THE IMPACT OF GOVERNMENT INTERVENTION ON HOUSING MARKETS IN KOREA

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Abstract

The Korean housing sector is characterized by pervasive and direct government intervention. Preoccupied with occasional price hikes faced with housing shortages, government has controlled the markets for housing output as well as of two major factors of production, i.e. land and finance. Complex layers of regulations have made housing supply irresponsive to changing demand, and prone to instability. Such interventionist approach has made some contribution to improving the nation's housing conditions especially since the mid-1980s, but probably at unjustifiably large costs. Moreover, the benefits from policy programs have not accrued to those who deserve them. In light of this, a new and more enabling approach appears necessary in the future. But whether government can pull out a major policy reform is questionable given the political constraints.

Key words:

Interventionist approach, enabling approach, efficiency, equity, speculation, price control, land use regulation

I. INTRODUCTION

Korean experience of economic growth is considered one of the most successful stories of development in modern times. Korea has risen from a small agrarian economy to the world twelfth largest over the past four decades and the living standards of the nation have improved enormously. The economy was hit hard by the Asian crisis in 1997 but managed to recover from it much faster than expected. Compared with such remarkable overall economic achievements, the housing sector was an under-performer. Although housing conditions of the nation have improved substantially since mid-1980s, supply of housing failed to meet the aspirations of urban households for better housing as their income grows. Housing prices shoot up occasionally and decent housing remains unaffordable for many urban households.

In this environment, it is not surprising that housing has become a charged and emotional subject in Korea. The media, the general public and the nongovernmental organizations (NGOs) are very much involved in policy debate over housing issues. This places housing policy in the political arena in which policy makers are forced to come up with short-term solutions rather than a fundamental reform. Consequently, government keeps adding new regulations and ad hoc measures each time a new round of housing price hike arrives.

Housing markets and housing policy can be analyzed from various perspectives the choice of an appropriate framework of government housing policy itself is a subject of debate. To an economist, Korean housing markets appear tempered by pervasive government intervention and the performance of the housing sector was neither efficient nor equitable. To those who approach housing policy from a social welfare perspective, government may have relied too much on market

mechanisms and made grossly inadequate efforts in addressing the needs of the low-income segment of the population. However, even a marketeer would agree that some government intervention may lead to desirable outcome for the society, whereas an interventionist would not believe that government can take the place of the market. The real issue is therefore about determining where and how government should intervene to improve the housing outcome, on the basis of a careful analysis of how it affects the environment in which markets function.

This paper offers an economist's view of the impact of government intervention on Korean housing markets. In order to do this, it starts with an overview of the evolution of housing policy and policy instruments employed. This will be followed by an evaluation of policy in terms of achievements of policy goals, the incidence of benefits, and side effects on the housing outcome. Time trends of key housing indicators will be presented and international comparison will be attempted as appropriate. The paper concludes with a discussion of implications and some thoughts on future policy directions.

II. Evolution of Housing Policy in Korea

Absolute shortages and high prices have been perceived as the two major housing problems in Korea. Therefore, government polices aimed at increasing the supply of new houses at affordable prices. Government also promoted the goal of "one dwelling unit per household" and tried to make sure that the benefits from housing programs accrue to the "right" groups of households. This has been done through an elaborate process of selecting qualified first-time homebuyers and through counter-speculation measures.

Stabilizing housing prices has been an overarching concern of the Korean government. In a market economy, housing prices fluctuate in real terms due to demand and supply factors emanating from both within and outside the housing sector. During the period of rapid economic growth and accompanying urbanization in Korea, housing prices had risen faster than other prices with sporadic price hikes. Macroeconomic variables played an important role in some cases although the inability of supply to keep pace with demand was the main problem. Government responded to such cases mainly with short-term measures to cramp down speculation deemed responsible for them. Although government also worked on the supply-side, it often ended up restraining the operation of the private sector through complicated systems of regulations impacting both the output market and key input markets. A combination of tight control on land use conversion[1], the price of new apartments and the mechanism for their allocation to potential buyers has made supply extremely irresponsive to market conditions[2]. By late 1980s, it had become quite obvious to some Korean experts that cumulative government intervention over the long period of time has distorted the Korean housing sector.

