Schwerpunkt: Markt- und Objektbewertung

Internationalisation versus Struggle of Methods – Challenges in cross-border valuation

Indem sich die Immobilienmärkte immer weiter für grenzüberschreitende Investitionen öffneten, nahm der Harmonisierungsdruck auf die Liegenschaftsbewertung zu. Können Grundstücke in einem Land mit einer Methode aus einem anderen Land adäquat bewertet werden oder ist die im jeweiligen Markt übliche Bewertung anzuwenden? Und wie lassen sich die unterschiedlichen Methoden ineinander überführen? Diese Fragen treiben die Sachverständigen nun schon seit einigen Jahren um, und doch gibt es trotz der Bemühungen länderübergreifender Organisationen immer noch Missverständnisse und Spielräume für Interpretationen. Im Folgenden will der Autor zeigen, dass auch unterschiedliche, national angepasste Wege letztlich zum identischen Marktwert für eine Immobilie führen. (Red.)

Real estate finance and property valuations take place across national borders. National methods diverge despite having the same value definitions. Do differently structured real estate markets need individual methods and approaches? How much harmonization can and should be available in the valuation? Which (standard-)methods are accepted in Europe and worldwide, nor enforced or long overdued?

Even equal Market Value definitions may have a different understanding about the duration of the valid period of time. Nicolas Sarkozy "defined" the period of validity by exclusion: "the ... value ... does not change from one second to another, nor every minute, nor every hour ..."[1]

The price is negotiated between seller and buyer and after agreement it is fix forever. The market value has a short period of validity, weeks or months, maybe years. Even if there is a valuation date the mortgage lending value is valid for years, maybe decades, if no thresholds were broken during the loan. The investment worth respectivly the Special Value (IVS-2011) always reflects particular attributes of an asset that are only of value to a special party, "which confusingly is sometimes called investment value"[2]. The concept of value and worth is known in Germany as "objektive and subjektive Wertlehre".[3]

Der Autor

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Trespass through the definitions of the market value

In the following cascade of definitions for the basis of valuation "Market Value" a trespassing is possible upward, stepping left or right and down again. The only difference between the definitions of market value by the two umbrella organisations is one expression: 'property' and 'asset or liability', which is at least 'subject of the valuation'. The national definitions originated mainly by professional bodies, only a few countries have legal definitions, like Germany.

Nearly every country is under one umbrella, either IVSC or TEGoVA, through at least one professional body, very few countries are represented in both umbrella organisations. Consequently, a valued market value is a market value everywhere, independent in which country it is reported, no matter what (standard-)method is used, a professional and experienced valuer provided.

There is no standard-method defined on umbrella organisation level. And on national level we have all the diversity we enjoy in our holidays. Whilst the RICS "does not instruct valuers on how to value in individual cases"[3] we have methods normed by law (codified by legislation) in Germany and the valuer decides which method is applied. The normed methods are at least obligatory only for valuations at the court. Every valuer is allowed to use not-normed methods, i.e. direct capitalisation, but you never know when you have to defend your valuation report at court and explain it to a judge. An English saying: "If you are in doubt, go without."

All professionals know the three approaches for valuation and use it according to the subject of valuation and the market. One problem for international valuations in cross border business is that no methodology is defined as standard on the afore mentioned umbrella organisation level, only national definitions are given by professional bodies or codified by national legislation, like in Germany.

