Property Taxation and Economic Development: With Focus on Korea

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I. Introduction

The importance of property tax as a major source of revenue for less developed economies has been well documented in historical facts and amply acknowledged in current deliberations of developmental issues. Historically, the tax on agricultural land has often played a uniquely important role in earlier periods of economic development. In subsequent stages of development, the relative size of the tax base in urban areas would tend to rise as industrialization and urbanization proceed. Urban residential, commercial, and industrial properties would comprise an increasingly larger part of the total taxable properties. Understandably, the subject of urban property taxation in LDC's has attracted considerable research interest in recent years. There have emerged a number of extensive case studies dealing with individual countries of Asia, South America, and Africa, the most notable ones being the recent World Bank study series on urban public finances in developing countries. Various facets of urban property taxation, including the level and growth of revenue, assessment practices, rate structure, equity and allocational effects, have come under intensive survey.

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The present study supplements the preceding studies and deals with the problem with a slightly different perspective. Here the tax is analyzed not so much in its role as a source of revenue, but rather as a fiscal instrument exerting influence on the capital formation process in the developing economies. It will concentrate on urban properties, in view of their growing relative importance, and on residential component, in particular, considering that housing activities directly compete with the private sector capital formation and government investment in infrastructure. Korea was chosen for an indepth analysis of the property tax system and for purposes of illustration, the choice being dictated in part by data availability and some familiarity with the country's institutions on the part of the author.

II. Property Taxation in Korea

Taxes on property in Korea are comprised of real estate tax, city planning tax, and fire tax (literally translated, fire service facilities tax), all levied by local governments. The basic statutory rate under the real estate tax is .3 percent on both land and building. The rates for residential real estate, as shown in Table 1, are progressive, ranging from the standard .3 percent to the highest of 5.0 percent, depending on the size of the land and the assessed value of buildings. The stipulated land areas and building values for higher tax rates, however, are such that most of the residential properties are subject to the basic .3 percent rate. All non-residential properties are subject to the uniform .3 percent rate.[1]

The city planning tax of .2 percent is levied on land and buildings within city planning zones. Properties within these zones are, thus, subject to a combined statutory rate of .5 percent in most cases. It is important to note that these rates are all related to the "assessed value" which is meant to be 50 percent of the market value (the ratio not achieved in all areas yet).[2] This would mean that the effective (market value) tax rate on urban properties under the real estate tax is .15 percent at most and even with the city planning tax included it is only up to the maximum of about .25 percent.

1. See Table 1 for exceptions of tax rates on non-residential real estate.
2. See footnote of Table 1 concerning the assessment ratio.

Table 1

TAXES ON PROPERTY IN KOREA STATUTORY RATES, ESTIMATED EFFECTIVE RATES 1983

Tax Base		Statutory Tax Rates: Real Estate Tax	Statutory Tax Rates: City[a] Planning Tax	Statutory Tax Rates: Real Estate & City Plan Taxes	Effective Tax Rates[b]: Real Estate & City Plan Taxes
		%	%	%	%
Residential Property					
Land (Pyong)[c]	Building (1000 won in assessed values)[c]				
Below 100	Below 5,000	.3	.2	.5	.25
Over 100	Over 5,000	.5	.2	.7	.35
Over 200	Over 10,000	1.0	.2	1.2	.6
Over 300	Over 20,000	3.0	.2	3.2	1.6
Over 500	Over 30,000	5.0	.2	5.2	2.6
Non-residential Property[d]		.3	.2	.5	.25

Sources: Extracted from Ministry of Home Affairs, *Manual of Local Tax System*, September 2, 1980, Seoul. The statutory rates remain unchanged since.

[a] City planning tax applies to properties within a city planning zone. The standard rate and the maximum rate are respectively .2 and .3 percent. Fire services tax (fire fighting facilities tax) applies only to buildings. Twice the regular rates apply to "fire-hazardous" objects. All statutory rates relate to the assessed value.

