

TOWARDS A NEW HOUSING APPROACH:
Analysis of Settlement Environment and Housing Policy in
Shanghai, China

By

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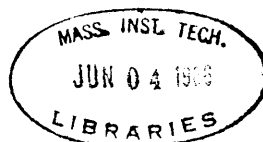
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ABSTRACT

In the recent decade, China has been facing serious housing shortages and inequalities in the urban sector. Shanghai, the largest and the most congested city in the country, represents housing problems of China in its extreme. Based upon the situation of this city, the thesis demonstrates the practice of China's urban housing policy: its achievements in eliminating urban slums at the early stage and its failure of providing adequate housing later on. The analysis of the housing problems is focused on the notion that housing should be a universally provided welfare commodity. A variety of negative effects resulted from this notion are broken down to illustrate: i) low priority and of investment and low production; ii) inequalities in distribution; iii) heavily subsidized rents; iv) difficulties in cost recovery; v) "stereotyped" new residential construction.

In the light of the analysis, the thesis discusses the current experiment in housing policy reform. Although the direction of the reform toward commercialization seems appropriate, the actual remedial policy provides only a temporary relief of the housing shortage but complicates inequalities in the urban sector. The argument of the thesis is that practical reforms should challenge the investment pattern and the distribution structure which have together led the problems. A combination of market and non-market methods to channel state housing services and subsidies to different income is suggested as a more effective way. In addition, the reform of policy will inevitably have its impacts on architectural design.

The aim of the thesis is to provide an overview of housing development in China. It shows that China shares with many industrializing countries a shortage of housing and housing inequality in the urban sector. Its housing problem, however, is brought about by a peculiar set of policy directives and institutional arrangements that differs entirely from many countries. The study provides a reference for future policy formulation in China.

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RMB: Chinese currency; 1 RMB equivalent to 0.33 U.S.\$.

I. INTRODUCTION

There is probably no major city in the world without some form of a "housing problem". In Los Angeles, Tokyo, New York, Moscow, Hong Kong, Paris, Stockholm, and Brazilia, housing is a serious public issue. Architects, planners, social reformers, and ordinary city dwellers have raised protests against housing conditions. Governments in every historical epoch have adopted a bewildering variety of measures to cope with widespread dissatisfaction about housing. The problem is persistent and universal. But what is the problem? What kind of impacts it has? What is the cause of the problem? Is it the same in different cities or different nations?

Shanghai is the largest city in China. With a population of 6.134 million in an urban area of 222.9 square kilometers, it is also one of the most crowded cities in the world. Table 1 presents gross residential densities for selected cities annotated by the concept of the area used. The average gross residential density of Shanghai is the highest of those shown in Table 1. It is about a third greater than that of Hong Kong and twice that of the center of Mexico City. Although the area definitions are not strictly comparable, Table 1 does indicate that Shanghai is a very densely populated and highly developed city.

Table 1: GROSS RESIDENTIAL DENSITY: SELECTED CITIES

City	Year	Area Concept	Area (Ha.)	Person/Ha.
Shanghai	1980	Urbanized Area	15,000	400
Hong Kong	1980	Developed Area	16,500	303
Mexico city	1970	4 Central Delegaciones	13,800	211
Buenos Aires	1970	Capital Federal	20,000	149
Bogota	1978	Urbanized Area	30,400	125
Calcutta	1971	Metro Area	56,900	123
Bombay	1971	Metro Area	43,700	136
New York	1970	Five Boroughs	77,700	102

Source: World Bank, East Asia & Pacific Regional Office
SHANGHAI, SECTOR MEMORANDUM, 1982, p. 48

By examining the housing condition in Shanghai, it is clear that most of existing dwelling units are substantial masonry structures which suffer from a lack of maintenance. Overcrowding, however, is a more significant problem than low quality in these structures. According to an estimate, at the end of 1982, there were 769,622, about 48% of all families in the city without adequate housing. They were mainly those newly-wed couples without allocated accommodations; families with housing areas less than 4 square meters per person; and families with three generations or two couples in the same rooms. Moreover, it is expected that there would be 280,000 additional families in the following eight years./1 It is no doubt that Shanghai is a unique city representing China housing problem in its extreme. However, the problem is not

'unique' or 'unusual'. Nationwidely, more than 7.6 million, about one-third of all urban families are living in inadequate accommodations and 1.83 million of them reside permanently in warehouses, workshops, classrooms, offices and cellars. The number of families with three generations sharing the same room comes to 1.89 milliom, and newly-wed couples without accommodations number several hundred thousand./2 Therefore, the focus of this study is not just on a particular city, rather on the national housing policies through the analysis of housing conditions in Shanghai.

Housing policy experts in many countries have been convinced that the housing problem is caused by shortages and by the number of dwellings classified by various indicators as sub-standard. This implies that the housing problem could be solved by building more housing, using a larger proportion of the national expenditure. The idea is particularly appealing in socialist countries where the state largely commands the housing market, produces a large number of new housing from its budget, and owns a large proportion of the national housing stock. Under those conditions it is easy for experts in housing policy to assume that the solution of the housing problem depends entirely on material resources and building capacity.

A Chinese planner in 1982 estimated that, for China to gradually solve the urban housing shortage problem, about 34.5 million units would have to be built each year for the next

ten years./3 This means that the urban housing sector would need an enormous investment to overcome its shortage problem. One obvious way to increase the supply of housing is to increase the state's investment in the urban housing sector. Since 1979, the urban housing sector actually has received an increasingly larger share of the total capital construction budget. According to the Chinese Statistic Yearbook 1981, the proportion of total capital construction funds allocated to urban housing has shown a significant increase (see Table 2). But even with these increases in investment funding, only 16.0 million housing units were built in 1980, satisfying just about 46% of the estimated demand for that year. However, as indicated in the latest proposal of the Seventh Five-Year Plan (1986-1990), a future increase of capital investment would not be possible in the next few years because the present scale of construction has already been over-extended beyond the national economic ability./4

Table 2: PROPORTION OF BASIC CONSTRUCTION INVESTMENT FUNDS ALLOCATED TO URBAN HOUSING

Period	Share of urban housing in total construction funds
1976	6.10%
1977	6.90%
1978	7.80%
1979	14.80%

Source: China's Statistic Yearbook, 1981, Hong Kong, Economic Reporting Society, 1982, p.309

The shortage of residential accommodation in cities indeed has already been acknowledged in China to be one of the most explosive social issues facing the nation, but the solution might not be as simple and explicit as assumed. It seems that more than just an increase in housing investment is needed to alleviate the urban housing shortage.

1.1 Housing in Shanghai

In the urban area of Shanghai, existing dwelling units are classified into seven categories (see Table 3). Most of the recently built tall apartment buildings (8 to 24 stories) have elevators and good amenities including water, electricity, sewerage, and piped gas for cooking. Detached houses are typically older homes built to a high standard before the liberation in 1949. Serviced terrace houses, some constructed after 1949, are newer row houses with water, flush toilets, electricity, and, in most instances, gas. Many residents must share kitchen facilities in these units. Old terrace houses are row house with interior tenements subdivided into small units. Electricity is commonly available and many have running water. There is a night soil collection system. Since these units rarely have gas, their residents cook in shared kitchen facilities using coke briquets. "Worker's village housing" is the name given to the ubiquitous five or six story walk-up buildings constructed in clusters throughout the urban area. These units, built after liberation, have amenities including flush toilets and gas. Many of the newer units have balconies. Temporary housing are those old, low quality, and marginal units which the authorities are actively trying to replace.

Table 3: STATISTICS BY TYPE OF HOUSING UNIT---SHANGHAI URBAN AREA (12 DISTRICTS)

1. Apartment Buildin



Quantity:
9.12 million square meters;
Represent 2.0% of total housing

Quality:
Steel & Concrete;
Elevators;
Indoor plumbing;
Electricity;
Piped gas

Percentage of Overcrowding
Families:
0.84%

2. Detached House



Quantity:
1.35 million square meters;
Represent 2.9% of total housing

Qaulity:
Cement & Brick;
Indoor Plumbing;
Electricity;
Piped gas

Percentage of Overcrowding
families:
1.82%

3. Serviced Terrace Hous



Quantity:
4.34 million square meters;
Represent 9.4% of total housing

Qaulity:
Cement & Brick;
Indoor Plumbing;
Electricity;
Piped gas

Percentage of Overcrowding
Families:
6.87%

4. Old Terrace House



Quantity:
18.53 million square meters;
Represent 40.2% of total housing

Quality:
Wood & Brick;
Piped water;
Electricity;
Night soil collection system

Percentage of Overcrowding
Families:
58.21%

5. Temporary House



Quantity:
4.19 million square meters;
Represent 9.1% of total housing

Quality:
Wood, bamboo, brick or mud
Indoor or outdoor piped water;
Electricity;
Night soil collection system

Percentage of Overcrowding
Families:
5.68%

6. Workers Village



Quantity:
15.92 million square meters;
Represent 34.6% of total housing

Quality:
Prefabricated;
Six stories walk-up
Indoor plumbing;
Electricity;
Piped gas

Percentage of Overcrowding
Families:
25.46%

7. Non-residential Space
Used for Housing

(Those originally were
workshops, class rooms,
offices, cellars, etc.)

