DISCUSSION PAPER

Report No. UDD-101

URBAN CONSTRUCTION RECONSIDERED
CHINA'S CITIES: ISSUES AND SOLUTIONS

by

Jun Zhang

June 1986

Water Supply and Urban Development Department
Operations Policy Staff
The World Bank

The views presented herein are those of the author(s), and they should not be interpreted as reflecting those of the World Bank.
Acknowledgements

The author is a Ph.D. student in the Department of Urban Studies and Planning, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139. This report was written as part of his summer internship in the Urban and Water Division of the East Asia and Pacific Region's Projects Department during June-September 1985.

The author wishes to express his appreciation to all the people who helped him in writing this essay. Among them, Professor Karen R. Polenske generously devoted her time to reading through the drafts of each stage. Her critiques, comments, and editing made a great difference in formulating the final version of the essay. Discussions with Mr. Yok-shui F. Lee and Professor John Friedmann were extremely instructive, and many of their observations have been incorporated into the essay. The author also appreciates Ms. Joanna E. Siegel's efforts in editing the early drafts. Appreciation is also expressed to Mr. Benjamin Cu Kok, who was the essay's supervisor, and to Ms. Felicia Quarcoo, who helped in editing and producing this report.

The author, however, remains solely responsible for all the shortcomings, errors, and mistakes in this essay.

Jun Zhang
March 1986
Cambridge, Massachusetts
ABSTRACT

This essay examines issues related to China's urban construction and financing. It argues that urban construction in China could be improved through better pricing and management of urban services, which would depend on how successfully China conducts its economic structural reforms.

China has been carrying out a new economic development program aimed at quadrupling her per capita GNP of 1980 by the end of this century. The nonagricultural labor required for this program may total 150-200 million, which is about the same size as China's current urban population. The present urban housing, civic infrastructure and facilities, however, are already strained and will have difficulty accommodating the newcomers.

China's past deliberate bias in investment, focussing on building factories and ignoring urban housing and infrastructure, has been the most obvious cause for the present strained urban services. This essay argues that a more fundamental cause has been the extremely undesirable institutional behaviors of the economic actors due to a distorted price system, which resulted from a misrepresentation of the socialist welfare theory.

The solution to the current problems does not lie, however, in immediately raising overall prices. For a period of time, wages and prices would have to be gradually adjusted hand-in-hand. Better urban construction in China will greatly depend on how successful China is in conducting the present economic structural reform.
CHINA

URBAN CONSTRUCTION RECONSIDERED

China's Cities: Issues and Solutions

Table of Contents

I. INTRODUCTION.................................................. 1
   Contexts of Economic Development.............................. 1
   Importance of Cities in the Chinese Economy.................. 2
   Terminologies Used in the Essay................................ 4
   Scope and Organization of the Essay........................... 5

II. URBAN RESIDENTIAL HOUSING.................................. 6
   Chinese Institution Providing Urban Housing................... 6
   Urban Housing Conditions........................................ 9
   Causes of the Housing Shortage.................................. 10
   New Trends Easing the Housing Crisis........................... 12

III. URBAN INFRASTRUCTURE AND URBAN SERVICES................. 15
   Inadequate Urban Infrastructure.................................. 15
   Deteriorating Urban Services.................................... 17
   Causes of Inadequate Infrastructure and Urban Services..... 19

IV. URBAN FINANCING.............................................. 23
   China's Planning System......................................... 23
   Urban Finance Patterns before the Economic Reform............. 25
   Current Funding Trends.......................................... 29

V. PROBLEMS RECONSIDERED......................................... 32
   Prices and Socialist Welfare Policy............................. 32
   Institutional Behavior of Service Producers and Consumers... 33
   Lessons from the Chinese Experience............................ 36
   Intricacy of the Solutions........................................ 36

VI. AFTERWORD.................................................... 39
APPENDICES

Appendix 1  Chinese Urban Definitions........................................... 41
Appendix 2  China's Migration Policy and Evolution......................... 43
Appendix 3  Two Case Studies of Urban Financing............................. 47

