

URBAN LAND PRICES AND THE HOUSING PROBLEM

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I. INTRODUCTION

THE SOARING LAND prices in Japan, especially in the large cities, are probably unmatched in any other country. According to research by the Japan Institute of Real Estate, the average price of residential land in major cities has increased by five times from 1961 to 1970. In other words, land prices have been rising about 20 per cent a year during this decade. As a result, at least three grave problems have developed. Firstly, new couples and young people who have migrated to the large cities have been prevented from getting their own houses. Although the wages of workers have increased by three times in nominal terms and two times in real terms during this decade, for the people who save money in order to purchase a residential lot, the wages have actually declined relatively because land prices have risen more rapidly. In Tokyo, for example, there are about 3 million families that possess no house, but must rent one or two rooms, in many cases without toilet and/or kitchenette, in wooden apartment houses. The number of these households, accounting for about a quarter of all households in Tokyo, does not seem to decline.

Secondly, the rising price of land has brought a large windfall to landowners, almost all of them originally farmers on the outskirts of large cities. In short, the rising price of land has been enlarging income differentials among the people. Thirdly, soaring land prices prevent the local governments from providing adequate facilities such as roads, parks, water and sewerage works, schools, nurseries, and public housing. The share of expenditures for land in public budgets has been increasing on account of the rising land prices. In addition, as the landowners want to reserve land expecting higher prices in the future, it is very difficult for the local governments to purchase the sites necessary for public facilities. In the case of the Tokyo Metropolitan Government, the expenditures for land are above half of the park and road budgets, and every year a sizable portion of the budget must be carried over unused on account of the difficulties in purchasing land. The rising price of land also accelerates the sprawl of building areas into the outskirts of cities and spreads the population more widely, so that city and town governments are required to make larger public investment than would be needed for more intensively developed areas. In this case, the final victims are also the ordinary people who pay heavy taxes and endure the unsatisfactory public services.

The soaring land prices can be said to be one of the gravest problems caused by rapid economic growth in Japan. In this paper, the author will try to describe

the land and housing problems in Japanese cities with emphasis on the Tokyo Metropolitan Area, the mechanism of land price increase, and some suggested policies for regulating land prices.

II. HOUSING PROBLEM IN THE TOKYO METROPOLITAN AREA

The characteristic features of the housing problem in Metropolitan Tokyo must be viewed in the light of the flow and concentration of population and capital into this area, and the reaction to these events by landowners. The flow of population surrounding the metropolis can be divided into three major categories. One is the migration of population into the ward area (which is the central core of the metropolis) from all over the country, especially from the northeastern part of Japan (Kantō and Tōhoku districts). Another is outmigration from the ward area to the surrounding areas (Santama district of Tokyo and three adjoining prefectures). And the third type of flow is the interchange within the ward area.

The first flow consists mainly of younger people coming to Tokyo in pursuit of jobs, schools, and marriages, the greater part of whom are accommodated as a first step in poor quality rooms in wooden apartment houses. Such housing has been mushrooming in the ward area in recent years. The second flow of population consists mainly of the people who move out to the surrounding districts to become owner-occupants after saving a certain amount of money, bit by bit, while residing at small rooms in wooden apartment houses within the ward area. It has become increasingly difficult for the people to become owner-occupants because of the rising price of land in the surrounding districts. As a result, the residential lots which can be found for purchase are getting farther and farther from the center of the city. The third flow of population consists mainly of the people who abandon the hope of getting their own houses and move from one apartment to another. Thus, the characteristic features of the housing problems are firstly the narrow space and poor qualities of privately managed apartment houses within the ward area, and secondly the remoteness and excessive price of land in the surrounding areas. These features will be presented more minutely below.

An overwhelming majority of the people who migrate to the ward area of Tokyo from various parts of the country become tenants of privately managed apartment houses; approximately a quarter of the households of the ward area reside in such apartment houses at the present moment. Such apartment houses are featured by the following conditions:

(1) Narrow space: About half of the tenants occupy apartments with per capita living space of less than three Japanese mats (approximately five square meters).

(2) Poor facilities: About 40 per cent of the tenants share toilet and/or kitchen facilities with other tenants.

(3) Poor living environment: Only 25 per cent of the type of apartment houses have satisfactory conditions in terms of adequate sun light, and freedom from smoke, effluent gas, vibration, and unpleasant odor. In addition, most of

the apartment houses are vulnerable to fire and earthquake.

