Land Registers and cadastre as prerequisites for land and building taxation: a case study of the Netherlands
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1. Introduction

In the international literature various definitions of 'land registration' and 'cadastre' are used. A new modern word is 'land administration' used by the UN/ECE initiative MOLA (Meeting of Officials on Land Administration), as the all-embracing concept of 'policies, legislation, organisation, financing and technical issues, related to, inter alia, land titling, restitution of land rights, land information systems, cadastres, and land registration, land use planning, land taxation, land valuation and land consolidation' (1).

However, focusing in this paper on the activity of land taxation, we use 'land registration' as the designation of the registration of deed and/or title concerning interests in land and 'cadastre' as the parcel based information system consisting of registers and maps. If the purpose of such an information system is land taxation, one often refers to it as a fiscal cadastre. If such a cadastre mainly serves the security of land rights, one speaks about a juridical or legal cadastre.

Another term with various meanings is 'land'. Sometimes e.g. it means the surface only, sometimes the surface and buildings on it. However, within the scope of this paper -land taxation- we prefer to use the term 'land' as being the surface without any buildings attached to it, thus separate from the term 'buildings', because in many countries land and buildings have a separate fiscal regime.

The financial contribution of the people to the government budget also may occur in different forms. 'Tax' is paid to the government without getting something specific in return. Land tax may be considered as such. A 'retribution' is like a tax, however in the context of a certain specific exchange from the government. The fees which are to be paid to enter a deed or title into the land register may be considered as being a retribution. Another form is the 'contribution', which is a tax for a specific target group of people which has a benefit from a certain government service (like the TV license fee). How that may be, within the purpose of this paper we prefer to use the term 'tax', comprising all the various forms of levies.

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11) Director Land Information and Land Consolidation Netherlands Cadastre and Public Registers Agency.
2. Contribution of land related taxes to the government budget

In 1984 the Netherlands Council for Geo-information published a report on the financial impact of taxes related to land and buildings to the budget of the government (2). It was investigated that in 1984 this was as follows (unit: millions of US $):

- national income tax: 420
- national wealth tax: 360
- national transfer tax: 500
- national death duty: 402
- municipal land and building tax: 1300
- municipal benefit tax: 5
- municipal land to be built tax: 0.5
- municipal sewerage tax: 16
- municipal commuter tax: 6
- waterboard tax: 133

We add:
- deed registration fees: 150

In the National Statistics we find more recent figures (1997). Of the government budget at State level generated by taxes (which is 100 billion US $), the contribution of income tax as far as related to land and buildings is 0.75 billion $ (1%), and the contribution of transfer tax (which is to be paid when conveying real estate) is 1.4 billion $ (2%). That is not so much, however when we look at the local government budget, we see that the municipalities have a (total) budget of 4.1 billion $, which is financed by the land and building tax for 2.05 billion $ (50% !). The Waterboards have a (total) budget of 1.75 billion $, to which the contribution of the local waterboard land and building tax is 0.35 billion $ (28%).

The conclusion may be that taxes related to land and buildings provide a substantial part of the government budget especially at the local level. We also may consider that in countries where difficulties occur in levying personal taxes (e.g. income tax, corporate tax, sales tax, value added tax), the contribution of land and building tax is even more substantial for financing governmental activities.

Land taxation without a cadastre (before 1814)

In many countries land and building taxes are long existing taxation. In the Netherlands land and building taxation goes back to the Middle Ages (3,4). The reason was that tax evasion was relatively difficult. Systematic land registration however was an unknown concept. Somehow (with e.g. simple landbooks at parishes, courts, feudal landlords) one succeeded in identifying the users and owners of land and
buildings, and in levying a tax. The base for taxation was the income one could gain from the land. However, the tax burden was neither always fair nor equitable distributed, because all kind of exemptions were given to the aristocracy, churches, family and friends of the landlords and large land owners. At the end of the 17th century there was in the a need in society for a more uniform system with a better foundation.