[b] The effective (market value) rates were estimated on the basis of the assessment ratio of 50 percent. The assessment ratio had been in the vicinity of 30 percent until 1980 and the 50 percent ratio is still a mere target in many areas where real estate values have risen more actively.

[c] Pyong is equivalent to 36.5 sq.ft. and as of early 1983, the exchange rate was US$1 = ₩750 approximately.

[d] Factories located in city residential areas are levied .6 percent, twice the regular rate while factories, new or additions, within major cities are levied 1.5 percent. The statutory rate on villas, luxury recreation facilities, vacant land, and corporate land unrelated to its business is 5 percent.

The fire tax applies only to buildings and its statutory rate ranges from the basic .06 percent to the maximum .16 percent, the higher rates applying to buildings of higher values. Its effective rates, thus, range from .03 percent to .08 percent. The combined effective tax rate (with all three components included) on most urban properties do not exceed .25 percent on land and .28 percent on buildings. The statutory rate progression in residential taxation, shown in Table 1, has little practical meaning since most properties are not subject to the surtax rates due to the generous standard for land area stipulated for surtax rates, prevalent assessment lags, and the low average assessment ratio.

The core of the problem for Korea's property taxation may be said to be its gross under-utilization. Determining the optimal property tax rate for any given country is a difficult task. But if we were to analyze the potential role of the property tax in the context of various national goals or simply to compare Korean performance in property taxation with other countries', one could readily concur that the present effective tax rates are much too low. In 1981, the total estimated revenue from taxes on property, including farm land taxes, was 318 billion won (US$466 million).[4] This represented 3.8 percent of the estimated total tax revenues in Korea for that year. By comparison, the equivalent ratios for Taiwan and Japan were 12.9 percent and 8.6 percent, respectively. In per capita terms, taxes on property in Korea were US$15.38 and this compared with Taiwan's $54 and Japan's $113.[5]

Underutilization of the property tax in a developing country is costly from the revenue point of view, but perhaps more importantly for its negative effects on the developmental process. The revenue implications are not difficult to see, but the effect of the low tax on the process of capital formation is not apparent. This paper focuses its attention on the latter aspect. Specifically, we shall address ourselves primarily to resource allocation, domestic savings, income distribution and urban configuration aspects

3. The statutory rate on agricultural land is .1 percent, one-third of the basic rate.

4. This includes real estate tax, farm land tax, city planning tax, and fire service tax. The figures were extracted from Ministry of Home Affairs, ROK, *Financial Abstract of Local Government, 1981*, Seoul, 1982.

5. Taiwan figures were computed from the data obtained from Council for Economic Planning and Development, Executive Yuan, *Taiwan Statistical Data Book*, Taipei, 1982. For Japan, data were extracted from Ministry of Finance, *Fiscal and Monetary Statistics: Monthly Report*, Tokyo, August 1982.

which all have a bearing on economic development in the short as well as the long run.

III. Effect on Resource Allocation

Housing activities compete directly with business investment in plants and with government investment in infrastructures. Such competition most likely becomes more intense as economy achieves some degree of development, as is the case of Korea, since the latter gives impetus to greater effective demand for housing. This surge in demand for housing will be further enhanced under conditions of inflation.

To the extent that a relatively high property tax acts as a curb on expenditures on housing, it will help channel the flow of scarce resources toward capital formation in other sectors through its moderating effect on their relative prices. The basic housing accommodation is a necessity. It promotes health and productivity of the working population and thus may be considered an investment in itself. But, significant rise in the demand for housing beyond the basic needs should be a matter of concern for a nation committed to a goal of sustained high level of economic growth.

The "basic housing need" is difficult to define. For our purpose, the term may be used to describe a bare minimum of housing accommodations necessary to keep the working population in reasonably good health and vitality. Conceptually, and purely from an economic point of view, we could set this minimum at that level below which the cost of ill health and productivity loss (from inadequate housing) exceeds the economic costs of added housing amenities. We would refrain from a more generous definition of the "basic need" lest providing for such a need comes at the expense of greater relative payoff from investment in industry. It is for this reason that we prefer the use of the term "non-basic" over "luxury". What is non-basic as defined here may not necessarily be thought of as "luxury" as the term is commonly perceived.