(4) High rent: Rents are very high (households which spend more than 20 per cent of their income for rent account for about half of the families with monthly income of less than thirty thousand yen).

In the case of residences which are built in the surrounding districts for the purpose of owner-occupancy, in most cases the area of the site is less than one hundred square meters and the floor space is less than fifty square meters. Furthermore, more than three hours usually must be spent every day for commuting to the city center and back. Despite that, the cost of building such residences is more than 6 million yen (about \$23,000), including the price of land, which is equivalent to the total average income for three to five years.¹ Around twenty thousand dwelling units are provided annually within the metropolis of Tokyo by various public housing authorities such as the Tokyo Metropolitan Government, the Tokyo Housing Corporation, and the Japan Housing Corporation. This public housing accounts for only 10 per cent of the total of the dwelling units which are built within the area every year. What is worse, the provision of housing by such public authorities is becoming more and more inadequate because of the increasing difficulty of acquiring sites. The situation can be said to be nearly hopeless.

III. MECHANISM OF RISING LAND PRICES

Hearing of such a desperate housing situation, one might presume that the land area is too scarce to meet the demand of the increasing population in the metropolitan area. But in fact there is a large potential supply of the residential land within this area. If we swing a circle with a radius of forty kilometers from Tokyo Station as the center, we have about four thousand square kilometers of land, excluding water areas, within the circle, but we find that only fifteen hundred square kilometers of it is used as building area. As the circle can be regarded as a border of residential land suitable for the people who commute to the central part of the metropolis, it can be said that we have twenty-five hundred square kilometers potential left for provision of housing. Why then cannot the potential be realized?

On account of the rapid concentration of capital and population into the existing urban centers due to the fast growth of the Japanese national economy during the second half of the fifties, the increase in land prices surpassed the standard rate of interest. Since then the rate of increase in land prices has not dropped below the general level of interest rates. Under such circumstances, it is inevitable that the owners of farmland have wished to continue to hold their land, or even buy more. Accordingly, the land has been placed under the seller's option.

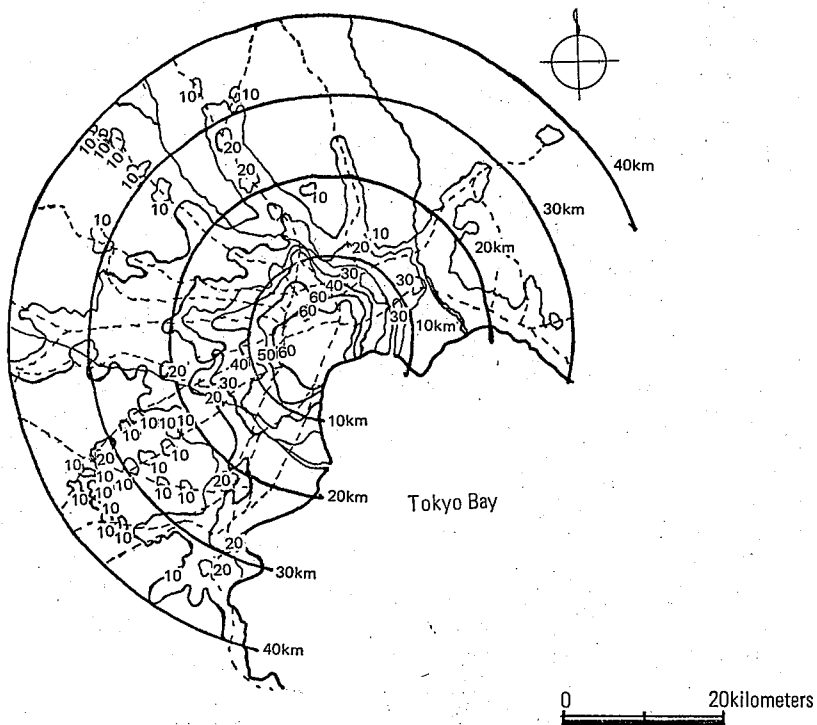
In the case of Japan, the owners of lands around the outer fringes of large

¹ The cost estimations are for 1970-71. Toward the end of 1972, prices of land and construction materials went up sharply, making the estimates rather modest by the more recent standards.

cities are small-size farmers who can earn their living by agricultural income, without selling their land. Many farmers are not very used to the entrepreneurial methods of managing their lands. Under the circumstances of the general rise in the prices of commodities, landowners are apt to select the course of waiting for future land price increase without doing anything at all to raise the productivity of their land. As a matter of fact, there are farmers who sell a part of their land at the outer fringes of the large cities. The revenues obtained through the sale of land are spent for modernizing their existing residences or for building houses or apartment houses for rent, in order to increase their incomes to cope with the rising standard of living. However, they cease to sell their farmland at this point because further sales are not necessary and keeping their land is the best way to increase the value of their assets.

