REAL ESTATE VALUATION

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HEIKKI KANGAS
NEWSEC VALUATION OY

THE FULL SERVICE PROPERTY HOUSE

WAKE UP

- Groups of three
- Common used valuation methods in 3 minutes

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PASSION

FOR CLIENTS
AND COLLEAGUES

EXCELLENCE

The desire and the ability to deliver solutions and services of the highest quality – exceeding both the client's highest expectations and the best capabilities of our competitors.

INNOVATION

The desire and the ability to seek, identify, and implement new solutions; to lead the development of new services and products – to have the courage to break with tradition.

INTEGRITY

The ability to ensure that every client's confidentiality is respected and that every task is undertaken with the client's best interests in mind – at all times with the highest business ethics and morals.
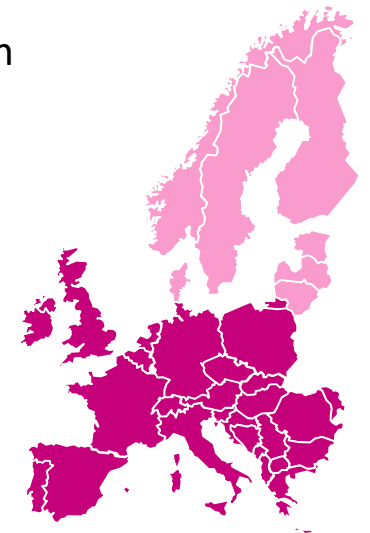
2.000 co-workers

37bn EUR under management

Real Estate valuation
140bn EUR/year

Signed lease deals
1.3m sqm/year

Transactions
2.7bn EUR/year

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VALUATION TEAM

- Valuation volume annually approx. 15 b€

- Personnel 20 experts, whereof 9 AKA-authorized and 5 MRICS
  - Named head of research and market analyst

- Extensive knowledge in all types of properties

- Valuation mandates for properties all around Finland, including Nordic Countries and Baltics with one point of contact

OULU

TAMPERE

TURKU

HELSINKI

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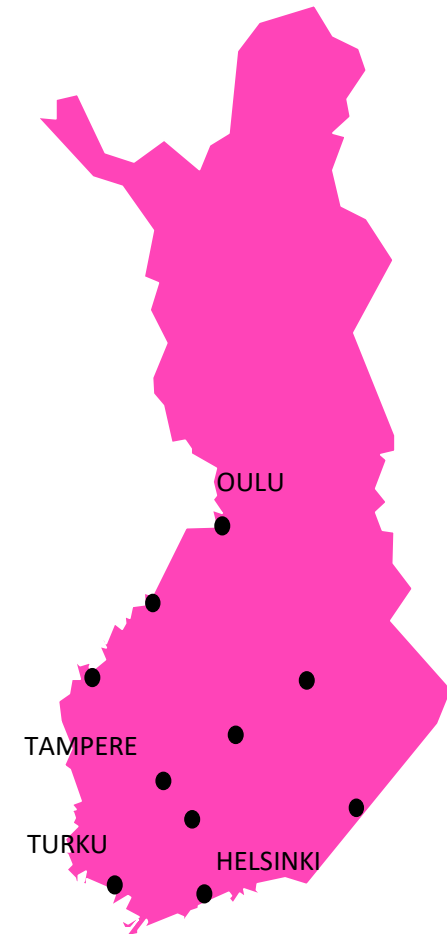
THE PRINCIPAL VALUATION APPROACHES USED IN VALUATION

1. Income Approach (direct capitalization and DCF)
2. Market Approach (Comparable Transactions Method)
3. Cost Approach
- based on the economic principles of price equilibrium, anticipation of benefits or substitution
- The goal in selecting valuation approaches is to find the most appropriate method under the particular circumstances
→ no one method is suitable in every possible situation

SELECTION OF THE VALUATION APPROACH*

- The selection process should consider, at a minimum:

(a) the appropriate basis(es) of value and premise(s) of value, determined by the terms and purpose of the valuation assignment

(b) the respective strengths and weaknesses of the possible valuation approaches and methods,

(c) the appropriateness of each method in view of the nature of the asset, and the approaches or methods used by participants in the relevant market, and

(d) the availability of reliable information needed to apply the method(s).

