

An Appropriate Land Policy to Foster the Korean Economic Growth in a Knowledge-Based Society

by

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Industrial society is becoming knowledge-based society due to changes in technological systems. It is important how to change the existing infrastructure of our society, including how to deal with human capital and land, especially, the economic policy and land policy. Thus, it can be considered that the present age is a turning point for macroeconomies. This study aims to propose an appropriate land policy to foster the Korean economic growth in the future. Specifically, we are supposed to examine as follows. Firstly, this study examines the mechanism of land price fluctuation and the distorted state of land possession caused by the advanced and short term economic growth in Korea since Korean War. Secondly, this study examines the positive and negative effects of the reformed Korean tax system related to land. Because the land policy reform measures of Korea have been undertaken drastically, in order to use land more effectively, redistribute land ownership, and recapture the enormous capital gains made from land. Thirdly, we offer a counterproposal that would generate greater social benefits through a revised version of the land policy reform for future economic growth. Finally, we present a model which shows clearly the relationship between land and macroeconomies.

Key words : Land policy, Sustainable economic growth, Knowledge-based society

1 INTRODUCTION : PURPOSE OF THIS STUDY

Korea was an industrial country. Her rapid economic growth has been strongly driven by growth-oriented economic policy, human welfare being sometimes sacrificed for economic growth. The growth-oriented policy should be remedied when the society faces cruel distributional contradictions. The policy realized the most advanced economic growth ; but inevitably was accompanied by the society's misadjustment issues, which are symbolically summarized in population concentration in urban areas. Shortages of urban housing, destruction of urban amenity, misalignment in land use, and increasing disparity in income also resulted.

Korean society is now standing at a turning point. Thanks to the advent of high-technology, the society is forced to transform itself into knowledge-oriented one. The turning point can be pervasively found from microscopic levels to a macro economic one. Particularly, the major turning point should be associated with social innovation. For example, infrastructure both in material and nonmaterial should be urgently renovated, human capital growth should be fostered, some institutional arrangements should be released from the traditional restrictions. Among others, institutional innovation related to the Korean land markets is central for Korea's transition from an industrial society to a knowledge one.

This study aims at reviewing Korean land policy and investigating the relevant land policy mix in the Korean context. The current paper is composed of three parts. First, we will try to trace the volatility of the Korean land markets, and their distorted structure in land ownership, by reviewing the economic growing processes after the Korean War. Second, we will epitomize the recent reforming of the Korean land policy, and examine its effects on the Korean land market structure. Third, we will try to investigate a plausible land policy mix, which can sustain further development of the Korean economy. The current paper concludes by proposing a relevant land policy mix which will foster Korea's transition from an industrial society to a knowledge one.

2 OVERVIEW OF KOREAN POSTWAR ECONOMY AND LAND MARKETS

2.1 Postwar Korean Economic Growth

Korea was one of the poorest countries in the world immediately after Japan's colonial rule and the Korean War. Even in 1960, after she recovered from the damages inflicted during the war time, Korea enjoyed only \$80 US of GNP per capita using current prices. At that time, few, if any, observers held out much hope of improvement for Korea's poverty-stricken economy. From 1963 on, however, Korea entered a period of sustainable high economic growth ; she

developed to a level which placed her into that category of newly industrializing countries by 1970. The 1960's was a fortunate time for the Korean economy to take off and to propel export-oriented industrialization, since the world economy turned around due to pressures of increasing wage rates ; labor-intensive industries in developed countries were struggling with increasing labor costs. In 1972, since Korea had suffered from the burden of overseas loans caused by the processing trade, the Korean government decided to transform the Korean industrial structure from a processing industry orientation to that of a heavy chemical one. Fig. 1 shows the shares of foreign stocks against the gross domestic investment in Korea. From this figure, we can understand that the Korean financial markets were surpassed by foreign capitals at the early stages of her economic development. It was not merely by chance that Korea achieved heavy chemical industrialization in such a short period of 10 years in the 1970's. It should be emphasized that there were strong peoples' intentions towards a self-supporting economy under the unstable international political and military circumstances surrounding Korea.

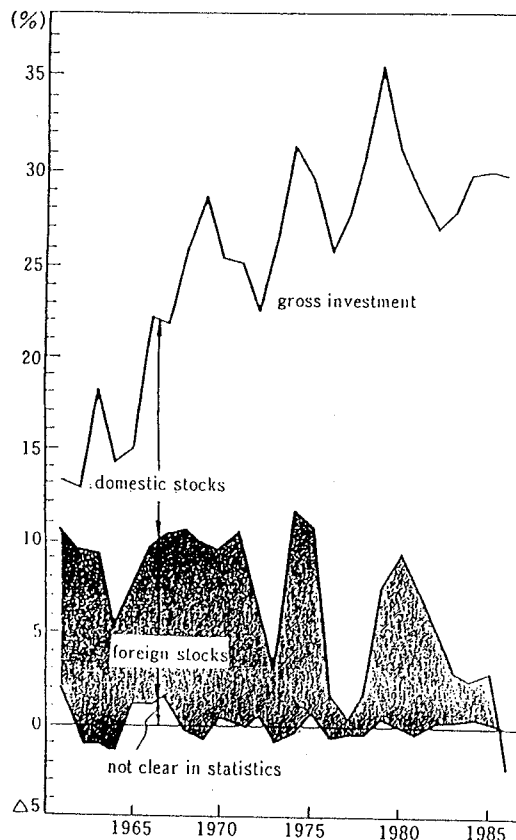


Fig. 1 The rates of foreign investment accounting for the gross investment
(Source ; Statistical yearbook, Seoul)

With the onset of the 'three lows' -low oil prices, lower currency exchange rates of dollars, and low interest rates-, the Korean economy stepped into a new era after 1986 on. It should be noted in the Korean economic history that Korean domestic saving began to exceed investment, and the international balance of payments turned from chronic deficit positions to surplus ones. As a result, Korea was able to reduce her foreign debts, which had peaked at \$46.7 billion US in 1985. It was at that time that Korea worry any longer about foreign debts accumulation and rely upon economic assistance any longer. By 1985, Korea appeared to have achieved its earlier goal of 'economic independence'.