New buyers of land then must go farther out than the previous border. There they purchase the minimum amount of land necessary for building their houses by investing an amount of money which is within the limits of their ability. This amount of money which is within the realm of purchaser's solvency rises, keeping pace with the rise of national income. At the same time, the outer fringe of the

Fig. 1. The Land Price Topograph within Tokyo Metropolis, 1970



Source: The research by Tōkyū Real Estate Inc.

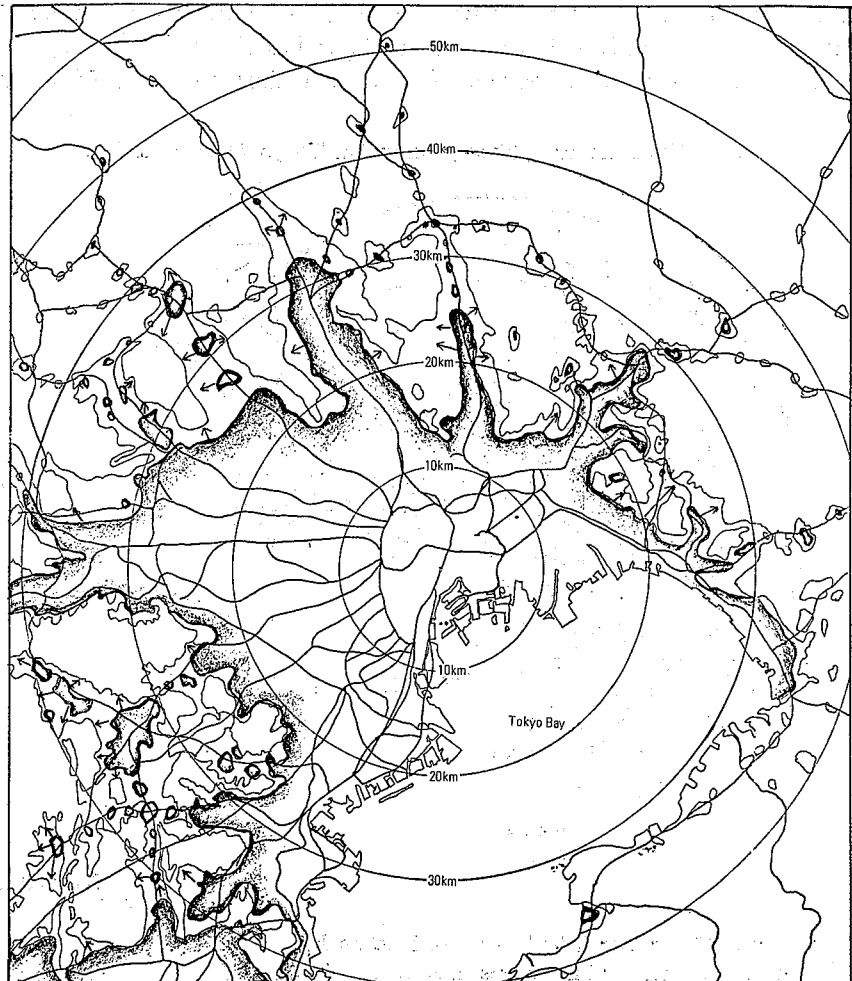
Notes: 1. Contour line figures indicate 10,000 yen/m².

2. Networks of dotted lines are railways.

marginal land recedes farther and farther out. Accordingly, the land which is left unsold inside the fringes of the city automatically appreciates in price, in most cases. Thus, a great amount of farmland is left unsold within the outer marginal boundary, and the total space of such land is much larger than is actually demanded annually. Despite that, the price of land continues to rise at a rate higher than the standard rate of interest, and the border recedes farther and farther out every year.