Quantity:
0.83 million square meters;
Represent 1.8% of total housing

Percentage of Overcrowding
Families:
1.12%

Source: "Research Report on How to Alleviate Housing Shortage in Shanghai Within Eight Years, (1983-1990).", By Research Group on "How to Alleviate Housing Shortage in Shanghai Within Eight Years" Shanghai, China, 1983

As shown in Table 3, the old terrace houses are the most prevalent type of unit. Typically they consist of lane houses or terraced houses built in the twenties and thirties. Temporary housing are constructed in various forms with wood and mud walls. Slums which are commonly found in other Asian cities, appear to be absent in Shanghai. However, the physical and infrastructure conditions of the terraced housing are quite bad compared to the new housing. This kind of housing accounts for 40.2% of the total living area and 52% (about 3 million) of the city's population. In 11 out of the 12 urban districts, about 30%-40% of the population live in terrace housing.⁵ In some parts of the older city, densities are as high as 2,000 person/ha. compared with a city-wide density of 395 person/ha and a net average city-wide residential density of 1,190 person/ha.⁶ When combining the old terrace houses (40.2%) with the temporary housing (9.1%) and non-residential category (1.8%), it is found that over half of the housing in Shanghai does not have access to flush toilets or gas for cooking. In some neighborhoods, about a third of the units have no kitchen and in many others they share facilities. As 50% of the city has night soil collection, toilet facilities are usually non-existent in most of these areas.

Besides the high densities and the lack of basic services (kitchen and toilets) in the old terrace housing, the condition in apartment buildings, detached houses and new

terrace houses are also undesirable. Many units originally designed for one family are now sub-divided to accommodate two or three families. Although they are better in quality and have all basic amenities, the inconveniences of sharing one set of kitchen and bathroom by several families are obvious.

Generally, it is not easy to distinguish people who live in different kinds of houses by their income or occupation. There is no apparent relation between physical housing characteristics and a household's economic status. One direct factor can contribute to this situation is that the rent charged for public housing is quite low, averaging less than 2% of income./7 In Shanghai, most families rarely have difficulties in paying the rent not only because of the low rental charge, but also because of a low unemployment rate.

1.2. Ideology of Housing Supply

Most literature dealing with housing problems in developing countries gives the image of uncontrolled slum and awe-inspiring fantasy houses; over-reliance on high standard housing construction while the bulk of low income families are without adequate housing. In Shanghai the situation is quite different. Overcrowding can be seen in all kinds of houses. It would be a grave mistake to apply the formulations of other western or developing societies in any mechanical way to these unusual circumstances. Housing policies in socialist

countries have basically different foundations from those of capitalist countries. Before analysing the Chinese housing policies, it is necessary to discuss the underlying ideologies of housing and related institutions in China.

Marx and Engels were obscure about urban policies of any future socialist society. Engels could only suggest that a revolutionary government could house the homeless by seizing housing from the rich. However, beyond that neither he nor Marx mentioned the housing situation that might develop in socialist societies. Therefore, the context of urban housing in China is greatly influenced by early Soviet attitudes towards the management of residential housing. In the early of post-revolution years, the state took over the ownership and distribution of most of the income-earning building, including apartment buildings. It established a monopoly of the supply and the construction of urban housing.

Were the ideals of the Chinese leadership to be realized, life in Chinese cities would differ from that in other societies not only because of the greater stability of residence and more encompassing and tightly organized social units but also the greater equality and security of living conditions, without sharp class divisions and inherited privileges. To achieve this equality and security, Chinese leaders set out in the 1950s to introduce rational economic planning to provide full employment and housing.

There are two guiding principles of housing policy in China. Firstly, housing should be a universally provided and not a market commodity. Secondly, its production and distribution should not be a means of unearned income. Therefore, housing doubtlessly should be distributed by bureaucratic allocation rather than by market forces.

1.3. Institutions of Housing Supply

With such a welfare notion, corresponding institutions have been established. In Shanghai, there are two channels through which the central government distributes housing services. For large enterprises and institutions especially for those owned by the state, it is the employer's responsibility to provide housing for its employees. The other channel is the Municipal Housing Bureau which mainly provides housing to the employees in local enterprises and services, mostly the collective enterprises. Fig.1 shows the structure of housing supply in Shanghai and the process in both channels.

Under a centrally planning economy, the central government prepares the annual budget and allocates state resources including housing to municipal governments. The resource for housing is then distributed to two channels. Besides the funds provided by the municipal government,

productive enterprises and institutions with high priority usually could get extra grants directly from the central government. After funds are allocated, both Municipal Housing Bureau and Enterprises have to apply for land from the Municipal Planning Bureau and then contract with design firms and construction firms. All projects must be approved by the Planning Bureau before construction.

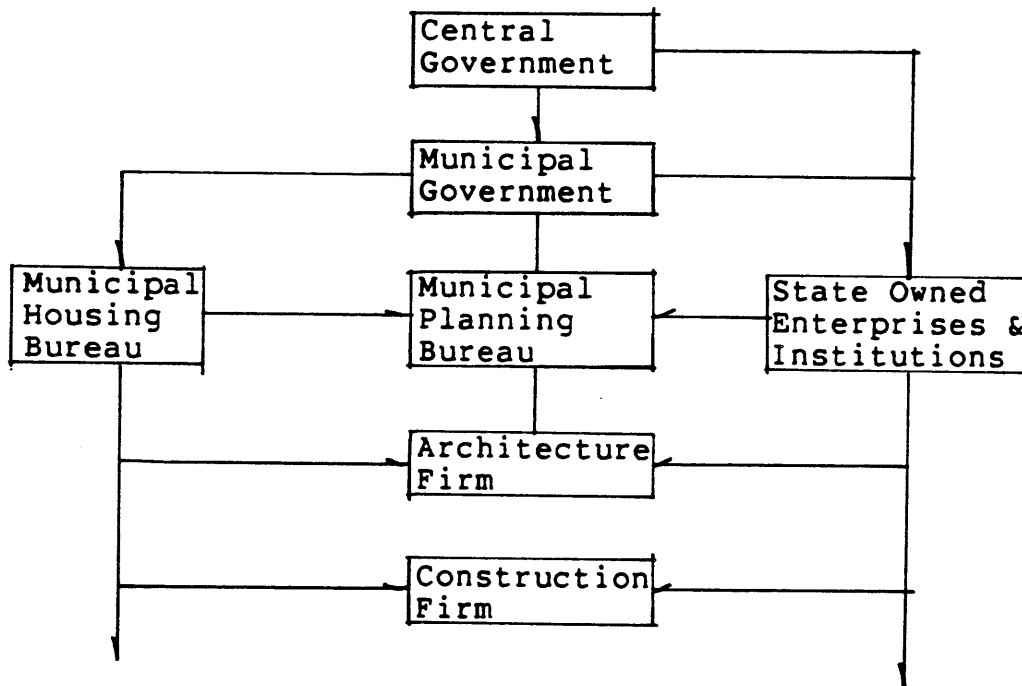


Fig. 1

The Municipal Housing Bureau, however, has two additional responsibilities. It is in charge of collecting rent from most public housing and the maintenance of the stock. Enterprises

often construct housing but than turn it over to the Municipal Housing Bureau for management. Hence, enterprises have dual role as builders and owners. Table 4 shows the existing ownership in Shanghai.

Table 4 OWNERSHIP OF HOUSING: SHANGHAI URBAN AREA

Agency	Area (square meters)	Percent
Municipal Housing Bureau	32,744,880	71.2%
Enterprises	344,925	7.5%
Private	9,795,870	21.3%

Source: Municipal Housing Bureau, Shanghai, 1984

Notes: 95.7% of private ownership housing are owner occupiers.

Here one may notice that there is still a proportion of private ownership. By the 1982, close to 20% of the housing in Shanghai remained in private hands. As long as the annual property tax was paid, these private houses could theoretically be both bought and sold or rented to others. By the mid-1970s, virtually all private homes changed hands simply through inheritance from parents to children rather than through the open market. Under the political atmosphere of that time, extra space which was rented out tended to be restricted to close friends and kin. People were afraid to be accused of being landlords, or they were also feared that new tenants might claim the space and refuse to leave afterwards. In any event, through both direct supervision by the district housing offices and general fear of being

criticized, rents remained so low that there was little economic incentive to open one's house to others. Thus, a private sector housing market which exists in many other countries is, therefore, absent in Shanghai.

II. A REVIEW OF HOUSING CONDITIONS

Before starting the detailed discuss, let's first take a look at some typical cases illustrating the housing conditions in Shanghai.

"Before the Liberation I lived in a slum area. Since my father couldn't find a regular job, we had no money to rent a decent house. Our house was built with bamboo covered by a sheet of reed mat. It was only about one and a half metres high thus, my parents couldn't stand inside. The neighboring houses around were similar to ours. There was no piped water, no electricity, and gas. There was even no night soil collection. Within this area, there was a badly polluted river. All the year round, there was an unbearably stinky. But we had to live with it. During the summer, flies and mosquitoes bred in the river. Three of five children in my family died because such bad living conditions.

Immediately after liberation in 1949, my father was assigned a regular job the in port and a house. The new houses was piped water, electricity, and gas five years later. The original slum area was cleared and the river was filled up. Now it has become a boulevard."/8

"We have been lived in this room since we married thirty years ago. At that time, a 25 square metres room was big enough for two of us. But in thirty years, we have got three daughters, the room becomes too small for five people. My husband made this double story bed by himself. However, there is still one girl who has to sleep on the floor. My husband works in a motor factory and I worked in a local dental hospital. Now I am retired. There is no house available both in my husband's factory and my previous hospital. We are also not eligible to get a house from the Municipal Housing Bureau because we do not belong to "hard living" units. We have more than 4 square meters per person. Some families have less than that and didn't get a house yet."/9

"Because these houses were design to be single family dwellings, the toilets, kitchens, and baths are

all inadequate for sharing.... In the kitchen, the space for placing burners is very crowded. There are disputes first over who gets what space for one's burner and then over storage. People spilt over into the other's space. Then others hook their stove to your natural gas stove. The cadre upstairs does this. She has the largest household in the building but she has the smallest utility bill since she hooks to our outlet when we are not at home. She also uses our cooking oil. Some places (not ours) have fights over these sorts of things.