A fiscal cadastre becomes a base for state level land and building taxation (1814 to date)

In 1810 the introduction of a fiscal cadastre became actual after the annexation of the Kingdom of the Netherlands by France. The French legislation became into power. Some years before, in 1808, Napoleon Bonaparte, who needed money to finance his activities, decided to establish a system of land taxation, based on a accurate inventory of land use and land ownership, with precise land survey of land parcels: a fiscal cadastre. In 1811 it was decided that also in the occupied Netherlands such a system of land taxation should be introduced. As a consequence, in 1812 the work started to survey the land, and to list users and owners of the land parcels.

The administrative structure in the cadastre was as follows. The country was divided in municipalities, and these were divided into cadastral sections, and these on their turn into cadastral land parcels. First the land surveyors, together with the municipal executives, determined the precise boundary of a municipality. Then he surveyed the parcels.

In the archives are still present:
• the official minutes of the boundaries of the municipalities;
• an overview map of the triangulation points;
• the original cadastral maps;
• the original land register.

After the fall of Napoleon, when the Netherlands became independent again, King William I adopted the system of land and building taxation based on a fiscal cadastre, and the work was continued. In 1838 the work was finally done and a country covering fiscal cadastre was ready.

Tax was levied on the value of land and buildings in terms of the revenue one could gain with it (the rental value). This rental value was assessed during the process of land surveying. The rental value was registered in the land registers and was fixed. The regulations didn’t have any provisions for updating rental values. Only if land parcels were divided or joined together, the rental values were divided and joined together according to the extent of the new surface area. With this respect the cadastre always showed a more or less actual situation. New erected buildings were appraised by comparing them with similar existing buildings, so they were put on the original scale.
The amount of the tax itself was based on a so called repartition-system. First it was decided by the national government which part of the national budget should be provided by the land and building tax (at that time this tax was a state level tax). The resulting amount was split up to the provinces, then to the municipalities and finally to the individual land parcels. It could happen that the amount of tax was different from one province to another. Anyway, at that time the rate was about 10% to 12% of the rental value.

The fiscal cadastre and the land registers join together (1839) forming a base for both land taxation and security of real rights.

The updating of the cadastre was based on changes in the legal situation of land and buildings. It was a major effort to have knowledge of these changes. Legal documents could be recorded at the local courts. The clerk of the court acted as a kind of land registrar. However, as an other Napoleonic rule, in 1811 it was decided that these legal documents, mainly deeds of transfer and of mortgage, should be recorded at the local office of the national tax department, in order to levy transfer taxes. Such a recording became compulsory in 1824.

Thus there were some sources for investigating the changes in the legal status of land. It became much easier however, when in 1825 it was decided to join together the legal land registers and the cadastre as a special department within the national tax department, the Ministry of Finance. Here are the roots of the Netherlands Cadastre and Public Registers Agency, in which -unlike many other countries- the land registration and the cadastre are combined in one organisation. The cadastre became a key to the public registers, even more when in 1838 a new Civil Code came into power, which ordered to include the cadastral land parcel number in notarial deeds of transfer and deeds of mortgage. The fiscal cadastre also became a juridical or legal cadastre, a situation which is still a benefit at date.

An attempt to keep the land taxation up to date (1870 to 1970)

The levying of land and building tax was still based on the assessment of the taxable yield of the beginning of the 19th century. A new law of 1870 decided upon a reassessment and a regular update every 20 years (5,6).

The first reassessment concerned the buildings. The taxable object included non-built area, to be considered as part of the real estate. In the period 1873-1875 the reassessment was carried out. Base for the taxable value was the rental value as an average of the rents in the period 1868-1872. For buildings from which a rental value could not be assessed, an amount of 6% of the purchase price was taken. If even such a purchase price was not available, an estimation of such a value was made. The cadastre provided lists with purchase prices in the required period. The assessment
was done by a committee of three to five valuers headed by the official inspector of the Ministry of Finance. After approval by the Minister, the renewed taxable values were recorded in the cadastre in 1875. The tax levy of 1876 was based on the new taxable values. The amount of the tax was 5.2%.