Figure 1 shows the distribution of price of residential land and Figure 2 shows how the contour line of ten thousand yen per square meter has expanded. Here we can see some characteristics of the land price rise. Firstly, the price of land makes a mountainlike topography with the center highest and areas more distant from the center lower in price, and with spreading ridges of high price land

Fig. 2. Expansion of Contour Line of 10,000 yen/m² from 1968 to 1970



Source: The research by Tōkyū Real Estate Inc.

TABLE I
THE LAND PRICE OF A LOCATION IN WESTERN PART OF
HIGASHIMURAYAMA CITY, AT SELECTED TIME INTERVALS

Period (Month, Year)	Actual Price (Yen/m ²)	Rate of Price Rise
March 1961	2,500(500/2,500/9) × 12 ≐ .27
December 1961	3,000	
March 1962	3,500(500/3,000/3) × 12 ≐ .67
September 1962	4,200	
April 1964	8,000(5,800/4,200/20) × 12 ≐ .83
May 1964	10,000	
July 1965	10,000 (2,000/10,000/41) × 12 ≐ .6
October 1967	12,000	
February 1968	14,000 (4,000/12,000/14) × 12 ≐ .29
May 1968	13,000	
December 1968	16,000	

Note: This location was absorbed into the residential area in 1962-64.

along the commuter railroads. Secondly, this mountainlike topography is always uplifting, but the rate of rise is not equal at every place, being faster at places farther away from the center. The absolute price level can never be reversed, and the area above the water level (the price level reasonable for agricultural management) is increasing. Table I presents the second characteristic. In this table we can see how the land price of a location in Higashimurayama City, located thirty kilometers west from the center of Tokyo metropolis, has risen. The rate of price rise was very high immediately after the location was taken into the border of the residential area (in other words, the spot appeared above the water level that we mentioned above). During this period the speed was approximately 30 per cent or more a year, but thereafter the price of the land rose more slowly, although still faster than the standard rate of interest.

As the result of the phenomena described above, the condition of housing has gotten worse. Table II shows the area of lots and buildings for individual residence that were built in 1962, 1965, and 1968 in Higashimurayama City. Here we can see the modes of the distributions for both lots and buildings steadily decreased. We can suppose from Table II that the standard areas of residential lots and buildings in 1962 were, respectively, 220 square meters and 50 square meters. Since the average unit prices for lots and buildings were, respectively, about five thousand yen and eighteen thousand yen, we can estimate the standard total cost of a house in 1962 at 2 million yen. Similarly we can estimate the standard total cost of a house in 1965 and 1968 at respectively, 2.65 million yen and 3.45 million yen. The rate of increase of the standard cost of a house is nearly equal the increase of wages. Since the price of land was rising more rapidly, this means that the condition of houses was becoming worse in spite of the increase of wages.

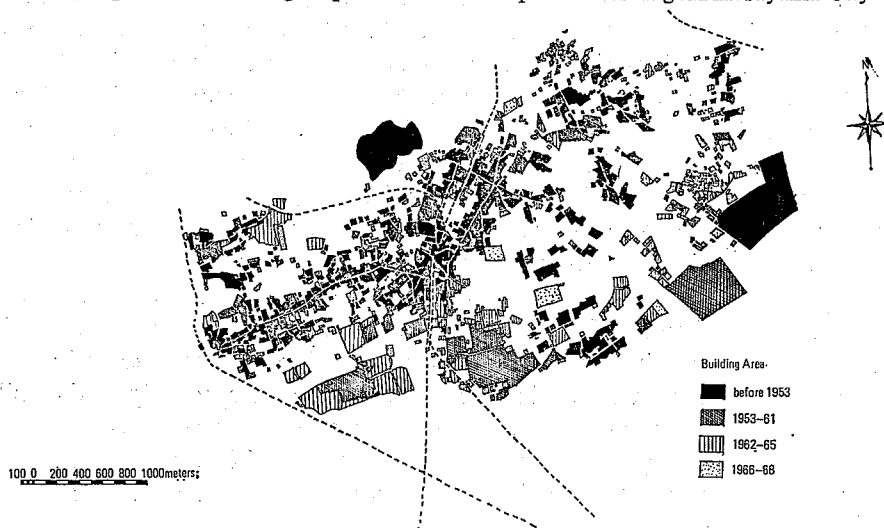
Within Higashimurayama City there is a large amount of farmland left. Figure 3

