

Land value taxation **Meeting the principles of transparency in ‘Good Tax Design’**

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Key words: Principles of good tax design

SUMMARY

Land value as a base for recurrent property taxation has presented a number of challenges in highly urbanized locations where land separate to improvements rarely transacts. The economists view that land being limited in supply makes it the most suitable and neutral base on which to assess the tax, is in contrast to the taxpayers perspective, due to the additional complexity in understanding how land value is determined. This paper is a review of improvements in the principles of ‘good tax design’ in Australia. Data on objection rates to land values have been sourced from the NSW Department of Lands both pre and post the introduction of the 2005 reforms recommended by the NSW Ombudsman.

This paper attempts to measure improvements in principles of ‘Good Tax Design’ via changes in objection rates to land values issued by the New South Wales Valuer-General, resulting from the provision of sales information to land tax payers from 2005. In conclusion a summary of improvements are provided as well as recommendations for refinements in the development of further measures needed in adding to taxpayer understanding of the valuation of land in highly urbanized locations.

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1. INTRODUCTION

1.1 Land Tax in Australia

Land taxes in Australia are imposed by state government in the form of state land tax as well as local government in the form of council rates, Table 1 is a summary of the base value on which these taxes are applied across Australia at the state and local government levels.

In many countries land tax is primarily a tax levied at the local government level and is perceived as a tax in return for the provision of services. However, Australia is one of the few countries which imposes a recurrent property tax both at the local government level in the form of council rating and as a recurrent land tax by the state (or middle tier of) government. Most countries imposing a recurrent property tax apply it to improved value (land & buildings) at the local government level and apply some form of limitation or cap on increases in revenue from this tax (Haveman 2008).

The focus of this paper is on state land tax, although the underlying principles are common to council rating where land is used as a basis of rates. Land value taxation, better known as land tax comprises four key components, the unit or taxpaying entity, the base on which the tax is assessed, namely land value, the rate in the dollar applied to the base and a threshold above which the aggregate land value of an entities assessment is taxed. It is the value of land used to assess this tax and its relationship with the tax principle of transparency in the valuation of land that is the specific focus.

Table 1: Structure of recurrent property bases used across Australia

STATE	STATE LAND TAX	LOCAL COUNCIL RATE
New South Wales	Land Value	Land Value
Queensland	Site Value	Site Value
Victoria	Site Value	Improved Value
South Australia	Site Value	Improved Value
Western Australia	Unimproved Value	Unimproved Value
Tasmania	Land Value	*Assessed Annual Value
Northern Territory	N/a	Unimproved Capital Value
ACT	Unimproved Value	Unimproved Value

Source: States Valuation of Land Legislation (*under review)

1.2 Principles of 'Good Tax Design'

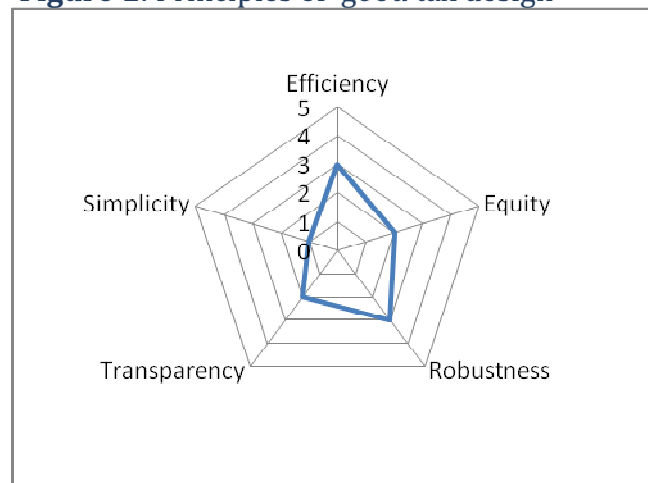
Unlike other taxes where the base is readily definable (income, consumption, capital gains, turnover or payroll), land tax has an additional layer of complexity in that the base is required to be determined by valuation as the first step in the assessment process. This is further compounded by the fact that unlike other taxes, in which the tax payer has a perceived level of control or input through the lodgment of tax returns, no such taxpayer input exists in the taxation of land. Once ownership of land is declared, land taxes are solely assessed by government without any reference to, or input from the taxpayer. On this basis, the valuation of the taxpayers land by government is a significant challenge in the acceptability of this tax.

In 1972 the Asprey Committee was formed to review the tax system in Australia, which came under significant criticism following increasing inflation and government spending which resulted in less positive opinions on the payment of taxes. The committee considered the key features of a tax system to be simplicity, fairness and efficiency. It was considered by the committee that fairness was not an easily measurable principle and it was determined that fairness was interchangeable with equity, which comprised two definable and measurable components, namely vertical and horizontal equity.

Following Asprey in Australia, the Meade inquiry (1982) reviewed the structure of direct taxation in the United Kingdom. Like Asprey, Meade established a similar set of principles for good tax design, which encompassed equity, transparency, efficiency and simplicity. The principle of transparency was defined to ensure that all elements of taxation were observable by the taxpayer.

