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**The incentive effect of property taxation on the property developer as  
landowner: A conceptual framework.**

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## **ABSTRACT**

Obviously developers play a key role in development outcomes and are ideally placed to assess the variables which influence development outcomes. Property Taxation can either be site value based, capital value based or a combination of the two and is a variable in terms of producing certain property development outcomes such as discouraging land speculation and advancing the timing of land development. However there are few definitive conclusions about its impact in practice on such development outcomes.

This paper outlines a conceptual framework within which variables influencing developers and property development can be classified and assessed. This framework also provides the basis for understanding better the significance of property taxation to property developers and also provides the foundation for developing research issues and propositions which can be investigated with the aim of establishing more definitive conclusions about the impact of the site value basis of taxation.

A more comprehensive knowledge of the impacts of site value taxation would facilitate the formulation of urban policy with respect to the appropriate basis for property taxation especially in developing countries and cities where the development outcomes outlined above are vital for the development of the economy

## **INTRODUCTION**

Property taxation systems can be classified according to their definition of the tax base and it is the tax base which has been the subject of most disagreement. The three major tax bases for property are total property value (ie. Capital value of land and improvements); site value (sometimes referred to as unimproved value); and, annual value.

Property taxation is an intervention in the urban land market and affects land use. Different property taxation systems have been argued to encourage different outcomes with respect to property development. Theoretical arguments strongly favour taxation of site value as a tax base.

Tideman (1994) argues that a site value basis of taxation encourages:

- (1) a quicker development response ie. - the process of putting the vacant and underdeveloped properties to a higher use as promptly as possible in order to minimise the land owner's holding cost. (Becker, 1969:.27)
- (2) discourages land speculation ie. with holding unimproved or under-improved property from the use that would bring the highest current returns in order to reap the advantages of a higher sale price or higher annual returns without any substantial capital investment. (Gihring T, 1999 :.64)

- (3) and discourages urban decline ie. the neglect and underutilisation of buildings and other land resources by property owners through lack of capital investment. (Canadian Research Committee on Taxation, 1997).

whereas a total property or capital value basis of taxation does not encourage or promote such outcomes with respect to the property development process.

Therefore property taxation systems, or more particularly, the extremes with respect its taxation base, can be viewed as one of many variables affecting land development patterns and outcomes.

Despite the theoretical arguments which strongly favour the taxation of site value, evidence only weakly confirms the predicted benefits of exempting improvement value from the tax base.

Bahl and Linn (1992) state that there is little quantitative evidence regarding the effect of a site value basis of taxation on property development. This absence of empirical work is further underlined by Flaherty and Lusht (1996) who state “neither a relatively rich theoretical literature nor a thin but growing body of empirical results have produced definitive conclusions”.

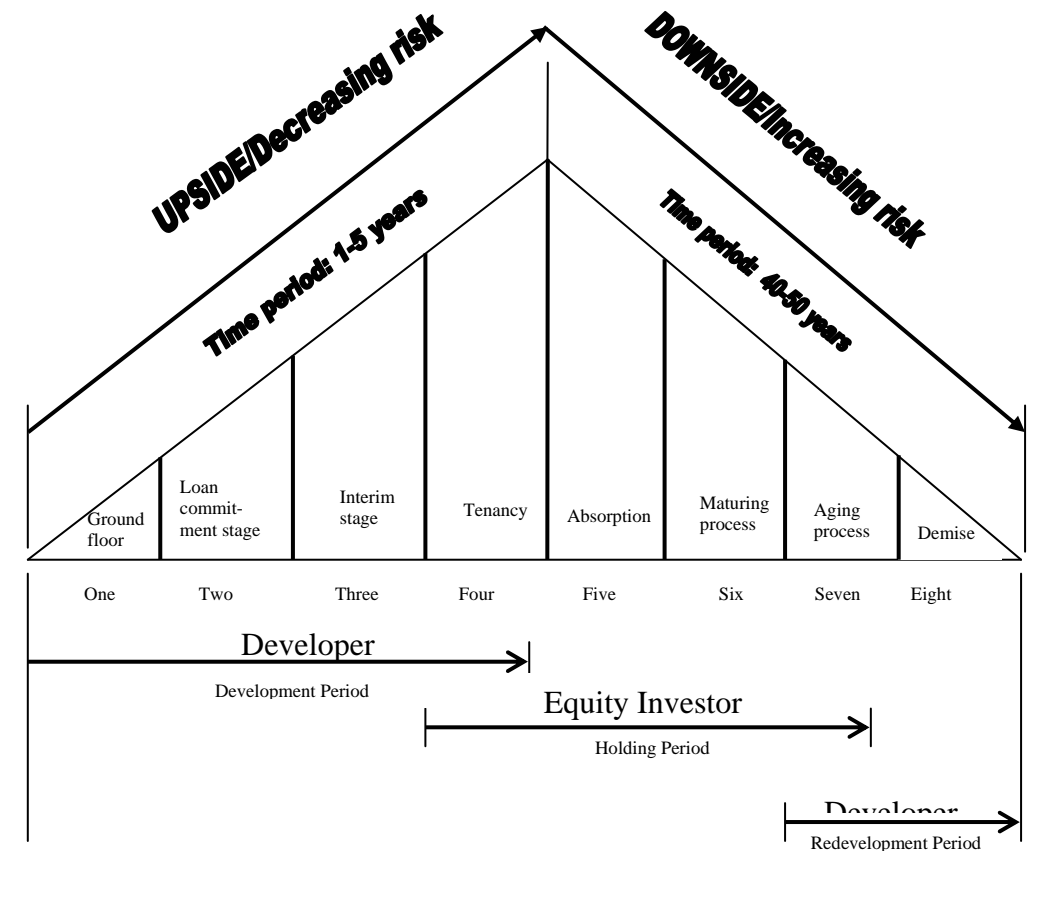
All other things being equal, site value basis of taxation should encourage the development outcomes stated. However, in practice “all things are not equal. The motivation of landowners involved in the development process will vary considerably according to the nature of the landowner whether they be individuals, corporations, public authorities, financial institutions, major property companies or whatever. The influence that property tax has in encouraging certain development outcomes will depend on the nature of the landowner and its motivation with respect to the development decision..

