitrary adjustment to the terminal capitalisation rate) for items such as pending lease expiries, rental reversions etc. to arrive at the terminal value.

10.3.6 Growth rates, at the discretion of the valuer based on his or her estimation of the market, are applied to the various cash flow streams over the investment horizon.

Capitalisation approach

10.3.7 This approach takes the current gross rent for all aspects of the property and deducts property outgoings and other expenses (for example ongoing vacancy allowance) to arrive at the net property income. The net property income is capitalised in perpetuity at a capitalisation rate to arrive at the core value of the property. Adjustments are made to the core value to account for rental reversions, letting up allowances, incentives and capital expenditure to arrive at the final value of the property.

The Capitalisation method is commonly used as a primary valuation approach for investment properties.

10.3.8 The capitalisation rate is a key input in the Capitalisation method and generally reflects the security of the income associated with the property and future income and capital growth prospects. Valuers will usually derive their capitalisation rates based on analysis of sales of comparable properties and their understanding of real estate investment market conditions.

In determining the appropriate capitalisation rate the valuer will consider the property specifics, including:

- Location and surrounding infrastructure and services;
- Building age, condition, quality of accommodation and associated future capital expenditure requirements;
- The security of the lease covenants over the property, remaining lease terms and rental review provisions; and
- Future income and capital growth prospects.

Direct comparison

10.3.9 This approach is used in cases where there are sales of properties that are similar to the subject property to enable them to be compared without significant adjustment for points of difference. This method of valuation is more typically used for the valuation of vacant land or residential real estate, however it is also commonly used as a check method to the DCF and Capitalisation approaches in investment valuations.

10.3.10 In applying the direct comparison approach the valuer will utilise a unit of comparison (for example \$/sqm of land area for vacant land, \$/sqm of net lettable area for office buildings) and make adjustments to the analysed rates from the comparable sales to take into account the specifics of the subject property.

Hypothetical development – Residual Land Value

10.3.11 This approach is also referred to as the Residual Land Value approach and is used to assess the value of development property. The approach involves estimating the future cash flows from the development of the property and making allowances for developers profit to arrive at a residual value for the property in its current form. The hypothetical development approach can be undertaken on a static basis utilising a profit and risk factor, or as a DCF utilising a developer target discount rate.

10.3.12 Numerous assumptions and estimates are utilised in the hypothetical development approach, which could lead to error as the residual land value is sensitive to changes in input assumptions. The approach has been accepted by the Courts on a number of occasions as being the best method applicable under certain circumstances; however, it is usually undertaken in conjunction with an alternate valuation method (direct comparison).

10.3.13 This approach is typically used by AMP Capital for assets under construction where the assessed value is based on an “As if Complete/On Completion” value less the cost to complete and an appropriate profit and risk allowance in accordance with the International Valuation Standard for Valuation of Development Property (IVS 410) and Valuation of Investment Properties Under Construction (IVS 233).

Summation or cost approach

10.3.14 In valuation practice, the term ‘summation’ means the addition of the values of the constituent parts of a property to arrive at its total value. This approach is most commonly used in respect to valuations of properties where investment-based approaches do not serve as an effective guide to value and in the valuation of specialised buildings where there is limited market evidence. This approach is not commonly used in the valuation of AMP Capital real estate assets, however maybe utilised for specialised properties, or in conjunction with other valuation methods (for example direct comparison) for vacant properties.

10.4 International real estate

10.4.1 The valuation of international real estate (excluding New Zealand) is undertaken on the same basis as the domestic assets detailed above. The main difference is that the valuer selection, valuer instruction and data integrity and review of the draft valuation are undertaken by the ‘Local Partner’. The Local Partner is the nominated AMP Capital representative in Europe, Asia or North America.

Prior to the finalisation of international valuations, the overseas joint venture partners undertake to:

- Confirm that the data has been reviewed and is correct;
- Confirm prior to appointment and instruction that a particular valuer has the requisite skill and experience; and
- Confirm (after having regard to regional / jurisdictional / asset class differences) that the approach to the valuation is in accordance with this Policy.