This paper is both a review of the improvement of one specific principle of tax design, that is the transparency of the valuation process and the information given to the taxpayer of the evidence of value. Figure 1 sets out the rating of land tax against the principles of good tax design in a 2008 review of New South Wales state taxes. It shows the weaknesses in the taxation of land under the principle of transparency among other principles (IPART 2008).

Figure 1: Principles of 'good tax design'



Source: IPART NSW 2008

Contributing to poor performance against the criteria of transparency and to a lesser degree simplicity, is concern that taxpayers have poor information about how their value is determined. Whilst the three year averaging of values has added a further level of complexity to this tax, the key issue is making available to taxpayers the information used to value land in their land tax assessments (Ombudsman 2005). Here, the sales data and related information used when valuing land has been identified as key in providing greater transparency and understanding for taxpayers on how the tax is assessed (Walton 1999).

Paramount in the assessment of any tax, and of particular relevance to land tax, are the principles of simplicity and transparency. The ability of the taxpayer to understand a tax and how it is assessed is one that ultimately contributes to its acceptability. A tax which is administratively focused, government centred and operationally inefficient, with little or no regard to taxpayer understanding, is a tax doomed to challenges and taxpayer distrust (Head and Krever 2009).

2. EVOLUTION OF PROPERTY TAXATION

2.1 History of the property tax

This section provides a summary of the evolution of the bases, along with an overview of the problems currently experienced with transparency in determining land value in modern highly urbanized cities like Sydney.

The taxation of land and property as a source of government revenue pre-dates the Roman Empire with traces of its existence dating back to Ancient Egypt 3,500 B.C., where taxes were imposed on the value of produce from land. A move from land to improved value resulted in the Hearth tax being introduced in 1662. The negative impact of this tax, which taxed property based on the number of fireplaces in a property, was also known as the chimney tax. The tax was abolished by King William III in 1689 and replaced by a window tax (Gibson 2008). The window tax lasted almost two hundred years until it was repealed in 1851 and replaced by a House Duty. The window tax was seen as easily assessable and transparent and in effect taxed larger property higher which had more windows (Timmins 2001).

The Colonial period of 1600-1750 in the United States denoted a period of settlement, growth and the development of land in which taxes were imposed on land and buildings. With the growth of local governments, this tax became the base for collecting tax revenue. As the tax grew in importance, councils were directed at the request of their communities to publish lists of taxpayers, their assets and tax payable. As the necessity for the property taxes grew, a residential frontage tax was introduced in New Orleans which was met with the development of the shotgun house, a long narrow house developed to avoid the tax. The final attempt to establish consistency of the base of a property tax resulted in a room tax, which subsequently led to the bricking up of closets and pantries in attempts to minimize the impact of the tax on the house (Fisher 1996).

As can be seen in the historical summary of the property tax, the inclusion of improvements in the base of the tax can have an impact on the neutrality of the tax, as alterations may be made

to improvements on land to minimize payment of the tax. To this end, and has been identified as the most neutral base on which to assess a recurrent tax on property.

2.2 Evolution of land tax in Australia

Property taxation commenced in Australia in 1884 and continues to predominantly operate in the form of a tax on land, also known as land value taxation. In Australia this tax exists at both the local government level in the form of council rating and at the state government level as a land tax. Australia is one of the few countries that impose a recurrent tax on property and more specifically a land value tax at state government level, without any financial cap or limit on the amount of revenue that it raises. In most developed countries, recurrent property tax is a local government tax, most commonly assessed on improved value of land. Improved value incorporates the value of both land and buildings, of which improvements are not necessarily maximally productive. The rationale for retaining land value as the basis of the tax, is its neutral base, being independent of any improvements on the land which may not represent the most productive or highest and best use. (Oates and Scwab 1996)

In 1982, New South Wales moved from unimproved capital value to land value as the base for the assessment of land value taxation. The primary objective of moving to land value was to account for improvements to the land which primarily provided services to it and for its use which included clearing, excavation, drainage and its retention. The majority of land that is taxed and rated in urban locations is not unimproved land and the same improvements made to it (Mangioni 2006). In bringing land into production in urban locations, it has services such as water, power, gas and telecommunication connections, which may be termed as improvements to the land. Whilst refinements were being made to the basis of value on which the tax was assessed. Problems with transparency began to emerge with fewer land transactions.

2.3 Defining the Problem

Historically land value has been measured based on the sale of vacant land. The absence of vacant land sales for rating and taxing purposes has resulted in concern over how land value is determined in practice (NSW Ombudsman 2005). This question has been the subject of much scrutiny and has challenged the transparency of the assessment of land value around Australia. Scrutiny has largely been leveled at the perceived element of judgment in the analysis and accounting for the added value of improvements, as land value is now more commonly deduced from improved sales. This has been an evolving issue over the past 15 years as cities of Australia and particularly Sydney has become highly urbanized.

As can be seen in Figure 2, the difference in the determination of land value between 1955 and 1975 using the bottom up analysis by reference to vacant land sales, and the period of 1996 to the present, using the top down analysis using improved sales epitomizes the problem. At the time of reintroduction of state land tax in NSW in the 1950s, vacant land sales were abundant during the 1960s and 70s. The following twenty years marked a period of rapid growth in the urbanization of Sydney (Daly 1982). During the period mid 1990s to the

present, vacant land sales have become the exception, resulting in greater reliance on improved sales in the determination of land value, which has raised concerns over transparency.