The second reassessment concerned the land (non built area). The taxable value was defined in the Law as the rental value in the period 1877-1881, less the costs of maintenance. If the appraisal of such a value was not possible (e.g. the land was never leased out), the valuers estimated a rental value based on the revenues of the land less expenses during the last seven years. If even that was not possible, the valuers compared the land with land parcels nearby and estimated a value. In 1892 the value of the non-built land parcels was approved, and recorded in the cadastre; 1893 was the first year with taxation based on the renewed values. The amount of the tax was fixed at 6% of the taxable value.

The second regular update, in 1897, concerned the buildings only. It was a laborious work. For the first time buildings were divided into three categories with distinct taxable values:

- houses: the average rental value in the period 1892-1896;
- farms: 1.5% of the buildings costs;
- factories c.a.: 6% of the purchase value in the period 1892-1896.

The assessment of farms did not seem to be fair: the estimation of building costs was not easy. Later, the government decided on another base for the reassessment of farms: 3% of the purchase price for the living area in the farm, and 1.5% of the remaining area. In 1906 the work was done and in 1908 the tax on buildings was levied based on the renewed taxable values (4.86%).

Remarkable is that after 1904 never a reassessment was ordered. Up to the 1970's the fixed values remained the base for land and building tax.

Decentralisation of land taxation: levying land tax becomes the competence of municipalities (1970)

After World War II there were serious concerns about the financial position of municipalities. In 1946 this position was really bad. Several government committees suggested improvements, such as a so called 'municipal town tax'. The government actually decided not to implement this new taxation but to review all taxations at the municipal level. After the review, the government finally decided to improve the autonomy of municipalities by allowing them to levy a land and building tax and to gain much more independency in financing their activities. The Law on Municipalities was changed in 1970 and established a municipal land and building taxation (7). At the same time the national land and building tax was cancelled, together with all kinds of small local taxes. The implementation of the new municipal land and building tax was ruled by a municipal regulation. In 1973 the first municipalities were ready
for levying their own land and building tax. In 1980 all municipalities were able to levy. In fact the municipal land and building taxation consists of two taxations, namely:

- the taxation of the benefit of having a real right on land and buildings, and
- the taxation of the actual use of it.

The taxation is of an objective nature, only the value of the land and buildings is a base for taxation, not the personal wealth of the owner or user. In the law there are two possible bases for tax levying of which a municipality may choose:

- value of land and buildings in the economic transactions;
- surface area of a land parcel.

In the last case the surface area should be corrected by multipliers corresponding with nature, location, quality and land use in order to respect differences in the economic value.

The criteria which should be taken into account when making a decision, are:

- the levy should reflect values in economic life;
- the levy should be applicable on ownership as well as use;
- the levy should be understandable for the taxpayer;
- the levy should provide sufficient legal security for the taxpayer;
- the levy should easily be implemented;
- the costs should be low.

The government preferred the surface area as a base for taxation, nevertheless many municipalities opted for the economic value, because making operational the multipliers on the surface area was thought to be difficult. At that time, e.g. two big cities out of five chose the surface area as a base, the other three chose the economic value.

The taxable object is still being defined as the building including the surface on which it has been built and remaining land, so in fact there are two categories.

Taxpayers are the persons or legal bodies which are registered in the cadastre as rightful claimants of the land and buildings at one hand, and the actual users at the other hand, the latter by virtue of a personal right (like rent, lease) or otherwise (actual use). The land registers and cadastre play -as all the years before- an important role in providing the information on rightful claimants, surface areas and purchase price information.

The new Law exempted from the municipal land and building tax the agricultural land, forests, waste lands and nature conservation areas. This was a compulsory exemption rule. Besides, the municipal could decide on the exemption of objects mainly serving a public purpose, street attributes, cemeteries and parks.

The base for assessment of the economic value is as follows. For current objects (houses) it is the highest purchase price a purchaser would pay for the empty house. The assessment method may be comparative (e.g. houses), or capitalisation of rental
values (e.g. shops). For unmarketable objects (e.g. factories, some offices) one may use the costs of replacement (the quantity survey approach) with adjustments for technical and functional obsolescence.