Toilets are also a source of contention. We haven't had this problem, but others in the lane have a severe problem when all three floors use the same toilet and bathe on the second floor. In the evening, everyone wants to bathe at same time. One family member will stretch out his time in the bath until another family member comes up and knocks and the member inside just lets in this late comer. There are similar problems in the morning when some people take their time, holding up others and making them late for work. They use your soap. If there is severe conflict, it may go to the residents' committee, but there isn't a great deal they can do since they can't move people."/10

"Both my husband and I are high school teachers. We were assigned this room ten years ago. We waited almost five years to get it after we were engaged. Our son is eight years old now. My mother-in-law has moved in with us recently because her house was given to my brother-in-law because he is getting married. So we have four people of three generations in the same room. We share kitchen and bath room with three other families. After supper, my son has to do his homework and my husband and I have to prepare lessons. There is only one desk in the room which is usually occupied by my son. Both my husband and I have to work on the dining table. My mother-in-law usually wants to go to bed early after one day's housework. Sometimes she wants to see T.V. if there is the Peking opera which she favors. My son will also ask for T.V. if he has finished his homework early. All these activities have to go on in the same room. It is inconvenient. Very often my husband and I have to work after they sleep."/11

"We have been in love for three years. We were engaged last year. My fiancée is twenty-six years old and I'm thirty. We are on the the waiting list in Municipal Housing Bureau, but we don't know when we can get it. Only those couples who's combined age is over sixty will have priority. So, we will have to wait two to three more years."/12

2.1. Positive Experience

In the 1950's, soon after the revolution, the state moved quickly to clear the largest slums in large cities, as well as in Shanghai. The term 'slum' is actually ambiguous. The definition of 'slum' changes from time to time and country by country. Here 'slum' refers to the lowest quality units: one-story makeshifts made of mud, scrap lumber, bamboo or reed mat, without any facilities.



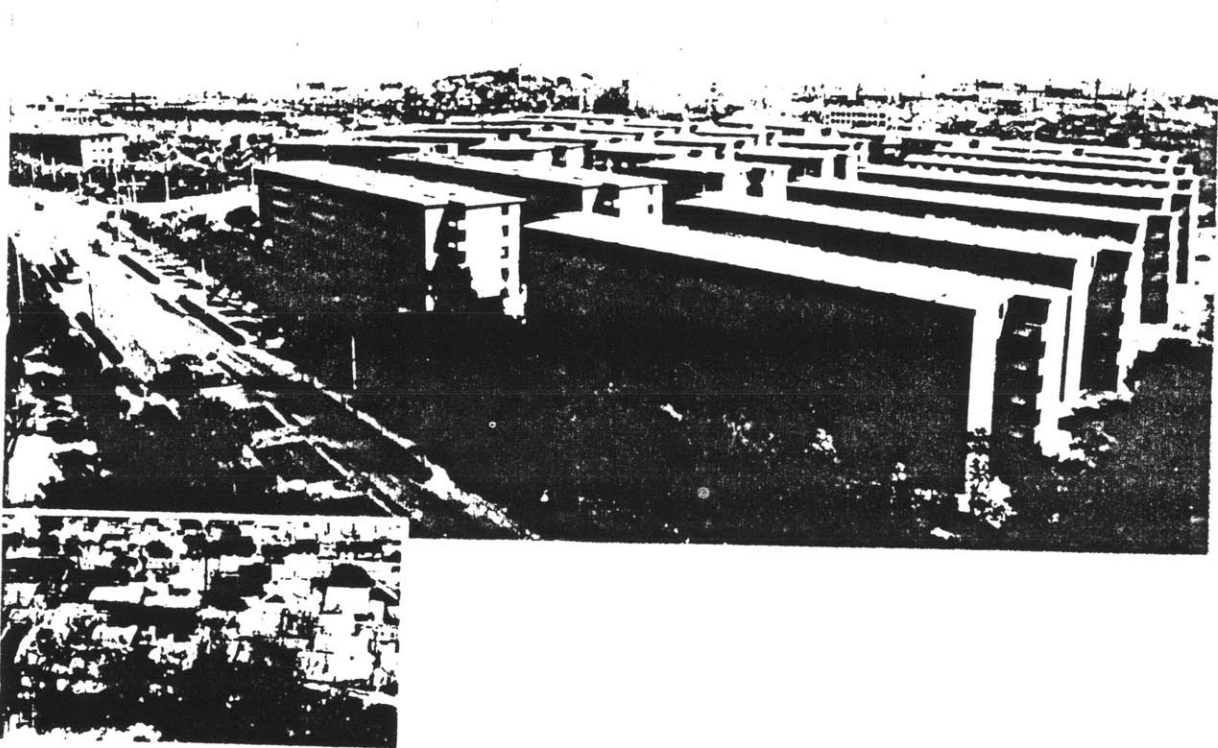
Slums in Shanghai Before 1949

Before the Liberation, one-fifth of the population in Shanghai were crowded together into slums, and many others were packed in cubicles and attics with virtually no running water and sewage./¹³ An early post-Liberation housing program removed the lowest quality slum units like those the huts and

shanties found in squatter areas in many large cities in other countries. Yet, even in the early 1950s, new housing failed to keep pace with the influx of new migrants into cities. And by the mid-1950s, national leaders began to have doubts about adequate housing supply which remained at a very slow pace through the end of 1970s. Nevertheless, Shanghai's urban housing still does not compare all that unfavorably with housing in many other developing cities where large squatter tracts mar the urban landscape. In a mid-1970s sample, the number of rooms per dwelling in Shanghai was only slightly below the average of that in other industrializing cities./14 In Chinese cities there were fewer dwellings with just one room./15 With birth control taking effect and fewer persons per household, the number of persons per room and the percentage of dwellings with three to more people crowded into a single room were no worse than in other developing countries. Moreover, some of the housing amenities in Shanghai were considerably better than those in other developing cities. As mentioned previously, residents in Shanghai were much more likely to have access to piped water and electricity. Though they didn't always had a kitchen for their exclusive uses, they could share it with other families in the same building. If indoor plumbing facilities were not so available, the Shanghai urban dweller could usually find a public facility readily---if somewhat busily---available.

Therefore, it would be unfair to imply that there have been no achievements in urban housing in China. Neither would

it do justice to China by suggesting that other developing countries at a similar stage of development have been much more successful in solving their urban housing problems. There are no slums in Chinese cities, this is more than one can say for most developing countries.



Fan Gua-lung, one of the largest slums was replaced by "Workers' New Village."

2.2. Negative Impacts of the Existing Policy

However, all this does little to mitigate the current severity of the current housing shortage. Needless to say, it

was the negative feature of pre-1949 urban life that helped to shape today's system. The Chinese Communist leaders had developed strong animosities toward the conspicuous consumption and privileged life styles of the pre-1949 urban elite and foreign residents, and toward the hoarding, inflation, and other disturbances of urban markets that wreaked havoc on living conditions. Slum, begging, starvation, and other symbols of the breakdown of the pre-1949 supply system were vivid reminders to people of what the new system had eliminated in early 1950s. By the 1970s, the housing shortage resulted from a series of factors had produced a supply situation that could not meet popular demands anymore. Especialy, when the younger generation reached the marriageable age, the problem become serious. Complaints on poor housing condition are becoming increasingly worst.

The Chinese architectural standard is that: the average living area should be no less than 4 square meters per person and children will sleep in the same room with their parents through age sixteen. After that teenagers of opposite sex should have separate rooms, though a grandparent may share a room with teenagers of either sex. By this standard, almost fifty percent of urban families in Shanghai were overcrowded at the end of 1982. The following table is an investigation in one of twelve districts in Shanghai at the same year.

Table 5: INVESTIGATION OF LIVING CONDITION IN
THE SOUTH DISTRICT (NANG SI QIU)

	Overcrowding Units	Unconvenient Units	Temporary Housing Units
Household	76232	67721	16088
Percentage of Total Households	45.4%	40.4%	9.6%

Source: Chen, Yiwei, Strategies for Renovation in Old
Districts in Shanghai, City Planning Review,
No.3, Vol. 31, 1984

Notes: Overcrowding Units: Square Meters/person less
than 4.
Unconvenient Units: Three generations in the
same room; two couples in the same room;
parents with child over 16 in the same room.

Housing is not a commodity that can be described as either a necessary or luxury good. There is no clearly and scientifically measured standard of the size of an area needed for the social health and well being for an individual. However, housing conditions can definitely affect ones individual and social life. The nature and location of people's housing can, at least to some degree, influence their social relationships, their performance at work, and even their children's performance in school. We properly can argue in a way that the housing becomes a problem only if it is creating social disadvantages. When most people come to believe that they suffer from that cause, the problem reaches the crisis proportion.

Conflicts over housing between neighbours, relatives and

family members become common because of overcrowding. Escalation of conflicts into violence and even murder also occurs. In 1981, three members in an architect's family committed suicide because of the conflict with their niece over housing. Environment is more than physical environment. It is a combination of physical, social, and personal factors. If people are able to escape an unpleasant environment, many conflicts might be averted, at least without escalation. In this respect, housing should not be a factor to trap people. However, the movement of households among dwelling units is virtually absent in Shanghai. Table 6 indicates typically low annual moving rates in Shanghai whereas it is much higher (15-20%) in many other countries. Other than moving into a first unit, exchanging units is the prevailing pattern of mobility. According to a survey, the main reasons for families to exchange are to avoid unpleasant neighbors or relatives. No doubt, the main reason for such a low mobility in Shanghai is that there is no adequate housing available.