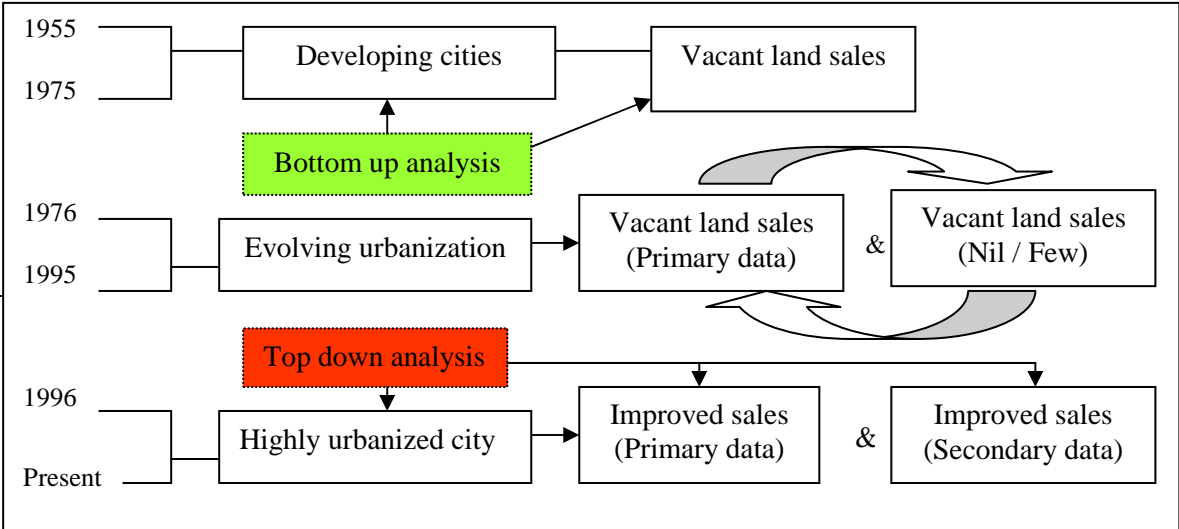
Taxes on capital including recurrent land and property taxes have an additional layer of complexity, being the valuation of the base on which the tax is imposed. The value of all land or property must first be valued at a specific point in time. This determination of value is known as the valuation process and is an important initial step in the assessment of land taxation and may be seen as the most arbitrary and contentious component of this tax.

Land value, as the base for the assessment of a recurrent property tax, has encountered a number of challenges over the past 15 years, particularly in the capital cities of Australia where most land tax is raised. Vacant land transactions have traditionally constituted the primary evidence used in measuring the underlying value of land. In the absence of vacant land transactions, the determination of land value from sales of improved property has become more heavily relied upon by statutory valuers. Figure 1.1 highlights the evolution of this problem in highly urbanized locations. As cities continue to evolve, the availability of vacant land sales diminishes and more reliance is placed on improved sales as primary evidence, which adds an additional layer of complexity to the imposition of this tax.

Figure 2 shows in Sydney, between 1955 and 1975 as the city grew from undeveloped land uses and rural land changed to urban land uses, vacant land transacted and the value of land could be easily determined. This resulted in the taxation principles of simplicity and transparency being achieved, as the tax payer could see how the value of their land was determined from the sale of surrounding vacant land. Where the taxpayer could see the sale of vacant land, the tax was considered to meet the taxation principles of simplicity and transparency.

The factors of value which determine the value of land are its the size, shape, slope, access and permitted uses. In the absence of vacant land sales, before these attributes of value can be determined, an additional layer of complexity exists, where the sale of land alone does not exist from 1996 to the present. That is, the added value of buildings and improvements on land must be deducted from the sales of improved property to determine its land value. This additional adjustment impacts on two factors good tax design, namely simplicity and transparency. In response to this emerging problem, a number of countries have move the tax base from land to improved value, which includes land and buildings.

Figure 2: Evolutionary deduction of land value in the Sydney Basin



It may be suggested, that a move to improved value as a basis for assessing the property tax is warranted. Whilst improved value may be accepted for local government rating in a number of countries, where services are visible to the tax payer, a tax on land may be far less tolerable. This is due to the fact that land value is market determined and predominantly based on its location (Vickers 2007). In contrast, improvements such as buildings may be an underutilization of the land or physically obsolete which add little or no value to land, a factor reflected in improved value.

The use of land value over improved value has been defined as a far more neutral base on which to assess the highest and best use of land (Oates and Schwarb 1996). That is, land is assessed based on what it could be used for if the existing use of the land is not utilized to its maximum economic and developable potential. The value of land cannot be distorted by the added value of improvements which are not maximally productive or represent the highest and best use of the land. At present as highlighted in Figure 2, this requires a process for partitioning land from improvements in highly urbanized locations in the absence of vacant land sales.