The base for assessment of the surface area is the amount of square meters of the building and the land. The cadastral surface area of a land parcel is input in this process. However, the surface area is adjusted by multipliers for the location, nature, use and quality of the object. In fact the assessments concern the estimation of these multipliers.

The Law at that time limited the total revenue of the municipal land and building taxation. Taking into account this ceiling, the municipalities are free to decide on the level of the taxes. In the meantime the government decided not to interfere in the limitation of the taxation. Town councils now decide themselves on the level of land and building taxation in their own community.

As far as the registration of the taxable values is concerned, these values are registered by the municipalities. So, unlike the situation before 1970, the taxable value is not a part of the cadastral land information anymore.


One should be aware that governmental institutions did not always use the value of land and buildings as assessed by the municipality. The Ministry of Finance used another value for income taxation; wealth taxation and corporation taxation; sales tax; transfer tax and death duty. The waterboards, which have the power to levy their own land tax, also used their own assessed value. All organisations did operate their own valuers. In the society there had been complaints about the use of different values for the same object. For the citizen this was too confusing. The Council for Geo-information has published a report (2) about this situation. They concluded that the way various government institutions had dealt with the value of land and buildings was very unclear, ineffective, inefficient, not exchangeable and too costly. In a next report (8) the Council proposed a new Law on the Assessment of Land and Buildings (the Council referred to these as ‘real estate’), aiming for a single value for each real estate, which could be used by all government institutions. This proposal has been adopted, and in 1992 a Law on the Assessment of Real Estate passed the Parliament.

The Law realises a complete functional and territorial decentralisation of the evaluation. It says that municipalities only are in charge of the valuation of land and buildings, furthermore that this value should be exchanged with all other government institutions and that these institutions are obliged to use this value as the base for their own activities. Functional decentralisation has been established in the sense,
that the supervision for this valuation has been given to an independent Council for the Assessment of Real Estate (9).

On 1-1-1996 the Law on the Assessment of Real Estate came into power. The municipalities assessed all buildings (including related land, like gardens, terrains) and in 1997 these values were determined. All owners and users of real estate received an official municipal order containing the indication of the real estate concerned, the reference date for the value (which was 1-1-1995 for the actual assessment), and the determined value. Such an order is an official document which one may lodge an appeal against. The Law states that the valuation report should be available for the persons involved and that one may ask for it.

The Law orders that the value has a validity of a 4 years period. The value of 1997 as a consequence is valid in the period 1997-2001, a next assessment will take place in 2000 with a reference date of 1-1-1999 and will be valid in the period 2001-2004.

The base for the assessment of houses is the value in the economic transactions, the purchases prices. The assessment report should give an analysis of the market value of the house concerned, and should give information about the sales prices of other houses comparable.

For some real estate the market will be mainly rental transactions (shops, offices, factories). In this case the Law allows assessment based on a capitalisation of the rental value. The assessment report should contain a market analysis of the rental values pro square meter, capitalisation factors for the object involved and other comparable objects.

Finally there are objects without any transactions, like schools, museums and hospitals. In these cases the Law allows as a value the replacement value with correction factors. Agricultural lands, nature conservation areas and public roads are excepted for assessment, because they are charged by the waterboard for the waterboard-tax.

The taxable object is mostly similar to the cadastral parcel, but it doesn’t need to be. If an owner owns two adjacent cadastral parcels, which together are to be regarded as one real estate, there will be one taxable object consisting of two cadastral parcels. Also it will be possible that one cadastral parcel generates more taxable objects. This will occur in both situations of ownership and use.

The role of the land registers and cadastre in the new context

One may observe that the role of the land registers and cadastre in the new context is more or less the same as all the years before. Periodically they provide the actual legal status of land and buildings and their rightful claimants. The cadastral parcels are a substantial part of defining the taxable object. The purchase prices to be used in the market analysis in the assessment reports are supplied by the cadastre.
All changes in the land registers and cadastre may cause a change of taxable objects, taxpayers and assessed values. To secure the quality of the tax administration of the municipalities, once a month they all get all changes -only information of their jurisdiction- from the Netherlands Cadastre and Public Registers Agency.

