BUILDING ECONOMICS
BUILDINGS AS INVESTEMENTS

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PRIMARY SOURCES:

McClean, C. Building Economic Lecture Notes 1985.

Speedy, S. Property Investment , 1974

INTRODUCTION

- Property investment concerns the commitment of capital resources over a period of time in expectation of future benefits.
- The principles of property investment are a branch of investment analysis, sometimes called capital budgeting or project evaluation.
- As the purpose of investment is to employ private economic resources, it must be primarily profit motivated, and should therefore be based on economic principles.
- If architecture is to adequately serve the needs of urban property investors, then knowledge of the elementary principles of investment criteria will assist in making better decisions.

ADDED VALUE PRINCIPLE

- It is the value of improvements, rather than their cost, which is the concern of valuers in estimating the market value of a property for investment.
- It is not the component parts of a property which are to be valued, but the extent by which their existence adds value to the land.
- The method of assessing the value of improvements is to fix the value of land, then to ascertain the value of the whole property.
- The value of the improvements is the added value over and above the value of land.
- Replacement cost of improvements is an approximate indication of value.
- Market value always takes precedence over replacement cost. Evidence of actual sales is the soundest guide to market value.

HIGHEST AND BEST USE

- The highest and best use is that use which at the time of the appraisal is most likely to produce the greatest net return to land and/or building over a given period of time.
- The principle of highest and best use is a relative concept as there is always the possibility of a higher use being found.
- The principle is based on the law of diminishing returns which operates against land. As

additional "units" are invested in land, a stage is reached when the additional return is equivalent only to its cost.

- The highest point if return represents the highest and best use of the property.
- Highest and best use does not mean the largest size or cheapest building. It is that use which brings in the largest net return in money and amenities over a period.
- The determination of the highest and best use of a property involves not only architectural design considerations, but also feasibility studies concerning estimated net returns and estimated costs.
- The highest and best use is the use that produces the greatest added value.
- The investment creates value in excess of its cost.
- The excess value is initially the entrepreneurs profit or reward for the successful combination of tangible and intangible components into a whole.
- When the project is successful, the total improved value is conventionally divided into land and improvements.
- As the cost of improvements is usually treated as the upward limit of value of improvements, the effect of a successful development is to raise the value of the land portion of total value.

OPTIMUM DEVELOPMENT

- Improvements which are not optimum may be described as either over-capitalised or as under-capitalised.
- An over-capitalisation is one which is so costly, or large, or superior, or inefficient and wasteful, as to produce a lower residual value of the land than could have been produced on the same site by less costly or smaller improvements.
- An under-capitalisation brings about the same results for the opposite reasons.
- Residual land value is the residual value after deducting the costs of improvements from its total value.
- This follows the economist’s concept or rent (or land value) being a "surplus" after providing for the cost of production.
- When the residual land value is below the market value of the land in its highest and best use, the improvements add less than the optimum value.

PRINCIPLE OF BALANCE

- The principle of balance suggests that in an urban community there is a balance and interdependence with a proper proportion of services for the community.
- This principle suggests that value is created and maintained in proportion to an equilibrium attained in the amount and location of property uses.
- A property that provides to few or too many services is not balanced, and will be under-improved or over-improved.

- Unless the services which the property can provide can find a proper place within the community, it will not be successful.

RATIO OF IMPROVED VALUE TO SITE VALUE

- The ratio between the type and size of improvements, and the value of the site are of economic importance.
- Any variation in such ratio for the class of property in the particular location, serves as a warning of the possibility of imbalance and hence under-improvements or over-improvements.
- The ability of a site to absorb wide variations from the hypothetical optimum improvements will depend very much on the nature of the locality.
- Where the usual improvements are of a particularly narrow class or range, any significant variation from what can be assumed to be normal, is courting economic obsolescence by under-improvement.
- In attractive localities where the range of improvements vary considerably, a greater deviation from the normal improvements-to-site ratio tends to be tolerated by the market. In such localities, the danger of over-improvement is greater than under-improvement.

MARGINAL VALUE PRINCIPLE

- The marginal value means the value of the extra or last unit to be applied to some aspect of the property investment.
- The marginal value criterion, as applied to architectural details, is whether the marginal increase in value arising from the detail equals or exceeds its marginal cost.
- Even if it is not possible or considered worthwhile calculating the marginal cost, merely considering the likely effect on value of the marginal expenditure serves to focus attention on the need for a conscious decision.
- According to Speedy "Money is frequently wasted in an investment project, simply because the marginal value effect of some aspects of the expenditure has not been considered, through ignorance, carelessness, or apathy'.