TABLE II
NUMBER OF INDIVIDUAL RESIDENCE LOTS AND BUILDINGS
OF SELECTED SIZES: HIGASHIMURAYAMA CITY

	Scale	1962	1965	1968
Lot	0 m ² -100 m ²	5 (1)	15 (3)	58 (10)
	100-135	49 (10)	90 (18)	144 (24)
	135-165	60 (12)	115 (23)	89 (15)
	165-200	75 (15)	108 (22)	88 (15)
	200-235	167 (34)	60 (12)	86 (14)
	235-265	80 (16)	37 (7)	51 (9)
	265-300	21 (5)	29 (6)	33 (6)
	300-335	12 (2)	13 (3)	14 (2)
	335-	22 (5)	31 (6)	27 (5)
	Total	491(100)	489(100)	590(100)
Building	0 m ² -35 m ²	55 (11)	115 (23)	194 (32)
	35-50	172 (35)	212 (43)	184 (30)
	50-65	184 (38)	102 (20)	116 (20)
	65-85	55 (11)	43 (9)	57 (10)
	85-100	12 (2)	10 (2)	23 (4)
	100-115	4 (1)	5 (1)	9 (2)
	115-135	6 (1)	6 (1)	4 (1)
	135-	3 (1)	5 (1)	3 (1)
	Total	491(100)	498(100)	590(100)

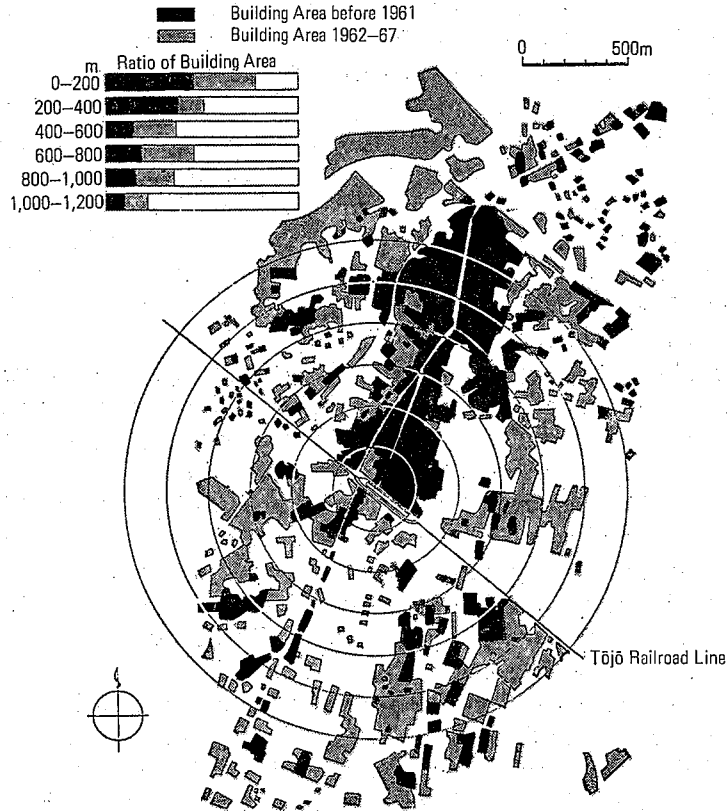
Note: Figures in parentheses show percentages of the total.

Fig. 3. Sprawl of Building Expansion of Built-up-Areas in Higashimurayama City



Note: Prepared by author from aerial photographs.

Fig. 4. Sprawl of Building Area near Shiki Station



Note: Prepared by author from aerial photographs.

shows how the building area has sprawled in an ugly fashion, and how much farmland is left even now. Similar phenomena can be seen in Figure 4 that describes the situation around Shiki Station along the Tōjō Line, one of the private commuting railways, a little nearer to the center of Tokyo than Higashimurayama. Both of these figures were prepared by the author from aerial photographs taken at different times. We can conclude that there is a large area of potential land for residential use within the metropolitan district, but the rate of increase in land prices, surpassing the standard rate of interest, prevents this potential land from being utilized, and thus limits the supply of land and further accelerates the rise in land prices.

IV. POLICIES

As a result of the interactions between the increase of population and the rising price of land, much farmland and forested area have been left undeveloped within the metropolitan area. Indeed, the area undeveloped surpasses that of the land

which is actually developed for buildings every year. Therefore, it is not too much to say that the districts around built-up Tokyo have enough potential for providing residences. The reason for the failure of this potential supply to manifest itself is the fact that the owners of land have become what we call hoarders of land in the process of the rapid inflation of the price of land.