## **THE RESEARCH PROBLEM**

An important category of landowner is the property company or developer The property developer is a key decision maker in the development process. Property developers vary in size, structure and function and have the capability to handle speculative land banking and the financing, packaging and selling functions of real estate development. Developers may take long term equity positions with respect to property development as well as having short term horizons with respect to investment. An overall goal, of course, is to maximise returns relative to associated risk.

Their typical involvement in the property life cycle is illustrated in Figure 1. below.

Figure 1: The Property Life Cycle Pyramid



Source: Pyhrr ,Cooper et al 1989:47

Depending on the nature of the developer then property developers will be involved in different periods of property ownership. The impact of variables such as property taxation on development outcomes as outlined above then will be perceived both in the role of landowner and key decision maker within the development process All will have some insight into the variables which influence development outcomes and their relative importance and in particular understand the degree of significance, if any, that property taxation has on property development outcomes The question is “how significant do property developers see the variable of property taxation as a medium for encouraging a quicker development response and discouraging land speculation and urban decline

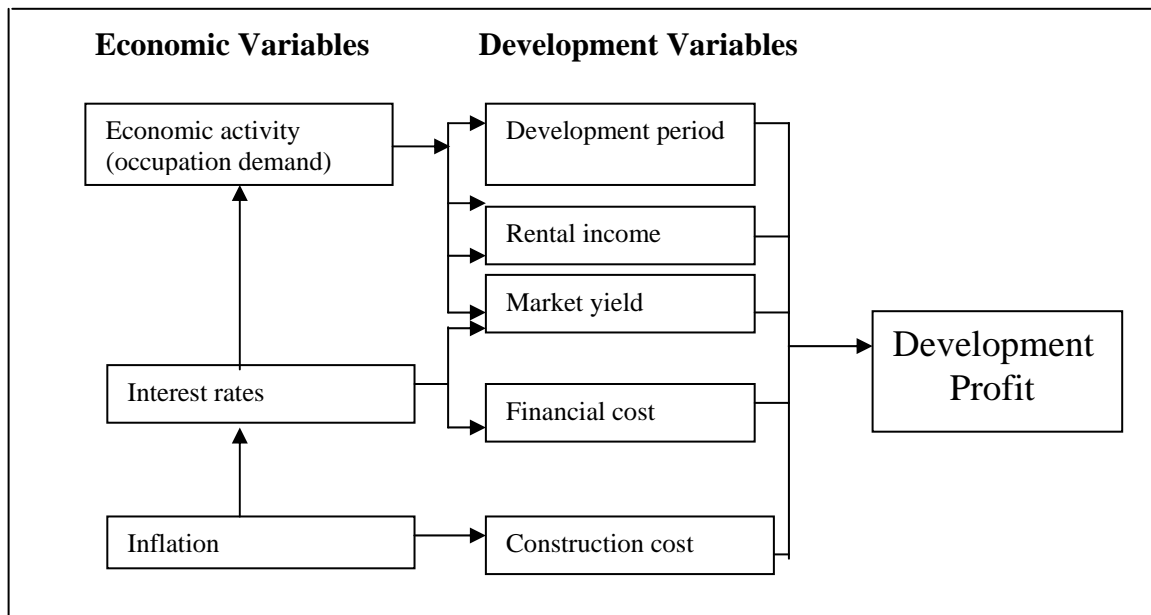
### THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK

