Real estate valuation
Overview – Global real estate market

Real estate market key issues in 2016 (% of resp.)

- Pricing/Valuation: 68%
- Performance: 30%
- Deal flow: 27%
- Investor Demands: 16%
- Ongoing Volatility: 16%
- Exit environment: 10%
- Liquidity: 8%
- Portfolio...: 8%
- Debt Financing: 6%
- Governance: 6%
- Other: 31%

Sources: Preqin
Real estate valuation
Valuation techniques, value drivers and usual traps

Purpose of the valuation
(RICS VPS 1)

“Purpose for which the valuation assignment is being prepared shall be clearly stated” (RICS)

Loan security
Investment decision
Investor reporting
Tax assessment
Dispute resolution
Financial reporting
Transaction
CIK

The purpose of valuation will determine the basis of value
# Real estate valuation

**Valuation techniques, value drivers and usual traps**

## Valuation approaches

**Market approach**
- **Method**
  - Comparison of identical or similar asset transactions for which price information is available

**Income approach**
- **Methods**
  - Discounted Cash Flow method ("DCF")
  - Residual method
  - Direct income capitalisation
  - Term & Reversion
  - …

**Cost approach**
- **Method**
  - Depreciated replacement cost
  
  *(used in specific circumstances)*
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Market approach

Comparable transactions

Prices of recent transactions of identical or similar assets in the market

- Identified comparable transactions have to be adjusted for the following value drivers (amongst others):
  - location
  - age & condition
  - quality of tenants and cash flow (WALT)
  - size (number of floors, net area)
  - type of use (office, retail, etc.)
  - …

Adjustments to reflect the characteristics of property valued

Adjustments involve use of professional judgement and strong rationale

Importance of:
- selection
- inspection
- measurement
- …
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Valuation approaches

Market approach
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Income approach

Formula:

$$DCF = \frac{CF_1}{(1 + r)^1} + \frac{CF_2}{(1 + r)^2} + \ldots + \frac{CF_n}{(1 + r)^n}$$

- $CF_i$ represent the estimated net cash flows
- $r$ represents the discount rate
- DCF usually over 10 years with a hypothetical sale/exit assumption

Appropriate discount rate composed of:
- inflation
- risk free rate
- asset specific premium

How to estimate it:
- inflation adjusted yield / discount rate resulting from similar transaction
- in the absence of similar transactions -> use of prime data as benchmark
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**Income approach**

Cash flows driven by following key valuation inputs:

- **Actual inputs:**
  - existing rents
  - contractual non-recoverable expenses
  - rent-free periods
  - weighted average lease term (WALT)
  - existing vacancy
  - …

- **Assumed inputs:**
  - estimated market rent
  - period for marketing/ re-letting (3, 6 or 12 months)
  - future non-recoverable expenses
  - structural vacancy in the market
  - capex amount
  - …
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Residual

Income approach

When used?
• Residual valuation method mainly used for development projects

Approach
• Value asset “as if complete”
• Estimate direct and indirect costs to build

Calculation
• Calculate Gross Development Value (“GDV”)
  ✓ Income approach (rental strategy) or Market approach (sales strategy)
• Estimate all costs to complete the project
• Discount GDV and remaining costs to present value and deduct any purchaser acquisition cost

In short
EUR 100m ➕ Present value of assumed market value at completion - GDV
EUR 80m ➖ Present value of assumed development cost
EUR 20m ⬇️ Residuum (land value) @ project start

DCF
Residual method
Income capitalisation
Term & Reversion
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Income approach

Market Value

Land acquisition

Construction starting

Reducing project risk profile

Value added

GDV (as if complete)

Estimated development costs

€

Income capitalisation

DCF

Residual method

Term & Reversion

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**Income approach**

**When used?**
- Quick and straight forward method
- Rental income capitalisation method in applying a *market yield*

**Approach**
- Estimate *stabilized rental income* (on a sqm basis & type of surface)
- Deduct operating costs in order to estimate a net rental income level
- Capitalise the *net rental income* in applying a *yield reflecting current market conditions* (e.g. market & asset specific)
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Income approach

Term & Reversion

When used?
- Single or multi-occupied property with existing lease agreements

Approach
- Based on existing rents calculate a term value
- Calculate a reversion value, based on current market rents

Lease end

Term

Reversion

€

Time
Real estate valuation
Valuation techniques, value drivers and usual traps

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Cost approach

When used?
- used in specific circumstances
- market or income approach not possible
- no market activity
- for insurance purposes or special use assets (factory, church, etc.)