A high level of housing activities is expected to have an effect on the costs of construction-related materials and labor. In Table 2, we note that during much of the seventies the wholesale prices of building materials, such as cement block, brick and stone, logs,

lumber, steel bars and others have generally increased at faster rates than did the overall level of (non-food) prices. Only during the 1972-75 period, the table reveals, did the rise in some of the building materials fall short of the general price increase and this was due largely to the 1973 oil crisis that triggered the tripling of oil prices (fuel oil comprises about 12 percent of total weight in the Korean wholesale price index).

Table 2

WHOLESALE PRICE INDEX FOR COMMODITY SUBGROUPS, KOREA 1968-1979

	All Commodities (Except Food)	Cement Block	Brick & Stone	Logs	Lumber	Steel[a] Bars	Steel[a] Pipe	Tile[a]
1968	39.0	26.3	45.5	40.1	45.8	34.6	43.3	72.4
1972	51.7	43.2	63.3	52.1	62.2	46.1	53.6	69.0
1975	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1979 (Jan.)	128.8	210.0	163.5	151.5	148.5	135.4	136.6	161.4

Sources: The Bank of Korea, *Economic Statistics Yearbook,* 1978, pp. 228-236; *Monthly Economic Statistics,* Vo. XXXIII, No. 2, February 1979, pp. 72-77; *Price Statistics Summary,* 1977, pp. 285, 289, 293-295 and through communications with the Bank of Korea Research Department staff.

[a] These items, declared "monopoly products," are regulated under the "list prices" which differ variously from the actual transaction prices. The indices shown reflect the list prices and significantly understate the increase in the transaction prices, especially for the most recent period.

Disparity in the pace of price increases between overall commodities and construction materials has widened to an alarming extent between 1975 and 1979; the price of all commodities (non-food) rose by 28.8 percent, but the prices of cement block, brick and stone, logs, lumber, and tile increased by 110.0, 63.5, 51.5, 48.5, and 61.4 percent, respectively. The prices of steel bars and steel pipes register lesser increases of 35.4 and 36.6 percent, but they understate the trend in the actual transaction prices since these goods, classified as "monopoly products," are subject to

price regulation.

These price phenomena may be explained, at least in part, by the rising demand for housing and other construction. The data depicting such demand are available in building permits. In Table 3, the number of building permits are presented, classified by use, covering the 1962-77 period. Using 1966-69 as the base period (this is the period during which the more tangible economic development was first achieved) the four-year total of dwelling permits increased by 112 percent by the mid-seventies, 1974-77, to the total of 417,358.

During the same period, there had been a comparable increase (114 percent) in permits for all other uses (business and government). It should be noted that a mere comparison of increase in the number of permits understates the force with which housing activities competed with business and the public sector for resources. Examining the lower part of Table 3, we note that

Table 3

BUILDING CONSTRUCTION PERMITS IN NUMBER AND FLOOR AREAS AND BY USE, 1962-77

	Dwelling		Total Non-dwelling[a]	
Number of permits		(Index)		(Index)
1962-65	65,272	33.1	24,112	60.2
1966-69	197,320	100.0	40,056	100.0
1970-73	305,803	115.0	58,849	146.9
1974-77	417,358	211.7	85,853	214.3
Floor areas (km^2)				
1962-65	4,875	35.4	7,190	49.5
1966-69	13,777	100.0	14,527	100.0
1970-73	23,927	173.7	21,795	150.0
1974-77	44,297	321.0	31,334	215.7

Sources: The Bank of Korea, *Economic Statistics Yearbook,* 1978, pp. 164-165; *Monthly Economic Statistics,* February 1979, p. 120.