What may be viewed as a simple process in determining the value of land, the Privy Council's 1925 simplistic account of land and the conceptual meaning of its value requires further refinement in the 21st Century. "What the Act requires is really quite simple. Here is a plot of land: assume there is nothing on it in the way of improvements: what would it fetch on the market?" (Toohey's Ltd v. Valuer General 1925). The explanation for what the prevailing legislation intended has resulted in a far more prescriptive and concise process needed in a top down analysis of improved sales in determining land value.

The ability to provide transparency in the deduction of land value raised the question as to how improvements on land are to be notionally accounted for in determining their added value. The residual value of land resulting from analysis of improved property sales again challenged the principle of transparency.

As vacant land sales become the exception, in its most simplistic terms, the primary issue turns on how improved sales are interpreted and how the added value of improvements are accounted for in the extraction of land value. Initially the question emerges of how to partition the constituent components of property which contribute to its value. However, a more complex paradox precipitates this question, that is what constitutes the highest and best use of land in the first instance and how are improved sales construed within the context of this question. In simple terms, if the added value of improvements are deducted from land which is not utilized to its highest and best use, a value well below land value may result.

Whilst not the subject of this paper, this question warrants brief discussion, as it determines in the first instance, which property sales are best suited for the partitioning process. In the absence of vacant land sales, at what point do improvements on land constitute added value and how is the added value to be determined? The two most pressing issues raised in the deduction of land value from improved sales were identified as, the absence of a method by valuers for the adjustment of time between the sale date and date of valuation and secondly,

the absence of a method by valuers for the adjustment of the added value of improvements on land (NSW Ombudsman 2005).

In the assessment of the added value of improvements and in particular in countries where improved value is the basis of assessment, an additional dimension exists. That is, how does the tax payer perceive the added value of improvements of their property and more importantly, how do they perceive the improvements of their property against the improvements of property that has transacted. As set out in Figure 3, the potential risk of this judgment lends itself to over focus and concentration on the visible attributes of improvements and less on the underlying attributes of land.

In addressing the gap in taxpayer understanding of the conversion of improved value to land value in the assessment of this tax, a further challenge arose to its transparency. This required a more systematic approach to the information provided to the taxpayer, which is covered in the following section under reforms to transparency of the valuation of land and prevailing legislation.

Figure 3: Factors of value and perception

Basis of value	Factors of value	Assessment & perception
Land value	Size, shape, access, views & slope of land.	Valuer assessed where the added value of improvements are accounted for by the value in the sales analysis process
Improved value	Size, shape, access, views & slope of land plus	Valuer assessed where the added value of improvements are part of the value and the taxpayer notionally compares the added value of improvements of their property with the sales.
	Size, type, style, layout, No of bedrooms, aspect to the living area etc.	

2.4 Taxpayer information

The principle of transparency and tax payer understanding of how the value of land is determined has been identified as paramount over the past 10-15 years. Following two recent inquiries into the valuation of land in NSW, the importance of the principle of transparency has been acknowledged and has led to a number of changes in improving transparency (Walton 1999 and NSW Ombudsman 2005). The key improvement has been the availability of sales information to taxpayers supporting the assessment of land values in New South Wales.

In understanding the importance of sales information in the context of objection to land values, a summary of the grounds of objection are highlighted in Figure 4 against the information available to the tax payer prior to the 2006 changes implemented by the NSW Valuer General.

Figure 4: Grounds of Objection

s34 Valuation of Land Act 1916 NSW	Information Pre 2006
(a) that the values assigned are too high or too low	Not available
(a1) that the, dimensions or description of the land are not correctly stated	Definable by survey or deposited plan
(b) that the interests held by various persons in the land have not been correctly apportioned	Better understood by the taxpayer
(c) that the apportionment of the valuations is not correct	Better understood by the taxpayer
(d) that lands which should be included in one valuation have been valued separately	As used by the taxpayer
(e) that lands which should be valued separately have been included in one valuation	As used by the taxpayer
f) that the person named in the notice is not the owner of the land	Better understood by the taxpayer

In each of the parts of section 34 as shown in Figure 4, with the exception of Part (a), the tax payer is able to determine the correctness of the facts relating to their assessment of land value by reference to an alternate source of information. As to the correctness of land area and ownership of land, title details, deposited plans and surveys and tax payers own knowledge of the land provides a basis for any objection to be lodged if this information is incorrect. It is Part (a) which addresses whether the land value is too high or too low that accounts for most objections to land values and has been the least supported and most scrutinized ground of objection.

In addition to the statutory grounds of objections in Figure 4, non-statutory common law grounds of objection extend the obligation for greater transparency in the valuation process. These grounds include objections on procedural fairness and judicial review. In Australia, in the first instance procedural fairness extends to include that the taxpayer has enough information of the basis on which the value of their land has been determined. This then extends to the second point of judicial review, and in particular emphasises the importance of having sufficient information on the valuation process to make an informed decision as to whether an objection or appeal to the valuation of the taxpayers land is justified (Walton 1999).