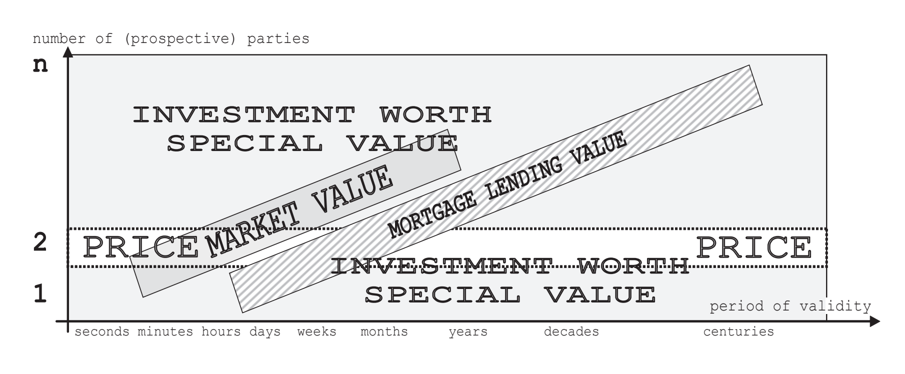
Investment Method in Germany

In Germany the valuation law with its normed methods and models forms a cicular system for all valuers. The administrative regional experts committee (Gutachterausschuss) derives from real transaction prices the valuation relevant figures (VRF, für die Bewertung erforderliche Daten) as indirect comparables and reports these figures regularly (annually) to the public. The period of validity gets significant here. These figures are criticized, i.e. from RICS-valuers as reflecting the past and being too old for a mark-to-market assessment of the MV with a (very) short period of validity, as the RICS understand the market value (MV).

On the other hand these regional figures (VRF) do not sway as much as valuation parameters in other countries and markets, due to the models used. If a valuer in Germany chooses a not-normed-(standard-)method, he may suffer under the lack of reliable indirect comparables for his selected model. And if the valuer in Germany still has his doubts and goes without, how shall he explain the result and method to the client?

The income approach in Germany with the split capitalisation model (§ 17, par. 2, no. 1 ImmoWertV, allgemeines Ertragswertverfahren) has a long tradition and is unique in the world. Therefore it is necessary not only to draw the report in a foreign language but also to translate the German valuation method into an international (standard-)valuation method. The client understands his language and is familiar with his methods. The valuer is the local expert and carrying out valuations cross border requires expertise not only in the market but also in the methods. The skill to transfer an only locally used standard valuation method into the foreign clients grammar is usually not present by the client.

Figure 1: The price and the basis of valuation – market value, mortgage lending value and worth respective special value



YP(years@yield) = years purchase for years with yield (YP, Diskontierungssummenfaktor)

MV.Split Capitalisation = GAE * (1- OpEx+VCL)/100)
* [YP(∞@PY) * LS + YP(RUL@PY) * (1-LS)]

MV.Direct Capitalisation = GRI * (1- OpEx/100)
* YP(∞@ARY)

So let us explain how you get an income approach using the normed German split capitalisation model (Ertragswertverfahren) by using the property yield (PY, Liegenschaftszins) transformed into a direct capitalisation model with an all

Figure 2: Definitions of Market Value

<table>
<tr><th colspan="7">Market Value (MV)</th></tr>
<tr><td colspan="4">EVS-2009 (Blue Book) – TEGoVA.org[1]
European Valuation Standards 2009</td><td colspan="3">IVS-2011 (Pink-white Book) – IVSC.org[2]
International Valuation Standards 2011</td></tr>
<tr><td colspan="4">EVS1 – Market Value (The same definition is used in EU legislation.)
Market value is the estimated amount for which the 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.

Approaches and (Standard)-Methods
EVS2, no. 10.2 Depreciated Replacement Cost
The current cost of replacing an asset with its modern equivalent asset less deductions for physical deterioration and all relevant forms of obsolescence and optimisation.
10.3.2. DRC is in some countries a recognised basis of value that lead to the MV (as in Germany)</td><td colspan="3">IVS Framework Para. 30:
Market value is the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

IVS Framework Para. 36:
Transaction costs – the MV is without any TC.

Approaches and (Standard)-Methods
Para. 57 f Market Approach (Comparison Approach)
Para. 59 ff Income Approach
Para. 63 f Cost Approach</td></tr>
<tr><td colspan="4">National Members (45 prof. bodies from 26 countries)
http://www.tegova.org/en/p4912ab00f1da3</td><td colspan="3">National Members (54 prof. bodies, 46 countries)
http://www.ivsc.org/members/index.html</td></tr>
<tr><td>Germany (7)</td><td>France (6)</td><td>United Kingdom (2)</td><td>United States (1)</td><td>The Netherlands (1)</td><td>United Kingdom (1)</td><td>United States (2)</td></tr>
<tr><td><u>legislation</u>
Verkehrswert / Marktwert[3])
§194 Bau-Gesetzbuch (BauGB)

