

New Challenges for Valuers – Need for Extended Education

Christina GUSTAFSSON and Stellan LUNDSTRÖM, Sweden

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SUMMARY

The rapid integration of the real estate market into the global capital market raises a new set of questions regarding collection, analyses and presentation of information for decision-making. Standardization of concepts is an ongoing issue in financial reporting, valuation and mortgage lending. At the same time are there new opportunities to gather and present information using Geographic Information Systems. One of the driving forces is the investor need for more timely and accurate information. Real estate should be compared with stock and bonds that are traded in real time. The regular annual valuations and performance reports are now in many cases followed up with quarterly and even monthly reports. The latest ten years have an increasing number of countries and real estate investment markets accepted a common standard for performance measurement by contributing to the IPD Property indices. To implement indices in different countries there has been a need for standardization of valuation concepts and to some extent even valuation methods. It is obvious, with the background from above, that the real estate valuer faces new challenges. Institutional changes are at the same time as new technique and extended requirements from the investment community. The traditional valuer should both be a kind of financial expert and a market analyst on a global arena understanding the effects of different cultures and legal systems. From both the perspective of academic and professional bodies are there new challenges for the education system – valuers need both a broader and deeper education. This paper will cover a description and analyses of the new challenges and how a valuation curriculum could be formulated for the undergraduate, graduate and vocational levels.

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OBJECTIVE AND ORGANIZATION OF THE PAPER

The overall objective is to discuss how the role of the real estate valuer will develop and how the academic education has to adapt to that change. The discussion is based on a brief literature review and an Internet survey of some leading universities combined with own experiences from both academic and professional practice.

The first section of the paper covers some evident and emerging trends and institutional changes that most certain will have an impact on the valuation profession. In the second section there is a brief discussion about the content of real estate curriculums at some universities around the world. This section is based on a more in detail description of the real estate program at the Royal Institute of Technology (KTH) in Stockholm. That discussion incorporates the changes in the curriculum that has to be implemented due to the Bologna convention that state a unified format for higher education within Europe. Finally there is a discussion about possible future directions for the valuation education and the profession of valuer's.

REAL ESTATE VALUATION IN A NEW CONTEXT

Richard U Ratcliff (1961), in his seminal book “Real Estate Analysis”, linked investment theory and decision making to urban management. In a way this book and the later book by Ratcliff (1972) “Valuation for Real Estate Decisions” moved Real Estate as a subject from a rather practical professional task to an academic subject that relied on theory. With that step it was motivated to conduct research and introduce Real Estate as an academic subject.

Most real estate departments around the world have had real estate valuation as their very first topic for research and education. Urbanization and the rapid growth of cities during the 1960s motivated valuation related to transactions, assessment for tax purpose and mortgage lending. Gradually has the focus of valuation changed from the technical aspects of real estate to market and financial issues. Residual models that expressed the value as the sum of land and building value has been replaced with cash flow models where the real estate value is expressed as of debt plus equity. This recent focus on financial aspects of real estate is also reflecting the integration of commercial real estate into the global capital market. Financial instruments, developed for financial assets, are transformed to the real estate sector and at the same time are methods for valuation of stocks and bonds adopted by the real estate profession. This change of focus increases the complexity and the need for the real estate valuers to expand their area of knowledge.

Different kind of expert systems has gradually taken over valuation tasks that are based on standardized assumptions and duplicate production like assessment for tax purpose and

mortgage underwriting of detached houses. Gradually has also automated systems been introduced for market analysis. Geographical information Systems (GIS) is a new and powerful tool for the valuer to collect and structure market information. GIS systems create a new area for real estate consulting and at the same time an increased need for competence in subjects like economic geography and urban economics.

The globalization of the real estate market immediately raises the question about standardization. To make cross boarder investments and to work in an international arena the real estate profession need common definitions and a transparent institutional framework. Concepts like market value, rent, yield and net operating income are at a first glance pretty straightforward. However, a closer look gives a lot of questions about the real meaning of the concepts, and most important, how comparisons could be made cross boarder. When the valuation profession becomes international there is a need to speak the same “real estate language”. International Valuation Standards Committee (IVSC) is the world leading standardization organization for valuers.¹ The need for standardization is also evident when the Investment Property Databank (IPD) compares return and NOI figures cross boarder.