*2017 International Valuation Standards Council.

1) INCOME APPROACH

- A fundamental basis for the income approach: investors expect to receive a return on their investments and that such a return should reflect the perceived level of risk in the investment

→investors in riskier assets demand a higher return to compensate for that risk

- Direct capitalisation and Discounted Cash Flow (DCF) method

- The income approach provides an indication of value by converting future cash flow to a single current value

- Under the DCF method the forecasted cash flow is discounted back to the valuation date, resulting in a present value of the asset

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INCOME APPROACH STRENGTHS AND WEAKNESSES

Strengths:

- The method often describes best the perceptions of the real estate market at the time of evaluation
- The point of view of the method is the present and the future, that is, it is not a "prisoner of history" as a trade value method/sales approach method
- The cash flow method of the application of the yield method allows for example annual changes in profit and cost data

Weaknesses:

- It is difficult to predict the factors influencing future returns and interest rate selections
- The relatively small change in the yield requirement level has a significant effect on value
- Due to the lack of investment demand, the assessment of the level of yield requirement is particularly challenging for empty / non-viable / remote properties
  → different methods and key figures should be used to break the market value

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EXAMPLE, DIRECT CAPITALISATION

Example:

- The gross rent for a 10 000 sqm office building is 1 200 000 € / year (10.00 €/ sqm /month)
- OPEX + CAPEX € 480 000 / year (€ 4.00 / sqm / month)
- The net rent is 720 000 € per year (6 € / sqm /month)
- Market Return Requirement 8.0%
    →720 000 / 0,08 = 9 000 000 €

Direct capitalisation is calculated as follows: $\dfrac{\text{Net income of the item €/ year}}{\text{Market Return Requirement \%}}$

- For example, if the yield requirement is 7 %, the return value is 10 300 000 €
- Respectively with 9 %: 8 000 000 €
- 100 base unit change in Yield when other variables remain unchanged
    →Value up 14% or down 11%

EXERCISE 1: SOLVE THE MARKET VALUE OF THE PROPERTY

Leasable area	200 sqm	
Gross rent	12,5 €/ sqm /month	
Care and maintenance costs	3,5 €/sqm /month	
Net rental	9 €/sqm /month	
Annual net rent	21 600 € (=200x9x12)	
Investor's return requirement "YIELD"	10 %	
Market value	**xx** €	
	€/sqm	

$$market\ value = \frac{annual\ net\ rent}{yield}$$

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EXERCISE 2: SOLVE THE NET RENTAL (€/M² /MONTH)

Leasable area	**300 sqm**	
Gross rent		**15,5 €/sqm /month**
Care and maintenance costs		
	xx	**€/sqm /month**
Net rental	**xx**	**€/sqm /month**
Annual net rent	**xx**	**€**
Investor's return requirement "YIELD"	**10 %**	
Market value		**414 000€**
		(1 380€/sqm)

What is the net rental €/sqm /month?

$$market\ value = \frac{annual\ net\ rent}{yield}$$

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INCOME APPROACH IN PRACTICE- DISCOUNTED CASH FLOW

- Discounting means calculating the present value of future cash flow
- In order for the current and future cash to be comparable, the value of future payments must be transferred to the present day, ie discounted
- The farther the future is, the less it has value in the present
- The discount rate used for discounting is to make the amounts of money at different times comparable
- The rate at which the forecast cash flow is discounted should reflect not only the time value of money, but also the risks associated with the future operations of the asset or business
- The euro is more valuable today than the euro tomorrow