Prior to valuations being approved, the fund manager will ensure that the valuations are presented to the REIC for review. Only after REIC approval will the new valuation be provided to the accounting team and booked to the ledger.

10.5 Real estate assets classified as inventory

10.5.1 Where real estate assets are held, or developed, for the purpose of sale, the asset is classified as an inventory asset. For example, development assets including development of residential apartments for sale, or the rezoning or subdivision of land for the purpose of resale. Inventory excludes investment property that is being constructed or redeveloped for the purpose of earning rental income or capital appreciation.

For financial reporting purposes, the carrying value of an inventory asset is measured at the lower of 'cost' and 'net realisable value'. Net realisable value is defined under accounting standards as the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Net realisable value is not adjusted to reflect the time value of money.

For unit pricing, where there are indicators that the fair value of an inventory asset is:

- less than the carrying value; or
- greater than the carrying value and significant milestones have been achieved;

the Valuation Manager / Fund Manager shall determine whether any adjustment to the carrying value is required, considering both the 'milestones' and 'additional factors' set out below.

Consideration should also be given to the frequency that any Information Memorandum requires for the Fund Manager to conduct a review of the carrying values of its investments and arrange independent valuations where material variations are evident. This review is reported to the REIC.

Milestones

10.5.2 In assessing fair value, the Valuation Manager / Fund Manager will also consider individual circumstances of each asset including:

- Approval of Development Application (DA) or rezoning
- Obtaining significant tenancy/ settlement pre-commitments
- Ability to significantly de-risk a project (e.g. executing a fixed price development agreement); and
- Achievement of practical completion of the development asset

Additional factors

10.5.3 As these milestones occur, the Valuation Manager / Fund Manager shall update the feasibility model and document how they impact the valuation of the development assets, including the magnitude of the impact, and the likelihood that the new value will be realised by considering the following additional valuation factors:

- Percentage of completion of the project;
- Changes in the feasibility timeframe
- Construction risk;
- Changes in price of raw materials and other inputs;
- Compressed / extended planning horizon;
- Changes in economic environment (for example interest rates, diminished property fundamentals);
- Sales contracts (exchanged or settled) and sales enquiries; and
- Taxes, commissions and selling costs that may or may not be applicable based on the expected realisation method for the project (e.g. sale of individual inventory assets or sale of an entire development site).

11. VALUATION OF INFRASTRUCTURE

This Section should be read in conjunction with Sections 1-8 and 12-17 of this Policy.

11.1 General

- 11.1.1 All unlisted Infrastructure Equity assets will be valued by a qualified independent expert (the independent valuer) with exceptions approved by the Infrastructure Valuation Committee (IVC). Exceptions will typically be due to issues of materiality and must be permissible by drawing reference to direction given in the investing Scheme's governing documents or client management agreements (see paragraph 11.2.4).
- 11.1.2 When an independent valuer's recommendation (generally the mid-point in the valuation range) is not used in preference for an alternative point in the valuation range, the Investment Executive is required to provide an explanation of the difference and prior to adopting the valuation, the IVC is to note any potential conflicts of interest which may arise from the difference in valuation (for example impacts to performance fees).
- 11.1.3 For those assets that are valued by an independent third party, the Investment Executive must detail, and the IVC must note, the period over which the current valuer has performed the valuation and the IVC should give consideration to their rotation after a term of three or more years. Circumstances may arise where an external valuer continues beyond three years (for example, assets where only one valuer exists in the market, or if AMP Capital does not have control over the valuation process for a particular asset).