[a]Includes commercial and public buildings and factories.

the 112 percent increase in dwelling permits represented a 221 percent rise in the total floor area. By comparison, the 114 percent increase in all non-residential permits involved a mere 116 percent rise in the floor space.[6]

What exact influence the housing activities had on the prices of building materials is difficult to assess; the conditions governing supply as well as external (apart from domestic) demand also play their role. It is clear, however, that the rapid increase in the demand for housing, a significant portion of which apparently was "non-basic," has contributed greatly to the rising trend in prices.

The impact of construction activities on the relative wages among industries is no less significant than on the costs of materials. Between 1974 and 1978, we note in Table 4, wages for

Table 4

AVERAGE MONTHLY WAGES FOR SELECTIVE INDUSTRIES, KOREA 1970-1978

	All Industry	Construction	Mining	Manufacturing	Wholesale Retail, etc.
			(In won)		
1970	17,831	24,295	18,574	14,301	19,807
1972	24,179	32,006	25,131	18,923	25,317
1974	35,542	43,984	41,068	30,209	36,066
1976	62,362	115,274	66,055	51,685	75,186
1978	111,201	222,772	127,685	92,907	123,765
			(In Index)		
1970	50.2	55.2	45.2	47.3	54.9
1972	68.0	72.8	61.2	62.6	70.2
1974	100.0	100.0	100.0	100.0	100.0
1976	175.5	262.1	160 8	171.2	208.5
1978	312.9	506.5	310.9	307.5	343.2

Source: Office of Labor Affairs, *Report on Monthly Labor Survey*, Seoul, April 1978, pp. 82-88.

6. Since the mid-sixties, the average floor space per non-residential units remained at a stable 360-370 m^2 level, but the average figure for residential units rose from 69.8 m^2 in the late sixties to 78.2 m^2 during the early seventies and further to 106.1 m^2 in mid-seventies.[4]

all industries increased by 213 percent. Construction industries, however, experienced by far the larger wage increase of 406 percent. Korea has, in recent years, been facing a serious problem from rising wages with its obvious implications on exports and on prices in general. The lopsided wage increase in the construction industry has most likely given added impetus to the upward trend in wages of other industries as well, under conditions of continuing high employment that has characterized most of the seventies. While external demand for Korean construction workers (that of the Middle East, in particular) undoubtedly had an important effect on the wage trend, there is little doubt that the rapid increase in domestic housing activities has substantially aggravated the situation.

IV. The Savings Effect

One cannot overemphasize the importance of savings in the economies determined to pursue rapid economic growth. Despite apparent efforts in many developing nations, some loopholes remain unattended in their actual campaign to achieve the goal of increased savings. The present widespread under-utilization of property tax among developing economies may be noted in this context.[7]

Increase in property taxes adds to public saving. Its effect on total domestic savings, however, would depend on the relative marginal propensities to save of the government versus the private tax payers since the taxes are paid in part out of private savings. If $MPS_g > MPS_p$, the net effect will be positive. Apart from the effect of the tax itself, a portion of the fund freed from reduced spending on "non-basic" housing may be added to private saving. Indeed, the latter could be a more important source of possible incremental savings. The basic housing accommodations, as noted earlier, are a necessity and the proposed levy of higher taxes relates mainly to the non-basic component of residential properties. Thus, a critical factor to affect savings in this context will be the price (tax) elasticity of demand for non-basic housing.

7. Weak revenue performance of property taxation is shown to be one of the district features of the tax structures in developing economies in recent World Bank sponsored studies. See, for instance, Roy W. Bahl, *Urban Property Taxation in Developing Countries*, The World Bank, Urban and Regional Report, No. 77-5.