Such being the case, it is necessary to hammer out some measures which will shatter the mechanism of the rising land prices and make more dwellings available. What is required is promotion of the provision of dwellings by the owners of the land themselves, through stimulating their desire for increased income. From this point of view, levying a heavy property tax and extending loans to the owners of land, so as to give an impetus to the provision of houses and apartments, may be most effective.

The rate of the property tax is legislated by every city, town, or village. The current rate is 1.4 per cent in most cases, but in major cities a city planning tax with a rate of 0.2 per cent is added to the ordinary property tax. In both of these taxes all property is required by legislation to be assessed ad valorem, or at the market price. However, for farmland a *preferential assessment* is adopted. Even within the ward area, for example, there are about seven hundred hectares of farmland with an average assessed value of only one hundred yen per square meter, while the assessed value of residential lot adjoining these farmlands is thirty thousand yen or more per square meter. This means that a salaried man who has just purchased a small lot, say a hundred square meters, should pay more tax, besides repayment of a loan in most cases, than paid by a farmer who owns one hectare (or ten thousand square meters) of potential land for residence.

It is said that there are some reasons why the preferential assessment should be applied to farmland. One of the most important reasons is that the actual income gained from the land in agricultural use is too little for the farmer to pay property tax. But the latent capital gain is very large; the market value of a landholding may amount to several hundred million yen and the latent capital gain may reach 100 million yen if the rise in the price of the land is over 30 per cent a year. Thus, the farmers need not feel the property tax is heavy. Recently a bill has passed the Diet which requires every locality to abolish the preferential assessment for farmland within the urbanization areas that were established by the Town Planning Act in 1970. The farmers are, however, strongly opposing this act, and consequently the act has not come into effect so far.

Some people may suppose that the income tax which will be levied when farmers sell part of their land and realize the capital gain actually can function as well as the property tax. The progressive income tax, certainly, may be useful in redistribution of income. But the income tax may accelerate the rise in the price of land on account of the so-called lock-in-effect: the land owner will hoard the land and expect an adequate rise in the price of the land to pay for the additional income tax. We may say, therefore, that the property tax levy

especially after abolishment of the preferential assessment for farmland in urbanization area, is the most effective and operational measure to regulate the rise of land price.

Even the right of eminent domain is weakened because of the soaring land prices. It is difficult to expect that eminent domain will be able to regulate the rise in land prices because the Eminent Domain Act requires public organizations to acquire land at the market price.

Under the housing situation described in the foregoing section, specific housing policies, which may have individual merits, would have the tendency to boost the price of land, which may make the general solution of housing and land problems all the more difficult. Special attention must be paid to this point, since the boost in the price of land creates the hard situation for the people who live in the metropolitan area described before. For example, extension of housing loans by public agencies to individuals who desire to build houses, and loan extensions by large companies to their employees for housing have the effect of strengthening and increasing the demand for residential land and accelerating the rise in land prices, because the price of land on the fringes of large cities depends upon the financial resources of potential home builders.

We must pay attention to city planning also. When the land was divided into urbanization areas and urbanization regulation areas in accordance with the provision of the Town Planning Act, development in the urbanization regulation areas was strictly restrained for the purpose of environmental protection. The boundary between the two areas became an obstacle to residential development and demand for land was concentrated inside the urbanization area. This resulted in the strengthening of the seller's market for the land, so that nowadays many developers have given up to acquire land inside the urbanization areas on account of the difficulties in persuading the landowners to sell the land. These developers are eagerly pressing municipal governments to permit them to develop residential lots in the urbanization regulation areas after they have acquired the land, even though residential development in these areas could be detrimental to the environment.

V. CONCLUSION

It is clear that land prices have been driven up by the rapid economic growth of Japan. Conversely, economic growth has benefitted from the rising land prices because the land whose price rises at a rate higher than the standard rate of interest is the best security for bank loans for investments in plant and equipment. But nowadays it has become obvious that soaring land prices constitute a large obstacle to the promotion of the people's welfare both because they enlarge income disparities and they prevent people from enjoying the common goods and services which should be provided by the public sector. Government policy should be changed from pursuing pure economic growth to removing the

obstacles to people's welfare, even though this shift may result in restraining the speed of economic growth, more or less, and in depriving a few persons of some kinds of vested interests or anticipated windfalls. There are measures for this. The problem does not seem to exist in methodology, but in the decision to adopt the appropriate policies.