Nordic Journal of Surveying and Real Estate Research 2:1 (2005) 49-56
Received on 18 October 2004
and in revised form on 11 February 2005

Towards National Real Estate Accounts – The Case of Slovenia

Ivo Lavrac, Ph. D. (Econ.)
Professor of Real Estate Business
University of Ljubljana
Faculty of Economics
Kardeljeva ploscad 17, 1000 Ljubljana, Slovenia
ivo.lavrac@ef.uni-lj.si

Abstract. *Conceptual issues of establishing national or "satellite" real estate accounts are discussed, as well as their relevance for the concerns of modelling and comparing of property transactions and their costs. First steps towards such accounts and the difficulties involved are illustrated with the Slovenian case and some data.*

Keywords: *national accounts, real estate, statistics, transactions*

1 Introduction

Satellite accounts are described in the System of National Accounts (UN 1993) or SNA. SNA is a monumental work by all the major international statistical agencies establishing international standards for statistical description of national economies worldwide. This description is mainly, but not only, in monetary terms to enable aggregation and comparison of diverse flows and stocks. In EU, the SNA is applied through the European System of Accounts (Eurostat 1995) or ESA, which is enforced through the EU legislation. The SNA chapter 21 on satellite accounts does not set firm standards but only provides draft guidelines for the evolving work of providing statistical description of particular fields of policy interest. These fields kind of surround the central SNA framework, so their accounts are called "satellite". Most of the work of applying these ideas has been done by the OECD, which has so far provided guidelines for the health (OECD 2000a), environment (UN 2003), agriculture (OECD 1999) and tourism (OECD 2000b) accounts. OECD generally avoids the term "satellite" as too confusing to the general public, so I decided in this paper to use the term "national". To the best of my knowledge, no formal initiative has so far been proposed to the OECD or any other agency to start work on real estate accounts. The OECD manuals as pioneering efforts strike a balance between policy needs and resource and data

availability and are still a far cry from the ambitious ideas described in SNA.

So what does the SNA mean by satellite accounts? To describe statistically a part of economy of particular policy interest, the idea is to use as much as possible of the central SNA framework, and extend it where necessary with other definitions and variables, in particular also non monetary. The central framework includes standard classifications of products and services, of activities, of institutional sectors, of transactions, of purposes and of accounts. There are two main advantages in analysing a policy field ("a segment of society" or "a market") using this standard framework. This way, one can use comparable definitions across countries and in time, and secondly, one can see the relative importance of the field in the economy and its links with the rest of the economy. These reasons are also important for the real estate segment of society and for the goals of the COST project "Modelling Real Property Transactions", which motivated this research, so we are trying, despite obstacles, to make progress in this direction.

An obvious first step to proceed is to define a field of interest, in order to enable measurement and comparison of its size, structure and links with the rest of the economy. The second step could then be to identify, what national accounting and other data statistical offices have available and could be used from the central SNA framework. The third step would be to identify other data needs and sources to meet these needs. The fourth step would then be the actual production of accounts and the fifth their analysis and recommendations for policy purposes. In this paper, we shall try to make some progress concerning the first three steps.

2 Identifying the real estate field

The SNA covers all the transactions and "other flows" in the economy, both market and non market, as well as the stocks, and presents them in the framework of accounts and balance sheets. Although in our projects we are mainly concerned with the cost of real estate transactions (Lavrac 2004, Blandy and others 2004), these costs are strongly linked to and based on the transactions of conveyance of property and underlying changes in stocks of property, to the transactions concerning services provided by the real estate itself, and to the ancillary transactions enabling and servicing the former two main types. So the proposal pursued here is to define real estate accounts to cover the links with these transactions and not just to cover the "cost of transactions account" focusing on the ancillary services only, without links to the main transactions. It will be obvious though, that achieving such an ambitious goal is a long term project. Any empirical data at this stage can mainly serve to clarify conceptual issues and it is largely premature to expect policy recommendations, although data may provide some glimpses of differences between countries.