To help visualize the possible impact of our tax measure on saving, let us assume that the value of the non-basic component of housing, H_{nb}, supplied in a given year is X and that the average market-value surtax rate, t, of say 3 percent, levied on H_{nb} causes α percent, say 50 percent, reduction in the supply of H_{nb} in that year.[8] Assume further that the marginal propensity to save, s_p, of those affected by the surtax (most likely those in the upper-middle and upper income groups) is 20 percent. The savings accruing from the restrained housing will be $\alpha X s_p$ or $(.5X).2 = .1X$. To this we must add the savings effect of the surtax itself. The surtax may apply eventually to all, new and pre-existing H_{nb}. If we assume the total value of all H_{nb} to be a β multiple, say 10, times of X, the effect of the incremental tax itself on savings will be $\beta X t(s_g - s_p)$ or $.3X(s_g - .2)$ where s_g is the marginal propensity to save of the government sector. This term is positive if s_g is greater than .2. The combined net effect on domestic savings for that year will be

$$(1) \quad S = \alpha X s_p + \beta X t(s_g - s_p)$$

The term, $\alpha X s_p$, is positive. Given X, the larger the value of α (i.e., the tax effect on the demand for H_{nb}) and the higher s_p, the greater will be the savings effect. The value of α will be larger, the higher the level of t. Thus, given X and s_p, the magnitude of $\alpha X s_p$ is solely a function of the level of t; an extremely high t will wipe out X completely and savings to result will be $X s_p$. The second term, $\beta X t(s_g - s_p)$, will be positive also as long as $s_g > s_p$. Given X and β, the higher the level of t, the greater will be positive savings effect, if $s_g > s_p$. If $s_g < s_p$, the savings effect of the surtax itself will be negative. But the total net savings may still be positive if $\alpha X s_p$ (the savings effect of restrained H_{nb}) exceeds the latter.

Two main aspects should be noted. First, expenditures on housing are often a form of saving or investment to many, especially under conditions of secular inflation. This would mean that $\alpha X s_p$ underestimates the savings effect of the surtax-caused reduction in H_{nb}; the fraction of αX that goes into saving should be greater than s_p. If we assume in the extreme that the entire

8. The term "average" is used here to simplify our analysis. In reality, a rate progression would be preferred for non-basic housing with higher surtax rates applied on higher marginal value brackets. Thus, a 3 percent rate may represent, say, a 2 to 5 percent range in the surtax rates.

H_{nb} is meant to be a form of personal savings, the incremental saving from reduced H_{nb} will be αX. More realistically, not all but a good part of H_{nb} may be assumed to take the place of saving. Thus, for a more reasonable approximation of the savings effect, $\alpha X s_p$ may be replaced by a larger magnitude.

Secondly, the distinction between public saving and public consumption are often arbitrary. What may normally be regarded as public consumption may contain elements of investment. Appropriation for salary increases for school teachers, for instance, or even for welfare payments for the poor may be seen as expenditures of a productivity-increasing nature and as such an investment in human capital. Thus, depending on how we define s_g, the magnitude of $\beta X t(s_g - s_p)$ will vary. A narrowly defined s_g could greatly understate the true and meaningful measure of savings and investment impact of the tax measure. Considering these aspects, the aggregate saving-investment effect of the surtax on H_{nb} can be very significant.

One may argue that the fund freed from spending on housing will be diverted into land speculation or hoarding of such items as gold, jewelry, foreign currencies, etc. under conditions of inflation or some of the fund may be wasted in conspicuous consumption. Legislating land speculation into an unprofitable undertaking is not very difficult for a determined government. Hoarding of precious goods or foreign currencies can go only so far; it becomes less attractive as domestic-international price gaps widen under a tight control. As for potential increase in luxury consumption, we may not find this to be totally unacceptable. Producers of automobiles, appliances, various new electronic products and other goods can use more sizeable and dependable domestic markets for their development, improvement and exports.[9]

9. There remains a question as to whether a uniform surtax rate structure should apply to all "non-basic" housing. To levy the same new surtax rate to all H_{nb} including those which already exist may be politically infeasible and economically disruptive. A partial levy or a gradual rate increase on the latter may be a more realistic approach. If we were to treat the pre-existing H_{nb} differently and levy a lower rate at k percent of the regular rate, equation (1) will be rewritten as

$$S = \alpha X s_p + [(1-\alpha)Xt + (\beta-1)Xkt](s_g - s_p) \qquad (2)$$

$(\beta-1)$ now representing all pre-existing H_{nb} as a multiple of X. The same conclusion would apply as in (1). As long as $s_g > s_p$, the second term is positive, but here the magnitude of the savings from the surtax itself will be less than in (1).