Korean housing markets and housing policies have drawn the attention of some international experts as well. To outside observers, Korea appeared to be a fascinating case of how bad policies can lead poor housing outcome. For example, Renaud (1993) said "Due to the cumulative long-term effects of piecemeal public regulations, …, Korean housing market distortions have become a serious burden on the economy and they hold the dubious distinction of being among the most severe market economies in the world." (p.291) He also argued "…housing policies have

[1] Hannah et al (1993) and Son and Kim (1998) discuss how rigid urban land use control has constrained the supply of housing.
[2] The housing policy paper of the World Bank (1993) presents Korea as an example of inelastic housing supply system.

been incremental, relative to short-term issues, physically-oriented and lacking a coherent economic framework during the most critical phase of Korea's urbanization." (p.293). Then, based on international comparative studies, he points out that high house price to income ratios in Korea have an institutional and regulatory origin rather than being caused by a physical or permanent shortage of land (p.306). Renaud concluded, "Improvements are needed in at least four areas: urban planning reforms and a streamlining of the process of producing residential land decentralized at the local level; financial sector liberalization which is neutral to housing; efficient and equitable taxation of land, housing and other forms of real estate; and genuine programs of direct assistance to low-income households, not middle-class programs" (p.326) He then added, "Given the necessary scope of such an alternative policy program, its political feasibility may be an important obstacle (p. 325)". Hence, the title "Can Korean Policies Break with the Past?"

Another paper by Green et al (1994) written at about the same point in time agreed that Korea has performed relatively poorly in the provision of high quality at reasonable prices (p.330) and shared Renaud's pessimist prospects about the future. They said, "..Little has been done to change the fundamentals, particularly the regulatory environment and the housing finance system; rather a political decision has been taken to increase production in response to rising prices"(p. 351).

The drive to build two million new dwelling over the 1988-1992 period could arguably labeled as the first serious attempt to increase the supply of new housing on a large scale. The drive included the development of five new towns in the suburbs of Seoul to accommodate nearly 300,000 households. The unprecedented increases in the supply of developable land and housing finance initiated by government policy intervention resulted in a quantum leap in the average annual production of houses

from 200,000 to 250,000 units to 500,000-600,000 in each year until 1997. In fact, the cumulated supply of new housing over the 1988-97 period amounted to 55 % of the total stock at the end of 1997.

Although it was an impressive outcome, the ambitious government campaign was also a vindication that housing supply was a political parameter under government control, rather than a response of housing producers and the factor markets to changes in demand conditions. As such, the drive in no way represented a fundamental departure from the approached of the past. This formed the basis for the pessimistic view about future housing policy. Renaud (1993, p.326) said, "Unfortunately, these results are achieved by overriding the institutional problems of the sector, and not by addressing them directly through a program of institutional, regulatory, financial and fiscal reforms. In more technical terms, the government policy shifted the steep supply curve to the right, instead of making supply more responsive to price changes through deregulation." Green et al (1994, p. 351) pointed out that "…what Korea does in response to rising prices is shift a fundamentally inelastic supply curve from time to time, encouraging a boom and bust cycle."

Housing prices fell in absolute terms as a result of the massive increases in new supply throughout the mid 1990s, and housing issues almost disappeared from a public policy arena for a while. It is fair to say that some policy reform took place relating to the housing sector in the wave of an across-the-board deregulation of the economy. As the problem of housing shortages was under control to a large extent, government began to lift the price control on new apartments in phases starting in 1995. The housing finance sector was also deregulated so that new players entered the market for housing loans in 1996 while the Korea Housing Bank, the government-owned predominant supplier of housing loans, was privatized in 1997. Land-use

conversion regulation on agricultural land near the outer edge of built up urban areas was partially relaxed in 1994. Nevertheless, the reform was implemented in a sluggish and piecemeal way[3].