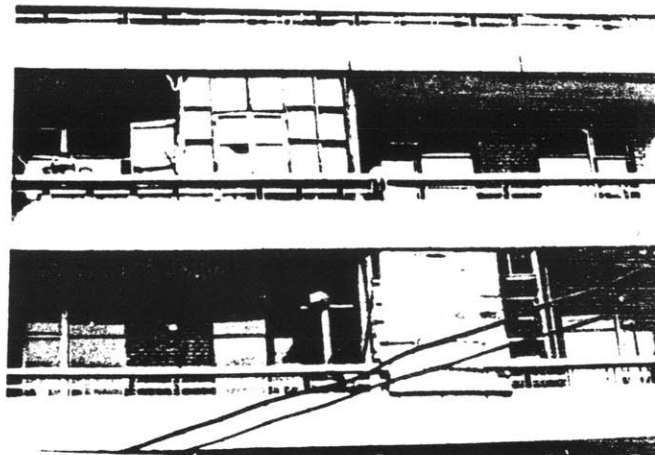
Table 6: HOUSEHOLD MOBILITY IN SHANGHAI URBAN AREA

Type of Move	Households	Percent of Total popn.
All Moving Households	53,000	3.5%
Move into First Unit		
(New Households)	30,000	2.0%
Displaced	10,000	0.7%
Exchange Units	13,000	0.9%

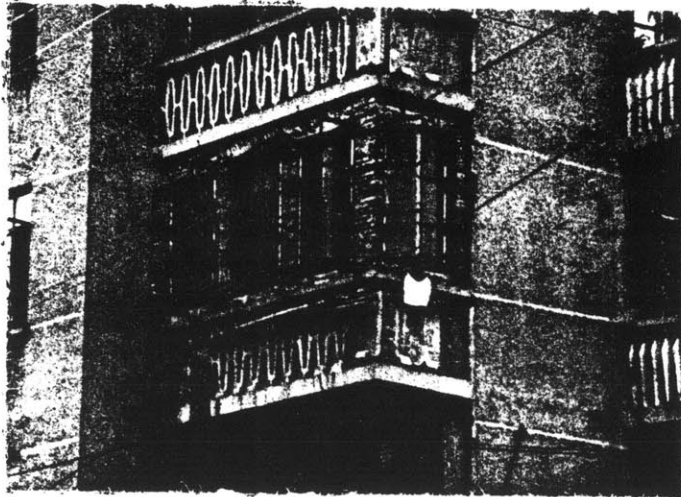
Source: World Bank, East Asia & Pacific Regional Office, SHANGHAI, SECTOR MEMORANDUM, 1982

The inconvenient and unpleasant environment finally creates social pathology. For example, the criteria for picking a spouse in Shanghai is heavily affected by housing conditions. This is particularly true of those couples who meet through a match-mate. The youth whose family has space to accommodate the new couple has greater advantages than others when looking for a mate. In the post-1949 period, the authorities tried to discourage people from thinking in materialistic terms and encourage consideration of personal character traits. But it has been clear that the housing shortage has, to a considerable extent, worked against these proclaimed goals.

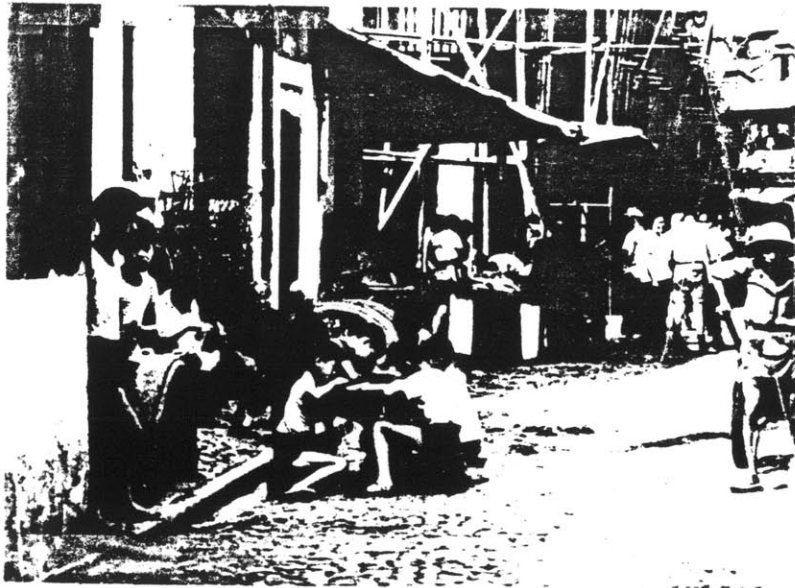
It would be a mistake, of course, to view housing as the only cause for social abnormality. Its influence, in most cases, is mitigated by other compensating elements. It is evident that the present conditions of housing scarcity in Shanghai are already having serious negative effects on its people.



Balcony Used for Extra Room



Belcony Used for Extra Room



School Kids Doing Their Homework in Street

2.3. Factors Affecting the Housing Shortage

If housing shortage causes the housing problem, the next question will be what causes the housing shortage. In essence, the crisis today can be attributed to a single underlying source: the notion that urban housing should be a welfare commodity provided universally by the public sector. It is this concept that leads to a series of negative effects on housing development. Detailed analysis of these effects is as follows:

i) Low Priority in Housing Investment and Low Production

In the new order, socialist industrialization was seen as the most important task of economic planning. Housing expenditure was classified as unprofitable---as a consumption of national income, rather than as productive investment. Since the investment in productive construction brings the government a rate of return whereas investment in heavily subsidized residential housing is basically money "thrown down the drain", the funds for housing are therefore disbursed scantily. There are no census data of housing investment in Shanghai, but a sequential national investment in the past years can be used to illustrate the situation.

Generally, proportion of annual capital investment in housing is typically 20-30%. Even in a country like India, it

ranges from 15-20%. In China, however, annual investment in housing as a percentage of total capital construction exceeded the 10% mark for the first time in 1979. During the First Five-Year Plan (1952-1957), investment in residential housing as a percentage of total capital construction was 9.1% even when accommodation was very tight. During the Second Five-Year Plan (1957-1962) the figure dropped to 4.1%. In the Third Five-Year Plan (1965-1970) it again dropped marginally, to 4.0%. In the Fourth Five-Year Plan (1970-1975), it increased somewhat to 5.7%. In the Fifth Five-Year Plan (1975-1980) it increased to 11.9%, because of the serious housing shortage accumulated through the past years. From 1980 to 1982, the percentage reached 21.3%.¹⁶ However, due to the burden of past debts in housing construction, the highest level of spending since 1980 can barely manage to meet new demand for housing units, let alone for making up for past shortfalls.

For more than thirty years, the residential accommodation has consistently received a low share of investment whereas the growth of urban population was very rapid. Although great emphasis has been placed on controlling the growth of urban population and net rural-urban migration has been held to a minimum, the sheer size of China's population means that even a relatively low rate of urbanization and low rates of natural increase nevertheless implies a gigantic urban population size and a substantial absolute increase. The 1979 population of

the 129 cities survey was 76.82 million, an increase of 83% over 1949. Total housing floor space in these cities, however, registered a net increase of only 46.7% in the same period, for a 1978 total of 277.18 million square meters./17

The control of population growth is particularly rigid in Shanghai. However, two other demographic factors have also contributed to the increasing population pressure on housing. Firstly, since the official conclusion of the Culture Revolution in 1977, large numbers of people forced to move from the city to the countryside have been allowed to return. Second, the baby boom cohort of the early to mid-1950s has reached marriageable age. Table 7 shows the increasing of marriage registration from 1979 to 1982. With the formation of new families, demand for new housing has increased dramatically.

Table 7: MARRIAGE REGISTRATION FROM 1979 TO 1982

Year	Number of Couple
1979	67000
1980	101000
1981	147000
1982	132000

Source: "Research Report on How to Alleviate Housing Shortage in Shanghai Within Eight Years, (1983-1990)", By Research Group on "How to Alleviate Housing Shortage in Shanghai Within Eight Years", Shanghai, China, 1983, p.168

ii) Inequality In Housing Distribution

Housing distribution in China ideally should be equitable. It seems to be an irreconcilable contradiction to suggest that socialist measures could generate inequalities. One of the early achievements of the new Chinese Government has been the greater equality in housing distribution among various types of urban dwellers. That equalization process took place rather automatically as the landlords and rich people lost their previous income sources. Private ownership of house was gradually, but not totally, eliminated. The abolition of the private ownership of housing, however, has greatly facilitated the state's ability to redistribute urban housing in a more equitable manner. However, as the economy developed over the years, a new pattern of housing inequalities gradually emerged.

By examining the new housing distribution in Shanghai, inequalities do exist. The most direct reason for that is the investment pattern. It has been noted that state resources for housing construction are allocated through two channels, the Municipal Housing Bureau and Enterprises. According to an investigation in 1981, enterprises built nearly two-thirds of the housing in Shanghai, while the Municipal Housing Bureau built the rest. Furthermore, even in the enterprises channel, the profitable enterprises are apparently in a much favorable position. Because of this allocation system, a three-tier

structure in terms of accessibility to new housing is formed.

Housing for the employees in large and new productive enterprises owned by the state, as well as those in high priority institutions would not be a problem. Besides the physical plant, housing and certain commercial and recreation facilities, which often form a "worker's new village", are also constructed. Baoshan Steel Complex is a case in point. It is located in the suburban of Shanghai. Upon completion, it is expected to produce close to one-sixth of China's total national output of steel products. By the end of 1984, the housing unit built could accommodate more than three-quarter of the employees needed for its ultimate full production capacity.

As far as for the old state-owned enterprises are concerned, housing has become a serious problem. There are a number of factors that have caused the shortage of housing: 1) Some workers are young and single when they begin to work for the factory. They originally live in bachelors' dorms and sharing a unit with several others. When they want to get married, no spare housing is available. 2) Some young married couples are assigned a room when they enter the factory. After a dozen years, they are still living in the same room even when their children have grown up. Since there is no new housing around, the children have to live with their parents until they are assigned a job and get a room. If the family has grown e.g., the parents have more children, or the

children's grandparents need to move in, or children have to live with their parents after getting married, then the situation becomes even worse. 3) With the expansion of factories, new workers are hired, but no additional grants for housing are given. The newcomers are then forced to join one of the above housing groups in inadequate housing.

