This is Peer Reviewed Paper FIG Working Week 2008 Official and Unofficial Valuation Standards in Sweden

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SUMMARY

Almost all property valuations in Sweden are carried out from a market approach. The theoretical background and basic valuation principles used were to a great extent established in the 1970's by the research team working at the Institution of Real Estate Economics at the Royal Institute of Technology in Stockholm.

Legislation concerning property assessment and expropriation are based on the market value principle. The property assessment law includes a definition on market value as well as a description of a valuation standard to be applied in the assessments. In applications of the laws where property valuations are included, e.g. expropriation and regulation of lease hold fees, comparable sales methods normally are favoured by the courts. However, in many specific situations comparable sales methods are not applicable. Specially designed methods developed by the National Land Survey or in negotiations between the parties concerned, are in some frequent cases adopted as practice by the courts. Professional practicing valuers are members of the Association of Swedish Valuers, which is a branch of The Swedish Society of Real Estate Economics – SFF. SFF is a member of the International Valuation Standards Committee (IVSC). Members of the Association of Swedish Valuers can apply for authorization and become certificated by SFF. The requirements for authorization are education, professional practice, current market knowledge and impartiality.

The most detailed valuation standard used in Sweden, which also have become a benchmark in valuations for other purposes, is the Valuation Guidelines for SFI/IPD Swedish Property Index. Definitions and value terms in the guidelines adhere to European Valuation Standards 2003 (EVS 2003), issued by The European Group of Valuer's Associations (TEGoVA) and to the International Valuation Standard, issued by IVSC. Since 2005 all public companies are obliged to report consolidated financial statements according to the International Financial Reporting Standards (IFRS). Properties and other non-current assets should be entered in the balance sheet to their fair value. Swedish companies use both internal and external valuations to determine the values on the day of balance. The valuations are carried out according to the IVSC standards.

Official and Unofficial Valuation Standards in Sweden

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1. HISTORICAL BACKGROUND

Apart from some special situations, e.g. calculations of insurance compensations, all property valuation in Sweden since the 1970's has been based on the market approach. A division specialized in property valuation and development of valuation methods were formed at the National Land Survey during the 1960's. However, most important research and development was done at the Institution of Real Estate Economy at the Royal Institute of Technology in Stockholm. At that time, Professor Eric Carlegrim was the head of the institution. Prof. Carlegrim and his research team adopted the theories of valuations which among others had been described by the American scientist R.U Ratcliff. In the 1970's, the market approach on real estate valuations was implemented in the legislations regarding expropriation and property assessment.

Earlier, research of property valuation was focused on agricultural properties. With the start during the 1970's, methods for valuation of residential, commercial and industrial properties developed rapidly..

Increased access to cadastral data and sales information, in combination with use of computer technology, was the basis for the development of computer aided sales comparison methods in the end of the 1970's. At the same period Stellan Lundström, presented his doctoral thesis¹, in which, among other subjects, he described how cash flow analysis can be used as a tool for investment analysis of rental properties. Thus investment analysis is a form of valuation, a valuation method – the discounted cash flow method (DCF) - was developed from the knowledge.

The DCF-method was soon implemented in the education at the Royal Institute of Technology, which at that time was the only university teaching property valuation in Sweden. A decade later – in the last years of the 1980's, a new tool became available to the practicing valuers:

The PC with spreadsheet software!

Former students from the Institution of Real Estate Economics and their collegues, working for valuation companies or different investors in the property market were now able to apply their theoretical skills and design their own DCF-models. The market condition was affected of the fact that practicing professional valuers as well as the analysts employed by the major investors had the same education and made calculations in the same way. The DCF method became rapidly the most frequently used and – since the valuers estimations matched the market actors own calculations – regarded with good accuracy.

Despite rapid development of computer technology and available softwares, sales comparison methods became less used in valuations of commercial properties. As long as the parameters in the DCF model were derived from the market, the need of sales comparison analyses was less necessary. Using the DCF-method, the appraiser didn't have to deal with lack of observations or observations which didn't fit in with the estimated value! The sales comparison method as a statistical method became in practice used in valuations of single family homes, summerhouses and undeveloped plots of land.

Lately, further obstacles for use of the comparable sales method in valuation of commercial properties have been raised. The transactions on the market are more complicated and the information reported to public registers is often inadequate. In order to minimize taxes, the property is transported to a subsidiary company by the seller and the shares of the company are the object for the transaction.

2. LEGISLATED VALUATION STANDARDS

2.1 Valuation in general assessments

The legislation for general assessments is the only example of valuation standard prescribed in Swedish law. This law, the law of property assessment, also includes a definition of market value. A definition corresponding to what normally is used in international valuation standards. Market value is defined as:

"The most plausible price in a sale on the open property market."