Approach
- estimate land value
- depreciated replacement cost ("DRC") of Property

Limited use & difficulty to assess depreciation

Depreciated replacement cost
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Valuation techniques, value drivers and usual traps

Usual traps

- Purpose of valuation Vs. Basis of value
  - “Investment value” for financial reporting purpose ✗
  - “Fair value” for financial reporting purpose ✓

- Net versus gross:
  - rents
  - Gross market value Vs Net market value
  - lettable area (GFA / NFA)
  - yield

- Independence of valuer
Impact of investment structuring on valuation
From property value to fund investment value

Investment structuring

Considerations

- Value of the fund's investments?
- Complex shareholding structure
- Co-invest & shareholder agreements
- Complex financing instruments
- Tax issues (CPEC, PPL, MRPS, etc.)
- Profit sharing mechanisms
- Non-regulated vehicles
- Unaudited financials
- Accounting issues, GAAP discrepancies, etc.
- Fair value of properties from appraiser
Impact of investment structuring on valuation
Performance

Fund structure

Value attributable to the fund?
Shareholding structure
Real Estate Asset

Performance

Valuation 1 year after

Profit sharing

GP
LPs
Real Estate Asset

NAV
100
120
115
100
Valuation policy and valuation process

Fund Set-up

**Policy**
- Asset class
- Methodology
- Inputs
- Assumptions
- Frequency
- Competences
- Governance

**Process**
- Steps from A to Z
  - Flowchart
  - Stakeholders
  - Tasks
  - Responsibility
  - Timing

**Risk mapping**
- Process
- Structuring
- Underlying

**Procedures**
- Controls
  - A priori (DD)
  - A posteriori
- Escalation measures
- Process enhancement
Valuation process
Steps, roles & responsibilities

1. Information
   - Investment Advisor
   - Property Manager

2. Valuation & Risk functions
   - AIFM
   - Portfolio Management

3. Oversight valuation process
   - Valuation policy

4. Valuation of portfolio companies
   - Information on portfolio companies

5. Approved values
   - Valuation process
   - Oversight valuation process

6. Depositary Bank
   - NAV Calculation
   - Fund Administration

7. Accounting Firm SPV
   - Accounting of SPVs and holding companies

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Real Estate Valuation
RICS update

Sustainability and commercial property valuation – Role of the Valuer

- **Market value / fair value for financial reporting**
  - Evidenced by market analysis?
    - **Yes**: Collecting data
    - **No**: Built into calculation of value

- **Investment value**
  - Factors not yet reflected in market value but influence investor decision?
    - **Yes**: Built into calculation of value

- **Sustainability features identified and recognized**
  - Impact on value
Real estate valuation
INREV update

European Association for Investors in Non-Listed Real Estate Vehicles ("INREV")

- improve transparency
- best practice reference guidelines

**Sustainability reporting Guidelines 2016**

May 2016

- Mandatory and best practice sustainability reporting requirements
- INREV compliance requires mandatory reporting requirements on an annual basis

Guidelines applicable over the **year 2017**
Real estate valuation
RICS update

Royal Institution of Chartered Surveyors ("RICS")

• RICS Guidance Note (GN) – recommended good practice
• RICS International Standard - mandatory

International Property Measurement Standards – Office Buildings

January 1, 2016

• International Property Measurement Standards ("IPMS") – Office Buildings - mandatory
• Objective of IPMS
  (1) – to provide a consistent measurement of property
  (2) – meet the requirements of Users of property for consistency in measurement and reporting (elimination of differences in the measurement procedure in different countries, locations etc.)
• Measurement can be used for valuation, transaction and benchmarking purposes
• Further information RICS Luxembourg event planned for September 2016
Thank you for listening
If you have any questions or comments, please contact valuation@deloitte.lu

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