V. Distributional Considerations

The central issue in tax policy of developing economies concerns how to obtain necessary revenue while at the same time providing correction for the extremes of income inequalities prevalent in many of these economies, yet without undue interference with private saving and investment. A very large share of earnings of those in high income brackets typically goes into "luxury" consumption. At the same time, private savings, as there are, originate largely in high-income segments. This combination of the consumption and saving patterns points to the merit of progressive consumption taxation as an ideal instrument of development financing.

Highly progressive income taxation and high profits tax would tend to have an adverse effect on private sector saving and a retarding effect on development. It has been stressed also that luxury consumption offers a substantial source of additional tax revenue and the call for progressive consumption taxes have been heeded, to varying degrees, in many LDC's. However, luxury housing often has not been included in the category of luxury consumption and, in many instances, has escaped differential taxes. Even where there are progressive statutory tax rates on high value housing, the effective rate would turn out to be moderate at best because of: a) low assessment ratios applied on property in general and on higher-value property in particular; b) chronic assessment lag in the face of rapid gains in the value of assets; and c) the general laxity in enforcement.

That luxury housing can be an important untapped revenue source applies eminently to the Korean situtation in view of its continuing rapid economic development and the rising effective demand for such housing. Use of this revenue potential is much to be recommended on distributional grounds. The additional proceeds from the tax would lessen the burden of the national treasury in its aid of local governments and improve the fiscal posture of the national government.

Income inequality in Korea is moderate compared with most other developing countries and does not appear to be greater than in developed countries.[10] A recent study, however, warns of possi-

10. The World Bank, *Economic Growth and Income Inequality in Korea,* Bank Staff Working Paper, No. 240, Washington, D.C., February 1976.

ble worsening income inequalities in Korea, attributing it to: a) "grant elements" implicit in huge sums of domestic and foreign loans which have accrued mainly to big businesses at lower effective interest rates, thus contributing to asset formation among high income brackets; and b) many cases of large capital gains from land and building that have resulted from rapid economic development and urbanization.[11] Causes for possible increase in inequalities are related uniquely here to increased concentration of assets and their values. Progressive housing taxation at higher effective rates could be a counterbalancing measure.

Continued high economic growth requires political stability. An effectively enforced progressive housing taxation can be highly visible among the tax-conscious population of Korea. It could have a significant restraining effect on expenditures on luxury housing; however, where strong preferences persist in spite of the tax, they are likely to generate less popular resentment. Unless, for reasons of political influence, effective enforcement of the tax is infeasible, the taxation approach to restrain luxury housing is preferable to administrative approach or executive sanctions. The former has an element of permanency and relative certainty while the latter would tend to be less consistent and more uncertain as the standards whereby "luxury" is determined and the penalties assessed. Should one choose to pay high (tax) prices for luxury housing, the nation perhaps could let him have his way in return for his due. When the level of "luxury" rises beyond what can be tolerated on social or economic grounds, the taxes can be adjusted upward in bringing it down to a more acceptable level.

VI. Urban Overconcentration and Property Taxation

Rapid urbanization and the resulting surge in public expenditures on urban infrastructure and municipal services often cause a major strain on scarce resources in developing countries. Various attempts to decentralize or contain the growth of their

11. Hakchung Choo, "Some Sources of Relative Equity in Income Distribution: A Historical Perspective," *Industrial and Social Development Issues*, Chuk Kyo Kim (ed.), Korea Development Institute, Seoul, 1977, pp. 303-330. During the 1975-77 period, an Industrial Bank of Korea study reports, the earnings of the low-income families had increased 4.5 percent while those of the middle-and upper-income families increased 9.8 and 17.5 percent, respectively. *Dong-A Ilbo*, April 13, 1979.

large cities, especially the capitol cities, seem to have borne little success. While urbanization may be a necessary process for industrialization and development, continuing concentration of economic activities and population in and around the already overcrowded cities can be counterproductive.

