**Week 3A - Real Estate Investments** (Important: Location, Location, Location!!).

**Purpose of Real Estate Investment**:

a. Private Purpose - own residential property for family living
b. Business Purpose – own commercial property for conducting business
c. Investment Purpose – Income purpose (periodic rental income) or speculative purpose (mainly looking for return in the form of quick capital appreciation).

| Advantages of Real Estate Investment | Disadvantages of Real Estate Investment |
|---|---|
| • Tangible Security<br>• Provides both income and capital growth (may also have capital loss)<br>• Control – investor can solely manage the property.<br>• Leverage – 'negative gearing' provides tax benefits for the investor. | Time Horizon:<br>• ST investors may be concerned with current interest rates and market expectations.<br>• LT investors may be concerned with economic factors (population growth and long term capital appreciation.<br>Geographic Area – property value is link the what is going on around it.<br>Liquidity – illiquid compared to financial securities (how long the property has been on the market).<br>Speed of Transaction<br>Maintenance Margin – repairs and maintenance to be carried out.<br>Government Controls – town and country planning regulations.<br>Economic Conditions – impact of economic growth, inflation, employment etc.<br>Legal Complexity<br>Availability of Information – property market is less efficient because of the lack of investor information.<br>Costs of Acquisition – legal costs and stamp duty. |

**Forms of Real Estate Investment**

1. **Direct Investment** – allows direct control over the investment, with no trust or management fee and the tax benefits are not diluted as in trusts.
   a. Disadvantages – poor liquidity, high transaction costs (including stamp duty), high entry capital costs, poor diversification (exception property syndicates) and management costs.
2. **Indirect Investment** – investing in property through Purchasing securities in an Australian Real Estate Investment Trust (A---REIT)
   **a.** Advantages: Low transaction costs, low capital requirements, high diversification and liquidity, and professional asset management
   **b.** Disadvantages: High management fees, and high correlation of A---REIT with All Ordinaries Index reduces some of the diversification benefit

| Property Valuation – Market Value |
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| **The Cost Approach** (aka Summation Method) – the idea that an investor should not pay more for a property than it would cost to rebuild it at today's prices for land, labour and construction materials<br>• Must amount for physical depreciation of the building and is suitable for residential property and new or relatively new buildings.<br>• Experts suggest that this approach should be used with other methods. |
| **The Direct Comparison Approach** – involves the analysis of comparable sales (Straight forward & simple approach)<br>• Based on the idea that the value of a property is about the same as the prices of which other similar properties have recently been sold – suitable for properties where several recent & similar property sales have occurred. |

| • All properties are unique so price adjustments are necessary. |
|---|
| **The Income Approach** – the value of the property is the present value of all its future income<br>= Annual Net Operating Income/ Market Capitalisation Rate (R).<br>• ANOI – subtract vacancy and collection losses and property expenses (except mortgage) from gross potential rental income.<br>• Market Capitalisation Rate – discount rate is obtained by examining recent market sales figures to determine the rate of return currently required by property investors. |

**After-Tax Cash Flows Investment Approach –** Discounted Cash Flows (NPV)

- DCF analysis is used in the assessment of larger and more complex investment properties
- Calculate the total present value of future period cash flows and terminal value discounted by a specific rate known as the discount rate.

| **Retrospective versus Prospective** | • Market value appraisals look backward: they attempt to estimate what the property will sell for by looking at the sales prices of similar properties in the recent **past**.<br>• Investment analysis approaches try to incorporate market and economic conditions, e.g. interest rates, population, buyer **expectations**, in the valuation process |
|---|---|
| **Impersonal versus Personal** | • Market value estimates represent market average price: they do not consider a **unique set of needs of a buyer or seller**<br>• Investment analysis approaches attempt to evaluate a property considering **personal conditions of a seller or buyer**. |
| **Unleveraged versus leveraged** | • Market value approaches assume either a cash or an **unleveraged** purchase and do not incorporate alternative financing plans that might be available (e.g. debt financing)<br>• Investment analysis approaches allow for the purchase price to be **financed with debt**. |
| **NOI versus after-tax cash flows** | • Market value estimates consider only NOI, which can have little meaning especially when investors finance their purchase with **debt**<br>• Investment analysis approaches provide investors with the answer as to how much cash they will be required to invest and **how much (after-tax) cash they are likely to receive from the investment** |

Considers the supply and demand for property as determinants of rent price, and therefore market value.
**Investment analysis** is **prospective** (incorporates market & economic conditions) and considers **personal** conditions of buyer ***<u>as opposed to</u>*** **market valuation** being **impersonal** (looks at the market average) and **retrospective** (looks backward to previous sales).

