

Market Data Collection for Mass Valuation of Commercial Real Estate

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SUMMARY

Valuation of real estate for taxation purposes has a very long tradition in Sweden. The property tax is a state tax and although valuation is an activity where knowledge about the local markets is necessary the prerequisites for standardised valuation methods that can be used countrywide are good in Sweden.

Efficient methods for market data collection are fundamental for a cost efficient system for mass valuation of real estate. Information in public registers is used to a great extent for valuation in Sweden. The real estate market is transparent and information concerning purchases of real estate is public information.

For market valuation it is necessary with fresh data concerning the properties. This is particularly the situation when it comes to valuation of commercial objects where some variant of the income method is used.

The valuation method used for mass valuation of commercial objects in Sweden is a market adjusted income method.

Examination of sales and collection of needed completing information concerning incomes (rents) and vacancies is an activity that requires resources.

A special problem that is dealt with is the problem with vacancies. In the Swedish valuation model there is a possibility to adjust the calculated value if there are unusual conditions for a certain valuation object. Vacancies have become a common such unusual condition.

SUMMARY IN SWEDISH

Fastighetsvärdering för taxering har en lång tradition i Sverige. Fastighetsskatten är en statlig skatt och även om värdering kräver kännedom om lokala marknader är förutsättningarna för standardiserade värderingsmetoder som kan användas i hela landet goda i Sverige.

Effektiva metoder för insamling av marknadsdata är av grundläggande betydelse för ett effektivt system för massvärdering. Information i offentliga register används i stor utsträckning vid värdering i Sverige. Fastighetsmarknaden är transparent och information om köp är offentlig. För marknadsvärdering är det nödvändigt med tillgång till aktuella uppgifter.

Detta gäller i synnerhet när det handlar om värdering av kommersiella fastigheter med någon form av avkastningsvärdering. Den värderingsmetod som används vid massvärdering av kommersiella fastigheter i Sverige är en marknadsanpassad avkastningsmetod.

Granskning av köp och insamling av kompletterande uppgifter om hyror och vakanser är resurskrävande. Förekomst av vakanser hanteras i värderingen genom något som kallas justering för säregna förhållanden.

1. INTRODUCTION

Property taxes are levied in Sweden on real property, with the exception of properties like hospitals, schools, churches and some other non-commercial properties. The owner of the property is charged to pay the tax. Every taxable property unit has an official assessed value. The values of land and improvements (buildings and other constructions, growing trees etc) form the base for the individual assessed value. In the Real Property Assessment Law there is a paragraph that prescribes the assessed value shall be 75 % of the market value.

Commercial properties are valued for taxation every three years.

The valuation standard used in Sweden is the fair market value at highest and best use. But the municipalities have a planning monopoly so in practise the base for the valuation in most cases is present land use. The point of time for the valuation is the second year before the taxation year (i.e. the 2007 assessment is based on the market value 2005).

In the law there is a reference to the three common used valuation methods. The sales comparison method has the highest priority. If this method can not be used the income method shall be used and in third priority comes the cost method.

2. THE VALUATION PROCESS

Sweden is, when it comes to property taxation, highly centralised in the sense that the tax is a state (i.e. national as Sweden is a unitary country) tax. Tax rates, valuation methods and standards are established at the national level.

Matters concerning property taxation are dealt with in a special small section of the Ministry of Finance. The Swedish Tax Board, under the Ministry of Finance, has the main responsibility for the current work of real property taxation. Staffs at the Tax Board's local offices are responsible for updating the registers and communication with property owners.

The National Land Survey of Sweden (NLS), a government agency is responsible for updating the valuation models and the computer systems used for the valuation. NLS also manages the sales price database that is integrated with the Property Information System.

Private valuers work with the valuation at the regional level. This work includes updating the zoning and determination of value levels and other rules for the valuation.