From that definition, the assessment values should be fixed to 75 % of the market value at the average prices two years before the year the assessment is carried out. In practice, the date of value is the 1st of July, two years before the year of assessment. For example, the date of value for the general assessment 2007 is the 1st of July 2005.

Since the market value has a statistical definition, the prescribed valuation methods are statistical methods in the first place, e.g. sales comparison methods. The only actual exception is the valuation model used fore extremely odd industrial plants, such as steelworks, petrochemical plants and cement mills. Thus properties and single specialized buildings and constructions e.g. silos and petrol stations, the values are calculated with a replacement cost method.

Besides the objective to determine assessment values corresponding to 75 % of the market value, there are other important objectives to be met within the assessment:

- The assessments have to be "fair" and "uniform".

These requirements have special influences on the construction of the different valuation models. One consequence is that the valuation models have to be understandable. The

valuation standards have to be presented in a way which makes it possible for the individual property owner to calculate the assessment value by themselves.

The assessments of small houses (1-2 family homes and summerhouses), multifamily homes, commercial properties, most of the industrial properties and agricultural land are carried out with fundamental valuation models, which are calibrated in "test assessments". Test assessments are carried out in geographical areas (value zones) with equivalent market conditions and price levels. The principle for the calibrations is to calculate the ratio between calculated assessment value and the sales price for representative sales in every value zone. When the average ratio within a zone is as close as possible to 0,75, the proper value level for the zone is found. The final selection of the sales and the test assessment is done by professional appraisers, specially assigned for the purpose by the National Tax Board.

Sales analyses are carried out on developed properties where the sales prices include both land and buildings. However, the value of buildings is defined as a residual - the difference in market value of the property due to existing building. Since the number of representative sales of undeveloped properties is very small, the distribution of the assessed values between land and building is in practice much of a theoretical construction.

Valuation models applied for the most common types of developed properties are briefly described as follows.

2.1.1 Small houses

The values of buildings are calculated from tables, originally constructed with aid from multiple regression analysis and other statistical analyses of the independent variables size, age and quality. The overall most important factor – the location – is determined from the test assessment as a multiplier. Values for the land are calculated with a formula where the most important factors are size of the plot, distance to waterfront and access to systems for water and sewage. An example of interactive map showing sales and results of test assessment in one value zone is shown in appendix 1. The information is open for public search on the National Tax board website.

2.1.2 Multi family houses and commercial properties

The sales comparison method is based on statistical analyses of gross multipliers. Relative variations depending on age and type of premises (residential or commercial) are analysed on a nationwide database. Geographical variations in market value levels are settled through calibration (test assessments) against sales in the local value zones. The annual rent is the key factor for the individual assessments. Values for buildings are calculated with the principal formula:

 $V = R \times L \times C$,

V= assessed value

R = annual rent

L = local value level factor

C = capitalisation factor (age factor)

Land values are calculated with a formula where the building right on the property is the important factor:

 $V = BR \times RV$

V = assessed value

BR = building right (gross building area, sqm except basement)

RV = recommended value for the value zone (SEK/sqm gross building area)

2.1.3 Industrial properties

According to the law, assessed values for the majority of industrial properties should be calculated with an income capitalization method. Due to successive development over the years, it is more appropriate to describe the valuation method as a sales comparison method, disguised as an income capitalization method. The valuation model for industrial buildings is based on a relative rent, due to type of premises, quality and age, which is multiplied with a locally calibrated market factor. It's nowadays impossible to separate the market factor in rent, net operating income, gross multiplier or yield. Land values in the geographical value zones are expressed as recommended values in SEK/sqm plot area.

2.2 Valuations in expropriation and compensation

The common principle in expropriations and other types of public encroachments on properties is that the compensation should correspond to the market value or, if part of a property is affected, the decrease in the market value caused by the encroachment. Valuation standards or valuation methods are not specified in the law. From the practice, two overall tendencies can be observed:

- I. Sales comparison methods, if possible to apply, are in preference. Evidence including sharp comparable observations from the market is normally rated with the highest credibility by the courts.
- II. In different types of frequent cases, where sales comparison methods are not applicable, specific methods developed by the parties concerned, has been accepted an adapted as common practice in the courts.

The situations where a plain sales comparison method is applicable are in practice quite rare. Most cases are classified to group II above. Examples of specialized valuation methods and standards accepted are:

- A method for valuation of forest land including timber supply. (The National Land Survey).
- Valuation of encroachments caused by power cables. (Landowners organisation and the power industry).
- Valuation of encroachments on agricultural land caused by national roads. (Landowners organisation and the Swedish Road Administration).
- Estimation of margin values of developed land. (The National Land Survey).
- Valuation of trees, plants and other garden facilities in connection to encroachments.
 (The National Land Survey).