additional regulations & guidelines ImmoWertV 2010 and WertR 2006 to be revised</td><td><u>professional</u>
Valeur Vénale[4])
Titre II, Chapitre 1, A, La Charte de l'Expertise en Evaluation Immobilière 2006</td><td><u>professional</u>
Market Value
RICS Valuation Standards – Global 2011 – (Red Book) IVS compliant</td><td><u>legislation</u>
Market Value
Uniform Standards of Professional Appraisal Practice (USPAP) 2012-2013

<u>professional</u>
American Society of Appraisers (ASA), Business Valuation Standards 2009 (PAP)</td><td><u>professional</u>
Market Value
IVS / RICS Valuation Standards – Global 2011 – (Red Book) IVS compliant

<u>legislation</u>
onderhandse verkoopwaarde artikel 3:268 Burgerlijk Wetboek (BW)
nowadays of minor importance</td><td><u>professional</u>
Market Value
RICS Valuation Standards – Global 2011 – (Red Book) IVS compliant</td><td><u>legislation</u>
Market Value
Uniform Standards of Professional Appraisal Practice (USPAP) 2012-2013

<u>professional</u>
American Society of Appraisers (ASA), Business Valuation Standards 2009 (PAP)</td></tr>
</table>

Germany http://www.gesetze-im-internet.de/bbaug/__194.html
http://www.gesetze-im-internet.de/immowertv/index.html
http://www.bmvbs.de/SharedDocs/DE/Artikel/SW/GesetzeUndVerordnungen/wertermittlungsrichtlinien.html
France http://www.expertfrance.com/chartexp.html
United States http://www.uspap.org/#/
http://www.appraisers.org/ProfessionalStandards.aspx

[1]) TEGoVA covers due to history the European diversity and expands with the Appraisal Institute, USA.
[2]) IVSC represents more non-European countries and is a more homgenous group with UK / RICS history.
[3]) The market value (Verkehrswert) is defined as the price which would be achieved in an ordinary transaction at the time when the assessment is made, taking into account the exisiting legal circumstances and the actual characteristics, general condition and location of the property or other object of assessment, without consideration being given to any extraordinary or personal circumstances.
[4]) The market value (valeur vénale) is the price which a property or property right could reasonably be assigned in case of sale at the time of Expertise, the following conditions are assumed previously met: The free will of the seller and the purchaser, available to a reasonable time for negotiation, given the nature of the property and the market situation, maintaining the value at a substantially stable during this period, that the property was offered for sale in market conditions, without reservation, with adequate publicity, the absence on personal factors.

Figure 3: The different approaches

Market Approach Comparison Approach	Income Approach	Cost Approach
Direct Comparison method **Indirect Comparison method**	**Investment Method (value)** discount of future earnings Direct Capitalisation model (rack rented) with the All Risks Yield (ARY, capitalised to perpetuity without separation of land and building) * core and top-slice model * term and reversion model Split Capitalisation model with the Property Yield (PY) (separation of land and building with capitalisation to perpetuity for the land and to remaining useful life of the building) in Germany normed, § 17 ImmoWertV (allgemeines Ertragswertverfahren) Gross Rent Multipler **Property Investment Valuation (worth)** Discounted Cash Flow method, not standardised (yrs 0/1..n) "The DCF is the recommended method to determine worth." "A worth calculation should always be accompanied by a market value estimate (see RICS Valuation Standards (The Red Book)." [2)] Short-cut DCF	**Depreciated Reconstruction Cost** DRC

[2)] Modern Methods of Valuation, E. Shapiro, K. Davies, D. Mackmin, 10th edition, 2009, EG Books, p. 179, 185

risks yield (ARY). The resulting market value (MV) is without purchaser's cost due to the derived parameters (VRF) from transactions. To explain the differences we concentrate on the main subjects, minor differences are neglected. If rack rented both methods start with the gross rental income (GRI, Bruttomieteinnahmen) respectivly the gross annual earning (GAE, Jahresrohertrag) and end with the market value. The differences are in the steps between.