The circumstances of local institutions and collective enterprises are the worst. Since there are no direct state funds available, housing for the people in this category is the responsibility of the Municipal Housing Bureau. A large percentage of population falls into this category, like high school and elementary school teachers, local hospital doctors, commercial enterprises employees, local services workers, etc. However, as mentioned earlier, the new units built by the Municipal Housing Bureau represent only a small proportion. Although a portion of the residential units constructed by state enterprises will be turned over to the Municipal Housing Bureau, the chances for people under this category to get housing are still far less than the others. Therefore, these people have to join the long queue for housing managed by the Municipal Housing Bureau.

The allocation process which allows some to occupy more than an equal share further aggravates the housing shortage problem. The low rent is another factor that greatly worsens the inequality even for people within the same tier.

iii) Heavily Subsidized Rents

Since 1949, the rental system in China has been based on these principles. Since housing should not be a market commodity, rents need not necessarily be strictly related to housing quality. Rent should be a very modest item of household expenditure. Within the limits of economic growth, families should have rights to healthy, modern, self-contained housing, and they should receive it as distribution in kind, independent of their rent-paying abilities.

In the early 1950s, average rents for urban housing in Shanghai accounted for about 8% of a household's income. After thirty years, household income increased but the rents did not change accordingly. As a result, rents averaged less than 2 percent of a household's income and it actually become a symbolic one. Housing expenditures vary as a percent of income in other countries, from 12 to 25 percent, sometimes even up to 30 to 35 percent of household income for renters. Housing obviously constitutes a significant in-kind subsidy for households in Shanghai.

There are serious social consequences result from this rental system. One of the most significant is the inequality in housing consumption in the urban area. Some people can occupy more space than others. This stimulates the competition for available housing by the means of power and

connections.

iv) Difficulty in Cost Recovery

Another significant economic problem caused by low rents is the difficulty in cost recovery. The relation between rental income and operating and maintenance expenses for housing in Shanghai is shown in Table 8. A typical rule of thumb in market economies is that monthly rent should be one percent of the value of a unit. The ratio in Shanghai is far below than that. For instance, the rent for six-story walk-up dwelling units is 0.253 RMB per square metre while the construction cost for this kind of building is 221.18 RMB per square metre.¹⁸ The ratio in this case is only 0.1 percent. Actual revenues do cover all administration and most routine maintenance costs, but they do can not cover major maintenance costs and depreciation. As the Municipal Housing Bureau is responsible for rent collection and the maintenance of most standing stocks, a large part of funds in this channel is used for maintenance and not for new construction. Consequently, the government has to subsidize its operation annually.

Table 8: RENT INCOME AND MAINTENANCE EXPENSE OF THE MUNICIPAL HOUSING BUREAU, SHANGHAI (RMB/M²)

	Rental income	Operation cost	Maintenane cost	Depreciation cost
Month	0.205			
Year	2.46	1.53	6.03	6.97

Source: Municipal Housing Bureau, Shanghai, 1984

As a result, urban housing is a heavy burden on the state budget. It can be seen clearly in Table 9 that the more housing built, the more houses owned by Municipal Housing Bureau and the heavier the burden on state finance.

Table 9: STATISTICS OF TOTAL SUBSIDY FOR MAINTENANCE TO CITY HOUSING BUREAUS FROM STATE

Year	Housing owned by city housing bureau (million M ²)	Subsidy (million RMB)
1978	172.69	185.15
1979	184.29	321.32
1980	191.55	331.42
1981	203.44	331.55

Source: Gu Zhe-ming, "Relationships between rents and finance", Housing Economy (in Chinese), No.3, 1983

Judging from all these factors, a vicious cycle can be observed. Government sets a low priority in housing investment. As a result, the resources are not sufficient to meet the demands generated from the growing of population. Insufficient resources are also allocated in an uneven way. Three levels of ability to access housing appear in the distribution. Low rent stimulates inequality and puts a burden on public finance because it cannot cover major maintenance costs. Finally, government finds it difficult to increase housing investment.

2.4. Consequences of the Existing Housing Policy

China has an urban population of 206.59 million. Housing such a large population is not an easy task in any welfare state, especially in a developing country like China. Poverty makes housing problem particularly difficult to deal with, but lack of realistic policies makes the situation even worse.

As discussed before, China was heavily influenced by early Soviet approach towards the management of residential housing. After the October Revolution, the Soviet Union treated residential housing as a welfare undertaking, with housing assigned to citizens at token rents. This was proclaimed as one of the manifestations of the superiority of the socialist system. In the 1960s, the Soviet Union and other East Bloc countries turned away from this policy and encouraged individuals to construct their own housing or buy it from the state at a price. Similarly, China is considering changing its ideology of housing supply.

The reformist planners argue that China's socialist economy is still characterized by "socialist commodity economic relations." As such, products are still commodities and the socialist principle of "distribution according to each person's deeds" has to be realized through the system of "commercial commodity relations." The residential buildings,

like all other consumer goods, are still commercial commodities in China's socialist economy and should be considered as such. Hence, if one wants to effectively tackle the housing shortage problem, the urban housing sector must be commercialized.

China's leaders and policy-makers have accepted this argument and are rethinking the basic premises governing the existing urban system. In the proposal of the Seventh Five-Year Plan (1986-1990) issued in October 1985, urban housing was particularly mentioned for the first time: "We should commercialize housing in the cities and towns and speed up the growth of the residential construction industry, making it a pillar of the national economy.... We should formulate a set of well considered methods as soon as possible to gradually commercialize housing." Here, "to commercialize housing" means that housing will no longer be a welfare commodity. "Speeding up the growth of residential construction industry", does not necessarily mean that the government will increase the investment in housing since it has been clearly pointed out that amount of capital investment would not be increased in the coming few years because of limited national economic ability. Thus, the aim for the government in reforming its housing policies becomes obvious. It wants to improve housing supply but do not want to increase the burden on public finance.

III. CURRENT REFORM EXPERIMENT

"I bought this apartment recently. I used up all my saving. I also asked my parents for support. I think it is not too bad. I have my own house anyway. Of course, I would not buy the house if I can get an a assignment of rental house."/19

The discussion on how to commercialize the urban housing sector can be traced to the early 1980s. The basic points of the argument were as follows. If urban housing is allowed to be sold to individuals, a much larger part of the state investment can be retrieved. When the returns from the sale are reinvested in the housing sector, the initial investment is multiplied, and in effect adding to the total amount of housing investment. Some suggestions were actually experimented on a limited scale in a number of cities. In 1982, a pilot test of a Beijing-approved commercialization plan was carried out in four cities: Changzhou, Zhengzhou, Siping, and Sashi. Although the program was not in Shanghai, the analysis would still be important since it was to guide the national reform direction.

From the mid-1982 to the end of 1983, a total number of 1,746 residential units were sold to individuals in these four cities./20 What is interesting to note is that the residential units reserved for individual purchase are sold at prices lower than their investment cost. The prevalent mode

of sale is that an individual pays one-third of the total construction cost of a residential unit, with the government and the buyer's work unit contributing an equal share of the outstanding balance. For example, if the construction cost for a residential unit with 50 square meters floor space is 10,800 RMB, a worker buying this flat would have to pay a sum of 3,600 RMB, with the government and his/her employer enterprises each subsidizing 3,600 RMB. Only one-third of the initial investment can be recovered through this subsidized sale program. Therefore, in the four cities where the pilot test was conducted, out of an initial investment of 13.3 million RMB, 3.89 million RMB were recouped for reinvesting in more new housing. In October 1984, this scheme was officially extended. In 1985, 5% of Shanghai's new housing construction were set aside for subsidized sale to individuals in the near future./21

The most obvious advantage of such an arrangement is the increased rate of housing construction as one-third of the initial investment is recovered and reinvested in new housing. Advocates of the commercialization scheme also point out that the state will save money in the future because it will no longer be responsible for the maintenance and repair of privatized housing.

However, this subsidized sale of new housing, as a way to generate additional resources to provide for more housing does

not look promising. Critiques of the commercialization scheme are quick to argue that since the subsidized sale program still requires a huge government contribution, the heavy financial burden allocated on the state would mean that such a strategy cannot be feasibly maintained over a long period of time. Secondly, many enterprises are extremely reluctant to contribute their share to subsidize their employees to buy new housing. The reasons are both political and economic. On one hand, to allocate limited resources to subsidize the purchase of new housing for a few workers can create political conflicts among competing factions on the shop floor and this is something that most officials try to avoid. On the other hand, many enterprises are financially constrained to subsidize their employees for new housing. Thus, it is very doubtful as to how extensive the operation of the subsidized sale of new housing can be expanded in the future.

The most unpromising consequences of this program are increasing and complicating inequalities in the urban sector. As we mentioned previously, the access to new housing for employees in large and profitable enterprises is much greater than those who worked in local enterprises. The people in this category will not like to pay a huge amount of money to buy housing since the down payment will equal to 60 years of rent payment for the same house./22 The sale program actually provides an opportunity for people belong to the third category. Moreover, the existing vertical inequality is soon accompanied by specific horizontal inequalities. Even among

people within the same social category, still there are the elderly who have homes, and the young who do not have them yet. There are original urban residents with homes and the newer immigrants without them. There are fortunate families with official connections and unfortunate families without. The house buyers are, therefore, only those already-disadvantaged households.