All methods might not fulfil the objective to result in market values in every single situation. However, their contribution to a uniform application of the law, smooth processing and reduced number of appeals is also important.

2.3 Leasehold regulations

According to the law, determination of reasonable fees in leasehold contracts should be based on the value of the land at the date of regulation. When leaseholds are granted for the first time, the fee is freely negotiable. Review of the fee is normally done every 10th or 20th year, where the fee has to be determined by the court if the parties fail to reach an agreement.

The legal provisions do not include any specific valuation method to be used. In practice "the value" has become defined as the market value of the property as undeveloped land, including building rights corresponding to the actual planning regulations and other regulations which might be specified in the leasehold contract.

As earlier mentioned, the comparable sales method is rated as the most credible by the courts. Therefore, valuations presented by the parties are often deep analysis of sold undeveloped plots in the actual submarket where the prices observed are adjusted and expressed in key figures such as SEK/sqm gross area building right or SEK/sqm land area. Assessed land values are used as basis to some extent. Especially in reviewing fees for plots with single family homes.

3. PROFESSIONAL VALUATIONS IN GENERAL

3.1 Introduction

Professional practising valuers are members of the Association of Swedish Valuers, which is a branch of The Swedish Society of Real Estate Economics – SFF. SFF is a member of the International Valuation Standards Committee (IVSC).

Members of the Association of Swedish Valuers can apply for authorization and become certificated by SFF. The requirements for certificated valuers are briefly:

- Minimum 3,5 years education on university level in specified subjects such as economics, law and civil engineering.
- Three years of fulltime fundamental practice in the profession.
- Up dated knowledge of the property market situation.
- Impartiality

To keep the certificate, continuing professional learning is required.

About 140 valuers are generally certified for all types of property valuations. There are possibilities to apply for certificates limited to small houses or agricultural properties. About 30 individuals are certified small house valuers and about 20 valuers are certified for agricultural properties.

Certified valuers are comprised of compulsory professional liability insurance and are obliged to meet "generally accepted valuation standards", specified by the association.

The generally accepted valuation standards correspond to the IVSC:s Code of Conduct.

3.2 Valuations for SFI/IPD Swedish Property Index

The most detailed valuation standard is *the Valuation Guidelines for SFI/IPD Swedish Property Index*. For the quality of the index, it is most important that the valuations are conducted with consistency and follows common principles. Definitions and value terms adhere to European Valuation Standards 2003 (EVS 2003), issued by The European Group of Valuer's Associations (TEGoVA) and to the International Valuation Standard, issued by IVSC.

All stages of the valuations must be carried out by a fully qualified valuer, which means the use of certified valuers if external valuers are assigned. However, a company which is member of and provides data to the index has the option to carry out the valuations with internal experts. In these cases, the valuers must meet all requirements for certification with exemption for the criteria of impartiality.

Market value is defined according to the IVS definition:

Market Value is the estimated amount for which a 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.

A Swedish definition is given in the publication "Property Nomenclature. Economic and Legal Aspects of Property Analysis" issued by the Institute for Property Valuation and the Swedish Association for Real Estate Economics (SFF).

The most plausible price of a property at a certain specified value date in a free and open market.

This quite short definition is close to the definition given in the law of property assessment.

There is no conflict between the Swedish and the IVS's definitions and the Guideline declares that valuations using both definitions should produce the same result, when applied in practice under normal circumstances. This statement also includes definitions of *fair value* given by the Swedish Accounting Council and the Swedish Financial Supervisory Authority.

The Guidelines include further definitions of several parameters to be used in the valuations and prescribes which information the property owner should provide.

Valuation principles, common valuation preconditions and valuation report requirements are described quite carefully. Since the index portfolio, with very few exemptions, consists of commercial properties, the guidelines are directed to valuation of properties with rental income.

Two categories of valuation methods are described:

- Comparable sales method and income capitalization method
- Discounted cash flow analysis (DCF)

Application of comparable sales method requires several transactions to be documented in the valuation report. It is not sufficient to cite general key ratios based only on the valuer's experience. The income capitalization method is basically a sales comparison method where observed prices are related to the net operating income.

98 % of the valuations for SFI/IPD Swedish Property Index are carried out with discounted cash flow analysis (DCF). An explanation behind this dominance is that most practicing valuers were "brought up" with the method in their education and the leading consultant companies have developed quite sophisticated and rational valuation tools, based on the DCF-technique. Difficulties to find and document a sufficient number of sales are also an explanation why valuers prefer the method in favour of the comparable sales method.

The DCF-method is thoroughly described and penetrated in the guidelines. For example, commercial lease contracts should be treated individually and the calculations should be carried out with a gross accounting principle. It is also very important that assumptions of inflation, real interest rates, valuation yields and discount rates etc are consistent. Every parameter must be able to motivate on an individual basis and in relation to other parameters.