An organising scheme and conceptual framework is required if the impact of variables such as property taxation on the development decisions of property developers and development outcomes listed above is to be evaluated.

One such framework is that which forms the basis for the traditional residual approach to appraisal and property development feasibility.

The model assumes the major objective of the developer is to maximise development profit and as such a number of variables have to be taken into account when the developer makes development decisions. These variables are summarized in Figure 2 below.

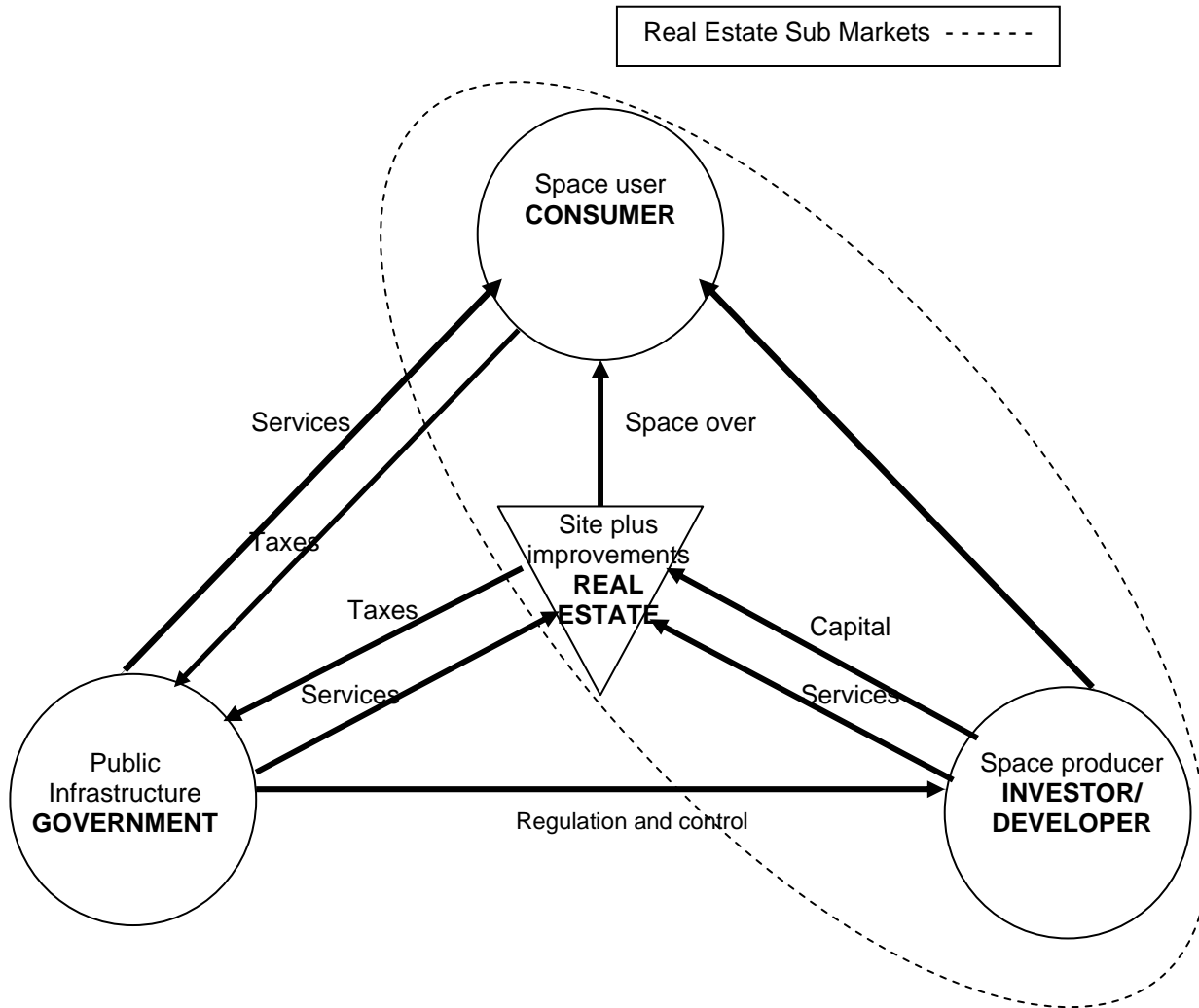
Figure 2: Economic Influences on Development Profit



Source: Fraser (1984: 243)

A wider more comprehensive framework is provided by Figure 3 (next page), which is a model of the Real Estate Investment Environment

Figure 3 The developers real estate investment environment.