INCOME APPROACH IN PRACTICE- DISCOUNTED CASH FLOW

Present Value of Discounted Cash Flows

$$PV = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} \cdots \frac{CF_n}{(1+r)^n}$$

CF equals cash flow for a period,

r equals the discount rate, and

n equals the number of periods.

$$D_n = \frac{1}{(1+r)^n}$$

Where D_n = discount factor

r = discount rate

n = number of years ahead

Example:

Investor's return requirement 8 %

Inflation assumption 2 %

Discount rate 10 %

Second year's discount factor= 1/ (1+0,02+0,08)^2 = 0,826446281

10. year's discount factor= 1/ (1+0,02+0,08)^10 = 0,385543289

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GENERAL APPLICATION OF THE YIELD METHOD - DISCOUNTING

Exercise:

Form the discount factors for the period of two years.

Investor's return requirement 7 %

Inflation assumption 2 %

Discount rate 9 %

First and second year's discount factors= ?

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INCOME APPROACH STEP BY STEP, DCF

1. Property's gross rents at the valuation moment and in the future

- current contract rentals based on length of lease:
  - subject of the contract, length of contract, term of notice, possible rent reductions
- market rentals, applicable after the end of the lease
- vacancy rate forecast

2. Current opex- and capex costs and an estimate of their annual development (heat, water, electricity, annual repairs, etc. for property owners, including renovation costs, insurance...)
   - →Note that the expenses for all squares though only part of the house are rented

3. Net rent = 1-2

4. Determine yield requirement for annual net income and capitalize residual value

5. Calculate the yield value by discounting the annual net income to the present and discounting the capitalized residual value to the present

EXAMPLES, DCF

1)

Leasable area	2000 sqm	Current contract maturity	6 years
Current rent	17,00 €/sqm/month	Inflation assumption	2,0 %
Market rent	17,00 €/sqm/month	Cash flow yield requirement	8,0 %
OPEX	3,50 €/sqm/month	Discount rate	10,0 %
CAPEX	1,50 €/sqm/month	Residual yield requirement	8,0 %

2)

| Leasable area	2000 sqm	Current contract maturity	6 years
Current rent	17,00 €/sqm/month	Inflation assumption	2,0 %
Market rent	17,00 €/sqm/month	Cash flow yield requirement	8,0 %
OPEX	3,50 €/sqm/month	Discount rate	10,0 %
CAPEX	1,50 €/sqm/month	Residual yield requirement	8,0 %
		Note vacancy rate 10% after 5th year!	

3)

Leasable area	2000 sqm	Current contract maturity	6 years
Current rent	17,00 €/sqm/month	Inflation assumption	2,0 %
Market rent	17,00 €/sqm/month	Cash flow yield requirement	8,0 %
OPEX	3,50 €/sqm/month	Discount rate	10,0 %
CAPEX	1,50 €/sqm/month	Residual yield requirement	10,0 %

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2)MARKET APPROACH-THE COMPARABLE TRANSACTIONS METHOD

- When reliable, verifiable and relevant market information is available, the market approach is the preferred valuation approach

- The market approach provides an indication of value by comparing the asset with identical or comparable (that is similar) assets for which price information is available.

- The market approach should be applied and afforded significant weight under the following circumstances:

(a) the subject asset has recently been sold in a transaction appropriate for consideration under the basis of value

(b) the subject asset or substantially similar assets are actively publicly traded, and/or

(c) there are frequent and/or recent observable transactions in substantially similar assets.