After that period, the trade balance positions with the US changed over from a deficit to a surplus. As a consequence of the Plaza Agreement, the exchange rates of the Korean Won dramatically increased against all other currencies other than the Japanese Yen for the period from 1985 to 1988. Furthermore, the labor costs showed continuing tendencies to increase due to economic growth. Triggered by frequently occurring labor strikes, labor costs dramatically increased around 1987. Business groups began to shift part of their production function to foreign countries to cope with the increases in the exchange rate and factor costs.

There are arguments that noticeable trade policy was requested to make industrial adjustment more flexible and speedy ; the government had been incapable of changing industrial policy in quick manners under the dead-locked circumstance of Korea's international relations ; Korea could not foster exporting industry without a strategic trade policy. To establish a self-sustaining economy, the government aimed at being independent from foreign investment, while she wished to promote technology transfer from outside. The government has frequently intervened in the economy to strengthen private enterprises in charge of expanding foreign exports.

The relationships between the highly centralized government and the business community have not functioned smoothly. Since the Korean government exercised more of controlling or regulating power, sometimes resulting in discouragement of private initiative, the public decision making is now requested to be decentralized to further vitalize private sectors. The increasing complexity of international economy and interrelation with foreign countries requires less governmental intervention and more institutional innovation to foster greater entrepreneurship in private sector.

2.2 Change of Land Price with Economic Growth

Land problems did not appear throughout the 1950's and the 1960's. Urban concentration of population was still moderate in those days though the impartiality of farm land ownership became serious. From the beginning of the 1970's, the discrepancy between demand and supply for land appeared and was wide in urban areas. Fig. 2 shows land supply by development types.

The Korean government propelled land supply with readjustment projects until the late 1970's, and enacted government-led residential land development methods in 1980, in order to supply reasonably priced lands for urban housing. However, the land development methods for urban housing were insufficient in their menu, and the methods themselves had some drawbacks which prevented them from fully functioning. Especially, the excess demand for land in the Seoul region became large and pushed up the land prices of the city compared to the surrounding areas. To make it worse, the strict land use regulation accelerated the inflationary process of land prices.

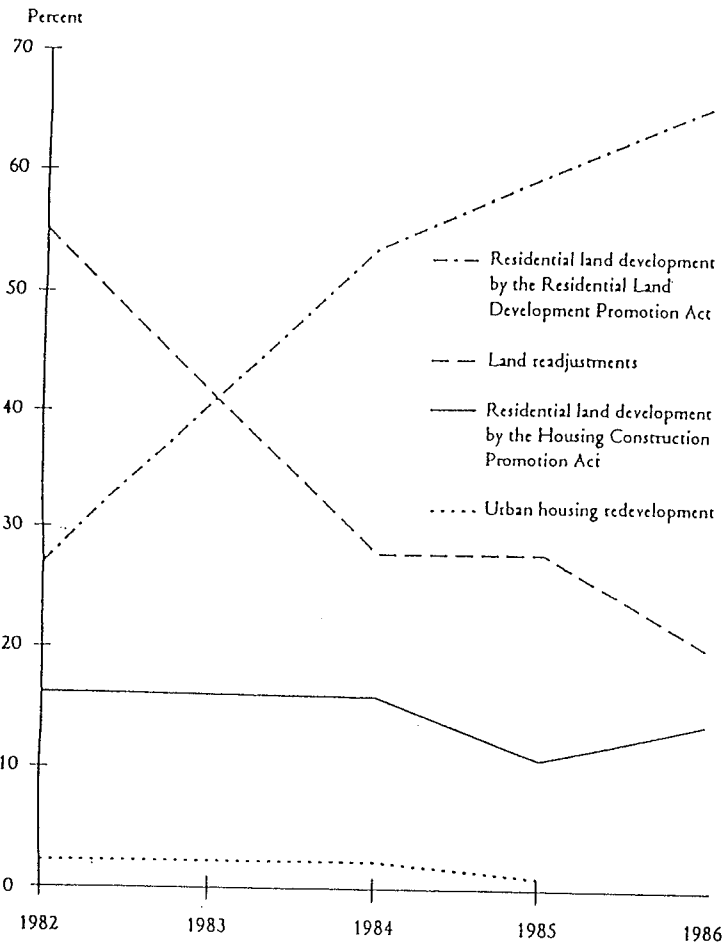


Fig. 2 Land supply by development types, from 1982 to 1986

The recent economic growth associated with the expansion of monetary supply encouraged speculation and investment in stock and land markets. Especially, at the end of the 1970's and the 1980's, when money supply was largely expanded, land prices soared. It can be observed that the land prices in Korea have strongly correlated with monetary supply, the GNP, and the land policy. As shown in Table 1, land prices measured by national land price indices have increased by 18.8 times in the last 18 years. This figure is much more evident in Seoul, where the land prices have increased by 36.2 times compared with the level of 1974. This feature of land price becomes more clear if it is compared with other economic indices ; the CPI increased by 5.9 times, the WPI by 4.2 times, the real GNP by 4.3 times, the M1(M2) by 26.0(39.2) times, and the stock price indices by 8.2 times in the same period. From these observations, it is clear that land prices have increased the most rapidly compared with other economic indicators.