Source: Pyhrr ,Cooper et al 1989:5)

This model identifies the developer (space producer) as one of 3 participant groups in the development process and decision making process. The developer, together with Government and public infrastructure being on the supply side and consumers (space users) who drive the process of real estate development. The dynamic interaction of these 3 groups forms the basis of the development process and the major influences in determining land use and development decisions. (Shown by arrows between circles.)

In effect, the development variables identified in Figure 2 are incorporated into Figure 3. Rental income and market yield are represented by rents and purchases from space consumers and construction and financed costs represented by the provision of capital

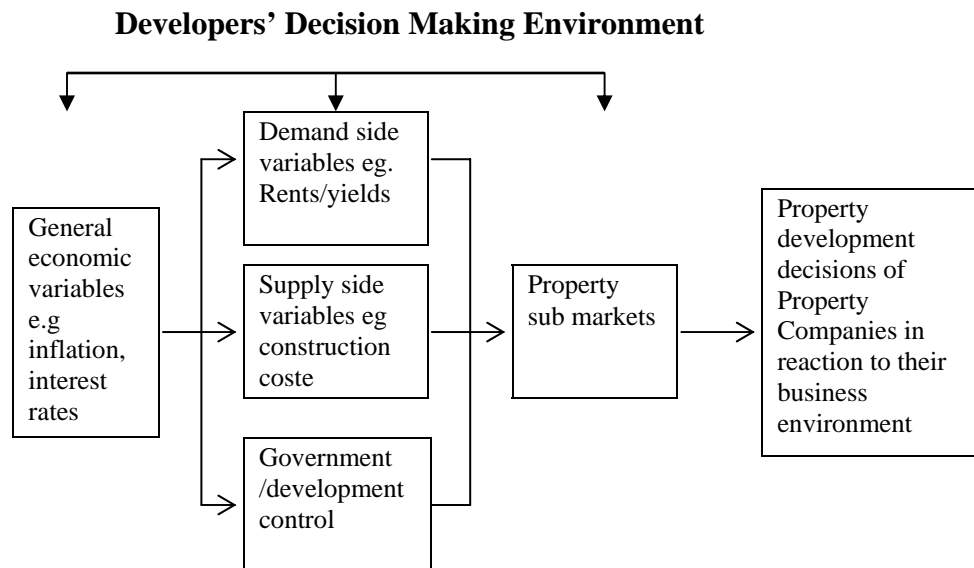
and services by the space producer. The development period will be dependent on a number of factors, not least the development control and incentives set down by government.

In addition to this framework a further dimension can be added, that of property sub markets.

Developers are not so much concerned with the supply and demand conditions of the overall real estate market, but rather only that part of the market with which a particular development project competes. Sub markets still comprise of the space producer and consumer and the real estate projects (as defined by the dotted line in Figure 3), but are defined by location price, property size etc.

From Figures 2 and 3 a conceptual framework to classify variables influencing the property development decisions can be derived as illustrated in Figure 4 below.

Figure 4 A Conceptual Framework for Development Decisions



This framework classifies the developers' environment as consisting of 3 major types of variables ie. general economic variables; specific development variables affecting the space producer/developer; and, the modifying factor of property submarkets. Specific development variables such as market yields (demand side) construction costs (supply side) and government controls and incentives (eg. property tax) can all to varying degrees be said to be influenced by general economic variables. Likewise all these variables are likely to be different according to the nature of the submarket within which the space producer is involved. All these variables could be described as making up the general business environment within which space producers make decisions. It is the reaction to

this general environment in terms of decision making and the generally assumed objective to maximise profits for each project that determine development outcomes such as the size, timing and density of urban development.

In essence, this framework can be further classified into three types of development variables, namely:-

- (i) supply and demand side development variables together with general economic variables which directly affect the space producer and consumer;
- (ii) the variables of government control and incentives which are not linked so directly with the general economic variables of interest rates, inflation etc.;
- (iii) variables in terms of the nature of the specific property sub markets within which the space producer operates.