**Leveraged Property Investment (LPI)** – Leveraging or gearing is the use of debt financing to acquire property – the debt financing affects risk-return parameters of a real estate investment

- Positive Gearing – net rental income is more than the debt cost
- Negative Gearing – mortgage interest exceeds the net rental income from the property, creating a tax loss.

**<u>Week 3B – International Investments</u>**

Appropriate for emerging markets with a stable political system, low regulation, and low

regulatory compliance costs. (Calculated risk and return the same as a domestic portfolio).

| **Advantages** | **Disadvantages** (Considerations) |
| --- | --- |
| • Increased investment choices<br>• Increased diversification (low correlated foreign markets).<br>• More opportunities to achieve higher rates of return in comparison of home country. | • Foreign Exchange risk (an additional component of return which must be managed to ensure it does not offset any higher returns achieved)<br>• Potential illiquidity, lack of information, and political risk associated with foreign investment |

**Week 4 – Derivatives**

Values are determined by the value of the underlying assets such as stocks, bonds or commodities. Common derivatives = forwards, futures, options, warrants and contracts for difference (CFDs).

| A **short (selling) position** commits a seller to deliver an item **at contract maturity**. | A **long (buying) position** commits a buyer to purchase an item **at contract maturity** |
|---|---|

| Forward & Futures Contracts | Option Contracts | |
|---|---|---|
| Long Positions<br>Short Positions | Calls | Puts |
| | Long Positions<br>Short Positions | Long Positions<br>Short Positions |

**To clear a position:** to take the reverse position in the derivative market to settle the contract, as opposed to delivering the underlying asset at exercise date (e.g. buy back a previously sold derivative)

**Can be short sold:** sold now at a higher price, and bought back subsequently when prices fall

**Open short---interest:** the number of short---sales currently open which can provide an indication of market expectations (e.g. a high short---interest ratio indicates a bearish market)

**Forwards & Futures**

| | |
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| **Forwards -** Buying a commodity, security or other assets **for future delivery** at a predetermined future date and at a predetermined price.<br>• Delivery price is fixed but not payed until the delivery date and is usually different from the prevailing spot price. | Features:<br>• Non-standardised (price and delivery date are negotiated<br>• Over the Counter Market (OTC)<br>• Between two private parties<br>• Does not require collateral or margin (involves credit risk/default risk).<br>• Illiquid |
| **Futures** – agreement between a buyer and a seller made in the futures market (organised exchange) to exchange a specified amount of cash for an asset at a specified future date. | Features:<br>• Standardised on size, delivery date, and conditions<br>• Futures exchange (intermediary) making them more marketable in the secondary market and a lower liquidity risk.<br>• Buyers and Sellers required to deposit funds (margins) = lower default risk.<br>Initial Margins range from 3% to 6% of the contract value<br>Margin Accounts held by the clearing house are marked to market daily at the settlement price. |

**Futures Hedging** (Involves a physical market position).

| Two Basic Hedge Positions | |
|---|---|
| Short Hedge | • a long position (purchase of assets) in a physical or cash market and<br>• a short position (sale) in the futures market<br>• **in order to protect the assets against a decline in prices**<br>• **(investor's/lender's/physical asset owner's perspective).** |
| Long Hedge | • a short position (sale of assets) in a physical or cash market and<br>• a long position (purchase) in the futures market<br>• **in order to lock in current (lower) prices and (higher) yield (investors/lenders - intending to buy assets).** |

Hedging futures provides the risk of an imperfect hedge and therefore basis risk.

- Number of contracts required (hedge ratio) = amount of asset hedged / size of each contract