The guidelines on common valuation preconditions points out principles to be used in calculations and estimations of e.g. inflation, rent levels, operating and maintenance costs, long-term vacancy levels, valuation yields and discount rates.

Valuation report requirements for SFI/IPD valuations are listed in appendix 2.

3.3 Valuations for other purposes

The Valuation Guidelines for SFI/IPD Swedish Property Index has become a benchmark in valuations for other purposes e.g. valuations for financial reporting and mortgaging. Normally, the requirements concerning the competence of the valuer and the use of definitions are referred to, while the requirements of the valuation reports differ and are defined in the specific assignment. A valuation report concerning a single property in a sales situation or for mortgage does normally include a more comprehensive market analysis. On the other hand, valuations concerning portfolios for financial reporting or internal strategically decisions can be done with a minimum of documentation.

Since 2005 all public companies are obliged to report consolidated financial statements according to the International Financial Reporting Standards (IFRS). Properties and other non-current assets should be entered in the balance sheet to their *fair value*. Swedish companies use both internal and external valuations to determine the values on the day of balance. The valuations are carried out according to the IVSC.

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BIOGRAPHICAL NOTES

Peter Samuelsson, MSc Surveying, graduated 1981 from the Royal Institute of Techology in Stockholm. Founder and CEO of Bryggan Fastighetsekonomi, Malmö. Certified valuer practicing as consultant in Southern Sweden since 1989. Earlier employed at the National Land Survey working with development of valuation methods for general assessments. Deputy member of the boards of Svergies Lantmätareförening (SLF) and Samfundet för Fastighetsekonomi (SFF).

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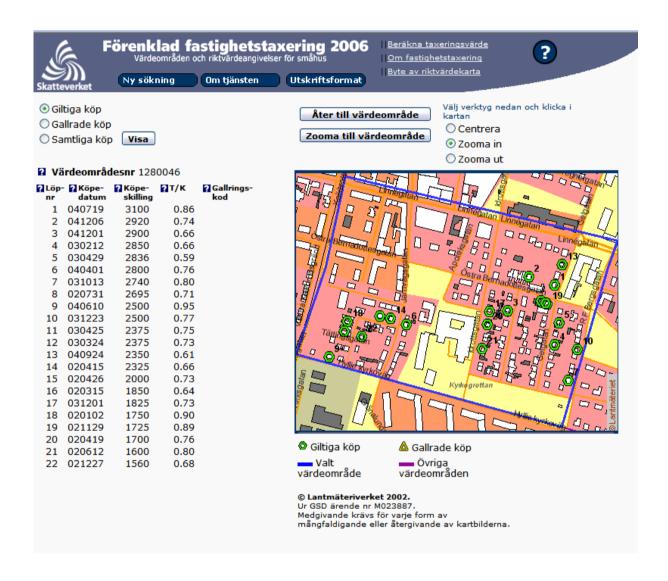
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PRESENTATION OF TEST ASSESSMENTS IN ONE VALUE ZONE, EXAMPLE

(2006 general assessment of small houses)

https://www1.skatteverket.se/fa/fa_webbkartan/login.do?kategori=sh&votyp=sh&taxeringsar=2006



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VALUATION REPORT REQUIREMENTS – SFI/IPD SWEDISH PROPERTY INDEX

Property name and municipality

Value date

Any disclaimer

Valuer and company, together with information on the Valuer's certification. Information on internal Valuers and their competence should also be given.

Valuation date (when the value was actually calculated)

Inspection date

Inspector (should be the same as the Valuer listed above)

Notes taken at the inspection on factors that influence value

Information on turnover in the relevant sub-market

Areas of residential and commercial floor space (BOA and LOA)

Current rent passing and the terms and conditions of lease contracts

Assumptions on operating and maintenance costs, as well as capital expenditure and tenant adjustments costs

Whether accounting of costs and rental additions were done in gross or net terms

Valuation methods

Market rental value of each unit as well as the property as a whole

Utility rental value for residentials, otherwise the lower market-based rent level estimate, summarized at whole-property level

Other income (parking, advertising signage, etc.)

Market value

When using DCF analysis, the valuation report should also contain:

Cash flow calculation, including the computation of present value

Present value, and any additions or deductions to present value

Information on assumptions in the DCF calculation concerning inflation, developments in the rental market, how costs will develop, exit yield, discount rate and long term vacancy rates

Reasoning behind decisions on the main parameters of the valuation, including market rent, operating and maintenance, investments, yields and discount rates

When employing the comparable sales method or income capitalization approach, the following should be included in the valuation report:

Comparable property transactions

Net operating income and yield on which the calculation is based

Justification of any value adjustments

Analysis of transactions and conclusions

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