Professions related to valuation, such as accounting and mortgage underwriting, undergoes the same standardization process as the valuation profession. A new accounting practice expressed in International Financial Reporting Standard (IFRS) introduces “Fair value” as a capital value for the financial reporting. Fair value is in the most cases regarded as an equivalent to market value. The objective is to achieve transparency. The controversial part of the IFRS rules is that the changes in market value should have a direct impact on the income statement. This will, especially in thin markets and the case of falling market prices, give a lot of discussions about valuation accuracy and the role of the valuer.

Real estate investors could 20 years ago buy real estate based on a single valuation report. The decision support in a transaction process of today is much more sophisticated and relies on a comprehensive due diligence process together with in depth analysis of the rental market and competing supply. The investment strategy could be more based on the growth opportunities of the economic base than qualities of the subject real estate. It follows that the formal value report is a part of an information package with a content that is built on a multidisciplinary approach.

One of the driving forces is the investor need for more timely and accurate information. Real estate should be compared with stocks and bonds that are traded in real time. The regular valuations and performance reports that are once a year are now in many cases followed up with quarterly and monthly reports. The direction for the demand of valuation is clear – investors want to have timely information.

The Swedish real estate index was introduced 1997. The introduction was mainly motivated with the need to increase transparency and attract investors. The introduction was just a couple of years after the real estate and bank crises in the beginning of the 1990s. With

¹ <http://www.ivsc.org/standards>

reference to the crises was there a huge discussion about valuation and how valuations should be conducted in a real estate market that was expected to be thin. The main result of that discussion was twofold. First it was decided that all valuations for index purpose should align to certain Valuation guidelines². Second should all assumptions made by the valuer be collected and reported to a database. The aim was to create consistency in assumptions and give feed back to the valuers based on aggregate numbers.³ A system like that with a kind of full transparency give several obvious results: The valuer can no longer “hide behind the market value” and there is an interesting discussion about parameters and the use of discounted cash flow methods for market valuation.

Results from the Swedish real estate index indicate that valuers in their DCF assumptions tend to reduce the differences in real estate specific levels for Net Operating Income. The “normalization” of NOI tends to reduce the spread in valuations. The recent discussion about “green building” and “green real estate management” will put a pressure on valuers to make explicit consideration of energy efficiency and resulting actual spread in NOI. This effect will be most evident in cases with gross leases.

There is a clear tendency that real estate transactions are becoming increasingly complex and harder to interpret. Real estate transactions are in many cases part of financial arrangements where tax consideration plays an important role. Few actors’ will than have the full information about the price paid for the subject real estate. The case of hidden information is even more evident when larger real estate portfolios are transacted with the explicit goal to minimize tax payments.

Vague information from the real estate market put more emphasis on the rental market and formulation of the lease contracts. To simulate the real estate market the valuer need to interpret the individual lease contracts and understand the impact of lease clauses, covenants and imbedded options. To fully evaluate the value of the lease contract it is necessary to understand the tenants business, the growth opportunities, and at the other side, the risk for foreclosure.

VALUATION AS PART OF THE REAL ESTATE CURRICULUM

Galuppo - Worzala (2004) describe the development process for a masters degree program in real estate at the university of San Diego. Evident is that within US there are two traditions for real estate programs. One is the multidisciplinary approach advocated by Grasskamp (1977) in Wisconsin and the other is a financial approach adopted by most universities.

The UK approach to real estate (property) is related to the surveying profession. UK education in the field of real estate therefore has a tradition based on a multidisciplinary approach, while continental Europe have seen valuation as a part of programs with a high degree of technical content like civil engineering and architecture.

² www.fastighetsindex.se

³ The case of consistency in valuations is discussed by Lundström – Gustafsson (2007).

Galuppo – Worzala (ibid) made a survey based on experience of real estate alumni. The result was a ranking of real estate courses and at the top was the “finance track” with courses like investment analysis, real estate finance and lending, real estate markets and valuation as number five from the top.

Baxter (2007) found that valuation often today is part of a broader real estate curriculum. As real estate are competing about students and funding will it be increasingly important that the teaching quality is at the top. The real estate staff has to adapt to the pedagogy developments within the university.