Table 1 Indices for land prices and other economic variables with 1974=100

| Year | Land Price | | Price Level | | Money Supply | | Real GNP | Stock Price |
|------|------------|-------|-------------|-----|--------------|------|----------|-------------|
| | Nation | Seoul | CPI | WPI | M1 | M2 | | |
| 1974 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1975 | 127 | 132 | 125 | 126 | 125 | 128 | 106 | 111 |
| 1976 | 161 | 153 | 145 | 142 | 163 | 171 | 120 | 136 |
| 1977 | 215 | 201 | 159 | 154 | 230 | 239 | 132 | 158 |
| 1978 | 320 | 474 | 182 | 173 | 287 | 323 | 145 | 200 |
| 1979 | 373 | 505 | 215 | 205 | 347 | 402 | 156 | 168 |
| 1980 | 417 | 572 | 277 | 284 | 403 | 510 | 150 | 152 |
| 1981 | 448 | 593 | 337 | 342 | 422 | 638 | 159 | 176 |
| 1982 | 472 | 644 | 361 | 358 | 614 | 810 | 170 | 170 |
| 1983 | 559 | 1016 | 373 | 359 | 718 | 933 | 191 | 178 |
| 1984 | 634 | 1253 | 382 | 361 | 722 | 1005 | 209 | 184 |
| 1985 | 678 | 1354 | 391 | 365 | 800 | 1162 | 224 | 193 |
| 1986 | 727 | 1404 | 402 | 359 | 932 | 1376 | 253 | 317 |
| 1987 | 834 | 1493 | 414 | 361 | 1069 | 1639 | 286 | 582 |
| 1988 | 1063 | 1911 | 444 | 391 | 1286 | 1991 | 321 | 965 |
| 1989 | 1403 | 2552 | 469 | 376 | 1516 | 2385 | 343 | 1279 |
| 1990 | 1692 | 3348 | 509 | 392 | 1682 | 2795 | 375 | 1040 |
| 1991 | 1908 | 3722 | 559 | 413 | 2301 | 3408 | 406 | 915 |
| 1992 | 1884 | 3619 | 594 | 422 | 2600 | 3916 | 425 | 818 |

Sources: Ministry of Construction, "Land Price Statistics", each year.
Bank of Korea, "Major Economic Statistics", each year

To investigate the mechanism which created upon the Korean land market, let us divide the concerned period after 1975 to present into 4 sub-periods as shown in Fig. 3 and scrutinize what was happened in the Korean real estate markets.

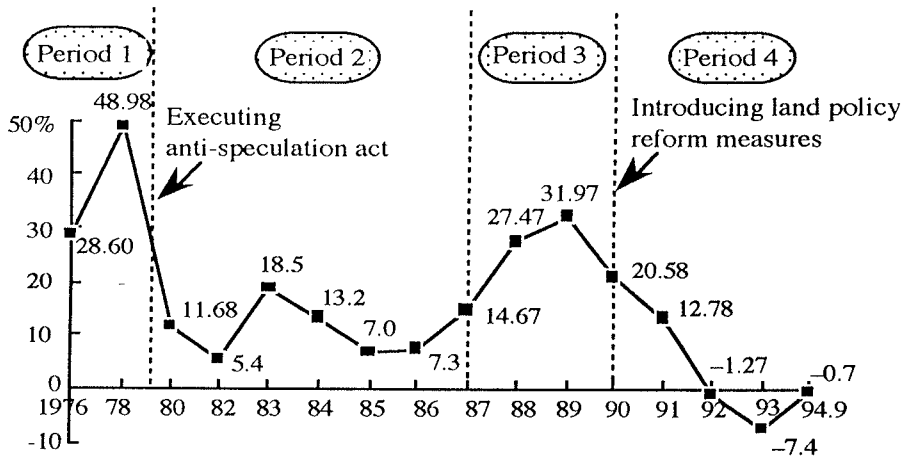


Fig.3 Annual increasing rates of land price in Korean real estate markets
(Source: The Ministry of Construction)

Period 1 corresponds to from 1975 to 1979. In this period, land prices increased at a rate of about 50%. In this period, the Korean government largely increased financial liquidity by expanding monetary supply to induce investment in heavy chemical industry and expand foreign exchange holdings, which, at the same time, shot up land prices.

Period 2 was the time of an overall depression of the Korean economy, which was partly triggered by the anti-speculation act of 1978. Due to a devaluation of the Korean currency, the purchasing power of the Korean people was decreased.