Although the whole of society uses real estate, and the substantial part also produces real estate services, to define the real estate field or/of activity we have to be much narrower in scope. Let us first consider if we can live with the definition of the activity as used in the national accounts. One of the 60 divisions of A60 level of NACE rev. 1.1. standard classification of activities (Eurostat 2004), belonging to the higher category K, is #70 Real estate activities:

***Table1**. Real estate activities according to NACE Rev. 1.1.*

K	**Real estate, renting and business activities**		
70	Real estate activities		
70.1	Real estate activities with own property		
70.11	Development and selling of real estate	This class includes: – development of real estate projects: • bringing together financial, technical and physical means to realize real estate projects for later sale, whether for residential buildings or other	This class excludes: – development and construction work of a real estate project by a construction unit, see 45.2
70.12	Buying and selling of own real estate	This class includes: – buying and selling of self-owned real estate: • apartment buildings and dwellings • non-residential buildings • land	
70.2	Letting of own property		
70.20	Letting of own property	This class includes: – letting and operating of self-owned real estate such as: • apartment buildings and dwellings • non-residential buildings, including exhibition halls • land	This class excludes: – operation of hotels, rooming houses, camps, trailer camps and other non-residential or short-stay lodging places, see 55
70.3	Real estate activities on a fee or contract basis		
70.31	Real estate agencies	This class includes: – intermediation in buying, selling, renting and appraising real estate	
70.32	Management of real estate on a fee or contract basis	This class also includes: – rent-collecting agencies – facility management, janitorial activities such as managing/ offering activities ranging from: • facility operation • cleaning and maintaining the premises of a building	

One can see, that this definition of activity excludes construction activity, which is a separate higher level activity in NACE. Also, and more disturbing for our purposes, it for example excludes surveying, notaries and similar as business activities to be found in the division #74, and public administration activities, to be found in division #75 (there is no sublevel to distinguish public activities involving real estate). On the other hand, this activity is exercised not only by business subjects but by definition also by households living in their own dwellings (so called imputed rent). I am leaving open to debate if this definition of activity is the best one. A satellite account can bring together for its purposes activities from different parts of a standard classification. NACE for example does not know the activity of tourism, so tourism accounts bring together hotels, travel agencies and the rest as necessary. As another option, one can get involved in the statistical debate involving next revisions of standard classifications. At present, almost all of them are in different stages of being revised.

An activity is defined as a group of units producing as their main product or service the one which is defining the activity. Standard classification of products and services CPA (Eurostat 2004) is at the P60 level a mirror image of activity classification NACE rev.1.1. Let us assume for the moment that the definition of the real estate activity as described in the table is the right one. Real estate services are in principle a different concept than a real estate activity and can in principle also be used for defining a real estate satellite account. Units active in real estate can namely produce also other, so called secondary services. Vice versa, real estate services can be produced as secondary services also by units, classified into different other activities. In Slovenia, real estate services are a wider concept than real estate activities, exactly 408 versus 365 billion sit in the year 2000, as some of these services are produced by other activities. Let us illustrate this point by selecting real estate rows and columns from the Slovenian supply and use tables (Statistical office 2003). Supply and use tables are supposed to be regularly produced by EU member states, so they can be compared across countries.

From supply and use tables of Slovenia a following picture of real estate services and activities can be derived:

Out of a total supply of real estate services (#70) of 408 billion sit, 361 or 88 % was produced by units classified as real estate activities, the rest was produced by many other activities. The customers, users of these services were many activities (businesses), which used these services as their intermediate consumption (18% of 408 billion), households (80%, major part being implicit rents – value of housing services of owner occupied dwellings), and government (0,5%), while a small part of these services (1,5%) also got included in the value of national capital formation.