As the land registers and the cadastre don't comprise information on the use of land and buildings, the municipalities use other sources as well. The main source for identifying the actual use of real estate is the census, which is kept by the municipalities themselves and the files of utilities and building corporations.

Experiences and recent developments

Of course the introduction of a new system of valuation of land and buildings involves all kind of unexpected teething troubles. The two big bottlenecks have been the delineation of the taxable objects and the assessment itself. After all, it has been necessary to submit a assessment report to the taxpayers with sufficient, satisfying and valid arguments for defining the object and the value. One may observe that in the meantime all owners and users of land and buildings have received an official municipal order and that the exchange of the value between municipalities, national government and waterboards has been performed successfully.

All municipalities have to manage an appropriate information system on land and building tax. To keep and maintain such an information system is considered as the next challenge for the municipalities. The main source for this information system is the cadastre.

A new development is the map of taxable objects. There is a need to visualise the taxable object on the cadastral map. The taxable objects are to be seen as an 'overlay' showing the relationships between cadastral parcels and taxable objects. It is expected that such a map improves the clearness to the taxpayers, and improves the efficiency of keeping the tax-administration up to date.

Land registration and cadastre as an IT-driven activity: developments in the Netherlands Cadastre and Public Registers Agency

The increasing demands from customers (like municipalities with respect to their tax administration, but also many other users of land information) and the strategy to meet these demands, resulted in 1996 in a comprehensive programme for renewal in the Netherlands Cadastre and Public Registers Agency. It was understood that the idea of meeting the demands of the users causes a need for re-engineering the existing information systems and the IT-infrastructure. Organisation theory says that when an organisation adapts and improves its strategy and its IT, the working processes should also be reconsidered. That is what is happening: business process redesign. Introducing new working processes, restructuring, splitting up in a front
office and back office and workflow management are in progress. More IT, less employees, better financial and social management. Integrated service delivery to the citizens, data sharing and the use of the Internet as a distribution medium are under investigation or under implementation. The land registers are digital since 1990, the cadastral map since 1998. Research is being performed on artificial intelligence in order to support the daily updating of the databases and the electronic submitting and recording of deeds in the public registers is under development. Plans aim for a realisation of all these developments in 2002. Then the Agency will consist of a head office and 6 regional offices, which by the way may have more branches.

Conclusions and recommendations

The contribution of land registration and cadastre to a sound land and building taxation is undisputed. The legal status of land and buildings must be knowledgeable. The delineation of taxable objects can not be done without information on cadastral parcels, their surface area and their features. Reliable assessment of values can not be done without the information on purchase prices, as known from the deeds of transfer of real estate. It is necessary to establish appropriate interfaces between the land register and the cadastre at one side and the tax officials at the other side. The managers of land registry and cadastre should aim for meeting the demands of the users of their information, the managers of the tax organisations should explicit their needs into operational terms. The attitude should be characterised by 'co-operation'.
References

(1) Land Administration Guidelines.
    UN New York 1996

(2) Netherlands Council for Geo-information RAVI
    Report on the appraisal of real estate.
    Apeldoorn 1985 (in Dutch).

(3) H. Schuttevaer
    Juridical and Societal Meaning of the system of publication of land and
    property (1820-1970).

(4) L. Gimbel
    A variant of the theme from Land book to Computerlisting.

(5) W.E. Kremer c.s
    Noorduijn and Son, 1946 (in Dutch).

(6) F.J.M. Otten
    The registers of valuation and land taxes 1873-1904.
    Institute for Netherlands History 1997 (in Dutch).

(7) J.P. Kruimel
    Theory and practice of municipal land taxation.
    FED Deventer 1987 (in Dutch).

(8) Netherlands Council for Geo-information RAVI
    Apeldoorn 1987 (in Dutch).

(9) Annual Reports of the Netherlands Council for Real Estate Assessment