BIBLIOGRAPHY........................................................................... 49

TABLES

Table 1.1: Projections of China's Urbanization in Year 2000.............. 3
Table 2.1: Housing Ownership in 200 Cities (1981)............................. 7
Table 2.2: Housing Ownership in Shanghai (1981)............................... 8
Table 2.3: The State Investment Pattern: 1953-80
                Productive, Nonproductive Sectors, and Housing............... 11
Table 3.1: Capital Investment in Infrastructure............................... 20

Note: The Chinese currency is the renminbi (RMB), or Yuan (Y). There are 100 fen per Yuan. As of 1986, the exchange rate between the U. S. dollar and the Yuan is approximately US$1 = Y 3.2.
I. INTRODUCTION

Contexts of Economic Development

1.01 The Fifth People's Congress of the People's Republic of China held in 1980 approved the nation's economic development program for the remaining years of this century. According to this program, the country should strive for quadrupling the gross value of industry and agricultural output (GVIAO), while achieving comprehensive progress in all social and economic aspects including income, employment, education, science and technology, and social welfare. As a major component of this program, the country launched a nationwide economic structural reform. This reform has two dimensions of emphasis: internally, market principles in general were, for the first time in the People's Republic's history, separated from ideological debate, and have been progressively introduced to the planned economic system. Externally, the country has begun to take a positive view toward participating in foreign trade and academic and technological exchanges, in receiving foreign loans, and in inviting foreign investment. These latter have been summarized as China's new "Open-Door" policy.

1.02 More than five years have passed since 1980, and the results from the economic reforms and implementation of the economic development program have turned out to be much better than expected: the GVIAO has grown at an average 10.6% annually, higher than the required average rate of 7.6% to achieve the quadrupling target and the planned 4-5% of the first decade (1981-90). About 51 million new jobs have been created. The average income of the state employees has increased by 25% in constant prices. The nation's economic capacity and political stability in general have been significantly enhanced. Although the costs of the achievement do not seem to be low (such as the problems of corruption and depletions in reserves in

2/ See, for example, Cannon, 1984, pp. 717-732; Interview with Gu Mu, 1984, pp. 16-18; Kawai, 1984, pp. 7-10.
4/ Zhao, Ziyang, 1985, p. 4.
1985\textsuperscript{6}), the recent Chinese economic achievements have been very impressive. If realized, the fulfillment of the Chinese modernization program by the end of this century would represent a significant improvement of living standards of more than a third of the total third world residents.

**Importance of Cities in the Chinese Economy**

1.03 The cities in China are playing an important role in helping China realize its economic development program. In 1980, the nation's 220 designated cities \textsuperscript{7} generated 75.4\% of the gross value of industrial output, and 68.2\% of the total state employment, and 82.6\% of the nation's profits and taxes.\textsuperscript{8} The population in these cities, however, was only about the 10\% of the national total.\textsuperscript{9}

1.04 The importance of the cities, however, extends far beyond these figures. The cities have been and would continue to be the economic and social centers of regions and of the nation. They are expected to be, as in the past, the most important generators of capital. Most of the national manufacturing industries are urban-based, and the technology and equipment required for the modernization program are expected to be principally provided by the cities. Some key cities, such as Shanghai, Beijing, Guangzhou, and Wuhan, actually represent the level of modernization of the surrounding regions and the country.

1.05 It has been estimated that the economic development program will require another 120 million of nonagricultural labor input.\textsuperscript{10} The majority of the employment will likely be created in the cities. Corresponding to the labor requirement, the urbanization rate \textsuperscript{11} in China may be raised from 20\% in 1980 to 30 to 35\% in year 2000. Therefore, there may be a net increase of 150-200 million in urban population. These estimates are summarized in Table 1.1. To grasp the magnitude of these figures, it may be useful to

---

\textsuperscript{6} See, for example, Delfs, 1985, pp. 68-69.

\textsuperscript{7} See Appendix 1.

\textsuperscript{8} Chen, 1984, p. 43.

\textsuperscript{9} The State Statistical Bureau, 1985, p. 97.

\textsuperscript{10} The World Bank, 1985a, pp. 36-40.