Then the Asian crisis broke out in late 1997, and housing price collapsed in 1998. Government now wanted to boost the housing sector in an attempt to stimulate economic recovery[4]. Many regulations that had been taken for granted for many years were suddenly removed or amended. Partial relaxation of green belts and the abolition of the price control on new apartments were examples. In addition, a generous set of tax breaks and financial assistance was introduced. As the economy started bouncing back since 1999, housing price trends were also turned around.

Another run-up of housing prices started in late 2001, this time caused by record-low interest rate, rapid expansion of consumer credit and the cumulated effect of the drop in housing production in 1998 and 1999. As usual, government went back to its arsenal of traditional weapons to suppress speculators. At the time of writing of this paper, the whole government is engaged in its fight to restore housing price stability. Already four major policy packages have been announced during the first nine months of 2002. The array of measures is almost as comprehensive as possible, and its implementation will engage the Ministry of Finance and Economy, National Tax Administration, the Ministry of Government and Home Affairs, Financial Supervisory Board, as well as the Ministry of Construction and Transportation, the main ministry in charge of housing policy.

[3] Kim and Kim (2000) try to explain the reasons for that.

III. Housing Policy Instruments Employed

Simply put, the Korean government has been controlling the whole process governing housing supply, i.e. what types and sizes of houses to build, where and for whom. Each year, the Ministry of Construction and Transport (MOCT) drafts a detailed plan for housing supply, and implements it using various instruments at their disposal. The major instruments have been the price control on new apartments and regulations on their size distribution, rules for selecting purchases of new dwelling, control on the conversion of agricultural and forest land into residential use, and the provision of housing loans at subsidized interest rates. In this policy environment, a typical private sector developer purchased plots of serviced land from a public developer and built apartments for the customers selected according to government rules. Compared with that of the Ministry, the role of local government has been marginal, limited to issuing building permits and extending trunk infrastructure where appropriate.

Supply of Developable Land

Once the national housing supply plan has determined the total number of new houses to be produced by both the public sector and the private sector by size categories and locations, the Ministry of Construction and Transport estimates the amount of land needed for residential, commercial, industrial development as well as infrastructure projects and ensures that the exact amount of land that is required be rezoned and developed. The Ministry also controls land use conversion such that large-scale land development projects are virtually monopolized by the public sector

[4] Kim (2000) discusses the impact of the economic crisis on the real estate sector and government responses.

comprising the Korea Land Corporation (KLC), the Korea National Housing Corporation (KNHC) and local governments (Hannah, Kim and Mills 1993). They purchase plots of raw land from landlords at appraised prices, exercising the power of eminent domain when necessary. The plots are serviced and rezoned as residential and commercial sites before they are sold to homebuilders. Prices of serviced plots are set by the Ministry based on the cost of land purchase and infrastructure according to government regulations.

The Price Control and Size Regulation

The price control on new apartments had been enforced from 1977 until 2000. The regulated price was determined as a mark-up to the cost of production and was much lower than the market price. Since the size of the windfall gain from the price control gets bigger with the size of the dwelling, the purchasers of new apartments prefer larger units as long as they are eligible to buy the units and have the ability to mobilize funds. The developers also had an incentive to maximize the share of large units in a project because the controlled price on the large units (exceeding 85 square meters of net floor space) was set higher than that on the small units while the cost of production of an apartment decreases with its size and also because larger units sold better. For these reasons, too many large units could to be produced in the free market. Therefore, government regulated the size distribution of apartments to ensure that smaller units were to be supplied in large quantities so that a large segment of population could benefit from the price control. Land development projects were required to set aside at least 60 % of developed residential sites for houses smaller than 85 square meters in net floor space, and 20 % to those smaller than 60 square meters. This ad-on regulation to the price control on new apartments was lifted in

January 1998. However, it was reintroduced in a weaker form effective in November 2001 to require that a minimum of 20 % of new apartments built in the Seoul metropolitan region be of a size less than 60 square meters in net floor space.

