Valuation for lending purposes: Appraisal theory and practice in Germany and the United States

International Conference on Collateral Risk:
A Historical Perspective and German and United States Case Studies
Berlin, 28 March 2014

Reiner Lux, Managing Director, HypZert GmbH, Berlin/Germany
Competence Center of the Association of German Pfandbrief Banks (vdp)

**HypZert GmbH**
- Certification of real estate appraisers who carry out real estate valuations for the Financial Industry

**vdpExpertise GmbH (formerly: HypRating GmbH)**
- (Further) development and distribution of the 'LGD–Grading' (Loss Given Default), which is used for identifying vital parts for real estate financing of the advanced rating approach of the Basel Capital Accord (Basel II)

**vdpResearch GmbH**
- Continuation of the vdp transaction database, assessment and analysis of real estate markets from the perspective of the finance industry and the provision of information for real estate valuation

**vdpPfandbriefakademie GmbH**
- Professional education and training of persons working in the valuation and financing of real estate, preparation for the certification examination as real estate appraiser HypZert for Mortgage Lending Valuation (CIS HypZert MLV)
House and apartment prices – selected countries (2005 = 100)

Sources: vdpResearch, national statistics, BIS
Assuming a redemption of 1-2% per annum, the term of a loan usually runs for 25 up to more than 30 years. The value to be determined therefore must be valid for this whole period. The market value, however, is a value related to an appointed due date.
House and apartment prices – selected countries
(2005 = 100)

Sources: vdpResearch, national statistics, BIS
“The use of market value when determining the value of the collateral, accompanied by a high LTV, could constitute a very high risk to mortgage lenders in the face of a downward trend in prices.”
(European Central Bank, 4/2000)

“Markets due to the long term financing possibilities and linked valuation are relatively stable...”
(World Bank - Study “The 1985 to 1994 Global Real Estate Cycle“)
Answer: Mortgage Lending Value

Market Value

Mortgage Lending Value

60% LTV limit for the preferential risk weight and for Covered Bond funding
The Mortgage Lending Value must not exceed the value resulting from a prudent assessment of the future marketability of a property by taking into account the long-term sustainable aspects of the property, the normal regional market condition as well as the current and possible alternative uses. Speculative elements must not be taken into consideration. The mortgage lending value must not exceed a market value calculated in a transparent manner and in accordance with a recognized valuation method.

The Market value is the estimated amount for which a property serving as collateral could exchange on the date of valuation between a willing buyer and a willing seller in arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.
Main Principles of the Mortgage Lending Value

- **Net rental income**
  - The income stream of the property should be no more than the sustainable net rental income that the type of property usually produces over time in the specific local market on the basis of a judgment of past and current long-term market trends, excluding any actual over-rent and other extraordinary cash flows.

- **Operational cost**
  - Deduction from the net rental income of all operational and administrative cost, allowances for obsolescence, reinvestment, annual maintenance, vacancy risk, tenant default risk and further risks to the rent.

- **Capitalization rate**
  - The application of the capitalization rate must reflect long term market trends and exclude all short term expectations regarding the return on investment of the property. The assessment shall include the sustainably income producing capacity of the property, multi-purpose or appropriate alternative uses as well as the future marketability of the property.
Essential Parameters of Mortgage Lending Valuation

- “Two-Pillar-Principle“ (Cost Approach, Income Approach)
- Operating expenses; including a modernisation risk
- Ranges to identify the remaining useful life
Aspects to be observed in the assessment of the sustainable gross rental income:

- **Long-term income** generating potential of the property
- **Sustainable incomes** from the property, which the respective owner can generate
- Income, which is achievable assuming proper management and permissible use
- **Alternative use** and sufficient **third party use** potential
- A sufficiently **large occupier group**
- Sustainable characteristics of the property serving as collateral
- Normal regional market conditions
- **Overrent not** to be included
Mortgage Lending Value vs. Market Value: a comparative calculation – Office(1)

MORTGAGE LENDING VALUE

- Operating cost
  - Management
    - BaFin minimum rate for
deduction 15%
  - Rental income risk
  - Maintenance
  - Modernization risk

Annual gross income

Net income

Return on land value

Net income on buildings

Income value of buildings

Income value

Difference: 25.79% (€1,913,263)
Mortgage Lending Value vs. Market Value: a comparative calculation – Office(2)

17 €/m² Market Value

MORTGAGE LENDING VALUE

- 2000 m² x 17 €/m² x 12
- Management
- BaFin minimum rate for deduction 15%
- + rental income risk
- + maintenance
- + modernization risk

Mortgage lending value

15 %

€408,000

annual gross income

€61,200 - operating cost

€346,800 = net income

€45,240 x 6 %

Compliance with BaFin minimum rates

€301,560 = net income on buildings

Capitalization rate: 6 %
(remaining useful life: 50 years)

Capitalization rate: 5.5 %
(remaining useful life: 50 years)

16.93 x multiplier

€4,752,585

€754,000 x 5.5 %

= income value of buildings

Capitalization rate: 5.5 %
(remaining useful life: 50 years)

€754,000 + land value

= income value

€5,506,585

= INCOME VALUE

Difference: 12.23 % (€ 767,440)
The Default Experience in the U.S.A. 2005-2012

- Commercial real estate loans:
- Charge-off rate (removed from books) peaks in 2009 and 2010 at 2.3%
- Delinquency rate (past due 30 days or more) peaks in 2010 at 8.5%

Source: Federal Reserve System
The German Default Experience in Germany 2008-2011

- Loans for commercial real estate funded by mortgage Pfandbriefe (within 60% LTV) perform well
- Percentage of loans in default remains clearly under 1%

Source: vdp
Real estate is cyclical, market value reporting is also cyclical. Financing decisions based on market value can be long-term. Mortgage Lending Valuation as a counter-cyclical analysis has contributed to the stability of the German real estate market.