Period 3 was a time when land prices soared again. It is attributed to an expansion of the monetary supply triggered by the Seoul Olympics and an increase in the trade surplus. Due to the rapid expansion of exports, a foreign trade surplus occurred, which was the first experience for the Korean postwar economy. In this period, in conjunction with increases in land prices, increases in consumption as well as decreases in saving were simultaneously observed. Land owners, capital owners, and some rich families obtained a large amount of capital gains from land price increase. Owing to the land price inflation, the private sector was encouraged to invest in plants, equipment and capital, while public investment in roads, railroads, harbors, and other social overhead capitals was largely discouraged. To make it worse, the infrastructure arrangement was largely delayed and regional development projects were deterred due to the rapid

increase of land acquisition costs. Ultimately, an increased cost of land acquisition will hurt the Korean economy in the long run due to an obsolescent infrastructural arrangement.

Period 4 again is one of an economic depression. The land policy reform measures of Korea were introduced in 1990. In this period, land prices dropped - it was the first experience after postwar period. Specifically, the rate of increase of land prices stood at -1.27% in 1990 and dropped again by -7.4% in 1993. Whether the deflation of land prices can be attributed to the land policy reform measures still needs further scrutiny. Many factors jointly contributed to the land price deflation. The regional integration of macro economies in East Asian countries, including Japan and Taiwan, is one of major factors to be considered in understanding the current downward volatility. As far as the Korean land market is concerned, the downward volatility seems to have stabilized so far. But, we can not deny the possibility that land prices may begin to increase again. Therefore, careful observation of the land market's movements is required.

2.3 Concentration of Land Ownership

Capital gains from land have been enormous in proportion to the scale of the Korean economy. The distributional distortion in land ownership is larger than that in income. Table 2 shows the Gini Coefficients with respect to land ownership and income distribution in 1985, which suggests the degree of distributive partiality. The Gini coefficient of income distribution amounts to 0.36, which suggests that the income discrepancy in Korean society is still large. Looking at the table, that of land ownership shows 0.85. Clearly we can see that the degree of distortion is much larger in land ownership. Moreover, we can see that the rates of land possession stayed at only 28.1% and the amounts of housing ownership were 50.6% in Seoul from Table 3, even though people desire to possess their own land and housing.

Table 2 The Gini Coefficient with respect to land ownership

| | nationwide | Seoul | Pusan | Taegu | Incheon | Kwangju |
|----------------------|------------|-------|-------|-------|---------|---------|
| whole household base | — | 0.911 | 0.946 | 0.944 | 0.937 | 0.838 |
| landowner base | 0.849 | 0.709 | 0.846 | 0.867 | 0.812 | 0.808 |

source : The economic planning board, 1989.5

GINI coefficient 1; equality

GINI coefficient 0; inequality

Table 3 The rates of land possession and housing acquirement

(unit : %)

| classification \ region | Seoul | Pusan | Taegu | Incheon | Kwangju | Daejeon | Seongnam |
|-------------------------|-------|-------|-------|---------|---------|---------|----------|
| possession of land | 28.1 | 33.1 | 38.3 | 30.1 | 69.7 | 46.2 | 22.1 |
| possession of housing | 50.6 | 50.9 | 49.1 | 57.3 | 51.7 | 55.3 | 44.1 |

(source: the economic planning board,1990,12)

Given the distributive structure of land ownership, land price inflation inevitably leads to a more uneven distribution of wealth among people. It was a noticeable feature of the Korean society that a few big land owners dominated the Korean land market. As shown in Table 4, the top 5% of land owners owned 65.2% of the total private land as of 1989. Workers in urban areas could not acquire their own houses, and their frustrations caused them to press for a wage hike, which acted as if it were a vent of national economic growth. Furthermore, buying-up of the land by big business groups also distorts resource allocation in land markets. For example, the areas of land that the 30 largest business groups bought up in the period from January to June of 1989 amounted to 42,900,000m², though they disposed of only 161m². The lands owned by these groups almost equal to the area of Taegu City, which marks the fourth largest city of Korea.

Table 4 Concentration of land ownership

(unit : %)

| region \ population | nation | Seoul | Pusan | Taegu | Incheon | Kwangju | Daejeon | Seongnam |
|---------------------|--------|-------|-------|-------|---------|---------|---------|----------|
| the upper 5% | 65.2 | 57.7 | 72.3 | 72.6 | 64.2 | 55.7 | 65.1 | 71.9 |
| the upper 10% | 76.9 | 65.9 | 81.4 | 82.4 | 77.8 | 69.4 | 76.4 | 83.5 |
| the upper 25% | 90.8 | 77.8 | 89.5 | 92.4 | 88.8 | 88.4 | 88.2 | 95.1 |

(Source: The economic planning board,1990,12.)

Political power can not but sway if distributive partiality is expanding. The Korean economy was suffering from frequent labor strikes and dull rates of economic growth. Thus, the Korean government was forced to introduce drastic land policy reform measures to realize the redistribution of wealth, which has the political implication of the 'upbringing of the middle class'. In the next section, we epitomize the Korean land policy reform measures of 1990, and discuss pros and cons of the measures.

3 THE KOREAN LAND POLICY REFORM MEASURES OF 1990

3.1 Outline of Land Policy Reform Measures

As shown in Fig. 4, the recent land policy reform measures of 1990 are composed of 1) The Law of Urban Residential Lands Ceiling (In brief, the LURLC), 2) The Law of Capital Gains Tax (the LCGT), 3) The Law of Excessive Profits Tax on Lands (the LEPTL), 4) The Law of Land Management and Regional Balanced Development Special Accounts. In addition to these, the government revised the other laws related to lands, i.e., The Law of Comprehensive Land Tax, The Law of Public Declaration Systems of Lands Values, and The Special Law of Real Estate Registration.