Allocation of New Apartments

Since the price control created a long queue of households wishing to purchase new apartments at subsidized prices, qualifying buyers were selected based on a set of criteria set by the government. In order to qualify for bidding to purchase a new dwelling, a household had to fulfill requirements by subscribing to a contractual savings scheme for a certain amount of time. The eligibility for purchasing apartments was granted in three different size categories i.e., 85 square meters and smaller, between 85 and 102 square meters, between 102 and 135 square meters, 135 meters and above, and the required deposit increased with dwelling size. Eligible homebuyers were selected on the basis of the bid within the specified limit and then by a random draw. However, all dwellings with a net floor space under 60 square meters and 50 % of those with a net floor space ranging from 60 to 85 square meters were reserved for households who did not own any other dwelling.

Counter-speculation Measures

Although there is no official definition of speculation, it has been perceived as a major cause of housing price hikes. Therefore, counter-speculation campaigns form a backbone of government intervention in housing markets in Korea. The complex and elaborate criteria for allocating new houses produced by both the public and the private sector developers or granting the public sector developers a monopoly status in land development could be understood in this context. Other direct measures

employed to fight speculation include special audits by the National Tax Administration on individuals and real-estate brokers engaged in frequent trading. Transfer of the title ownership of pre-sold apartments is prohibited and real estate taxes are designed so as to discourage holding and transactions rather than a revenue source for local government.

Public Sector Housing Finance

Development of market-based housing finance system has never materialized until very recently. On the other hand, the National Housing Fund, a public sector specialized lending vehicle established in 1981, has played a dominant role in providing subsidized loans to qualifying homebuyers and developers. The Fund has been operated by the Korea Housing Bank according to the rules and procedures set by the Ministry of Construction and Transport[5].

Rental Housing

Korea has a big rental market. Just over one half of all houses are occupied by their owners and the rest are rented mostly based on chonsei contracts. Under this contract, the tenant pays the landlord an up-front deposit that exceeds 50% of the value of the property. The deposit is fully returned to the tenant at the end of the lease, which is typically two years[6]. The Tenancy Protection Law has a provision that rent should not increase more than 5 % per annum, but it is not binding. Government does set the rent and deposit level on rental apartments built by the public sector or those built by the private sector with financing from the National Housing Fund. The "standard rent" is set based on the cost of operating the rental housing and is much

[5] See Kim (1997) and Lee (2002) for a discussion of housing finance.
[6] See Kim (1990) for a detailed description.

lower than the market rent. But the overall impact of rent control is limited because it covers a very small fraction of the total rental housing stock

IV. EVALUATION OF GOVERNMENT INTERVENTION

Achievements of Housing Policy Goals

The ultimate goal of government intervention in housing markets should be improving the quantity and quality of housing as well as its affordability. Korea's overall housing conditions improved substantially since the mid 1980s as can be seen from the key indicators summarized in table 1. Total housing stock doubled over the past two decades. Housing supply ratio, defined as the ratio between the number of dwelling units and the number of households, jumped from 71.7 % to 94.1 % between 1985 and 2000. The figure has already surpassed 100% in several provinces and is expected to reach 100 % very soon for the country as a whole[7]. In addition, per capita floor space increased from 46.4 square meters to 62.9 square meters during the same period. Other indicators of crowding as well as quality of dwelling and facilities improved remarkably.

Housing has also become more affordable during 1990s, excepting in Seoul. Although the data are sketchy, the house price to income ratio (PIR) is declining for the whole country. However, PIR for Seoul was 7.9 in 2000 and it might be even higher due to the recent price increases. There are no data on homeownership rate, and the figure in the table represents the share of houses inhabited by their owners.

[7] The housing supply ratio is not an ideal measure of housing shortages because it is based on inadequate definitions of housing and household. But it has been used as the single most important indicator in Korea.