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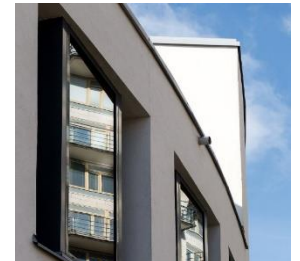
THE KEY STEPS IN COMPARABLE TRANSACTIONS METHOD

1. Identification of the asset (s) to be assessed

2. Collecting comparable sales (Internal database, HSP, MML etc.)

3. Perform a consistent comparative analysis of qualitative and quantitative similarities and differences between the target to be valuated and the comparable sales

4. Cutting off unfavorable trades

5. Make necessary adjustments, if any, to the valuation metrics to reflect differences between the subject asset and the publicly-traded comparable sales

6. Calculate the key figures of comparable sales

7. Market Analysis and Determination of Final Value

ADVANTAGES AND WEAKNESSES OF THE COMPARABLE TRANSACTIONS METHOD

Advantages:

- Based on actual transactions
- The method does not involve uncertain future forecasts, such as the income approach method
- Widely adopted and accepted
- The method is easy to understand

Weaknesses:

- Based on historical data
- The heterogeneity and scarcity of observations, especially in empty / non-modern / remote properties
- Prone to unfavorable sales

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3)COST APPROACH METHOD

- The cost method examines the possibility that as an alternative to the acquisition of a particular commodity, a modern similar commodity with similar usability can be acquired
- In connection with the property, this includes the cost of acquiring a similar land and building a similar new structure
- The price that the buyer would pay for the asset being valued would be no more than the cost of a modern counterpart. (unless time constraints, inconvenience and risk are affected)
- The estimated commodity is often less interesting than the cost of a new one due to age or aging.
- As a result, an decrease in value/depreciation is required (IVS)
- The cost method method is most commonly used for building construction cost information published by Haahtela and the Building Price Assessment Guide based on it

ADVANTAGES AND WEAKNESSES OF COST APPROACH METHOD

The advantages:

* Technically easy and systematic

* A good support method if there are few market observations

The weaknesses:

* The depreciation obsolescence (economic/functional/technical) is subjective

* Fails to evaluate old items

* Rarely describe market valuation -> using the only evaluation method is dubious

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COMBINING METHODS

- In general, the evaluation is based on the main estimation method and the auxiliary method
- Commercial premises are evaluated with DCF method.
- In addition, the parameters of the DCF are derived from the actual transactions and leasing deals
  - YIELD
  - Market rent
  - Vacancy
- In addition, the reference prices are the price per square meter / total price -> reality check to DCF outcome!

EXERCISE: DISCOUNTED CASH FLOW

First with DCF:

evaluate commercial property (value date 01.01.2019), which is located at street level as a part of apartment house company (as. Oy, Suomi) in the medium large city center

- Leasable are 90 sqm
- Current rent 15 €/sqm/month and market rent 17 €/sqm/month
- OPEX and CAPEX totally 3,5 €/sqm/month
- The yield requirement varies between 7,5 -8,5 %, Inflation assumption 2,0 %
- The premises is rented for a clothing store, there is a relatively high demand for rental space in this size class☐ there are no free spaces in the area
- The currents contract remains 2,5 years including term of notice
- The commercial property is located at a reasonable commercial location
- Planned renovation which costs 500 € / sqm and it is decided to implement after 3 years.
- → First, use income approach
  1) direct capitalisation and
 2) five year discounted cash flow

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EXERCISE: COMPARABLE TRANSACTIONS METHOD

Then, evaluate the same property with comparable transactions method:

→ 4 comparable sales:

Comparable sales									
	sale 1	Notes	sale 2	Notes	sale 3	Notes	sale 4	Notes	The target of evaluation
Asset type	Office		Retail		Office		Office		Retail
Municipality	Fingerpori		Fingerpori		Fingerpori		Fingerpori		Fingerpori
District	Center		Center		Not center		Not center		Center
Address	Fingerporintie 2	better location	Fingerporinkuja 12	better location	Fingerporinsuo 1	worse location	Fingerporin polku 1	worse location	Fingerporinniitty 1
Area (sqm)	58	smaller	120	bigger	64	smaller	79	bigger	90
Construction year	1 958	older	1 970	older	1 980		1 958	older	1 980
Rooms	1	less rooms	2		2		2		2
Details	Business, back room, toilet		1room+kitchen		Shop + cellar		2 rooms and kitchen		2 rooms and kitchen
Floor number	1		1		1		2		1
Number of floors	1		2		3		3		1
Price	88 000		200 000		78 000		95 000		-
€/sqm	1 517		1 667		1 219		1 203		-
Condition	Satisfying	worse condition	Extremely good	better condition	Poor	worse condition	Good	same condition	Good
Date of transaction	1.2.2019		18.7.2018		18.1.2018		30.6.2016		-
Building material	Concrete		Brick		Concrete		Other		Brick