\textsuperscript{11} See para. 1.10.
consider that the combined populations of Britain, France and Federal Republic of Germany in 1982 were just about 170 million.  

Table 1.1: PROJECTIONS OF CHINA'S URBANIZATION IN YEAR 2000

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>Quadruple</th>
<th>2000</th>
<th>Moderate</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>70</td>
<td>59</td>
<td>61</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Non-agriculture</td>
<td>30</td>
<td>41</td>
<td>39</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Of which: Service</td>
<td>10</td>
<td>14</td>
<td>13</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Labor Force (millions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>316</td>
<td>372</td>
<td>385</td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>Non-agriculture</td>
<td>136</td>
<td>259</td>
<td>246</td>
<td>303</td>
<td></td>
</tr>
<tr>
<td>Of which: Service</td>
<td>45</td>
<td>88</td>
<td>82</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>452</td>
<td>631</td>
<td>631</td>
<td>631</td>
<td></td>
</tr>
<tr>
<td><strong>Population (millions)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>990</td>
<td>1,196</td>
<td>1,196</td>
<td>1,196</td>
<td></td>
</tr>
<tr>
<td>Dependent rate</td>
<td>2.19</td>
<td>1.90</td>
<td>1.90</td>
<td>1.90</td>
<td></td>
</tr>
<tr>
<td>Total urban population</td>
<td>208</td>
<td>343</td>
<td>327</td>
<td>402</td>
<td></td>
</tr>
<tr>
<td>Urbanization rate (%)</td>
<td>21</td>
<td>29</td>
<td>27</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

Note: Assume 70% of non-agricultural population will live in cities.


1.06 That China's cities are expected to experience rapid population growth raises a serious question: would China be able to prevent a sharp decline of the urban environment due to a rapid increase in urban population? In turn, this question leads to another question that is even more serious: is there a hope that China can realize her modernization program without rapid urbanization and some of the unpleasant side effects?

1.07 Urban growth is a highly complex issue. When this issue is considered in the Chinese context (large population, vast expanses of land, and a planned economy), the task becomes even more difficult. Before the
discussion is carried further, some terminologies that would be frequently used later in this report need to be defined.

Terminologies Used in the Essay

1.08 Urban Physical Forms. Cities are combinations of different physical elements: residential and nonresidential housing, transportation, traffic and communication lines, power and water supply facilities, sewage disposal channels, etc. With an amount of concentrated provision of these physical elements, highly intensified economic and social activities can be performed. In urban geography literature, of such phenomena are termed as "urbanism". These physical elements can be reasonably grouped into three categories according to their functions: urban residential housing, urban infrastructure, and public and nonresidential buildings.

1.09 Urban residential housing refers to all the shelters that are built for sheltering urban residents. Urban infrastructure, by Chinese definition, comprises urban facilities for: (a) generating and supplying water, electricity, heat and gas; (b) drainage systems and sewage disposal treatment; (c) traffic, transportation, and communication; (d) environmental protection and beautification; and (e) disaster prevention. Public and nonresidential buildings include the buildings and facilities that provide the following functions: (a) administration -- buildings that shelter government agencies, such as city hall, municipal courts, etc.; (b) commerce and services -- department stores, food markets, restaurants, hotels, barbershops, and other providers of household services; (c) recreation -- cinemas, theaters, stadiums, gymnasiums, etc.; (d) culture and education -- schools and colleges, libraries, museums, exhibition halls, street status and sculptures, etc.; (e) health -- hospitals, clinics, child care centers, sanatorium etc.; (f) special activities -- plazas, squares, transportation terminals; and (g) accessory activities -- parking lots for vehicles and bikes, poster stands, etc.

1.10 Cities, towns, urban population, and urbanization rates. There are no universally accepted definitions of the above four related terms. Each country has had its own understandings and definitions. Because China has adopted a residential card system that breaks down the population into two categories, agricultural population and nonagricultural population, the problem of defining urban population and urbanization rate becomes more complicated and, therefore, more debatable. Appendix 1 of this chapter provides some relevant information on how China defines its cities, towns, and the status of population. Urban population is defined as the people who live in cities, towns, and other designated urban areas. "Urbanization rate" in this essay will represent the ratio of population living in urban areas to the total population of the country.