Futility of debate on the optimal city size has been amply stressed. It has been argued in recent years that a city ought to be considered as an aggregate productive unit and a rise in the city size often brings with it an improved productivity.[12] The proposition seems valid, but it can not be used as justification for an endless expansion of a city. If the city keeps attracting more and more business, one could argue, it must have something good to offer. And if so, it would be in the interest of economic efficiency not to interfere with the process of continuing city immigration. Two things need to be considered: negative externalities and the average-cost pricing of public services. Negative externalities involving serious pollution, congestion, and associated health and safety hazards typically do not enter in the cost of business activities in an urban area. Where the marginal costs exceed the average cost of public services, as may be expected in many major cities, the average-marginal cost differences could become increasingly larger as the city must accommodate, at increasingly higher costs, additional water supply, sewage and drainage systems, and transportation network, etc. If the national pride and/or media attention dictate special accommodations of infrastructure and municipal services in major cities, especially in the capitol cities, this will indeed provide an important additional attraction thus creating conflict with the policies of decentralization.[13]

12. See William Alonso, "The Economics of Urban Size," *Papers*, Regional Science Association, Vol. 26, 1971, pp. 67-83; Harry W. Richardson, "Optimality in City Size, Systems of Cities and Urban Policy: A Skeptic's View," *Urban Studies*, Vol. 9, No. 1, 1972, pp. 29-48; Alan W. Evans, "The Pure Theory of City Size in an Industrial Economy: *Urban Studies*, Vol. 9, No. 1, 1972, pp. 49-77.

13. Buchanan and Wagner, addressing to the problem of the United States, strongly warn against "the use of massive central government grants to urbanized areas in attempting to improve the urban environment." "Such a policy of grants," they argue, "can aggravate existing allocative distortions by providing still further fiscal incentives for migration to urbanized sectors." See, James M. Buchanan and Richard E. Wagner, "An Efficiency Basis for Federal Fiscal Equalization," The *Analysis of Public Output*, Julius Margolis (ed.), National Bureau of Economic Research, 1970, pp. 139-158.

National security and other considerations aside, the observed congestion of existing public facilities in areas of population concentration and the high level of pollution which extends to wide areas of the City of Seoul with their potential health problems clearly point to an urgent case for a containment policy for that area.

The combined presence of the national government and the top-rated universities places the capitol city in a unique position. Major corporations cluster around the site of the national government by necessity and for reasons of prestige; the family-oriented and devoutly education-conscious Korean parents strongly favor their children to attend an esteemed institution of higher education, preferably, commuting from home. The tripartite alliance among major corporations, the government, and the universities (whose professors often have affiliation with a corporation or the government) is a hard nut to crack. Some imaginative measures have been taken, the industrial zone policy being a notable example. Achieving any meaningful containment or decentralization, however, would require a more comprehensive combination of measures. Property taxation, to this end, can play an important part.

Two things may be noted in this context. The present level of property taxation is excessively low. Moreover, the statutory rate structure, which applies uniformly to all local jurisdictions, is not a desirable feature. Within stipulated ranges, the tax rates should be decided for individual localities according to their respective financing needs. The larger cities, such as Seoul, Pusan, Taegu, Inchon, and others, should be allowed to levy higher rates commensurate with the level of services rendered.