11.2 Valuation process

Frequency of valuation

- 11.2.1 The valuation of unlisted Infrastructure assets managed by AMP Capital is undertaken at least bi-annually.
- 11.2.2 In June and December of each year, the Investment Executive responsible for each unlisted asset is required to commission or undertake a valuation of their respective investments, and present the results of the exercise to the IVC. The Investment Executive is also required to demonstrate the appropriateness of the valuation methodology adopted, analyse and discuss the key assumptions and confirm the compliance with each investor's mandate concerning the valuation.
- 11.2.3 The Investment Executive will give consideration to commissioning or undertaking a valuation (independent valuer or internal valuer) of the asset outside of the bi-annual process when they form a view that a significant movement in the underlying asset has occurred. Significant movements may occur through events such as company specific issues, macroeconomic factors or the payment of dividends or capital returns to shareholders.

Internal valuations

- 11.2.4 When an independent valuation is not required (ie. is excepted from an independent valuation) due to issues of materiality (see paragraph 11.1.1) and the Scheme/mandate's governing documents allow it, the Investment Executive may elect to complete an internal valuation to determine fair value instead of appointing an independent expert. Internal valuations should be carried out in accordance with Section 11.3.
- 11.2.5 The internal valuations are commonly referred to as Directors' Valuations. If a Directors' Valuation is to be undertaken, then prior to that valuation being approved, the draft calculations will be presented to the IVC where the workings are discussed and assumptions reviewed, queried and if necessary challenged. Only when the IVC is satisfied that a valuation reflects the fair value, will a Directors' Valuation be adopted.

11.3 Valuation methodologies

- 11.3.1 There are several valuation methodologies that may be considered for use in estimating the Fair Value of unlisted investments. The valuer (independent valuer or internal valuer) should use his or her judgement to select the valuation methodology that is the most appropriate for a particular Investment. The valuation methodology adopted by the valuer may include, but is not limited to, one of the methodologies set out below:

Price of Recent Investment

11.3.2 In applying the Price of Recent Investment methodology, the valuer may use:

1. the Cost of the investment itself (which may include transaction costs); or
2. the price at which a new investment or external transaction is known to have occurred

to determine Fair Value of the investment. If the carrying value of the investment is determined using these methods, then it should also be supported by a valuation using an appropriate alternate methodology.

Earnings Multiple

11.3.3 This methodology involves the application of an earnings multiple to the earnings of the underlying business being valued in order to derive a value for the investment. This methodology is likely to be appropriate for established businesses with an identifiable stream of continuing earnings that can be considered to be maintainable. In using the Earnings Multiple methodology to estimate the Fair Value of an investment, the valuer should:

1. Apply a multiple that is appropriate and reasonable (given the risk profile and earnings growth prospects of the asset) to the maintainable earnings of the business;
2. Adjust the amount derived in (1) above for surplus assets or excess liabilities and other relevant factors to derive the Gross Enterprise Value for the business;
3. Deduct from the Gross Enterprise Value all amounts relating to financial instruments ranking ahead of the highest ranking instrument of the investor in a liquidation and taking into account the effect of any instrument that may dilute the investors investment in order to derive the Net Attributable Enterprise Value;
4. Apportion the Net Attributable Enterprise Value appropriately between the relevant financial instruments.

Net Assets

11.3.4 This methodology involves deriving the value of an investment by reference to the value of its net assets. This methodology is likely to be appropriate for an investment whose value is derived mainly from the underlying value of its assets rather than its earnings, such as property holding companies and investment businesses. In using the Net Assets methodology to estimate the Fair Value of the Investment, the valuer should:

1. Derive the Gross Enterprise Value for the company using appropriate measures to value its assets and liabilities (including, if appropriate, contingent assets and liabilities);
2. Deduct from the Gross Enterprise Value all amounts relating to financial instruments ranking ahead of the highest ranking instrument of the investor in a liquidation in order to derive the Net Attributable Enterprise Value;
3. Apportion the Net Attributable Enterprise Value appropriately between the relevant financial instruments.