The German investment method starts with the gross annual earning (Jahresrohertrag), deducts the non-recoverable operating costs (NonReCo, Bewirtschaftungskosten) with management (Mgmt, Verwaltung) and maintenance/repair/refurbishment (MRR, Instandhaltungskosten) and vacancy and collection loss (VCL, Mietausfallwagnis) receiving the net annual earning (NAE, Jahresreinertrag).

The direct capitalisation model

The international investment method for rack rented properties is the direct capitalisation model (DC), and starts with the gross rental income (Bruttomieteinnahmen) deducts the operating expenditures (OpEx, Betriebsausgaben), which omits the vacancy and collection loss. This risk is covered in the all risks yield. Continuing with the net rental income (NRI, Nettomieteinnahmen), which is different to the net annual earning (Jahresreinertrag), it is direct capitalised to perpetuity and we receive the MV.

The German investment method uses the property yield (PY, Liegenschaftszins) for capitalisation. Due to non-recoverable

Figure 4: Transformation of PY to ARY

Income Approach (MV) – Split Capitalisation model (Germany)			**PY = 6,50%**	*PY-2-ARY*
Gross Annual Earning (GAE) market rent			1,00000	*6,500% PY*
Non Recoverable Operating Cost	13,00% =	10,00% OpEx	- 0,10000	*+ risk premiums*
incl. 'Vacancy and Collection Loss'	+	3,00% VCL	- 0,03000	*0,192% rp VCL*
Net Annual Earning (NAE)			0,87000	
minus interest of the land	6,50% Property Yield	Land Value 2,40000	- 0,15600	
remains for interest & amortisation of the building			0,71400	
NAE for the Building	40 yrs RUL	14,1455 YP(RUL@PY)	10,09989	*0,364% rp RUL*
Land Value (location),	LS = 19,20 % of MV	15,3846 YP(perp@PY)	2,40000	*0,143% rp LOC*
Market Value before corr. (split capitalisation)		multiplier of GAE =	12,49989	***7,200% ARY***

		influence	normalized
Transformation: PY to ARY with a normalized influence to the multiplier			
rp VCL	= (1 - ((1-OpEx/100)-VCL/100) / (1-OpEx/100)) * YP(perp@PY)	0,5128	0,274878
rp RUL	= (YP(perp@PY) - YP(RUL@PY)) * (1- LS/100) * (1- VCL/100)	0,9712	0,520556
rp LOC	= YP(perp@PY) - ((1-LS/100)*YP(RUL@PY) + LS/100*YP(perp@PY)) *) - (YP(perp@PY) - YP(RUL@PY))/2	0,3816	0,204566
*) subtract the half difference (YP(perp@PY)-YP(RUL@PY)) means a LS above 50% get's a risk deduction due to the very good location.		sum 1,8656	1,000000

The above calculated influences normalized to 1,0 and multiplied with the difference of ARY-PY to get the risk premiums.

Normalisation is done by risk premium X % = influence X / sum(influence) * (ARY-PY).

ARY = (1-OpEx) / (MV/GAE) = (1 - 0,1) / (12,4999 / 1,0) = 7,20007%;   delta (ARY - PY) = 0,70007%

ARY = PY + risk premiums = 6,50% +0,1924% rpVCL +0,3644% rpRUL +0,1432% rpLOC = 7,2001%

Income Approach (MV) – Direct Capitalisation model				**ARY = 7,20%**
Gross Rental Income (GRI) rack rented				1,00000
Non Recoverable Operating Expenditures			10,00% OpEx	- 0,10000
Net Rental Income (NRI)				0,90000
Direct Capitalisation	**7,20% ARY**	13,8888	YP(perp@ARY)	12,49989
Market Value before corr. (direct capitalisation)			multiplier of GRI =	12,49989
Gross Initial Yield (GIY) (1,0 / 12,4999 * 100) = 8,00007%				**GIY = 8,00%**

The estimated Market Value before corrections corresponds to the calculated gross initial yield (GIY).

operating costs the lower net annual earning (Jahresreinertrag) is divided into a part for the ground (Bodenwertverzinsung), which is capitalised to perpetuity. This present value (PV, Barwert) is the land value and the land share in percent (LS, Bodenwertanteil) of the MV is used later on.