From an urban policy point of view, the relatively higher statutory rates on industrial plants in major cities should be strictly enforced, especially in Seoul; for such a measure to have a tangible effect on industrial location, however, the overall effective tax rates will have to be higher. Inasmuch as it is the job opportunities that cause continuing influx of population to urban centers, any attempt to contain or decentralize the latter ought to aim at dealing with the basic cause. While creating environment amenable to industry around less congested cities and elsewhere, business properties in major urban centers should be subject to effective tax rates considerably higher than at the present level.

VII. Conclusion

The central problem of property taxation in Korea lies in its present state of gross underutilization. That this is allowed to continue, given the critical need for increased revenue, is indefensible. Inadequate property taxation is costly not only from the revenue point of view but also for its negative effect on the developmental process.

The focus of our analysis was on urban residential properties. Rising income and continuing inflation give forceful impetus to the demand for housing. The latter, when unchecked, would tend to compete strenuously for scarce resources with investment in industry and in infrastructure. Apart from the basic need, excesses in housing ought to be checked. Property tax, acting as a curb on housing, will help channel resources toward capital formation in industry through its moderating effect on the prices of these resources. Recent Korean statistics seem to underscore the role the property tax can play in this capacity. The marked increase in the relative prices of building materials and the lopsided rise in relative wages in the construction industry closely followed the great surge in housing activities during the seventies.

The proposed levy of higher taxes, as noted, relate mainly to the "non-basic" component of residential properties. Property taxation, elevated to its rightful status, in level and progression, is expected to add significantly to the domestic saving. Statistics as well as casual observations attest to a rapidly rising trend in "non-basic" housing in urban centers of Korea. The tax measure, serving as constraints on expenditures in such housing, could help provide an important source of additional funds for business investment.

Korea's rapid growth policy and outward-looking industrialization strategy were aided by various incentive schemes aimed at promoting exports and selected industries. Preferential credit, tax privileges (exemptions, deferment, etc.) and other enticement have apparently borne their results to varying degrees of success. But in the process, they tended to have inequalizing effect on income distribution. Recent studies suggest that income inequalities in Korea have increased in the seventies, after moderate decline in the latter half of the sixties. This may be attributed in part to the effect of the promotional policies cited above and many cases of large capital gains in real estate that

resulted from rapid industrialization and urbanization. These contributing factors most likely will remain potent for the foreseeable future. In this situation, progressive housing taxation can serve as an effective offsetting measure.

Urbanization is a necessary part of the process of industrialization and development. However, continuing expansion of economic activities and population in overcrowded major cities, such as Seoul, can generate economic inefficiencies. While large cities offer economies of scale and agglomeration (external) economies, these advantages could eventually be more than offset by external diseconomies. The fact that these advantages are taken into account in the location decisions while the negative externalities do not enter in the costs of business activities will tend to lead many large cities into an inevitable state of overexpansion.

The problem is compounded by the typical average-cost pricing of public services. Where the average cost lies below the marginal cost, a likely situation for many large cities, the average-cost pricing would lead to overdemand and overprovision in urban public services. Apart from the theoretical considerations, the observed congestion of existing public facilities in areas of population concentration and the extensive pollution over much of the City of Seoul clearly point to the urgent need of a containment policy for the capitol city. Achieving this goal would require a comprehensive set of measures. Property taxation, in this regard, can play an important role.

Our main theme has been that property taxation, in addition to being a major revenue source, is an effective tool of development. Restoring its role in these capacities calls for substantial increase in its effective tax rates, with an effective progression incorporated. Such a measure, however, must be preceded by securing an adequate number of qualified assessors and an administrative machinery to protect their integrity. The equity aspect of the property tax must be taken more seriously once the tax rid itself of its present meager status and as its burden on the taxpayer becomes more consequential.

Introducing an ideal design of a property tax that would be fully suitable under given conditons is a challenging task. Administrative problems in implementing the design can be most

difficult but certainly not insurmountable. As for Korea, with her demonstrated experiences in various new social and economic programs, these tasks would involve no major problems. The most important prerequisite to a successful undertaking of the project would be the clear recognition of its merits and a strong resolve to act.

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