A more detailed list of such variables is outlined in Table 1 below.

Table 1: Development Variables

Occupation demand and supply of space	<ul style="list-style-type: none"> <li>• Interest rates and finance Costs</li> <li>• Availability of finance</li> <li>• Cost of Finance</li> <li>• Construction costs</li> <li>• Rate of inflation</li> <li>• Market yields/Rental income</li> <li>• Stability of the economy</li> <li>• Development period</li> <li>• Level of competition</li> <li>• Population growth</li> <li>• Availability of anchor tenants</li> <li>• Geographical and historical development patterns of the city</li> </ul>
Sub-markets	<p>Type of property</p> <ul style="list-style-type: none"> <li>• Office</li> <li>• Retail</li> <li>• Industrial</li> <li>• Tourism accommodation</li> <li>• Major residential</li> </ul> <p>Area</p> <ul style="list-style-type: none"> <li>• CBD</li> <li>• Inner suburbs</li> <li>• Suburban</li> </ul>
Government control and Incentives	<ul style="list-style-type: none"> <li>• Zoning regulations</li> <li>• Plot ratios</li> <li>• Process of development approval</li> <li>• Property tax ie. Land and rating tax</li> <li>• Capital gains tax</li> <li>• Tax incentives               <ul style="list-style-type: none"> <li>(1) depreciation allowance</li> <li>(2) goods and services tax (gst)</li> <li>(3) discounts in residential valuations</li> </ul> </li> </ul>



Within this conceptual framework then 3 major influences can be seen to impact on decision making with respect to the property developer. Also a number of issues can be identified that might form the basis for further research..

First, there is the influence of government control and incentives. The significant changes which have occurred in the property development industry and the environment within which it operates, and the growing importance and complexity of the development approval process has placed the developer at the centre of the decision making within the development process. The growth in this size and concentration of property development firms has meant that projects have become increasingly broad in scope, more complex and involving much greater investment. (Wiilburn and Gladstone, 1972,:9)

It has thus been observed that the growth of large firms and the promulgation of development control regulations are closely related. Rudin (1978,:51-52) has argued that “Larger developers, by assembling large tracts in advance of development, are able to produce a more orderly pattern of development. Strict development controls have been accompanied by the emergence of large development firms”. Rudin further argued that, “while development industry concentration has worked towards provision of an orderly path or urban expansion, this must be considered to be largely as a response to government policies.”

As observed by Cyert and March (1962) a rational and adaptive property development industry will devise and negotiate an environment so as to reduce the uncertainty of the development approval process.

In this context it could be argued that a site value basis of taxation has little effect on the development process and that the complexity of development control nullifies any incentive effects that the basis of property taxation might induce.

Second, the overall influence of general economic variables and their impact on supply/demand side variables has created property cycles which have major effect on the development decision. For example, in a business upturn, economic activity generates demand for the occupation of property and, as user demand increases, rents rise and vacancy rates fall, so investor optimism increases. Capitalisation rates fall, as a result of lower interest rates, lower expected risk and higher expected rental growth results in increased capital values rise. Developers take these market signals and begin to develop, and lenders and investors are willing to fund the developments or to purchase the completed developments. Increases in development profitability lead to a rise in land values and development. Thus a further research issue therefore is to what extent do the economic times/property life cycle fluctuations influence the site value tax input effects on the property development decision?

Third, the existence of different sub markets within the conceptual framework suggests that variables which influence decision making by property developers will differ in significance according to the nature of the property sub market. Generally speaking it

might be proposed for example that the influence of a variable such as the property tax would vary according to different property sub markets. For example, it would be expected that in site value tax would have a more significant influence on property sub markets such as Central Business Districts where land values are high.

## **CONCLUSION**

This paper has attempted to outline a conceptual framework which categorises the major influences and associated variables which influence the development decisions of property developers. Within this framework it should be possible to determine the significance of property tax to developers as a medium for encouraging quicker development responses and discouraging land speculation and urban decline. Also a number of research issues can be generated which will assist in providing a better understanding of the relevant significance of property taxation as one of the many variables that need to be taken into account.

The limitation of course is that property development companies are only one of the various categories of landowners that are affected by the incidence and incentive effects of property taxation with respect to various property development outcomes. However, as development companies are the key actors within the development process they may also as a group be able to provide an insight into the incentive effects of property taxation on other categories of land owners.

Any information about how the variable of property tax influences the development outcomes in practice should facilitate the understanding of the impacts postulated in theory. In this context more definitive conclusions might be achieved about the incentive effects of property tax.

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