THE KTH VALUATION PROGRAM

Valuation research and education at the Royal Institute of Technology (KTH) was from the very beginning a part of the Surveying program. A professorship in Real Estate Economics was established in 1965. The field of application was at that time agricultural and forest. Real Estate was also regarded as a part of a land formation program. During the 1970s the whole curriculum changed to urban issues and the whole change was mostly demand driven. Over time has real estate economics been growing as a teaching subject. After merging the programs for surveying and civil engineering real estate economics is the biggest program within the school of Architecture & Built Environment in the number of master students. The department of Real Estate & Construction Management currently host six different real estate programs:

- Land management – A two year master program devoted to countries from former Soviet Union, the Balkan states and East Africa (60 students are admitted every year, teaching in English)
- Real Estate Management – A two-year open master program for students from the whole world. The program is given since 1997. (30 – 40 students, teaching in English)
- Building and Real Estate Economics – A major (and a master profile) in the five year (3 + 2) program Architecture & Built Environment. (30 – 40 students, coordinated to 90 % with Real Estate Management, teaching in English).
- Land and Real Estate Law - A major (and a master profile) in the five year (3 + 2) program Architecture & Built Environment. (20 – 30 students, teaching in Swedish)
- Real Estate & Finance – A bachelor program with emphasis on Banking (three years, teaching in Swedish).
- Real Estate Economics - A sequence of courses designed for the real estate industry.

Here will we take a closer look at the Building and Real Estate Economics (BRRE) program that has been developed during 40 years to be a top class education of general Real Estate Economists and particularly real estate valuers. However, the real estate program has always been developed under a set of restrictions;

- It is part of a program at the Royal institute of Technology, which the initial two years of studies give strong emphasis on mathematics and natural science.

- It is one of nine specializations within the school of Architecture & Built Environment (ABE). These nine programs have, due to economic reasons, to coordinate courses and at the same time they are all competing about a given number of students that are admitted to the school.

In the first three years – to the bachelor level at 180 ECTS –the distribution of credits among subjects for the BRRE program is as follows:

Mathematics, physics, IT	57 ECTS	
Building science		28
Economic science		45
The planning and building process		15
Law		21
Natural resources		6
GIS		8

Economic science contain macro- and microeconomics, economic geography, accounting, taxation, investment analysis, real estate management, Real estate principles and quantitative methods with real estate applications, In the final two years – the master level – the students have to take 12 courses, all 7,5 Credits, and added to that a master thesis (30 credits). A course sequence that aims to give a cutting edge competence in valuation is presented below.

A general course about research methods

Business research methods

“The urban management track”

Urban and regional economics

Market analysis

Business cycles in construction and real estate market

Real estate development

“The finance track”

Financial economics

Investment analysis of financial assets

Institutional and household portfolio management

Real estate financing and risk management of financial institutions

Contract theory

A Research oriented elective course

Advanced issues in real estate

An applied valuation course

Real estate valuation

The number of independent Swedish valuers has been rather stable over time. The Swedish association for real estate economics authorizes slightly more than 100 valuers. Most of these

valuers have their education at KTH. The number of people that are conducting interior real estate analysis is many times higher. Pension funds, mortgage banks etc have in-house staff that conduct valuation and analysis close to valuation assignments.

THE KTH PROGRAM IN RELATION TO OTHER PROGRAMS

Here is the real estate program at KTH compared with three Universities; Reading in the UK, Wisconsin in the US and University of Western Sydney (UWS) in Australia. Reading is regarded as one of the leading UK universities and Wisconsin is “the Graaskamp University” with a long tradition of real estate education. UWS has a strong real estate faculty.

The Reading real estate and planning program

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The Reading program is offered at a department Real estate & planning. Reading has a bachelor program in Investment and finance in real estate and added to that a master program with different majors. One of them in appraisal of real estate. A broad comparison over five years of studies it is striking how similar the course topics are. However there is one major difference and some minor in comparison with KTH.

- 1) The major difference is the strong KTH focus on mathematics the first year of studies. Reading has no formal course in mathematics at all.
- 2) Reading has a planning tradition that has an impact on several courses. The KTH culture is building science.
- 3) The first two KTH years are broader. Or put it the other way; Reading are already at the start of the bachelor program focusing on real estate.

The Wisconsin real estate and urban economics program

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The Wisconsin program is offered at a department “Real Estate and Urban Land Economics”. At a first glance is the program more focused on real estate than urban economics. The topics of the presented courses are similar to both KTH and Reading.

- 1) The major difference is the strong KTH focus on mathematics the first year of studies. Wisconsin has no formal course in mathematics.
- 2) Wisconsin offers a series of electives related to design and architecture which is in line with the well known multidisciplinary approach advocated by Graaskamp.

⁴ <http://www.reading.ac.uk/Study/ug/InvestmentandFinanceinPropertyBSc.asp>

⁵ <http://www.bus.wisc.edu/undergrad/majors/realestate.asp>

The University of Western Sydney property and urban and regional development program

The University of Western Sydney (UWS) offers a bachelor in Property and Urban and Regional Development. That bachelor is offered within department of Business. Added to that is a master offered in Property investment and development.