Let us look at Table 10: The majority of the households buying new housing has a per capita income below the national average. For instance, in 1984, 93.9% of the new home buyer in Siping had a monthly per capita income of less than 45 RMB, when the average per capita monthly income in this city was 47.74 RMB. Hence, while it is true that some new houses are bought by the few rich, many buyers are low and medium income workers who have to pay an excessively huge amount of money to obtain housing. This fact should not come as a surprise because it corresponds well with China's urban housing system.

If the situation is examined together with the wage system, the problems become more explicit. The employees in local enterprises especially in collective sectors are usually paid less than those in state owned enterprises. Low income workers also tend to be the young, their remunerations are thus fallen to the bottom end of the wage scale and their low seniority making them ineligible for housing provision. Thus, this subsidy sale scheme is complicating the housing

inequality problem by creating a new disparity between two major groups of urban dwellers: those who obtain housing as a matter of right and privilege and those who have no alternatives but have to pay a huge sum of money out of their own pockets.

Table 10: PURCHASE OF NEW HOUSING BY INCOME GROUP

City	Per capita monthly income of new home buyers	As % of total number of new home buyers	Year
Xining	35-36 RMB	53.7%	1984
Changzhou	less than 40 RMB	11.5%	1983-84
	40-50 RMB	45.0%	
	50-60 RMB	22.0%	
Siping	less than 45 RMB	93.3%	1984

Source: "A Discussion on How to Channel the Workers' Consumption into Housing", in Proceedings of the First Conference on Urban Housing Problem, p.25, p.42, p.82

According to a survey carried out in old terrace housing district, the most crowded housing type in Shanghai, only 20% of those overcrowding families were willing to buy houses while the rest were not.²³ The reason for such a result is quite simple. If there is still a chance to get rental subsidized housing, how one can expect people to spend all their saving on housing. Therefore, the recent remedial policies provide only a temporary relief to the housing shortage without addressing the underlying structural factors that have led to the problem.

IV. TOWARDS A MORE EFFECTIVE HOUSING POLICY

Referring to the argument that the serious housing shortage is a result of the "vicious circle", we believe that the first task of policy reform in housing should be to break that vicious circle. There are two key links or components in that circle:

1. A greater proportion of national income has gone to other investments because of the state's deliberately biased investment policy against the urban housing sector. The current housing shortage could not be improved unless housing receives more resources, other than just a increase in state investment.
2. The almost free public rental housing allocation has become a substantial wage supplement, and their distribution has not only increased real income inequalities between social strata but also caused difficulties in cost-recovery in the public sector. Therefore, physical improvement alone will not rid the country from "inadequate" housing unless the distribution system is also properly changed.

Based upon these two cruxes, we are inclined to agree with the argument of reformist planners that a more market

oriented method might be an alternative. Firstly, housing would attract its fair share of resources allocation, to some degree, if it could be "merchandise" in a market way. Secondly, distribution might be more reasonable if the criteria of a household's affordability is taken into account. It should be emphasized, nevertheless, that market methods could only be applied in restricted ways with limited expectation. As a market economy grows, profit-motivated entrepreneurs will not be interested merely in housing investment except in limited luxury ones. This will aggravate housing shortage by directing capital to the over-production of more expensive housing. Housing policies in market economies already indicate that limited success is expected. Obviously, there is no intrinsic or doctrinaire advantages favoring either market mechanisms or administrative mechanisms. The task of housing planners is to design combinations of market and non-market methods in utilizing state housing services and subsidies. In capitalist economies, it often requires a substantial state intervention. In China's circumstances, it requires some application of market methods. In this respect, although the current remedial policy is of limited success, the direction of the reform---housing commercialization---should still be regarded as positive. This chapter suggests some better principles and practices of how to commercialize housing and formulate a more effective housing policy in Shanghai.

4.1. Suggestions

i) Standards

For more than a century, all developed countries have been taking public actions against starvation and physical misery. Some consider access to basic goods is a fundamental human rights. Nobody should be in danger of starving and freezing. There should be no argument on the need for basic goods. However, there is argument as to which particular goods and what level of provision it should be. People may probably agree that housing in its very nature is "basic". If it is so, housing should be taken out of the market for direct distribution, and the policies analysed in this paper should be ideal---but we believe they are not. Therefore, it seems more practical that a certain minimum quality of housing should be defined as basic and gurranteed as a right while all housing above that standard is treated as market goods for differential consumption by those who can afford it. If that is the policy, what standard should be defined as basic? Should there be standard on house size? In fact, it is not easy to define the necessary minimum standard of housing for a family. The physical requiriements change continuously. Today's superior housing may be tomorrow's basic housing and today's slums may be rehabilitated socially as well as architecturally. According to Szeleyi's book "Urban Inequalities under State Socialism", the real requirement of 'basic' housing should be defined based on two things: "a

housing stock without unacceptable extremes of slum housing or segregation; the efficient filtering of people through the housing stock, according to their real need."

What is the real need? Housing need in fact is unlimited. The real need probably is the need under some constraints. Goods and services consumed by any particular family is heavily affected by the level of household income. Thus, the household's income as a factor has to be taken into consideration in determining real needs.

In China, the standard for new residential construction is raised in these years. This improvement is not only reflected in large floor space, but also in higher quality (see Table 11). Newspapers, journals and official reports all indicate that the living standard has been improved in terms of square meters per person. The goal of the government is to reach 8 square meters living area per person nationwide. The standard, however, has nothing to do with households' income, ability and willingness of households to pay for acceptable accommodations. The per unit cost of housing construction in many countries represents a certain proportion of national per capita income. It varies from 5 to 8 times of per capita income. In 1985, the per unit cost housing construction in China was 12600 RMB which was 19.53 times of per capita income at that year./24 It is obviously far more than 'basic needs'. The improvement of general per capita

space does not mean that housing shortage is also alliviated. In fact, the increase of new construction did not alliviate housing shortage much instead enlarged the gap of inequality. This is why the living condition seems to be improved in terms of space per person, but the number of families in overcrowded condition remain the same.

Table 11: THE STANDARD AND COST OF NEW CONSTRUCTION OVER TIME

Year	Total Floor Area Per Unit (square meters)	Cost per Unit (RMB)
1972	34	2237.20
1973	34-37	2841.42
1977	38	
1978 (Type A)	42-45	4350.00
(Type B)	50	5000.00
1981 (Type A)	42-45	6063.47
(Type B)	45-50	6621.03
(Type C)	60-70	9060.35
(Type D)	80-90	9757.30

Source: "From National Income to Exam Our Housing Standard", Lin Zhi-quin, 1983

It is certainly difficult to measure housing demand since the current rents are much lower than the cost of production. The housing authority should determine the basic housing needs through social research. Without such information, it is impossible to devise efective policies and strategies, to establish priorities, and to set realistic targets for the housing sector within the context of the prevailing national social and economic conditions.

ii) Housing Classes

An important principle is that housing resources should be made available through a variety of programs to all income groups. Some people in Shanghai are economically strong enough to look after their own housing needs so long as the housing market exists. There is no reason for the government to guarantee those people free housing. If the government could exclude this group from public housing or subsidy, it will help to relieve the pressure on housing shortage on the government and leave more resources to those who cannot afford housing in the market. Therefore, it is desirable to classify families according to their incomes.

Although the Chinese authorities once attempted to minimize the difference in wages, the difference between mental and manual labour, state owned enterprises and collective enterprises still exists. Since early 1980s, economic reform raises the income of some people substantially, especially those in individual enterprises. There are two additional factors contributing to the difference in wealth in Shanghai. Firstly, the previously dispossessed savings of the former capitalist class has been returned. Secondly, a considerable number of families receive financial support from their overseas relatives. The following tables (Table 12 and 13) show the results of a survey of the average monthly expenditures of 500 households and the percentage of 420 families belonging to different

groups according to their regular monthly incomes (not include incomes other than salary like bonus, saving interests and support from overseas relatives).

Table 12: AVERAGE MONTHLY EXPENFITURE OF 500 HOUSEHOLDS

Average Total Monthly Income Per Household: 233.50	
Average Icome Per Person (Include Children): 58.27	
Items of Expenditure	Percentage of Total Income
Rent	1.5%
Pipe Water	0.5%
Electricity	0.8%
Clothes	13.2%
Food	51.2%
House Ware	12.5%
Saving	18.5%
Others	17.4%

Source: "Research Report on How to Alleviate Housing Shortage in Shanghai Within Eight Years", By Research Group on "How to Alleviate Housing Shortage in Shanghai Within Eight Years", Shanghai, China, 1983, p.161

Table 13: PERCENTAGE OF 420 HOUSEHOLDS BELONGING TO DIFFERENT INCOME GROUPS

Monthly Income (RMB/person)	Number of Households	Percentage
20-25	1	0.2
25-30	5	1.2
30-35	18	4.3
35-40	38	9.1
40-50	132	31.4
50-60	126	30.0
60-70	66	15.7
70 or more	34	8.1
Total	420	100.0

Source: Same as Table 12.

According to these two tables, while taking the actual situation into account, a rough classification could be made as follows:

Group 1: High-income families: individual enterprises, former capitalist class, families receiving financial support from overseas and high salary earners. This group requires no assistance to purchase or rent housing and it probably represents less than 10% of the total families in Shanghai.

Group 2: Middle-income families: senior intellectuals, high-ranking officials and employees in the enterprises which have a high bonus. This group needs no direct subsidies but requires some assistance in the purchase or rental of housing, such as easier mortgage loans, lower interest rates. This group has some ability to pay and some knowledge of the ways in which housing finance works. Indirect forms of government assistance to this group might include the promotion and development of savings and loan systems and co-operatives through initial capital formation and the provision of incentives to encourage families to participate and save in these systems. Around 20% of families belong to this category;

Group 3: Low-income families: junior officials, intellectuals and other employees. This group requires substantial assistance, although not necessarily in the form of deep subsidies per family. A large proportion of

families, about 70%, belong to this group.