3. RESEARCH METHOD

In gauging the impact and benefits yielded from the recommendations implemented by the NSW Valuer-General from the 2006 land tax year, with particular reference to making sales information available to land tax payers, a preliminary analysis of pre and post 2006 objections has been conducted. This analysis has been conducted based on objection information provided by the NSW Department of Lands using objection numbers to land values from a sample of ten local government areas located within 15 kilometers of the Central Business District of Sydney. As at the date of this analysis there were forty two local

government areas within the Sydney Metropolitan area, of which the sample of local government areas analysed, represents approximately 25 percent.

In qualifying the information and results of this preliminary analysis, a number of other factors which are not quantifiable, have been identified. These include the adoption of a three year averaging of land values and threshold, the revised formula for the annual adjustment of the threshold and the level of values at the commencement of the 2006 land tax year. Each of these factors would to some degree impact on land tax assessments and were among the thirty two recommendations made and subsequently phased in (NSW Ombudsman 2005).

The objection numbers have been provided by the New South Wales Department of Lands for each local government area in the analysis. In analyzing the number of objections to land values, two factors were considered. The first consideration was the location in which objections were grouped by local government area. The second consideration was the base date of valuation. In New South Wales, each parcel of land is valued annually as at 1 July each year and is the basis of value for the following land tax year. This date is known as the base date of valuation. The analysis was undertaken between base dates 1-7-2000 and 1-7-2008.

3.1. Analysis & discussion

The aspects and criteria of the analysis of this study are broad and consider the overall change in the number of objections between the annual valuation cycles of land values. The number of objections registered with the government are provided by local government area and hence provide a basis for defining a trend both before and after measures were introduced to improve the tax design principle of transparency. The information that was provided by government is sensitive and limited to the broad numbers provided in Table 2.

Table 2 sets out the objections by local government area and base date, in which a grand total of objections has been tallied on each of base date, to provide an overall trend by area and time. Each of these local government areas have been colour coded to provide a further level of geographic analysis. A detailed discussion on this data follows.

Table 2: Objection totals by location & date

Council Area	1/07/02	1/07/03	1/07/04	1/07/05	1/07/06	1/07/07	1/07/08	Grand Total
MOSMAN	252	23	102	152	9	3	38	579
NORTH SYDNEY	61	43	462	71	26	44	12	719
WAVERLEY	51	91	25	121	159	50	47	544
WOOLLAHRA	93	316	30	144	200	50	77	910
RANDWICK	31	217	74	185	195	21	32	755
BOTANY BAY	3	8	14	15	3	17	Nil	60
BURWOOD	8	7	48	11	3	7	Nil	84
LEICHHARDT	217	30	38	67	16	10	59	437
MARRICKVILLE	51	146	27	17	42	7	17	307
ASHFIELD	7	4	63	6	8	7	2	97
Grand Total	774	885	883	789	661	216	284	4,492

Sydney North	Sydney East	Sydney South	Sydney West
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In looking at the general trend of objections in Table 2, from 2004 to 2007 it may well be argued that the provision of sales information to land tax payers has increased transparency and resulted in a reduction of objections. This cannot be concluded at this point, as the number of objections increased from a low base in 2000 climbing to a peak in 2003/04 and then declined again until 2008, where a small increase is noted. This may also well be argued to be part of the larger cycle of ebbs and flows in objections to land values over longer periods and cycles.

A more detailed account of this is highlighted in five of the ten local government areas as set out in Figure 5, in which an increase in objections is noted for base date 1-7-2008. From this information, it may be that these increases which are marginal increases, are at or below the 2005 level and further confirms that a review of objections for 2009 & 2010 will be necessary. This data is not yet available, as objections to 2009 and 2010 are still in either the objection phase or before the courts.

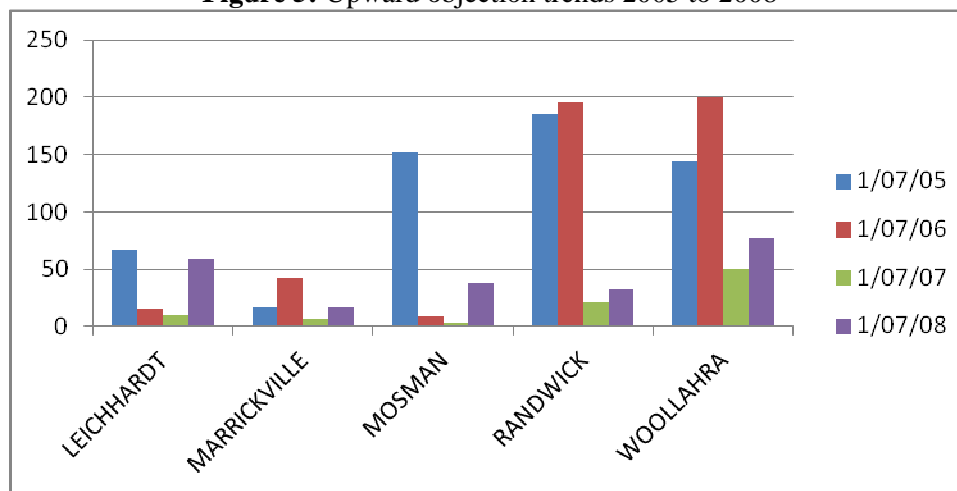
Still remaining a consideration for tax payers which is not readily observable, is whether land tax payers whilst still engaging in the objection process, have a better understanding of how their land value was derived and its relativity to the available sales information. This raises the question of whether land tax payers are more accepting of the value, but not of the tax itself. In summary, as tax payer understanding continues to evolve, do objections to land values solely constitute objections to values, or a broader dislike for land tax itself of which the land value is the outlet for expressing dislike for the tax.