EXERCISE: COMPARABLE SALES
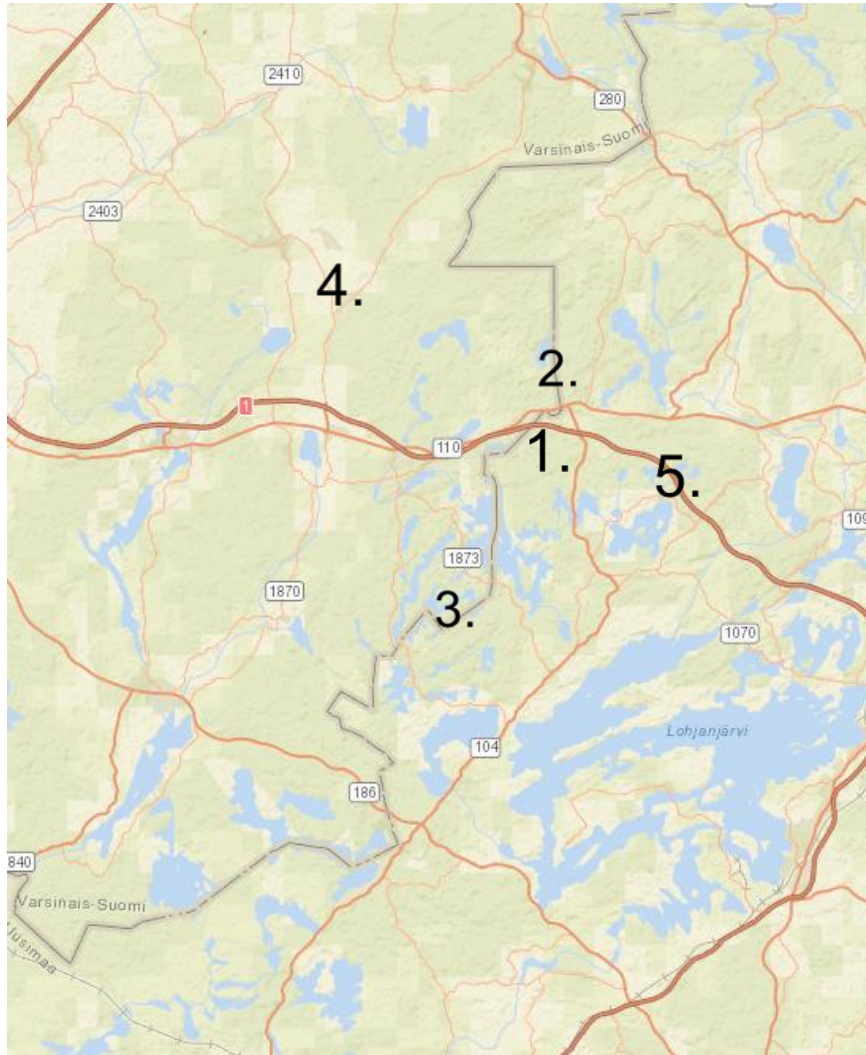
1. Fingerporintie 2
2. Fingerporinkuja 12
3. Fingerporinsuo 1
4. Fingerporinpolku 1
5. The target of evaluation (Fingerporinniitty 1)

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THANK YOU!

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