Mortgage Lending Value is not Market Value.

One is an apple, one is a tomato – they are both fruit but good judgment tells us not to put a tomato in fruit salad!
Mortgage Lending Value – Final Thoughts II

CIS HypZert (M)
Real Estate Valuer for Market Value Analysis
Market Value Analysis (international)

CIS HypZert (F)
Real Estate Valuer for Financial Purposes
Market and Mortgage Lending Valuation for Standard and Special Use Properties

CIS HypZert (MLV)
Real Estate Valuer for Mortgage Lending Valuation
Mortgage Lending Valuation for Properties outside of Germany

CIS HypZert (S)
Real Estate Valuer for Standard Properties
Market and Mortgage Lending Valuation for Standard Properties

Delta Exam to gain CIS HypZert (M)
Focus on International Methods and Markets

Delta Exam to gain CIS HypZert (F)
Focus on Special Use Properties/Complex Commercial Properties
Mortgage Lending Value – Final Thoughts II

- Federal Association of German „Volksbanken und Raiffeisenbanken“ Co-operative Banks
- Federal Association of German Banks
- The Association of German Public Banks
- Saving Banks Finance Group
- The Pfandbrief Bank Associations
- Association of Private Building Society
Mortgage Lending Value – Final Thoughts II
Regulatory Framework from 12 May 2006

- **Part I** General provisions and principles of procedure (§§ 1 – 4 BelWertV)
- **Part II** Valuation report and valuer (§§ 5 – 7 BelWertV)
- **Part III Valuation methods**
  - Income approach (§§ 8 – 13 BelWertV)
  - Cost approach (§§ 14 – 18 BelWertV)
  - Comparison approach (§ 19 BelWertV)
  - Special features of individual properties (§§ 20 – 24 BelWertV, i.e. residential properties in case of small loans, hereditary building rights)
  - Valuation for properties located abroad (§25 BelWertV)
  - Review of the determination of MLV (§ 26 BelWertV)
- **Part IV** Concluding provisions (§§ 27 – 28 BelWertV)
- **Annex 1** – Band for individual cost items for the determination of MLV (Management and maintenance costs, loss of rental income risk, modernization risk)
- **Annex 2** – Empirical values for the useful life of building(s)
- **Annex 3** – Bands for capitalization rate(s)
- **Annex 4** – Multiplier table
Gross rental income must be reduced by the costs which the owner of a property must regularly or periodically bear to maintain the property.

**Operating expenses** are:

- Management costs
- Maintenance costs
- Loss of rental income risk
- Modernisation risk

Total amount at least 15% of gross rental income!
Empirical Values for Remaining Useful Life

Annex 2 (to § 12 (2) BelWertV)

A) Residential use (properties situated in Germany)
   Apartment buildings: 25 to 80 years

B) Commercial use (properties situated in Germany)
   a) commercial and office buildings: 30 to 60 years
   b) department stores, shopping malls: 15 to 50 years
   c) hotels and restaurants: 15 to 40 years
   d) land used for agricultural purposes: 15 to 40 years
   e) clinics, rehabilitation facilities, retirement and nursing homes: 15 to 40 years
   f) warehouses, production buildings: 15 to 40 years
   g) leisure properties (e.g. sports facilities): 15 to 30 years
   h) multi-storey car parks: 15 to 40 years
   i) self-service and specialty stores, consumer markets: 10 to 30 years
   j) petrol stations: 10 to 30 years
## Minimum Capitalization Rates

### Minimum Criteria

<table>
<thead>
<tr>
<th>Residential</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 5%</td>
<td>At least 6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prime Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 5.5%</td>
</tr>
</tbody>
</table>

- a very good location in the urban agglomeration,
- a preferred site in keeping with the respective type of property,
- a good infrastructure,
- good design,
- high-quality fixtures and fittings,
- a high-quality type of construction,
- an especially high marketability,
- restriction to the uses retail, wholesale, office and business,
- a very good state of the property and
- the given possibility to put the property to other uses
“To calculate the land value, enquiries must be made regarding

1. the location, size and layout of the site,

2. the type and extent of the possible uses stipulated by building laws and the actual use,

3. the type and nature of ingresses,

4. the most important commercial and transport connections,

5. possibilities of connections to services, sewers and drains,

6. the recoupment charge for local public infrastructure still to be incurred and

7. existing reference values and comparable prices.

The land value must be stated in square meters of the site area. When calculating the land value, no higher-grade use may be stated than that permissible.”

(§ 15 BelWertV)