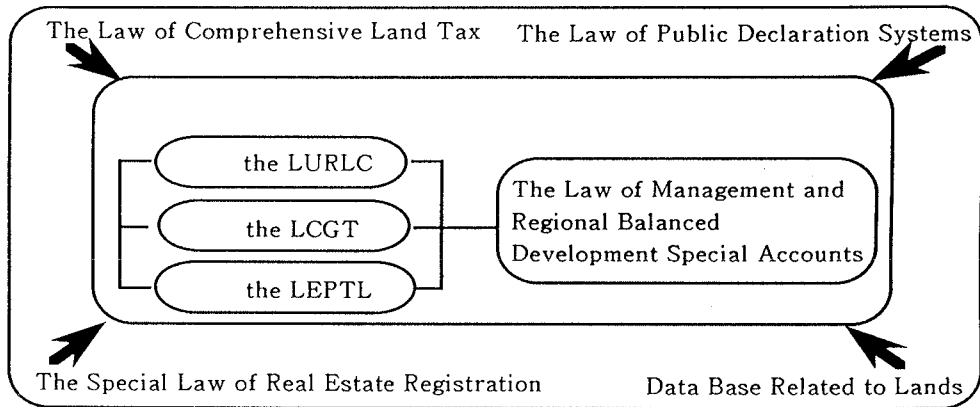


Fig. 4 The land policy reform measures of Korea

1) *The Law of Urban Residential Lands Ceiling*

The LURLC intends to expand the land supply for urban housing by restricting the individual land holdings to up to 660m² in the 6 large cities (Table 5). The law is applied to residential lots of the 6 big cities now, and the excessive land holding of individuals beyond this limit is forbidden in principle. Those who do not dispose of the excessive parts of land by the deadline (2 years) will be charged the excessive land holding tax (Table 6). All of the excessive land holding tax will be deposited into the land management and regional balanced development special accounts.

It is difficult to anticipate the increase of the land supply, because the applicable areas are only 0.1 percent of the residential land. Furthermore, the rates of the excessive land holdings tax are set to be at the same level across these 6 cities irrespective of their differences in average land prices. Thus the tax rate can not be differentiated across the cities under the current political arrangement. Regional differentiation in the tax rates needs more decentralized au-

tonomy of local authorities.

Table 5 The ceiling of the land holdings

| applied region | ceiling of land holding | supplementary allowances |
|-------------------------------------|------------------------------------|------------------------------|
| 6 cities * | 660m ² / a household ** | 132m ² per capita |
| cities of 50 thousand peoples above | 990 m ² / a household | 198m ² per capita |
| the other regions | 1,320 m ² / a household | 264m ² per capita |

* Seoul, Pusan, Taegu, Incheon, Kwangju, Daejeon

** These ceilings are applied up to the five members households.

The supplementary allowances per capita can be added to the ceilings for those households with more than five family members.

Table 6 The rates of the excessive land holding tax

| Tax subjects | Tax rates | |
|--|----------------------------------|---------------|
| | within 2 years after enforcement | after 2 years |
| the excessive idle lands held from the day of enforcement on | 6% | 11% |
| the excessive lands attached to the housing from the day of enforcement on | 4% | 7% |
| the excessive lands attached to the housing which are bought after the enforcement | 7% from the time of acquisition | |
| the residential idle lands not to be disposed within the deadline | 11% after moratorium | |

2) The Law of Capital Gains Tax

The LCGT aims to restrain preference for land ownership by recapturing the fixed share of the capital gains. The system is to assess the development charge of the developer, which will account for 50% of the capital gains calculated by the increase of the land price. The charges can be exempted or reduced in the case where the developer is the government. Fifty percent of the development charges are deposited into the land management and regional balanced development special accounts, and the remnants are given to the concerned local governments.

Capital gains are assessed based upon the public land value indices, which are generally less than market prices. Developers are forced to pay the capital gains tax before investment costs are withdrawn. In this case, it is possible for developers to impute the development charges

to consumers, since the demand in Korean land market is so high, while land supply is very limited. Moreover, the lots less than 660m² are free from the tax in Seoul, 990m² in cities, and 1,650m² in the other regions. It is possible to bring about an inefficient land use because development charges can be avoided by subdividing project areas into a set of small-sized lots. Consequently, it is apprehensive that the development charges may discourage land developments by the private-sector, and hinder potential land supply for urban housing.

3) The Law of Excessive Profits Tax on Lands

The LEFTL aims to redistribute residential land ownership, and to recapture windfall gains on an accrual basis. Fifty percent of capital gains are imposed on the owners of idle land or vacant land whose prices increase by more than 1.5 times compared with the annual average of increase rates of land prices across the entire nation. The LEFTL is levied on a land possession basis, which is updated every 3 years. Fifty percent of the excessive profits tax revenues are deposited into the land management and regional balanced development special accounts, and the remainders are given to the concerned local governments.

The enforcement of this law, while it works to suppress the reservation demand for land and to encourage the supply of urban residential land, inevitably lead to serious resistance by the tax payers. The practical measures to implement this law in an effective manner, unfortunately, have not been sufficiently prepared so far. This law would increase land use efficiency, if the implementation systems were matured.