Group 4: Very low-income families: unemployed. This group requires total government subsidies, though the number is extremely small.

Clearly, then, a great proportion of most government's housing efforts should be directed towards providing low-income families with minimal, adequate shelter and services. Housing for moderate and middle income groups, however, should also be encouraged whereas the provision of housing for upper-income group probably could be left to the private sector.

An argument might be raised against this suggestion. Criticism is just given on the inequality of current policy. One may ask whether the classification of people according to their income is a fair way. Inequalities in administrative allocation is probably inevitable as long as the wage policy is unchanged. If wages are set officially to exclude the cost of housing, then housing must obviously be allocated to all people including those with high income. The previous analysis has shown that the attempt at deliberate social distribution of housing has in fact distributed it as a market might have done, with some further effect by upsetting the intended distribution of real income. The state could meet its social intentions better if it would build a more differentiated stock and charge market prices and rents to all those who can afford. Here, we are not proposing any general

increase in inequalities of income or housing standards. On the contrary, we are proposing that the previous pattern of partly or wholly concealed benefits be brought into the open and incorporated plainly into the economic system and the visible distribution of income. If better-off families want better-than-average housing they should pay for it out of their better-than-average incomes. If those austere conditions should provoke second thoughts about the desirable range of wage and income inequality, those arguments should be resolved on their merits, not shelved in favour of covert 'wage supplements' conveyed through the housing system. Inequalities should be reduced to the practical minimum. The task will best be done with full awareness of the real distributive effects of the relevant economic and social policies.

iii) Private Sector

If housing for high-income group is treated as 'machandise', then this group could only get a house through the housing market. Who should provide housing for them? Is it still the government's responsibility? The government, of course, can do it by just putting part of the housing stock on housing market. If it is the case, we are afraid that the housing shortage situation could not be much improved. The only advantage of doing so is that part of the initial investment could be recovered. However, the extension of

housing construction is restricted not only by fund but also by land, construction materials and labour. Efforts on cost recovery are not enough to combat the housing shortage. In fact, a considerable amount of temporary construction labour flow into Shanghai because of the change on rural system since the early 1980s. These rural construction teams are mainly work on small projects and, much more flexible than state owned construction firm. The contribution of them is remarkable. In 1982, 20% of housing construction finished in the city was done by these rural labour./25 Therefore, it is worth to have a private or informal sector to supplement the public sector both in finance and construction. As autonomy granted, some enterprises might be interested in housing investment. If credit arrangements are made and if the building industry is reorganized to allow the participation of more enterprises, then the government could put its effort to where it is most needed.

There are a number of ways in which the private sector can be encouraged to participate in the achievement of national housing goals.

- a) Government may assist in promoting and strengthening of local construction material industries.
- b) Government may level and clear, layout and service sites for private housing projects (especially if this cost is later to be recouped through leasing or taxing)
- c) Government may provide schools, clinics and other community facilities on land to be developed by the

private sector.

d) Government may grant tax deduction allowances on mortgage interest paid, exemptions from property tax during the construction period and other incentives related to taxes.

iv) Tenure Forms

For those who require substantial assistance, there is a question of whether government aid should be in a form of rental or sale. The governments of most developing nations can point to various factors favoring the latter. The desire for home-ownership is a significant normative value to be found at all levels of the population. However, it is a little bit different in the case of Shanghai. Households who rent dwelling units from the Municipal Housing Bureau seem to have substantial property rights on their units. They continue to occupy the same unit after retirement. Upon death the occupancy rights to the dwelling seems to be---for all practical purpose---transferable to their family members. For example, the return of vacanted units to the central pool is essentially unheard of in Shanghai. Rental housing actually becomes ownership housing. Thus, it is difficult to assess the value of homeownership to the resident in Shanghai.

However, since the current supply of public housing falls far short of demand, government should concentrate more of their resources on production and save as much as they can on

the costs of housing management. In this concern, homeownership schemes seem more favourable. As the maintenance costs on housing took 32% of total construction investment, the transfer of maintenance responsibility from the Municipal Housing Bureau to occupants should be seriously considered./26

Certainly, home-ownership projects require considerable managerial skill in collecting and processing payments until mortgages have been paid off and in organizing households in the maintenance of the dwelling units and common areas. There are two factors which would provide the operational feasibility to do so. Firstly, as introduced before, employment in Shanghai is relatively stable. Most employees have regular income. Enterprises are therefore possible to have mortgage insurance for their employees. Such schemes also can decrease the down payment required for individual home buyers by insuring the mortgage lender for a certain percentage of the loan. Thus, homeownership can be made accessible to those who have a regular income but do not accumulate enough money for a large down payment. Secondly, there is still a substantial proportion of privately owned housing as indicated in Table 4. These families have very good experiences in housing co-operative, whereby occupants pay monthly fees to cover such items as collection of refuse, repairs of external parts of building and public equipment and the like.

v) Institutions

The reforma could not be realized without a responsible institution. The argument raised on the existing institution is its two-channel investment pattern discussed earlier. If society wants two jobs to pay similar wages, and two families therefore to earn similar incomes, it should not then proceed to frustrate its own intentions by giving a large housing benefit to one but not the other, thus differentiating their real incomes substantially. In this concern, the state resource should be allocated to the Municipal Housing Bureau so that the state housing services and subsidies could be channeled to eligible households in the whole society.

One of the important strategies is the effective use of existing institution. In fact, there are a lot of advantages to the current institution. With the experience of more than thirty years' central planning, a well organized Municipal Planning Bureau and Municipal Housing Bureau could play a powerful role in land management, rent collection system, etc.

There are also, of course, many aspects needed to be implemented if housing is to be commercialized and private-sector participation is to be encouraged. The most obvious deficiency will be the lack of a financing institute which can response to these activities. In market economies, there are a series of financing housing systems such as the national

housing bank, land banks or special "home saving bank", saving and loan associations, building societies and co-operatives. Some suggestions have been made such as enterprises can take the responsibility of mortgage loans. It is also possible to set up unitary financial institutes since China used to be under a unitary system. Such a system probably has more advantages in terms of avoiding duplication and overlapping functions, and to working with a rational priorities when allocation housing resources. One way or another, it is important that Shanghai should benefit from the experience of other countries while taking its own particular situation into account.

vi) Policy on Existing Stocks and the Feasibilities of Reformation

All the suggestions above are concentrated on commercializing housing and the policies for future housing provision. Now let's turn our focus to the existing stocks.

No one probably would like to buy or rent housing at market prices if he or she has chances to get free housing that could be occupied forever. Thus, when new housing construction or part of it is commercialized, the occupants will only be those who have no access to the existing stock. This actually happened as discussed in Chapter III. In such a case, commercialized housing only has its effect on those of the disadvantaged housing class. Therefore, we believe that

any action in terms of housing commercialization would be dangerous without first commercializing the existing stock. Based upon our analysis, two changes for the standing stock seem necessary. First, the rents have to be raised so that the costs of construction can be recovered in a reasonable period. Second, there should be no ownership for public rental housing. If a renter wants to keep the house, he or she should buy it at the market price.

Because of the incredible gap between current rent and cost, it is difficult to raise the rents to a reasonable level at one time. One technical method suggested here is that rents could be raised once a year over a certain period. The level of raised rents in each time should not exceed 25 percent of the renter's average income. Therefore, when rent is more than 25 percent of the tenant's income and the renter finds it difficult to pay, he can be transferred into a smaller house. If the renter is already in a minimum standard or 'basic housing', the excessive part of rents should be subsidized by the government.

Here, the most tricky problem arrives. What is the feasibility of such a scheme? Technically, it is not impossible to implement. In recent years, purchasing power in China has increased dramatically. The supply of consumption goods, especially those expensive goods like refrigerator, color TV and washing machine falls short of demand. According

to a national statistics, at the end of 1983, the actual purchase is only half of the potential purchasing power in that year./27 Thus, from a macro point of view, rent increasing is desirable since it can relieve, to some degree, the pressure on the supply side in a consumption market.

However, things become complicated if we consider its political consequence. For people who don't have houses or don't have adequate 'basic' house, the first thing they worry about is how to get access to a house rather than how much rent they have to pay. Only for those who already have houses, especially those who have better-than-average houses, rent increase would be a problem. It means that they would lose the benefits which they possessed. However, it is these people who usually have more influence than others because of their power and connections. In this respect, the current housing problem might remain unsolved for many years to come. However, it probably might not be so pessimistic. The reformulation of housing policy is only one part of the national economic reform in China today. Since some positive experiences have been gained in other sectors, it is hoped that it would also happen in housing.

vii) Research

Finally, the promotion of research in the housing and building field is needed. Since China has rejected a market economy in the housing sector for more than thirty years, it

would be advantageous to undertake studies in formulating policies. Testing experiences of other countries can avoid unnecessary duplication of effort and inappropriate application. There are a wide range of models to explore when designing housing policy. For instance, Yugoslavia has also attempted to experiment with 'market' housing for their rich. The result is that the 'rich' still could not afford to pay 'real' rents. Because they were expected to pay more, they naturally expected higher standards. Finally, luxury housing was built for the 'rich' and its rents were higher. Because incomes were still not sufficiently high enough, the state had to subsidize luxury housing even more than standard housing. No one can guarantee that this would not repeat in China. Therefore, it would be helpful if the policy maker could have these experiences in mind from the beginning.

The research could be carried out at universities and which have close ties with municipal housing authorities. Qualified housing planners and architects in China today are of limited supply, while academic training is usually lagging behind its demand. It is necessary to undertake academic training in a more realistic form. This is not only for the research itself, but also for producing more experienced housing managers in the long run.