OPPORTUNITY COST OF PROPERTY INVESTMENT

- The opportunity cost of an investment is the loss or sacrifice involved in accepting the alternative under consideration, rather than the next best opportunity.
- The opportunity cost of an investment can also be considered as the rate of return of forgoing the next best alternative investment.
- The opportunity cost of using a particular resource of a firm is not the amount of cash to be paid out to secure its sue. A site for development may be already owned by a firm and its

current cost is merely incidental holding expenses. To consider only the current holding expenses would ignore the real worth of the asset as an economic resource.

- An important maxim of economic behaviour is "bygones are bygones". Past costs are sunk costs and should have no influence on economic decisions.
- Costs in decision-making should be measured by the next best alternative available for their use at the time.
- The opportunity cost for a site is its value in the next best alternative use by the investor himself or its market price if it could be sold.
- Many people use land below capacity, or even let it stand idle, because they disregard the opportunity cost of the capital tied up in it, or the lost income it could earn. Sometimes this may be offset by rising values, but as often as not this is a result of good luck rather than good management.
- From an economic view, cost implies a return on capital invested. It should be treated as an economic cost and not as a profit, as accountants do. This comes about because the opportunity cost implies that all economic resources to be used in a project should be paid for their use. The accountant's profit is really a payment to the owner for the use of his capital resources.

SENSITIVITY OF COSTS TO VALUE

- Expenditure on a property investment is often assumed to add its cost to the value of the property. Some expenditure may be sensitive to value and add more than its cost. Other expenditure may be relatively insensitive and add less than its cost.
- Empirical experience suggests that expenditure on visible aspects of design is much more sensitive than expenditure that is covered up.
- Once the structural standards have been found adequate, any extra costs through "heavy-handedness", or excessively cautious approach, tends to be insensitive to value.
- Expenditure on good aesthetics and finish is highly sensitive to value.
- One measure of sensitivity is the ratio or percentage of marginal value to marginal cost. Another measure is to relate the percentage of marginal cost to total cost, to the percentage of marginal value to total value.
- Even when these ratios cannot be calculated precisely, it can be useful to consider how sensitive value is likely to be to the particular expenditure.
- If the ratio is trivial, it is not worth spending much time in considering the cost.
- The recognition of the source of investment value is likely to make the difference between good investment decisions and bad ones.

TYPES OF INVESTORS

CREDITOR INVESTOR OR MORTGAGEE:

- Primarily concerned with the long-term low risk utilisation of his money as mortgage security.
- The mortgagee estimates the productive life of a building and its profitability and sets his mortgage loan offer to fall within both so that at no time within the life of the mortgage will the net profit be less than the costs of debt service.
- Examples of creditor investors are the Savings banks, Insurance Companies, Building Societies, and Private Lenders.

USE INVESTORS:

- Example is the homeowner who is concerned with the efficient use of his money and with the security of his investment.
- A homeowner is also concerned with liquidity to enable mobility. Liquidity is the relative ease with which an investment can be converted into money without appreciable loss of value.

CAPITAL GAINS INVESTOR OR SPECULATOR:

- Primary motive is to sell for profit.
- Profits are maximised by quick turnover and by correct market analysis.

RENTAL INVESTOR:

- Rental investor builds with the intention of keeping his property and making the maximum return from his investment that is in keeping with his requirements of security and liquidity.
- This class of investor is concerned with long term returns and places emphasis on the use of low maintenance, long life materials.

NOTE: Various combinations of the above types of investors occur in the market place.

MUTUAL FUNDS:

- Mutual funds are professionally managed on behalf of syndicated small investors.
- These small investors are really class 1. creditor investors, but the funds are applied by the syndicate management in class 3. and class 4. type investments.

LEASEBACK:

- Leaseback operations are combinations of class 1. and class 2. investments.
- For example, a class 2. investor who owns and operates his own factory and the buildings which houses it may find it profitable to sell the building to a Mutual Funds syndicate and then to lease the building back again.
- He stays where he is and continues in production as before, but he gains in two ways.
- First, he releases his capital from the building for more highly productive purposes,
- Second, he can deduct the whole of the annual lease payments from his cash flow before tax.
- The building investor obtains a long-term tenant with high level security for his investment.