Since new houses were supplied in large numbers and most of them allocated to first-time homebuyers, home ownership rate must have increased substantial. However, the reported figure showed no sign of inching up during the past five years[8].

Government intervention should be responsible for reducing the overall housing shortages and stabilizing the prices of housing to a large extent. Although macroeconomic conditions were favorable to house price stability in the 1990s, massive increases in the supply of new housing were the dominant factor. But the very high PIR in Seoul shows that housing in preferred locations still remains scarce.

The Incidence of Benefits of Housing Policy

Government housing policy focused on promoting home ownership by middle-income groups although greater attention has been directed at addressing housing problems of the lower income households in recent years. The heavy subsidies generated through the price control on new housing accrued predominantly to the middle class. Those who were lucky enough to be selected to purchase new apartments received a windfall capital gain that was equivalent to a few years' of average salary. There are several reasons to believe that the system favors the relatively well-to-do. First, the size of the capital gain rises with the size of the dwelling. Secondly, one needs to mobilize a larger amount of funds in order to profit from purchasing an apartment at the controlled price. Thirdly, the pre-sale scheme favors those who are capable of mobilizing funds for advance payments (Kim 1993).

In addition, policy emphasis on promoting home-ownership and punishing speculation has made the life of renters very difficult. New houses get built only when

[8] It is likely that many more people now own homes but a substantial fraction of them live in rented property because their own houses do not meet their preferences for size, location and school district.

there is demand for them. Since not every household can afford to become a homeowner, some new houses must be sold to those who already own a house, and then rented out to those who cannot afford to buy their own houses. But those who own more than one house are often labeled as speculators rather than suppliers of rental housing. Such social environment tends to discourage the rental housing business, and to limit the housing options for the low- income renters. A disproportionately large number of small single-family houses were demolished to give way to higher-density redevelopment aggravated shortages of affordable housing for the poor. Although government provides financial support to the production of rental housing, public rental housing stock is only 6.9 % of the total housing stock (MOCT 2001, p.39). Moreover, 42 % of the subsidized public rental housing was allocated to those who did not meet the selection criteria (MOCT 2001, p.385)

A similar point can be made regarding the incidence of benefits from interest subsidies. The two most important sources of housing loans in Korea have been the Korea Housing Bank (currently Kookmin Bank) and the National Housing Fund. Although the latter is supposed to serve a clientele with lower average income, the distinction has not been that obvious in practice. One reason is that families with income level below say 40 % from the bottom have little chance to be homeowners.

Side-effects of Government Intervention: Price Control and Regulation on Size Distribution

An analysis of the impact of government regulation should ideally be based on costs and benefits of specific regulations. I present the case of the price control on new apartments and the regulation on size distribution described in the previous section. Although a typical price control normally leads to a decrease in supply, this

was not true in the case of the price control on new apartments. The reason was that government was able to control the supply of housing by controlling the amount of land rezoned for development. A major efficiency consequence of the price control and the regulation of size distribution has been the distortion of the size distribution of new apartments supplied.

Data on the size distribution of all apartments supplied during the 1993-96 period reported in Kim and Kim (2002) shows that 41 % of new supplies were clustered between 59 and 61 square meters in net floor space, 33 % between 83 and 85 square meters, and 5 % between 133 and 135 square meters. One could recall that the line was drawn at 60 square meters, 85 square meters and 135 square meters to divide up the would-be home purchasers into three size categories. On the other hand, two other categories accounted for 2 % each and eight other size categories had 1 % each, while no units were found in other categories in more than 1 % of the total supply. Most interestingly, no units within the range of 62 to 82 square meters or 85 to 133 square meters are supplied. In short, the price control and the supplementary regulations led to skewed and concentrated size distribution of new apartments. In the absence of such regulations, the size distribution of new apartments would more or less resemble that of household income, and hence be very different from the observed pattern of distribution.