However, many unforeseen lawsuits have arisen arguing the unconstitutional nature of this law in its stance and imperfections in its contents, while few suits were forecasted for the implementation of the law. Moreover, the law has triggered construction booms. Since the standards used to judge the idleness of lands are very ambiguous, and the criteria for delimitation between 'business' and 'non-business' use is rather artificial and arbitrary, Land owners were rushed to build on their idle land. Another drawback is that a single standard rate of capital gains across all sites in different regions, namely the nationwide average of annual rates of land price increase is used to calculate the capital gains tax, irrespective of heterogeneity in the real capital gains rates. The tax rate does not reflect any peculiarities and characteristics specific to individual lots.

4) The Law of Land Management and Regional Balanced Development Special Accounts

The Law on Land Management and Regional Balanced Development Special Accounts aims to install the earmarked budgets for infrastructure arrangement and regional development projects. The effects on the installation of earmarked budgets are never small. However, the

reduction of income tax for the middle class is not set up yet, with which the charge of land taxes is counterbalanced. Eventually, the financial situation of the middle class is not largely improved; they are not endowed with the sufficient purchasing power of houses. Those who can not afford to pay tax in cash are allowed to substitute lands for cash. The law does not prescribe the way for substituted payment in a proper way. This inevitably leads to the situation that the government has to purchase the offered lands instead of tax revenues.

5) The Law of Comprehensive Land Tax

The Law of Comprehensive Land Tax aims to prevent landlords from excessive land holdings, by imposing high taxes progressively. According to the Table7, the tax is applied in a two-part scheme, which is comprised of fixed rates and progressive rates. The fixed rates are applied to land holdings of factory sites, farm land, and luxury land. The progressive rates, subdivided into 9 levels, are applied to holdings of speculative land, residential land, and commercial land.

Table 7 The tax scheme of The Law of Comprehensive Land Tax

| Classification | Land Use Type | Tax Levels (Won) | Tax rates (%) |
|-------------------|--|-------------------|---------------|
| Fixed rates | Factory site | — | 0.3 |
| | Farmland tilled by owner | — | 0.1 |
| | Luxury property for non-productive one | — | 5.0 |
| Progressive rates | speculative land residential land | below 20 million | 0.2 |
| | | below 50 million | 0.3 |
| | | below 100 million | 0.5 |
| | | below 300 million | 0.7 |
| | | below 500 million | 1.0 |
| | | below 1 billion | 1.5 |
| | | below 3 billion | 2.0 |
| | | below 5 billion | 3.0 |
| | | above 5 billion | 5.0 |
| | commercial land | below 100 million | 0.3 |
| below 500 million | | 0.4 | |
| below 1 billion | | 0.5 | |
| below 3 billion | | 0.6 | |
| below 5 billion | | 0.8 | |
| below 10 billion | | 1.0 | |
| below 30 billion | | 1.2 | |
| below 50 billion | | 1.5 | |
| above 50 billion | 2.0 | | |

(Source : The Tax Administration Agency , 1990)

The law induces efficient land use by imposing higher tax rates on non-productive lands and relatively lower rates on productive ones. It can suppress the partiality of land ownership because the tax systems are largely progressive for the respective land owners according to total land holdings. Additionally, it is effective not only in anti-speculation but also in increasing land supply in the short run, and it raises the developmental funds for city planning by local governments. Particularly, the financial independence of local governments is very important, since the Korean government has continued to transfer part of its power to formulate a regional development plans to the local autonomies in 1991. Needless to say, an increase in financial revenues is beneficial to local governments. However, the increase in land holding costs brings about the fragmentation of development lands, so that it hinders effective land use in the long run.

These systems can only be effective, when the nationwide registration systems are supported by computerized data base. The Ministry of Home Affairs has centralized the computerized land ownership records, by which the amounts of tax payment for respective land owners are effectively calculated. Thanks to the centralized registration system, the possibility for tax evasion has been largely diminished.

The comprehensive land tax is still calculated based upon the appraisal base formulated by the Ministry of Home Affairs, which is undervalued tax base. For example, the appraisal base of this tax is less than 15.6% of the public declared land price in the case of 1991. The effective tax rates, the rates of the total tax amounts divided by the actual land prices, amount to 0.03%, c.f., Japan 0.4%, Taiwan 0.2%, United States and Europe 1.6%. This tax is levied independently from the LURLC, the LCGT, and the LEPTL, and all the tax revenues are entered into the general accounts of the concerned local government. Since they are not earmarked, this tax systems do not sufficiently work to supply public housing, and to promote regional development projects. The comprehensive land tax system still needs further refinements to realize efficient land use, since it involves some items for tax reductions or exemptions which cause distortion of resource allocation in land markets.

6) The Law of Public Declaration Systems of Land Values

It is crucial to estimate land price scientifically and appraise the tax reasonably, in order to enhance the effects of the recent land policy reform measures. In 1990, the Korean government established the Law of Public Declaration Systems of Land Values and integrated the conventional land appraisal methods formulated by different institutions of land assessment, which are diversified according to the subjects applied for, into the unified standards. The 3 hundred thousand points serve as reference points, whose standard land values are annually evaluated by use of the full market prices by licensed appraisers. The land values of rest rest of the 24 million

privately held parcels are estimated by use of multi-regression models and summarized in the form of more than 700 land value tables.

The introduction of the systems makes a contribution to the land tax reform measures more effectively. However, in reality, appraisal of individual land lots is more or less subjective, and there are some instances which the appraisal land values are higher than the actual land prices. Since the reference points were limited to only 3 hundred thousand parcels in the whole country. Later on, the number of points are gradually increased to overcome the subjectivity in appraisal as much as possible.