- 1) The major difference is the strong KTH. The UWS property program offers no formal course in mathematics.
- 2) There is a strong emphasis within the program on economics and finance.

Comparing the real estate tracks at KTH and three other universities give some clear conclusions:

- 1) The core of real estate is about the same around the world. Emphasis is on topics like investment, finance, valuation, property management and development.
- 2) The local culture and the kind of department that offers the program have a distinct impact on the course content; Urban land, business, planning, building science etc.
- 3) The KTH real estate program deviates from most of the other programs with the strong emphasis on mathematics and building science.

It is obvious that the real estate profession has an international academic back up. Organizations like the International Real Estate Society (IRES) with its local affiliations, the American Real Estate and Urban Economics Association (AREUEA) and professional organizations like the Investment Property Databank (IPD) has an tremendous impact on the real estate agenda around the world.

CONCLUSIONS ABOUT THE FUTURE DIRECTION FOR VALUATION EDUCATION AND PROFESSION

In the long run is it evident that the valuation profession needs a strong academic back up. All higher education in the field of valuation should be backed by a combination of advances in theory and systematic empirical research. With a back up from research it will be motivated to give courses in valuation at the master level and write doctoral thesis in the subject area.

The conclusion about the importance of research is valid for all real estate subjects. Resources for research are critical for both universities and the real estate profession, especially when university programs compete on an international arena.

Valuation will prevail as a distinct profession as long as the profession in key areas is regarded to have a higher competence than competing consultants. Knowledge areas that in most cases differentiate valuers from financial and accounting consultants are urban economics, market analysis, real estate management and building technique. The key

⁶ <http://future.uws.edu.au/ug/business/economics>,
http://future.uws.edu.au/postgraduate_study/business/prop_investment_dev

competence should give as a result value estimates that are differentiated and reflecting individual qualities of the properties. The need to identify the sustainable net operating income of individual properties is a result of the focus on concepts like green building and green properties. The recent emphasis of technical and environmental issues indicates that the education of valuers is not only a case about finance.

Another future key competence for the valuer is the perspective on real estate as a set of contracts. Real estate regarded as an economic good within an institutional framework give a deeper understanding of real estate as an asset class and especially an understanding of different risk characteristics. Their will for a long time be major differences between legal systems in different countries.

Expert systems and automated valuation systems are here to stay and they will gradually take over all kind of mass valuation. More timely information from real estate index – monthly or weekly - has to be based on a process where the valuer more has the role of an independent expert that interprets macro and micro information related to the real estate market and individual properties.

Real estate valuation is a core course at all real estate related departments. The technical content of the courses are also almost the same regarding theories and methods for valuation. What differs is the broader context of the valuation course. It can, as discussed above, be related to mathematics and building science (KTH), Planning (Reading), Urban Land Economics (Wisconsin) or business and finance (Western Sydney).

Real estate valuation is built on information at different aggregate levels, from specific technical details of the building to macroeconomic trends. The differences in department culture are to some extent a guarantee for a continuous development of valuation as an academic subject.

REFERENCES

Baxter, J.S (2007): *Re-engineering valuation degree. How did we get here and where do we go?* Journal of Property investment & Finance, Vol 25, No 5, pp 444-467.

Black, R.T. – J.S. Rabianski (2003): *Defining the real Estate Body of knowledge: A Survey Approach.* Journal of Real Estate Practice and Education, Vol 6, No 1, pp 33-54.

Galuppo, L. A. – E. Worzala: (2004). *A Study into the Important Elements of a Masters Degree in Real Estate.* Journal of Real Estate Practice and Education, Vol 7, No 1, pp 25-42.

Graaskamp, J. A (1977): *The failure of the universities to teach the real estate process as an interdisciplinary art form.* In Graaskamp on Real Estate 1977. Edited by ULI, Washington.

Lundström, S. – C. Gustafsson (2007): *Discounted Cash Flow as a tool for market valuation Evaluation of consistency in assumptions.* Paper presented at the ARES Conference in San Francisco, April 2007.

Ratcliff, R. U (1961). *Real Estate Analysis.* McGraw-Hill, USA.

Ratcliff, R. U (1972): *Valuation for real estate decisions.* Democrat press, USA

CONTACTS

Stellan Lundstrom
Royal institute of Technology
Building & Real Estate 'economics
S-100 44 Stockholm
SWEDEN
Tel: + 46-8-7908630
Email: stellan.lundstrom@infra.kth.se

Christina Gustafsson
Email: christina.gustafsson@ipd.com