As highlighted earlier, land values are assessed and land tax liabilities are determined by

government and their valuation contractors with little or no input or reference to the taxpayer. In the absence of tax payer input, perceived control, predictability and potential for fluctuations in value from a number of causes, government must understand the importance of the objection process. In fact, the objection process serves as an important taxpayer outlet, and in some cases constitutes tax payer participation and input in the land tax assessment process.

The objection process is crucial in many cases as some land values will inevitably be incorrect, that is the primary function of the objection process to identify and correct. It may well be that the provision of sales information is an important first step in minimizing objections and this may still be proven to be correct over time.

Figure 5: Upward objection trends 2005 to 2008



CONCLUSION

It has been discussed in this paper that the tax on property has taken many forms over the centuries. In the current century, the two main bases of value have been on either improved value (land and buildings) or land value, being the land by itself. It has emerged that economically, land value is the more neutral basis as it is not distorted by improvements on the land which are not highest and best use. The has disadvantages and impacts on the principles of 'good tax design', but specifically on the principle of transparency in high urbanised locations where land rarely sells independent of buildings.

In maintaining land value as a base of recurrent taxation, continual improvements in the analysis, determination and application of value are crucial in improving transparency of the valuation process. A lack of transparency of how land value is determined and especially the availability of the sales transactions to the taxpayer is a most important part of achieving this principle of good tax design. As discussed, both the Walton Inquiry 1999 and Ombudsman Report 2005 have greatly contributed to the improvement of taxpayer understanding through recommendations for information and transparency of the valuation of land process.

The provision of sales information to tax payers in New South Wales is a significant step in improving transparency as to how land values are determined. In continuing to improve transparency, the continual updating of sales information and its availability to taxpayers at more regular intervals throughout the year would be useful. To this end, a register of sales information used to assess land values could be made available to taxpayers before the issuing of land tax assessments. This is further improved by giving information to the taxpayer on the levels of value of surrounding land being taxed.

In conclusion, as the sale of vacant land continues to reduce in highly urbanised locations, the resistance of moving to a less efficient basis of value such as improved value, is better achieved by improving transparency through giving sales evidence to the taxpayer as part of their tax assessment. In addition, transparency may be further improved by explaining to the taxpayer which specific sales were used to value their land. A further improvement would include in cases where land transactions are not available, how improved property sales / transactions were used to value the land of the taxpayer and how the added value of improvements were accounted for.

REFERENCES

- Asprey, K.W. 1975, Tax Committee Full Report, ACT Canberra
- Carlson, R.H., 'A Brief History of Property Tax' (Paper presented at the IAAO Conference on Assessment Administration, Boston, Massachusetts, 1 Sept 2004).
- Coleman, C. and McKerchar, M., 'The history of land tax in Australia' (2008) *Australian School of Taxation UNSW*.
- Daly, M.T., *Sydney Boom Sydney Bust* (1982). George Unwin and Allen, Sydney
- Daw, C.A., 'Land taxation: an ancient concept' (2002) 1(Feb 2002) *Australian Property Journal* 20-25.
- Fisher, G.W., *The worst tax: A history of property taxes in the United States* (1996).
- Gibson, J., 'The Hearth Tax' (2008). <http://www.nationalarchives.gov.uk/records/research-guides/hearth-tax.htm>
- Haveman, M. & Sexton, T.A., *Property Tax Assessment Limits - Lessons from Thirty Years of Experience* (2008).
- Head, J.G. and Krever, R. (eds), *Tax Reform in the 21st Century - A Volume in Memory of Richard Musgrave* (2009).
- IPART Independent Pricing and Regulatory Regime, *Review of State Taxation Report to the Treasurer* (2008).
- Mangioni, V., *Land Tax in Australia* (2006). Australian Property Publications, Bondi
- Meade, J.E. (1982) *The structure and reform of taxation*, Institute for Fiscal Studies, London
- NSW Department of Lands 2010, Valuer-General valuation objection data for Sydney, years 2002 to 2009.
- NSW Ombudsman, *Improving the quality of land valuations issued by the Valuer General* (2005).
- NSW Parliament, *Parliamentary Debates*, NSW Valuation of Land Act 1916.
- Oates, W.E. and Schwab, R.M., *The Impact of Urban Land Taxation: The Pittsburgh Experience* (1996).
- Smith, S., *Land Tax: An Update* (2005). Briefing Paper No 5/05 NSW Parliamentary Library
- Timmins, G., *The History of Longparish* (2001). <http://www.longparish.org.uk/history/cover.htm>
- Toohey's Ltd v. Valuer General, (1925). A.C. 439
- Vickers, T., *Location Matters: Recycling Britians Wealth* (2007). London Shephard-Walwyn
- Walton, J., *Report of Inquiry Into Operation of Valuation of Land Act* (1999).