1.11 Productive and nonproductive sectors and activities. From the Marxist point of view, societies are organized as a circle that includes three

---

13/ Liu, 1984, pp. 302-303.
related components: production, circulation, and consumption. Sectors associated to material production are called productive sectors, such as mining activities, manufacturing industry, etc. The other sectors that are not directly involved in material production, such as education, national defense, etc., are classified as nonproductive sectors. These concepts play an important role in making public investment decisions. Construction of urban residential and nonresidential housing, and the provision of urban infrastructure are traditionally classified as nonproductive activities. There also has been some debate in Chinese economic circles whether transportation should also be treated as a "nonproductive" sector. These concepts have a great deal of similarity to the concepts of social overhead capita and direct productive activities (DPA) proposed by Hirschman.14/

Scope and Organization of this Essay

1.12 Since the foundation of the People's Republic, China has had many striking social and economic achievements. The extreme urban poverty of pre-1949 has been largely removed; the basic needs of the country people have been reasonably met; an independent domestic industrial system has been established and some highly complicated high technology (such as launching and receiving satellites) have been mastered.15/ Most of the Chinese cities are orderly, and no large scale of slum towns are to be found in them. All these achievements have been made by mobilizing the population, with little reliance on foreign-aid and foreign assistance. These Chinese achievements, although tentative and somewhat primitive, have inspired some researchers to speculate, "If China could do this, why should it be out of reach for other countries?"16/ Like most of the third world countries, however, China has not clearly broken away from underdevelopment. Problems arising from urban construction and financing may provide some insights into the degree of underdevelopment.

1.13 In this essay, only the issues that are related to constructing and financing China's urban physical forms will be discussed. Chapters 2 and 3 will deal with the problems of construction and provision of residential housing, infrastructure facilities, and nonresidential and public buildings in cities and towns. Chapter 4 will discuss financing problems. In Chapter 5, the focus will be shifted to the most fundamental issue that governs the urban construction and financing, showing the linkage between the problems of urban physical forms and the reform on the economic structural in general. The aim of this analysis is to help identify the important elements of the present Chinese economic structural reform that are relevant to a healthy growth of urban physical forms. Although these problems are viewed from Chinese special context, they may have some relevance to similar urban physical form problems in the third world countries.

16/ Friedmann and Weaver, 1980, p. 164.
1.15 While preparing this paper, an intensive literature survey was conducted, mainly through various computerized information retrieval systems provided by the World Bank-IMF Joint Library. The author frequently referred to relevant World Bank reports (both formally published ones and internal documents as well as those still being processed) and recently published Chinese yearbooks. A literature review on major economic and financial periodicals and magazines in Chinese was also conducted. However, it was difficult to collect systematically the Chinese literature, especially those from periodicals, that was specifically relevant the urban sector since several major Chinese periodicals, such as City and Town Planning, City Planning Review, Construction Economics, Economic Geography, Urban Problems, etc., were not fully available in the area's libraries. A very important reference book, China's Urban Social and Economic Statistic Yearbook, which is be the first urban-specific publication since the "Cultural Revolution," was still being compiled at the time this essay was being written. Although this essay will not provide abundant quantitative information, it is nevertheless hoped that drawing on the author's knowledge and experience, a meaningful discussion has been possible.

II. URBAN RESIDENTIAL HOUSING

2.01 The history of Western industrialization and the recent experience of developing countries both indicate that rapid industrial growth is usually accompanied by serious urban housing problems. The magnitude of the urban housing problems in China raises the issue as to whether China can carry out its ambitious modernization program, since in order to modernize, the workers needed for modernization would have to be adequately housed. Compared with most of the third world countries, China's housing problems emerged from a very different background. In China, majority of the urban housing is provided by the government, either directly or through enterprises owned by the state. The entire urban housing in the country is treated as part of social welfare. No private or collective (non-state-owned) housing developers exists.