Every general assessment consists of two parts, the preparatory work and the assessment of all properties. The preparatory work starts with analysis of the real property market. Is there a need to revise the valuation models? What worked well and what did not work well in the previous general assessment? Where did people appeal and why did they appeal?

The sales price database is of basic importance in the work to analyse the market. This database is a part of the Property Information System and consists of all sales of real estate property in Sweden. The sales from the last three-year period are examined carefully in the preparatory work for a general assessment. Sales that are not representative, for example sales between relatives, are excluded from the variant of the sales price database used in the subsequent analysis.

Sometimes more market data is needed than what can be found in the existing registers. Forms are sent to owners of purchased properties to collect for example information about rents for commercial premises.

All market data is processed for overhaul of the valuation models. Parallel with this work starts the work with the value zones. The starting point is the zoning from the previous general assessment. New housing areas or other changes give cause for changes in the zoning. Next step is to decide the value level for a norm property in each value zone. Tables and formulas are used to determine the assessed value for properties with other characteristics than the norm property. The models and the zoning are tested in the test valuation. Here the ratio between assessed value using the valuation model and price is calculated for each sale.

In average this ratio shall be 0,75 for different statistical selections of sales. The law states that the assessed value shall be 75 % of the market value. The last stage of the preparatory work is formal decisions about the valuation rules including value maps with value zones and chosen value levels (valuation rules) for each zone.

The second part of the work is the assessment of all properties. The Tax Administration carries through this work mostly at the local level. The process is described below.

In the middle of October the year before the general assessment a form is sent to the property owner. For properties where the Tax Administration has relevant information in the registers the form is pre-printed with data from the register and also a proposal for assessed value based on the data in the register and the valuation rules for the value zone where the property is located. Property owners who accept this proposal do not need to sign and send the form back (silent accept). The property owners who have objections against the proposed value based on another opinion regarding the characteristics for the property or that there are some special circumstances With influence of the value of their property send their forms back with changed or completed information. The forms shall be back to the Tax Authorities in the beginning of November.

The local tax office examines all the forms and communicates with the property owners if necessary. The Tax Authority shall send a decision to all property owners in the end of June the assessment year. If the property owner not is satisfied with the assessed value of his

property he can apply for reappraisal. This can be done up to five years after the end of the year for the general assessment. If he is not satisfied with the reappraisal he can appeal to the administrative court. The property tax has to be paid as long as the appeal procedure goes on. If the property owner wins he will get the surplus amount back plus interest.

3. VALUATION MODEL FOR COMMERCIAL PROPERTIES

Multi-dwelling-houses, offices, stores and hotels belong to the category commercial properties. Apartments in multi-dwelling-houses are not registered as separate real estate in Sweden also if they are located in tenant-owned houses with user-rights very similar to condominiums. Consequently apartments are not valued separately.

The properties in this group are valued by a combination of the comparable sales method and the income method.

But there are not so many sales of properties in this group compared with the one-family houses. In the valuation the information received from sales has to be combined with information about rents.

The most important value-factor is the location. There are about 2 000 value zones for commercial properties. The value zones are rather small in the central parts of the cities where the values are high. In the countryside there are usually large value zones.

The values are determined separately for land and buildings. But most of the properties contain both land and at least one building. The main thing is that the total value for land and buildings for each property will be correct.

First the value of the land is determined. The possibility to use the land plot is connected with the development rights. In most cases there is a connection between the existing buildings and development rights.

Dwellings and premises are valued separately (different valuation units). There is a rent control system for dwellings but not for premises. Therefore these two markets work in different ways. There are hardly any vacancies for dwellings in cities and other regions with growing or stable population.

Value factors for the land:

- Location
- Type of use (dwellings or premises)
- Development rights (m² gross residential floor area or premises area)

Because of the limited number of sales of vacant land a land value table is developed for valuation of land for commercial use. In this table you can find the connection between the

value level of a real estate unit consisting of land and building and a property consisting of vacant land but with development rights.