Discounted Cash Flows or Earnings

11.3.5 This methodology involves deriving the value of an asset by calculating the present value of expected future cash flows (or the present value of expected future earnings, as a surrogate for expected future cash flows). The cash flows and terminal value are those of the underlying business, not those from the investment itself. In using the Discounted Cash Flows or Earnings (of Underlying Business) methodology to estimate the Fair Value of an asset, the valuer should:

1. Derive the Gross Enterprise Value of the company, using reasonable assumptions and estimations of expected future cash flows (or expected future earnings) and the terminal value, and discounting these cash flows to the present value by applying the appropriate risk-adjusted discount rate that quantifies the risk inherent in the underlying business;
2. Deduct from the Gross Enterprise Value all amounts relating to financial instruments ranking ahead of the highest ranking instrument of the investor in a liquidation in order to derive the Net Attributable Enterprise Value;
3. Apportion the Net Attributable Enterprise Value appropriately between the relevant financial instruments.

Discounted Cash Flows (from the investment)

- 11.3.6 This methodology applies the DCF concept and technique to the expected cash flows from the investment itself. Where realisation of an asset, or a flotation of the underlying Business is imminent and the pricing of the relevant transaction has been substantially agreed, the Discounted Cash Flows (from the investment) methodology (or, as a surrogate, the use of a simple discount to the expected Realisation proceeds or flotation value) is likely to be the most appropriate methodology.
- 11.3.7 In using the Discounted Cash Flows (from the investment) methodology to estimate the Fair Value of an Investment, the valuer should derive the present value of the investment, using reasonable assumptions and estimations of expected future cash flows and the terminal value and date, and the appropriate risk-adjusted discount rate that quantifies the risk inherent to the investment.

Industry Valuation Benchmarks

- 11.3.8 A number of industries have industry-specific valuation benchmarks (for example "price per bed" for nursing home operators). Other industries, including certain financial services and information technology sectors and some service sectors where long-term contracts are a key feature, use multiples of revenues as a valuation benchmark. The use of such industry benchmarks is only likely to be reliable and therefore appropriate as the main basis of estimating Fair Value in limited situations, and is more likely to be useful as a sense-check of values produced using other methodologies.

12. MONITORING

The effectiveness of controls is assessed through the completion of regular Control Self-Assessments by business units for operational responsibility for asset valuations. Adherence to the Policy is attested to in the Quarterly Compliance Report (QCR).

13. RECORD KEEPING

AMP Capital will ensure that all records concerning this Policy are retained for seven years after they cease to be current.

14. CONSEQUENCES OF NON-COMPLIANCE

Breaches of the Policy will be assessed against the criteria for an Incident in the *AMP Enterprise Risk Management Handbook* and raised in the Incident Management Database as appropriate.

15. OWNER OF POLICY

The Chief Executive Officer - AMP Capital has responsibility for this Policy and may vary it with the approval of the AMP Capital Investment Committee. The Global Head of Investment Operations and Control is responsible for the day to day application of this Policy.

16. REVIEW AND ASSESSMENT

The Global Head of Investment Operations and Control will coordinate the review of this Policy by the Business Circulation List at least annually to ensure that it remains relevant, current and compliant with all applicable laws governing AMP Capital's relevant activities and functions including obtaining approval from relevant stakeholders and Boards.

Approval by the AMP Capital Investment Committee will only be required following material changes to the Policy.

17. REFERENCES AND OTHER RELEVANT POLICIES

The Policy should be read in conjunction with the documents below.

Document Title
AMP Capital Unit Pricing Discretions Policy
ASIC/APRA Unit pricing: Guide to good practice (RG94)
FSC Standard No. 9: Valuation of Scheme Assets and Liabilities
FSC Guidance Note No.26: Asset Valuation and Unit Pricing for Infrequently Valued Assets
Custodian Securities Pricing Policy
Price Source Agreement – AMP Capital Investors and Custodian
International Property Valuation Standards 1, 2 and 3
International Private Equity and Venture Capital Valuation Guidelines
Accounting Professional & Ethical Standard (APES) 225: Valuation Services
Enterprise Risk Management Handbook
PSP Investments International Portfolio Appraisal Specifications