BIOGRAPHICAL NOTES

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Vince has twenty years experience as a statutory valuer and has been an advisor to the Australian Government, (Australia's Future Tax System) 2009 in the review of state land tax and local government rating. He has undertaken extensive research into property taxation in the Nordic and Baltic regions. During 2010 he was a visiting researcher with Professor Kauko Viitanen at Aalto University Helsinki Finland.

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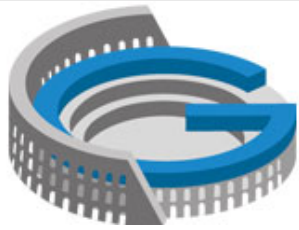


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INVITATION BY PRESIDENT FAUSTO SAVOLDI, CNGeGL

Dear Colleague,

I'm particularly glad to address to You this invitation to the thirty-fifth Working Week that will take place in Rome, from the 6th to the 10th of May in 2012. Italy and the Italian Surveyors want to talk to You about the universally-spread values that constitute the basis of our being together: human rights protection, environmental preservation, respect for the identity and the culture of everyone, and, last but not least, solidarity among the Nations and the different generations. It's according to these values that we chose the subject of our Italian Working Week: "*Knowing to manage the territory, protect the environment, evaluate the cultural heritage*". The CNGeGL delegation at the FIG Working Week in Marrakech was particular numerous, and most of its members are young people. They are all active in different FIG Commissions and truly embody the idea of "*Young Surveyor*". These young people represent the future and will assure the continuity of our Category and of the FIG. It will be up to them to make you visit the artistic treasures in Rome and to let you know a culture that contributed so much to the creation of our modern society. Knowledge is the true and precious condition able to bring education to beauty, to a correct management of the environment, of the territory and of the cultural heritage. Therefore, the theme of the FIG Working Week is focused on this particular topic meant to live in the respect of the present human generation and, above all, of the future one. The Italian Surveyors look forward to meeting their colleagues coming from all the world in 2012!

Fausto Savoldi
CNGeGL President

FINAL PROCEEDINGS NOW AVAILABLE

PROGRAMME BOOK AND TECHNICAL PROGRAMME AS .PDF FILES

LIST OF PARTICIPANTS (updated 27 April 2012)

REGISTER NOW AND BOOK YOUR HOTEL AT THE SAME TIME

Online registration to FIG 2012 is now open. Please register online [here](#).

Please remember also to book your social events as seats to the dinners will be limited and selling out fast.

The conference will be held at **Rome Cavalieri Hotel** - book your room now by using this [booking form](#) to get the special rate. Book your room now!



TECHNICAL PROGRAM AND PROCEEDINGS NOW AVAILABLE

More than 500 papers have been accepted for presentation in Rome in almost 100 sessions, forums and workshops.

SPECIAL SESSION ABOUT PROFESSIONAL WOMEN

CNGeGL is organising a high level session "*Professional Woman - Development of Advanced Economy*" on **Wednesday 9 May 14:00-15:30** with high profile Italian and international speakers. See [more...](#)

FAO/FIG FORUM IN ROME

The main partner of FIG 2012 is FAO. The programme includes a plenary talk of **Alexander Mueller ADG**, FAO and three sessions on **Monday 7 May** and a technical visit and training session at FAO headquarters on Tuesday 8 May 2012. See [program](#).

THE FIRST FIG YOUNG SURVEYORS CONFERENCE - Programme now available

If you are a young professional under 35 years



Register to FIG Working Week 2012

Program Book as .pdf
Technical Program as .pdf
Proceedings

Sub events:

- **First FIG Young Surveyors Conference**, 4-5 May 2012 - see [programme](#)
- **FIG/IAG technical seminar on reference frame in practice**, 4-5 May 2012 see [programme and proceedings](#)
- **History Workshop**, 4 May 2012

PLATINUM SPONSORS:



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PLENARY SESSIONS NOW CONFIRMED

Within the technical program there are three **Plenary Sessions**. The first plenary "**Knowledge to Manage**" will address the challenge to manage and protect our dynamic and fragile environment through principles, voluntary guidelines and responsible actions. The main speakers include ISPRS President **Orhan Altan**, and **Franco Maggio**, Director, Agenzia del Territorio, Italy

The second plenary session "**Knowledge to Protect**" introduces **Alexander Mueller**, Assistant Director General of UN FAO on Tuesday, **Norbert Lantschner**, Director from Clima Haus from Italy, and DVW President **Karl-Friedrich Thöne**.

The third session "**Knowledge to Evaluate**" will generally address the challenge to preserve our culture and heritage. The speakers include expert on preserving the cultural heritage in Italy, **Fabio Remondino** from FBK and RICS President **See Lian Ong**.

HISTORICAL INSTRUMENTS ON DISPLAY

A **special collection of historical surveying instruments** will be displayed at the exhibition of the Working Week. At the same time a book about the instruments will be launched.

If you are a young professional under 30 years, consider attending the First FIG Young Surveyors Conference 4-5 May 2012 and continue to the Working Week. The Young Surveyors Conference offers excellent opportunity to network with other young professionals and prepare for the Working Week. See [more](#) and [register](#) and see the [programme](#).