The regulation also created an artificial scarcity of large apartments and consequently the price per square meter of floor space rises more than proportionately with size. Empirical evidence clearly points to a positive relationship between the price of unit floor space of an apartment and its size. A hedonic price study by Chung and Lee (2002) using a sample of about 4,700 apartments located in Seoul confirms this. The study reports that the unit price of a small apartment (up to 60 square meters

in floor space) was 3 % lower than the medium-sized apartment (60 to 85 square meters in floor space) while the unit price of a large apartment (85 square meters and up) is 8.5 % higher than that of the medium-sized apartment. Kim and Kim (2002) further suggest that the regulation must have resulted in a net welfare loss and that some households among the intended target group might have made worse off.

There are other distortions created by the current system of housing supply. Houses are built where developable land is supplied, and this does not coincide with where the demand is. As a result, houses remain unsold in some markets and shortages persist in other areas.

V. LESSONS AND POLICY IMPLICATIONS

Korea's housing sector is a showcase of pervasive direct government intervention throughout the entire process from land development to the production and allocation of new housing. Such pervasive intervention might have contributed to tackling the problem of overall housing shortages, and stabilizing housing prices since late 1980s. But the very fact that the housing prices fell following the massive production of new houses demonstrates that high housing prices have been attributable to government restrictions on the supply of developable land. The first lesson therefore is that government should allow more land to be converted for urban development where there is demand.

But a more important question is whether an alternative, enabling approach would have worked better. My indirect answer is that the interventionist approach of government to ameliorate housing shortages was neither efficient nor equitable. Its achievements were not worth the costs in the form of wasteful utilization of resources to produce housing in quantities and qualities unwarranted by preferences and

willingness to pay by potential customers. International comparative studies using housing indicators data endorse the conclusion on the efficiency side. Angel (2000) found that cities with more enabling policy environment produce better housing outcome in prices and affordability as well as living space. And Seoul was one the cities with the least enabling environment among the high-income countries.

A natural question arising from the conclusions above is why inefficient and inequitable policies have been maintained for so long. The answer is their political palatability. The general public wanted deep subsidies for housing and government cater to such demand with an elaborate system of regulations that had no direct cost to them. Such coincidence of wants has sustained housing policy and also contributed to expanding the society's middle class. Consequently, it was very difficult for government to repeal regulations even after they were judged unjustifiable. The piecemeal and lukewarm approach to deregulation in the recent years can be understood in this context (Kim and Kim 2000). An important lesson then is that government must be very careful in introducing a policy program that generates large benefits to a wide cross-section of the society. One such regulation may necessitate a host of other regulations to allocate the benefits to confound the system, which becomes difficult to change later.

A related point is that deregulation should be carefully designed and implemented considering its short-term dynamics and the role of expectations in determining the impact of deregulation. A major reason for the delay in lifting the price control on new apartment has been the pervasive belief that deregulation will raise the overall prices of housing at least in the short-run[9]. Deregulation in one area should be coordinated with that on other related sectors so as to avoid side effects. For example,

[9] See Kim and Kim (1999) for details.

expanding housing finance in a city with inelastic supply may lead to housing price increases without much gain in housing production.

The next point concerns the interaction between housing shortages and speculation. Contrary to the majority view in Korea, speculation may be a consequence, and not a cause, of housing price hike. Speculation cannot be sustained unless housing prices are expected to rise in the future and such expectations make much more sense when government regulation limits the supply of developable land and urban housing. Speculation interacts with housing shortages and destabilizes the housing markets[10]. The fundamental cure of speculation then is to secure a system in which supply can adequately respond to demand in terms of both quantity and quality.

My conclusion is that Korea needs a different approach to address the housing challenges of the future. Housing is a local issue, although not entirely, that requires a local approach. Since the nature and severity of housing problems vary across markets and points in time, a uniform and national solution may not work. It is intriguing to see government resort to the same set of measures all the time regardless of the cause of housing price increases[11].