The other part of the net annual earning remains for interest & amortisation of the building (Verzinsung der baulichen Anlagen) and is capitalised to the estimated remaining useful life (RUL, Restnutzungsdauer) of the building (Gebäudeertragswert). The sum of the two present values, land & building, is the MV.

MV.Split Capitalisation =
PV.Land(∞@PY) + PV.Building(RUL@PY)

Different mathematics but the same result. Is this magic? No it is tradition in different cultures. The corresponding ARY can be calculated with the market value from the split capitalisation model:

ARY = (1 - OpEx) / (MV.Split Capitalisation/GAE)
= PY + Risk Premium

The interpretation of the ARY as PY plus RP (risk premium) shows that the risk premium is a function of VCL (vacancy and collection loss), RUL (remaining useful life) and the LS (land share). Besides the property yield (PY) and the market rent (rental income), these three components are the main value drivers.

Therefore the PY is more stable, than the ARY. Growth implicit ARY as in PY, and yields are not the target rate (return on investment) and is therefore not comparable with other investments. For worth (special value) calculations the capitalisation rate (CR) is used in the recommended DCF(NPV) as net present value or DCF(IRR) with an internal rate of return. As a rule: CR >= ARY >= PY

Transformation of PY to ARY

The previous example starts for simplification with an annual earning of 1 Euro. The market value (MV) is calculated with the normed German split capitalisation model using the reported parameters by the administrative experts committee derived from real transactions. In a second step the all risks yield (ARY) is calculated and in the right column in *italic style (PY-2-ARY)* the equivalent risk premiums are presented.

The segregation into risk premiums due to VCL, RUL and LOC (location) is calculated with an approximate calculation without partial differentiation, just to take advantage of the transparency instead of a black box ARY in one figure only.

Internationalisation

Where are the international (standard-)methods defined? The "ImmoWertV-2010" tried to introduce the much more sophisticated DCF-model. But the regulated method "periodisiertes Ertragswertverfahren" is not a DCF-model for special values, because it prerequesites the periodical cash-flow in the understanding of gross annual earning (GAE, Jahresrohertrag), which is mostly different from the real annual rental income. Furthermore, it is discounted with the property yield and considers the land value to perpetuity.

Since the German legislation in coordinance with professional bodies failed to introduce an international property investment valuation model it is clear, that future adaptions of the national valuation regulations can not introduce any other international method, like direct capitalisation, even if they are much more easier. This is not necessary either, like the above presented short-hand transformation to direct capitalization to perpetuity showed.

For the future a professional body on umbrella level may define the major method for the three approaches, of course without instructing the valuer on how to value in individual cases. But more sophisticated are the translation of expressions associated with a certain meaning in different legal frameworks and markets. The lack of international definitions of expressions is the main reason for misunderstandings and misinterpretations.

In the German market more and more international players take part and influence the market, with movements and acceleration. At the end all markets work with the same mechanisms, but have a different history, legal or professional framework, use different tools to estimate the market value – but the value is equal. Equal definitions are the foundation for standard expressions, standard methods and standard models to grow.

The benefit of variety and foreign culture we enjoy on holidays is now in daily business. We all use the same definition of market value. But it is the responsibility of the individual valuer to demonstrate methodological competence and the last little difference can be explained with the period of validity, following Nicolas Sarkozy.

Footnotes

1) Nicolas Sarkozy, President of the French Republic, Opening speech of 40th World Economic Forum, Davos – Wednesday, January 27, 2010, https://members.weforum.org/pdf/Sarkozy_en.pdf

2) Modern Methods of Valuation, E. Shapiro, K. Davies, D. Mackmin, 10th edition, 2009, EG Books, p. 183

3) Bewertung von Unternehmensimmobilien, Eduard Paul, MRICS in Praxishandbuch der Unternehmensbewertung, Peemöller (Hrsg.), 5. Aufl. 2012, p. 853.