4.2. Implications of New Approach from Architecture Perspective

"Factory-built housing, the dullest and most rigid, but allegedly the cheapest and quickest type of residential construction is holding away beyond all state and ideological borders, constituting almost the sole visual connection between East and West. Craneways and concrete factories play havoc with Moscow, Peking, Berlin, villages and suburban areas. Regional characteristics, familiar human surroundings, nationally differentiated developments are dumped onto the waste heap."

-----An architect

Since the 1950s, town planners and architects in many countries have been confronted with the task of meeting an ever-increasing housing demand. Besides technological progress, the housing policy deliberately makes giant industries monopolize the urban housing construction. The result gives birth to a sort of international architecture, and "a paper pattern chart of modern building for the cities of the world." By the adoption of large-scale industrial methods, the direct relationship between the architect and the "consumer" is broken. The social aim of architectural design becomes problematic. China was no exception in this regard. It becomes even worse by removing housing from the market and inventing the convenient phantom of the 'standard human being'. Architect is left without any official or direct 'feedback' from his customers. Although housing design competitions are often held at local or national levels, the situation has not improved. Architects necessarily have to

look for rule-of-thumb norms and standards to guide their work.

The most basic human need, of course, is shelter. We are assuming that any housing design, however maladapted to the resident's social needs, will at least provide that. When people's shelter needs have been satisfied, they become concerned about security from outside threats, real or imagined. When the needs of shelter and security are taken care of, people begin to demand that their housing also fulfills the needs for comfort and convenience. There may be little concern for exterior aesthetics, but considerable concern about having a house that is cozy and comfortable. Finally, when all these needs are met, people become concerned about aesthetics of their house and neighborhood... Therefore, in a hierarchy extending from shelter, security, comfort, convenience, through socializing and aesthetics, a lower level of needs must always take precedence over higher ones. Not until the lower level of needs have been satisfactorily met, the higher ones then emerge into consideration.

It is no doubt that the most important issue in Shanghai is to have more housing to its people. The argument for uniform housing, therefore, is not on its aesthetics but on its effectiveness in satisfying housing needs in a particular society.

Chinese society today is still, to a considerable degree, a stratified society. It is segmented both vertically and horizontally. The segments are penetrated through by complex webs of various strata. At the present stage of technical development, organization of labour, and socialist property relationship; the society rewards its members in a number of ways. The different labour group reward and develop differing modes of behaviour, follow differing values and norms, and have unavoidably different needs. People's positions in the system of social stratification very much determine their way of life. The society is sufficiently differentiated and complex to generate a considerable diversified ways of life styles, and a corresponding diversity of needs should be satisfied by housing and urban design. When actual needs and standards are determined by certain group of officials, they defines their own needs and own desired standards, and generalizes them. As a result, housing built will accordingly neglect the need of other groups. It would be ideal if people could live where and how they want to live. As long as they cannot, it would be great if we could have architects who could help them have more options rather than fewer.

However, all previous policy analysis have provided us a socio-economic ground that it is worth experimenting with differentiated classes of new public housing in combating the housing shortage problem. To sum up: all first-class housing should be distributed through the market, with the lowest

level of subsidy. The second-class should be allowed where necessary to carry a little more subsidy than the first. Housing should be distributed by both market and administrative methods. Some of it should go out through the market, sometimes using devices of subsidy and regulation to direct it to consumers with middle or low incomes. Meanwhile housing for the third-class should be regarded as 'social' or welfare benefit for administrative distribution. The main resources of new housing should be for the lowest income group.

All these seem to deal only with the issues of allocation. However, the main arguemnt here is that if high income families are willing to pay their better-than-average income for housing, the society should provide them better-than-average housing. Thus, it becomes clear that under such a scheme, some better-than-average housing would accordingly emerge. Thus, as long as our analysis is reasonable, we can say that a larger variety of housing types will be a better approach than the uniformed one to combat the current housing shortage problem. On the other hand, the housing policy reform will inevitably have a strong impact on architectural design.

Household income and preference rather than officialdom will influence housing design. Since different spending priority in a family may determine different functional needs,

the designer thus has to know what particular pattern of functional needs to expect. This not only indicates that architects could have more 'feedback' from consumers, but also urban residents would have more choices from basic functional needs to specific satisfaction.

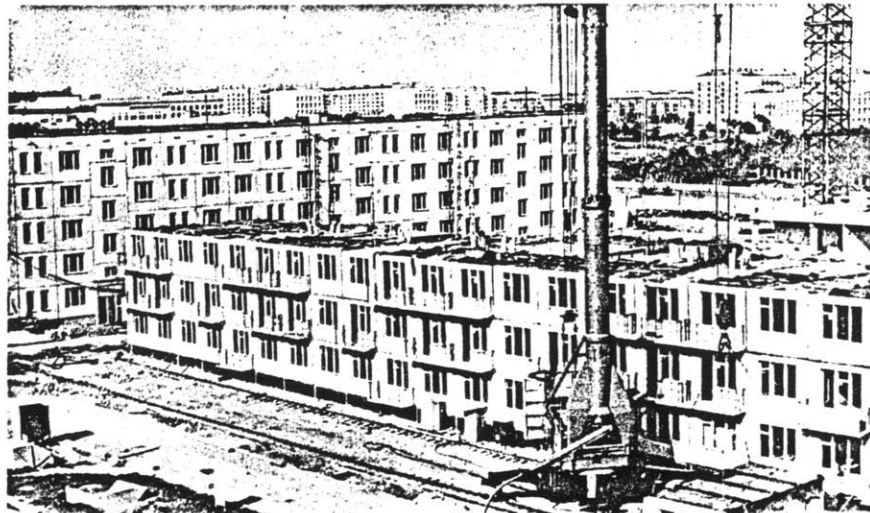
It seems true that architectural design is influenced by policy. On the other hand, architectural design can also affect the success of policy. Referring back to our case, the basic aim of the new housing policy is to maximize and generate more resources. In this respect, architects can, to some degree, enhance or defeat this objective. This happens because, in addition to its functional performance, housing is also a very important form and symbol of social status. Although not every family puts great emphasis on housing as a status symbol, some families will do so and alter their spending priorities on housing. If housing design can attract families to spend more on housing, wouldn't that be desirable? Contrarily, how can we expect people to pay more to get the same house as other's standard housing without any improvement in design?

So far, we can only draw a limited conclusions of the implications of new policy from an architecture perspective. Firstly, the current cheapest six-story walk-up buildings will still be the main component in future construction, since to most families in Shanghai, it is importance is to have a 'basic house'. Secondly, some high-standard apartment

buildings will be built to encourage the high-income groups to buy or rent houses at market prices. Thirdly, a few detached houses (one unit for one family) which is traditionally favoured by many residents in Shanghai to be built so that they can attract those buyers from overseas.



New Residential Constructions in China



One of the U.S.S.R.'s Urban Housing Projects

4.3. Summary and Conclusion

Shanghai is always treated as the most important city in national economic development. The unique position in the country together with the severity of its problem give Shanghai a decisive role in the reform of China urban housing policies. The conclusions may be summed up as follows:

1. The urban housing shortage problem can be seen primarily as a result of firstly, the state's deliberate biased investment policy against the urban housing sector and secondly, the state's decision to keep a very low rent for the urban dwellers. Housing inequalities stem also partly from the particular system of distribution of urban housing investment and partly from the structure of distribution of rental subsidies in the urban sector. Thus, a practical reform has to challenge these two underlying factors, investment pattern and subsidy scheme, which have together led to the current housing problem.

2. Housing policies in many countries indicate that the supply of housing can not be left to the market alone. The case in Shanghai gives a counterevidence that government's attempt to guarantee housing for every resident is similarly frustrating. A combination of market and non-market mechanism which may together channel housing services and subsidies to different income groups is, therefore, necessary.

FOOTNOTES

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- 4/ Zhao Zhi-yang, "The Proposal of the Seventh Five-Year Plan (1986-1990)", Beijing Review, Vol.28, No.40, 1985, pp.15
- 5/ The World Bank, Project Department, Urban and Water Supply Division, East Asia and Pacific Regional Office, "SHANGHAI, SECTOR MEMORANDUM", Vol.I, 1982, pp.30-54
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- 8/ Huang Gou-fu, Architectural Journal, No.3, 1976, pp. 23-24
- 9/ Interview with Households in Shanghai, 1984
- 10/ Martin King Whyte, Urban Life in Contemporary China, The University of Chicago Press, 1984, pp.341
- 11/ Op.cit. Interview, 1984
- 12/ Ibid.
- 13/ L.J.C. Ma, "Urban Housing Supply in the People's Republic of China", in L.J.C. Ma & F.W.Hantan (eds.), Urban Development in Modern China, Westview Press, 1981, pp. 216
- 14/ Op.cit. Whyte, pp.78. (Comparing with the housing condition in 16 countries with \$130-\$600 which bracket China's 1976 figure of \$200-\$300)
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- 16/ Op.cit. Lalkaka, pp.70

17/ Ibid.pp.67

18/ Ibid.

19/ Interview with house buyer, "Housing Development Report, Shen Yan Railway Bureau", 1984

20/ Proceedings of the First Conference on Urban Housing Problem pp.29

21/ Ibid. pp.164

22/ For a unit of new residential construction with 50 M floor space, one-third of costs is around 3,600 RMB. The rent for same unit is 55-65 RMB a year.

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24/ Lin Zhi-que, "Examination of the Relationship Between Housing Standard and National Income" Research Paper on the First Conference on Urban Housing Problem, Beijing, China, 1983

25/ Op.cit. Research Group on "How to Alleviate Housing Shaortage in Shanghai Within Eight Years", pp.32

26/ Shanghai Housing Management Bureau data: national costs of housing construction in 1984 is 1100,000,000 RMB and costs for maintenance is 450,000,000 RMB. Therefore, $450/1100=32\%$

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