For each value zone a land value per m² development rights is determined for dwellings and premises.

Value factors for the building:

- Location
- Type of use (dwellings or premises)
- Rent (gross rent)
- Age

Through comparison of the paid prices and rents for the sold properties it is possible to find the average building gross capitalisation factors for buildings with dwellings and commercial buildings in different value zones. The age of the building is also an important component in the building gross capitalisation factor at least for buildings with dwellings.

In principle the valuation factor age will say something about the remaining length of the buildings life. A "value-year" is determined for every building. The year of construction is important when the value-year is determined. For all buildings not rebuilt the construction year will be the same as the value-year. If a building is rebuilt it will get a new value-year according to the costs for the rebuilding activities compared with the average costs for construction of a new building.

There is a function used to determine the value of a building:

$$R=N \times H \times f$$

where R = the assessed value of the property before adjustments

N= the H-factor recommended for the value zone (a capitalisation factor)

H= the rent and

f= the age-factor

There are also possibilities for the property owner to receive adjustments for unusual circumstances. For example if a building has obvious higher vacancies than other buildings in the value zone the value can be adjusted.

4. MARKET DATA IN PUBLIC REGISTERS

The Swedish Real Property Register is an integrated register with information about properties, rights and values. There is a Real Property Part consisting of a register and the Cadastral Index Map. This part includes information about properties, plans, regulations and rights (servitude's/easements). The Land Register Part includes information about title, leasehold, mortgage, rights and notifications. There is a Property Tax Assessment Part with information about assessed values and some characteristics needed for the valuation. This part is an extract from the Property Assessment Register managed by Swedish Tax Agency.

Other parts of the Real Property Register are the Address Part and the Building Part. The information in the Real Property Register is public and used by authorities, banks, realtors, valuers and others that are active in the real estate market.

For valuation purposes there is a separate database with information about purchases. This database, the Sales Price Database, is an extract from the Real Property Register and it includes information about purchases like price, seller, buyer, date of sale, type of property and characteristics about the sold property.

The Property Assessment Register is a separate register managed by Swedish Tax Agency but it is integrated with the Real Property Register. To update this register the municipalities have to send information about building permits to the local Tax Agencies. In the same way Land Survey authorities send information concerning changes in property formation. Every year the Tax Agency then sends property declaration forms to the owners of changed properties.

The Swedish real estate market is very transparent. Information concerning sales of real estate is public information. The price is public information as well as the name of the seller and buyer. A transparent real estate market with a lot of reliable information available for all the actors makes the market efficient and attractive for investors.

5. COLLECTION OF COMPLETING MARKET DATA

Although there are a lot of public information available regarding sales of real estate there is a need to collect more information for the mass valuation. For commercial properties such information is information about rents and information about vacancies.

To receive needed information questionnaires are sent to all buyers of commercial real state for properties bought during the last three years. With an annual turnover of around 5 000 commercial properties that means that 15 000 sales have to be examined and completed with information that is not available in the public registers. In principle it is obligatory to fill in the form and send it back but in reality there are no punishments. The percentage of answers is over 90 %. That gives a good base for the work with creation of value zones and determination of capitalisation factors but first all the sales have to be carefully examined.

6. EXAMINATION OF MARKET DATA

All the collected market data is examined. Sales that have not taken place in the open market are sorted out and excluded from the material that will be the basis for the valuation. Such not representative sales are sales between relatives or between companies with connection regarding the ownership. Other sales may be sorted out because the property has been changed after the sale and it is impossible to compare present rents with the type of property that was sold. It is also rather common that several properties are sold in one package at the same time. If it is not possible to find the real price for each property the sale is sorted out. Valuers at the central and regional levels carry through the examination of sales.

From the beginning there were around 15 000 sales that had to be examined and completed for the general assessment of commercial real estate 2007. 60 % of the sales were sorted out for different reasons and 40 %, 6 000, were used for the mass valuation.