From total revenue of real estate activities of 365 billion sit, almost all of it (361 billion) came from supplying real estate services. The cost structure (use) of this revenue was: 18% was spent on intermediate consumption of goods and services while 82% or 298 billion was value added. A very minor part of this value

added were wages and other compensation of employees (only 7 billion), net taxes on production were 4 billion and major parts were depreciation ("consumption of fixed capital") in the amount of 125 billion and net operating surplus (in different forms of property incomes like rents, interest and dividends) of 162 billion.

We shall not go here into comparison of real estate with comparable structures of other services and activities. Nor is the comparison of real estate transactions across countries a direct goal of this paper. Still, for the international reader interested in the economic meaning of Slovenian figures we are providing here some benchmark figures and converters. Slovenian gross domestic product (GDP) in 2000 was 4252 billion sit, so real estate services are (408/4252) 9,6 % of it (remember: including imputed rent – in Slovenia, some 90 % of dwellings are owner occupied). Exchange rate to euro in 2000 was 205 sit for 1 euro so Slovenian GDP was 20.7 billion euro or 10371 euro per capita. In purchasing power it represented some 68% of EU15 average. Most of the figures in international comparisons can be made comparable by calculating them as % of GDP or per inhabitant. Slovenia's population is almost 2 million.

3 Desired versus available content of national real estate accounts

A desired content of national real estate accounts should reflect the need for a comprehensive and internationally comparative analysis of a real estate market of a country, in order to provide a basis for national policy advice. Ideally it should cover both the market for real estate services, primary and ancillary, as defined somewhat in the previous chapter, and capital real estate transactions, that is trade in new and existing real estate assets. It should describe financing of these transactions and the transaction costs from the point of all the institutional sectors involved, in particular enterprises, banks, government and households.

So the content of real estate accounts should be wider then the scope of the real estate activity itself, which we tried to define in the previous chapter, as the links of this activity with the rest of the economy should be brought into view as well. The capital transactions should be linked to the changes in stocks and the stock of real estate, with its structure and distribution. Monetary estimates should be accompanied with simple underlying physical estimates, like the number of people, of dwellings, parcels, square meters, transactions or cases, to enable meaningful international comparisons per unit.

Little of all that is readily available for a fairly typical country like Slovenia. But we should avoid the practice often seen in the national statistical offices to statistically describe only what is statistically available, instead to define what is relevant and to provide rough estimates if necessary. Policy measures, like business decisions, sometimes have to be taken only on the basis of expert judgement, and can not be postponed till necessary surveys are put into place. So let us start with some rough estimates.

Our best estimate at this moment is, that the output of real estate services in Slovenia today amount to some 10 to 15 % of GDP, depending on the definition,

with some 2 to 3 % of GDP of that belonging to ancillary services. If we add some 6% for the construction activity we can estimate the size of real estate services at the level of almost 20 % of GDP (or some 8% of a wider, but less internationally comparable category called total output of the economy).

The turnover on the real estate capital market for existing real estate (without construction) is about 1.5 billion euro (see for example Kozar 2002) or some 7% of GDP, this low share reflecting the underdeveloped real estate market in Slovenia. This turnover is the result of some 30 000 transactions annually. Only some 30 % of it is intermediated through real estate agencies. Only a small share of financing comes though mortgages.

There are some 700 000 dwellings (Statistical office 2004, Kozar 2002), about the same as the number of households, with some 70 m2 of average floor space, and only some 7000 new dwellings per year. There are a lot of census data on the distribution of dwellings. The revenues of some 200 real estate management companies serving this market amount to some 100 mil euro annually.

This is just some basic information about the real estate market; we can not go here into details. National accounts of Slovenia on their own are not detailed enough to shed much light on the real estate market. In particular, there are as yet no detailed accounts by institutional sector, so there are no figures expected by SNA 1993, like Acquisitions of existing tangible fixed assets (transaction #5112 in SNA) or Acquisitions less disposals of land and other tangible non-produced non financial assets (transaction # K.21) by sector. Also, there are as yet no balance sheets. Different other data on real estate sector exist but are scattered. But several big integrated public databases, driven by the desire to introduce property taxation, will become operational in the next years, so the data situation should get better.