7) The Special Law of Real Estate Registration

The Korean government has assigned landlords the duty to register land ownership in order to upgrade peoples' trust in land policy and to encourage efficient land use. The special law of real estate registration is supported by the centralized controlled data base system which describes the structure of land ownerships and the contents of the respective transactions. The government has enforced the land owner to register the ownership relations by use of 'real name' and 'real transaction prices' from July 1995 on. This law tries to destroy a part of Korean conventionality in a sense, since in the past people did not have sense of guilt using fake names for transactions.

3.2 The Advantages of the Land Policy Reform Measures

Though there are some practical problems in their management, the major advantages of the reformed measures can be summarized as follows.

First, the most important advantage is that these reformed measures implant somehow the concept of 'public use of land' in peoples' minds. It can be asserted from the fact that few insist on the abolition of the measures themselves, even though the negative-side effects of the measures are pervasively recognized. Rather, they request the revision of the proposed measures.

Second, the winds of circumstance favour the enactment of the reformed measures. Irrespective of controversies about the effectiveness of the reformed measures, the soaring land prices have been stabilized. Land price deflation contributed to accelerating public-directed regional development projects.

Third, administrative volitional powers are remarkably enhanced to implement the measures, after the real estate registration systems supported by the data base on land ownership were established.

Fourth, financial budgets for infrastructural arrangement are remarkably augmented by recapturing capital gains and by increasing land holding costs.

Last, peoples' perception towards real estate holding has been changed. The speculative needs and demands for land are fairly moderated. A sound perception to real estate is being formed.

3.3 The Disadvantages of the Land Policy Reform Measures

The land policy reform measures have been somewhat contributing to dropping land prices because the measures were timely enforced. However, land price deflations are mainly caused by discouraging market transactions. In fact, after the enforcement of the measures, transactions in land markets have been remarkably diminished. No matter how the land markets seem to be stabilized, these consequences are not desirable. Judging from the market oriented views, there is still a need for investigations about how the market mechanism will function under alternative land tax schemes. The disadvantages of the measures including their side effects are summarized as follows.

First, there are yet no concrete prescriptions on how to implement the laws, though the concept of the laws are widely accepted. Actually, the contents of the laws are insufficient, since a national consensus of tax subjects and tax methods has not been formed. Recently, the LEPTL has been criticized for the unconstitutionality in its stance and its imperfectness in formulating tax methods. Accordingly, the constitutional court has judged that the law within the current Korean legal systems is not consistent with the constitution, i.e., it is approximately judged to be unconstitutional. From this, a good lesson can be learned the policy methods are never less important than the policy purpose itself. Since the LEPTL has been ruled to be unconstitutional, other laws related to land reform can not avoid legal inspections regarding their constitutionality.

Second, the current land policy does not take into account the indirect effects upon the macro economy. In fact, the LURC and the LEPTL had many unintended impacts on macroeconomy. They caused the economic boom in construction activity because the timing of enforcement was coincided with the period that the government tried to expand the housing supply plan.

Third, the sectionalism within the administrative bodies raises some intra-organizational conflicts regarding the implementation of the measures. Administrative restructuring and procedural rationalization are essentially requested.

Fourth, the trade-offs between equity and efficiency have not been harmoniously resolved in formulating the measures. The measures are designed mainly to suppress the excess demand for lands, but are not oriented to induce efficient land use.

Fifth, the measures are behind the times and do not reflect adequately what people really

need. Some of the measures are against the waves of deregulation, since they are oriented to encourage governmental intervention in land markets. Also the measures could hinder potential land supply by discouraging private-sector developers.

Sixth, the measures hurt the urban landscape. Specifically, the measures brought about fragmented land use, and disordered and slipshod features of buildings, in order to evade paying their land taxes.

3.4 Changes in Management of the Land Policy Reform Measures After Setting up Kim's Government

After Kim's government came to power, three major points were modified in the management of the land policy reform measures.

First, the Kim government formulated the plan which intends to alleviate land use regulation in order to augment urban land supply. According to the Five Years Economic Plan of 1993-1997, the 10 categories of the old zoning system are unified into 5 new categories. The basic idea underlying the simplification of zoning categories is to deregulate, to some extent, land use in urban areas. After the modification, land development works, if they are guaranteed not to pollute the environment, are allowed to be carried out even in the zones in which development had been strictly prohibited under the umbrella of the old plan. The new plan may induce more participation in land developments by the private sector.

Second, the government has revised the Farm Land Law enacted in 1949 to cope with the recent changes in the world agrarian markets, and strengthened the competitive powers of the Korean agriculture. The conventional system of farm land ownership was liquidated, so as to prevent further fragmentation of farmlands and to encourage entrepreneurial farmers to increase agrarian productivity. As a side effect, this plan turned about to encourage land supply for housing in the outskirts of large cities.

Third, the Korean government has extended coverage of permission zoning where land transactions are forced to be observed by the relevant public bodies. Because the reforming of financial systems was executed in August, 1993, aiming at dissolving informal and underground markets of spending money.

The Korean central government is still endowed with a strong power to control land development projects taken up by municipalities, though she is gradually transferring this power to local governments. She cannot but change and follow up the management policy of the reformed land laws in order to sustain further economic growth in the turn of the century and beyond. The Korean economy can no longer expect the rapid economic growth supported by the revival of 'three lows' she had enjoyed so far. The economic policy should be modified to cope with slowing

down rates of economic growth and stagnated foreign exports.