OPENING CEREMONY AND CONCERT AT PARCO DELLA MUSICA

The **Opening Ceremony** will include a concert and buffet dinner at the famous Parco della Musica. The other social highlights include the **FIG Foundation Dinner** with Al Bano and the conference dinner at **Villa Miani** with spectacular view overlooking the historical Rome. [Read more...](#)



Knowing to

Manage the territory
Protect the environment
Evaluate the cultural heritage

Proceedings

FIG Working Week 2012

Rome, Italy 6–10 May 2012

Organized by:



INTERNATIONAL
FEDERATION OF
SURVEYORS



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Overview of Technical Sessions

Technical Program and Proceedings

Organisation of the Peer Review Process for the FIG Working Week in Rome

ISBN 97887-90907-98-3

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FIG WORKING WEEK 2012

May 6–10 2012
Rome, Italy

FIG Working Week 2012 – Territory, environment, and cultural heritage

Proceedings



Technical programme as a .pdf file. (Technical Program booklet)



Programme book as a .pdf file.

Plenary and Technical Sessions

Thursday, 3 May

Thursday,
3 May
09:00–17:00
Rodi, Rome
Cavalieri

FIG Council Meeting
Commission: FIG Council

- By invitation only.

Friday, 4 May

Friday,
4 May
08:45–17:30
Fondazione
dei Geometri
Italiani, Via
Cavour
179/A, Rome

FIG History Workshop
Commission: IIHSM

- See programme at: <http://www.fig.net/fig2012/history.htm>
- Separate registration required.
- Proceedings

Friday,
4 May
09:00–17:00
Cassa
Geometri

First FIG Young Surveyors Conference: Knowing to create the future
Commission: Young Surveyors Network

- See programme at: <http://www.fig.net/fig2012/youngsurveyors.htm>
- Separate registration required.
- Proceedings



Friday,
4 May
09:00–17:00
Cassa
Geometri,
Rome

IAG/FIG Commission 5/ICG Technical Seminar - Reference Frame in Practice
Commission: IAG, 5 and ICG

- See programme and information: <http://www.fig.net/fig2012/commission5.htm>
- Separate registration required.
- Proceedings



Cassandra Nanlal, Dexter Davis (Trinidad And Tobago) and **Michael Sutherland** (Canada):

An Evaluation of Tides in the Caribbean (5875)

[abstract] [paper] [handouts]

Ayhan Ceylan and **İlke Ekizoglu** (Turkey):

A Study on the Assessment of Bathymetric Changes via GIS: Altinapa Dam (Konya) Example (5992)

[abstract] [paper] [handouts]

Reuma Arav, Sagi Filin and **Yoav Avni** (Israel):

Monitoring of Changes along Receding Lake Environments (6047)

[abstract] [paper] [handouts]

Shabnam Farboud (Iran):

Determination of Accurate Sea Border Lines of Countries (5855)

[abstract] [paper] [handouts]

This is a flash presentation.

This paper has not been presented at the conference.

Tuesday,
8 May
14:00–15:30
Bernini,
Rome
Cavalieri

TS05G - Taxation

Commission: 9

Chair: Prof. **Winrich Voss**, Germany

Rapporteur: Dr. **Frances Plimmer**, Chair, FIG Commission 9, United Kingdom

Vince Mangioni (Australia):

Land Value Taxation - Meeting the Principles of 'Good Tax Design' (5486)

[abstract] [paper] [handouts]

This is a peer reviewed paper.

Mehmet Ertas (Turkey):

The Necessity of Real Estate Valuation for Property Taxation (5614)

[abstract] [paper] [handouts]

Joycelyn Makena and **Mwenda Makathimo** (Kenya):

The Role of Fiscal Instruments in Enhancing Land Use and Management (6078)

[abstract] [paper] [handouts]

Maximilian Karl (Germany):

The Fiscal Reform of Land Tax in Germany (5766)

[abstract] [paper] [handouts]

Mehmet Çete (Turkey):

The Need for Re-Engineering in the Turkish Real Estate Valuation System (5912)

[abstract] [paper] [handouts]

Saviour Mantey and **Naa Dedei Tagoe** (Ghana):

Geo-Property Tax Information System - A Case Study of the Tarkwa Nsuaem Municipality, Ghana (5882)

[abstract] [paper] [handouts]

Martin Smodiš and **Dušan Mitrović** (Slovenia):

Development and Implementation of the Real Estate Mass Valuation System in Slovenia (5672)

[abstract] [paper] [handouts]

This paper has not been presented at the conference.

Tuesday,
8 May
14:00–15:30
Pisa, Rome
Cavalieri

TS05H - Remote Sensing I

Commission: 5, 6 and 3

Chair: Prof. **Ralf Schroth**, Germany

Rapporteur: Dr. **David Martin**, France

Mariane Alves Dal Santo, Fernandes Parreira Sinara, Francisco Henrique Oliveira, Pedro Henrique Machado Porath and **Thales Vargas Furtado** (Brazil):

The Use of GNSS Geodetic Receiver to Orthorectification of IKONOS II Satellite Images (5490)

[abstract] [paper] [handouts]