We tried to dig a bit deeper to reveal some operations of government services serving real estate market. COFOG classification of government purposes is here of no help, as it is too rough. One has to collect instead annual reports of different government bodies and the detailed government budget information. It is easier when the whole of an agency can be attributed to real estate services, like Surveying and mapping authority of the Republic of Slovenia (Surveying and Mapping, 2003). Its budget in 2003 was some 20 mil euro, with some 550 employees and 20 000 km2 (the surface of Slovenia) and some 6 mil parcels to administer. Its cost recovery rate at the moment is only some 5%.

It is more difficult if a service is hidden inside a wider public function. This is a case of the court system in Slovenia. Its services related to the real estate market include mainly inheritance cases, neighbour, restitution, housing and similar cases, enforcement procedures involving real estate and land registry. We can try to provide a rough estimate of the split of the courts budget based on the number of cases (Ministry of Justice, 2004). The budget of the courts, if we understood the complicated system correctly, amounts to some 100 mil euro. The courts in the year 2003 solved 570 000 cases, and about the same amount is unsolved backlog, which is slowly increasing. They did it with about 700 judges and 2200

employees. They solved about 24000 inheritance cases, 14000 diverse real estate cases, 6600 real estate enforcement cases and 220 000 land registry cases (only a minority of apartments are as yet registered). To sum up, real estate cases amount to some 46 % of all cases. With the somewhat unrealistic assumption that they are as demanding as other cases, the budget for them would be 46 mil euros. That would leave us with a rough estimate of 46 mil euro spent for real estate courts services or some 180 euro per case. I am leaving it to the discussion, if in international comparison perspective this is realistic and if such kind of statistical exercises are a useful way to proceed towards a national real estate account.

References

Blandy S., Cirman A., Cormack. P., Dehesh A., Hills. S., Hunter. C., Juznik.L., Lavrac. I., Stevens R.: Deliverable One: Interim Report on WP5 Context and Existing Instruments of Reurbanisation in Each City. EU Fifth Framework Programme: Reurbanisation on Condition of Demographic Change, Sheffield Hallam University and Faculty of Economics Ljubljana, Sheffield 2004.

Ministry of Justice of the Republic of Slovenia: Courts statistics for the year 2003, Ljubljana 2004-10-12

Eurostat: European System of Accounts ESA 1995, Luxembourg 1996.

Eurostat: Ramon: Eurostat's Classification Server (http://europa.eu.int/comm/eurostat/ramon/), 2004

Kozar. A.: Real Estate Market in Slovenia. The FIABCI European Study Days, Porto 2002.

Lavrac I.: Transparency of Real Estate Market and Transaction Cost in Slovenia. COST G9 Action: Modelling Real Property Transactions. WG3 meeting, Ljubljana, 11.-13. March 2004

Lavrac I., Kalin J.: Findings in Compiling Supply and Use Tables in Slovenia: Lessons for the Transition of Data Sources. 13th International Conference on Input-Output Techniques, Macerata, Italy 2000. International Input-Output Association 2000

OECD: Economic Accounts for Agriculture, 1999

OECD: A System of Health Accounts, 2000a

OECD: Measuring the Role of Tourism in OECD Economies: The OECD Manual on Tourism Satellite Accounts and Employment, 2000b

Statistical Office of the Republic of Slovenia: Input-output tables for 2000. Ljubljana 2003.

Statistical Office of the Republic of Slovenia: Web home page: (http://www.stat.si/eng/index.asp), 2004

Stuckenschmidt H., Stubkjaer E., Schlieder. (Eds). The Ontology and Modelling of Real Estate Transactions, Ashgate, Aldershot, UK (2003)

Surveying and Mapping Authority of the Republic of Slovenia: Activities Report 2003

UN/EC/IMF/OECD/WB: System of National Accounts, New York 1993.

UN/EC/IMF/OECD/WB: Integrated Environmental and Economic Accounting, 2003