4 TRANSITION OF LAND POLICY TOWARDS A KNOWLEDGE SOCIETY

The land policy reform measures have proven to be useful in encouraging the public land supply for urban housing, mainly stemming from the augmentation of public financial budgets. Judged from what has been experienced so far, however, the reformed land policy is only designed to resolve the land issues typically observed in industrial society. The Korean government is now asked to revise the drawbacks of the measures in order to maximize the social benefits of the measures in our society.

4.1 Revision of the Reformed Land Policy

Before anything else, the defects of the laws are requested to be revised regarding the tax subjects and the appraisal methods, in order to fixate a nation consensus towards the publicness of the land. In this section among others, we focus upon the 5 laws which are asked their revision, and propose a counterproposal for them.

Regarding *the Law of Urban Residential Land Ceiling*, the regions where this law is applied to should be enlarged to cover the whole country. The ceiling levels and tax rates, should be differentiated across the regions, in order to discourage further overconcentration and conjection of urban activities in Seoul. The relevant differentiation structure is the significant issue to be investigated.

The Law of Capital Gains Tax is becoming more important to control land development projects in the case of deregulation. This tax is levied against land development projects. Due to the tax, a lot of profitable development projects have been discouraged and sometimes resulted in their withdrawal. We have to investigate more scientifically the relevant appraisal methods of capital gains. Also it will be necessary to provide the private-sector with more incentives for land development projects, since the land supply for urban housing has still been suppressed.

The Law of Excessive Profits Tax on Lands has to be equipped with appraisal methods to rate real capital gains of respective lands, instead of using the standardized ones. This law is transitional in nature. Once the land markets are equilibrated, there is no room to capture excessive profits. The law is to be replaced by the transfer capital gains tax and the comprehensive land tax in the future, even if the law has to persist while the land markets are stabilized.

Regarding *the Law of Comprehensive Land Tax*, it is necessary to replace the conventional appraisal methods with the Public Declaration Systems of Land Values, and modify the progres-

sive structure of the tax rates so as to apply a moderate rate for the middle and a progressive one for the rich. Though the nominal rates of the tax do not seem to be low, the effective rates of the tax remain low since the tax bases are fairly lower rated than the market prices. Given the current progressive structure, it is expected that the Public Declaration Systems of Land Values will automatically increase tax charges for all tax payers. Therefore, the new progressive tax rate structure should be designed to work under the Public Declaration Systems of Land Values.

The Public Declaration Systems of Land Values need more scientific appraisal standards which can take into account the hedonic structure of land characteristics. Furthermore, for the practice of land value appraisal, it is also requested to increase the number of appraisers and sampling points, and shorten the updating intervals in order to diminish the gaps between the appraisal values and the actual land prices.

4.2 Toward More Flexible Land Use Planning

We have pointed out the drawbacks of the reformed land policy measures, and analyzed how they can be revised to make the measures more beneficial for people. The land policy reform measures are provided to indirectly regulate land ownership through market mechanisms. On the other hand, the Korean land markets are regulated by the strictly controlled land zoning systems. The comprehensive land management system should be established, which can integrate these laws related to land use control under a unified framework for land use planning.

Korea has adopted a strict land use zoning system. It is argued that the Korean land use plan is very strict in concepts but ambiguous in details. The Law of Land Use Planning was formulated in the 1960's. Though it has been sometimes revised, the law is now outdated. It includes some idle items which are not applied in the current circumstances. The outdated parts of this law sometimes become obstacles to promoting efficient land use. The law should be essentially restructured to cope with the current issues in land markets and make land use planning more flexible and adaptable to the contemporary needs for land use. We can not achieve efficient land use only through the revision of these laws. Those laws related to land supply, e.g., the local self-governing laws and the city planning laws should simultaneously be revised.

4.3 Toward More Diverse Urban Development Methods

Due to the lack of systems to control and recapture the enormous capital gains from land development projects, the Korean government had been mainly directing development projects to avoid any intervention of profitable rights in urban development projects. With the new laws on recapturing capital gains, however, the government is transferring some functions in urban land development to the local governments.

The results obtained in this research imply that the Korean land policy is advantageous especially in new town development projects and government-directed development projects. These approaches to the land development projects, however, hardly meet the peoples' needs in the new era. To promote further economic success, two fundamental policy shifts in urban development method may be required : the shift from a new town-oriented development project to a redevelopment one, and a shift from a government-directed method to a civil-directed one.

5 CONCLUDING REMARKS AND RECOMMENDATIONS

Faced with the regional disparity and inefficiency in land use caused by the growth-oriented economic policy, Korea has to find a new policy that can bring about more efficient and spatially-balanced regional developments. In that sense, Korea can be viewed as being at the point of steer towards a knowledge-based society. It is however, easy to forecast that movement in this directions may accelerate the concentration of functions in the metropolitan area, resulting in much more imbalanced regional development compared to the existing situations in the industrial society era. It is therefore time to devise a new economic policy, especially, a land policy that enables Korea to foster an advanced economic growth as a knowledge-based society.

We have presented the relevant land policy framework that will foster the economic growth of Korea's knowledge society : The policy framework should consist of both the revision of the land policy reform measures and also the revision of land use planning.

The future research may include the modelling of the proposed land policy. Also, the simulation of the model with the empirical data to verify the model may be beneficial.

NOTES

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