7. RENTS

The income method is used for mass valuation of commercial properties. That means it is necessary to determine rents for all properties that are going to be valued. To start with rents are needed for all sales that are going to be used for calibration of the valuation model, that means for calibration of capitalisation factors. For some commercial objects there are no market rents, for example when the owner also is the user of property. In such cases it is necessary to determine estimated rents based on rents from comparable properties.

A special survey is carried through to determine average rents. There are average rents established for dwellings, offices and in areas where rents for shops are higher than rents for offices also average rents for shops.

One of the outputs from the collection of rents is a compilation of average rents. Normal rents for apartments and premises in buildings with different age are determined for an area consisting of a value zone or a set of value zones.

8. SALES

Information regarding prices from sales is needed to determine gross capitalisation factors. The capitalisation factors are determined separately for dwellings and premises. The rules of the game are not the same with one regulated market (dwellings) and another not regulated (premises). Location is also important for the capitalisation factor. Some localities may have a promising future with increasing rents in sight. Other localities may have a more dark future with risks for vacancies or decreased rent levels.

The sales are essential for construction of relationship tables, creation of value zones and determination of capitalisation factors. But there are not sales of all types of commercial objects in each value zone. The valuers have to combine information from sales with market knowledge.

9. CREATION OF VALUE ZONES

The work with creation of value zones is more based of the experience of the valuers than of statistical analysis of sales. Starting point is the zoning from previous mass valuation three years ago. Usually the result of a revaluation is around 10 % more value zones than last mass valuation. One reason for creation of new value zones at the general valuation 2007 is the structural transformation of trade. The number of external shopping centres increases and they have to be valued separately. Rent levels are usually higher in these shopping centres compared with the surroundings.

The number of sales is usually too limited to only rely on sales for the work with creation of value zones.

A GIS-tool is used for the work with the value zones. All real estate properties have coordinates and the boundaries for the value zones are digitised.

10. VACANCIES

In the mass valuation system there is a special possibility to adjust the value of the property on the basis of what is called “unusual circumstances”. For commercial real estate one such unusual circumstance is vacancies. More vacancies for the object compared with what is normal in the value zone opens a possibility for adjustments. Adjustments for unusual degree of vacancies may be the case when the vacancies for the object exceed the normal degree of vacancy with more than 20 %. In the long run will the rent market in a working market economy hopefully be in balance. In the short run it is often in imbalance. The market is a cyclic not perfect market depending on business cycle, urbanisation, long time needed for adjustment to changed conditions and other factors.

The idea behind the recommendations for adjustment for unusual degree of vacancies is that the market adjusts itself but it may take some time. The present value of losses in rent incomes is the basis for the calculation of adjustment in value.

11. PRESENTATION OF COLLECTED INFORMATION

A GIS is used to facilitate the analysis of all collected information. All observations of prices and rents are visualised on the map. The GIS is integrated with a CAMA system. Changes in capitalisation factors results in changed assessed values and new ratios between calculated assessed value and paid prices. In the same way if the boundaries for a value zone is changed a recalculation of values is carried through immediately.

When the mass valuation is finalised a lot of the results is published on the Tax Agency’s homepage. Here it is possible to see the division in value zones and also the valuation rules for every value zone. The sales, both the useful and those that are sorted out are also presented on Internet. It is also possible to calculate the assessed value for a property if the value factors and the value zone are known.

12. CONCLUSIONS

Access to reliable market data is a linchpin for efficient mass valuation of real estate. It is an advantage if needed data can be captured from existing registers. But all data that is going to be used has to be examined and benchmarked.

The property owners usually have the best knowledge about the characteristics of their properties. Therefore collaboration with property owners is essential for creation of a sales price database with quality but created with reasonable costs.

A transparent valuation system contributes to acceptance of the system also if the purpose with the valuation is taxation of real estate.

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