Also in light of the projected changes in the demographics of the population and their diversifying preferences for housing, a greater role should be granted to the private sector. Government needs to facilitate such transition by allowing the private sector developers to participate in the process of land development and by removing the remaining regulatory bottleneck. It should also monitor the performance of the housing sector using relevant indicators and make policy adjustments as necessary.

On the issue of enhancing equity in housing outcome, government is responsible for providing assistance to those who deserve it. Assistance should be

[10] See Malpezzi and Wachter (2002).

targeted at people as opposed to houses, and efforts should be made to minimize the cost of such programs[12]. As long as government assistance takes the form of interest rate subsidies on housing loans, it cannot reach the very poor because they may not afford to buy their own houses[13]. What matters in the end is how to secure decent housing option whether it is an owner-occupied unit or a rental unit.

Looking ahead, government policy choices are likely to be bound by political constraints. For example, engaging the National Tax Administration for housing policy purposes looks strange. It is their job to ensure that all forms of income are taxed properly all the time, not just when housing prices rise. However, such intervention has become a widely accepted practice over the years and the public seems to like even harsher action. Another example concerns the call for raising the local taxes on holding of housing and land. A prominent NGO recently claimed that too light a tax burden on property holding was the fundamental cause of speculation and hence housing price increases. But one should look at the user cost of housing of which property taxes are only one component. Implications on the incidence of the proposal and its impact on the rental market should also be considered. Besides, property taxes are local taxes tied to the provision of local public services. Nevertheless, this proposal seems to sell quite well. The same group opposes to new town development projects in the Seoul metropolitan area saying that it will exacerbate the problem of over-concentration of people in the region [14] and will be detrimental to the environment. Unfortunately, it appears to be the most viable option for increasing the supply of houses people demand most, and thereby alleviating the problem of

[11] The current price run-up is mainly attributable to low interest rates and the imbalance between demand and supply by location, size, quality, and neighborhood rather than overall shortages.
[12] Government plans to identify those households whose housing conditions fall short of a minimum standard recommended by KRIHS (1999) and reduce their number with various means.
[13] Not knowing what the current ownership rate is, it is difficult to decide how further government can promote home ownership.

mismatch between supply and demand. Again, many people sympathize with the anti-growth sentiments[15].

So, what do I foresee? Can Korean policies finally break with the past by tackling the multiple layers of regulations? For one thing, Korea is a highly dynamic society capable of changing the course of policies once a consensus is somehow reached. But it also has a short memory. The momentum for serious deregulation built in the aftermath of the economic crisis dissipated once the crisis was over. In order to implement a long-term reform in real estate policy, it will be necessary, at a minimum, to break many myths about land and housing. After all, the desire to live in a larger and better house as income increases is as natural as wanting to wear better clothes and drive more comfortable cars. The average Korean consumes less housing space than his income would justify. Wouldn't it make sense then to rezone more land for residential development?

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[14] See Mills and Kim (1998) and Kim (2001) for a discussion of this issue.
[15] It should also be a harmonious solution between planning and markets (Son et al 2001)

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Table: Selected Indicators of Housing Conditions

	1980	1985	1990	1995	2000
Housing supply ratio (%)	71.2	71.7	72.4	86	94.1
Housing stock ('000)	5,463	6,271	7,357	9,205	10,959
Owner occupancy (%)	58.6	53.6	50.8	53.3	54.2
Per capita floor space (m^2)	10.1	11.3	13.8	17.2	20.2
Floor space per household (m^2)	45.8	46.4	51	57.3	62.9
Average number of persons per dwelling	4.7	4.2	3.8	3.3	3.1
Rooms per household	2.2	2.2	2.5	3.1	3.4
Share of households living in a single room (%)	NA	32.5	28.3	12.3	7.9
Share of houses with hot bath (%)	4.3	20	34.1	74.8	87.3
Share of houses with modern kitchen (%)	9.7	34.6	52.4	84.1	93.9
House price-to-income ratio, Korea (Seoul)	NA	NA	NA(9.2)	5.7(NA)	5.0(7.9)

Source: Kim and Suh (2002) and Kookmin Bank