2.02 This chapter will explore the following questions: how serious is China's housing problem? What are the causes of this problems? What has been done to solve the problem? Some basic background information on housing ownership and institutions of urban housing provisions will be presented.

Chinese Institution Providing Urban Housing

2.03 Tables 2.1 and 2.2 show the results of a housing survey for 200 cities and the case for Shanghai city proper, respectively, with a breakdown of ownership for all urban dwellings. Both surveys were conducted in 1981. House owners in China were categorized into three major groups: enter-

17/ Jingji Yanjiu (Economic Studies), 85/1.
18/ Howe, May 1968, p.73.
prises and institutions (factories, companies, universities, government agencies, etc.), municipal housing authorities, and private owners. It is interesting to note the pattern of housing ownership in China. Enterprises and institutions, nationwide, owned the largest share -- more than one-half -- of total urban housing (See Table 2.1). The rents they charged were also lower than those of the municipal housing.

Table 2.1: HOUSING OWNERSHIP OF 200 CITIES (1981)

<table>
<thead>
<tr>
<th>Housing owned by</th>
<th>Floor space (mil m²)</th>
<th>Percentage</th>
<th>Monthly rent (yuan/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Housing Authority</td>
<td>203.40</td>
<td>28.67</td>
<td>0.08-0.12</td>
</tr>
<tr>
<td>Enterprises and institutions</td>
<td>380.33</td>
<td>53.60</td>
<td>less than 0.08</td>
</tr>
<tr>
<td>Individual</td>
<td>125.78</td>
<td>17.73</td>
<td>20-30 % higher than above two</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>709.51</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>


2.04 The reason why the enterprises and institutions have had the largest share was simple. In China, generally speaking, it has been the employer's responsibility to provide housing for his employees. This was especially the case if the employer was the state, as in the case of a state-owned factory. When factories were constructed, or sometimes when they were expanded, in addition to the funds for building the factory itself, grants for building housing for workers were also normally allocated.

2.05 In explaining the results that are summarized in Table 2.2, a World Bank background report on Shanghai mentioned that, "Enterprises often construct housing but then turn it over to the municipal authorities; hence the large role of enterprises as builders and their small role as owners." If a project involved relocations of original residents, as a usual practice, the sponsor of the project had to build an extra housing and hand them over to the municipal authority to compensate for the relocated population. This amount of housing would normally be added to municipal housing bureau's fixed assets.

19/ The World Bank, 1982, p.50
Table 2.1: HOUSING OWNERSHIP OF SHANGHAI (1981)

<table>
<thead>
<tr>
<th>Housing owned by</th>
<th>Floor space (mil (\text{m}^2))</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Housing Authority</td>
<td>41.85</td>
<td>44.23</td>
</tr>
<tr>
<td>Enterprises &amp; institutions</td>
<td>43.00</td>
<td>45.44</td>
</tr>
<tr>
<td>Individual</td>
<td>9.77</td>
<td>10.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>94.62</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>


2.06 Normally, enterprises and institutions would not try to make profit from the housing they owned. This housing was exclusively provided for their employees as part of the Potter's overall emolument. Since all the profits the factories made were to be turned over to the government, the factories had no incentive to charge high rents.

2.07 The municipal housing authorities accounted for the second largest proportion of urban housing (about 30% of the total). The municipal housing authorities have had the general responsibility for constructing and maintaining housing in cities, as well as collecting rents. In many cities, such housing authorities, usually called the Housing Management Bureau constituted one of the powerful administrative branches under the city governments. They usually had their own studios, branch agencies, technicians, construction teams, as well as a fixed amount of annual operating grant for the construction and maintenance of the city's housing. The housing owned by the housing bureau was the most important source of shelter for the workers and staff who work for small non-productive institutions. Most of these enterprises usually were not financially able to provide housing for their employees (either because they were too small to receive the state's funds or because they were not owned by the state). The housing bureau also provided housing for senior staff working in government agencies and sometimes in enterprises and institutions.

2.08 Private housing made up the remaining 20% of the urban housing total. Such housing was mostly passed down from the owners' ancestors who built it before the birth of the People's Republic. During the Revolution, a large amount of housing owned by the previous government and its senior officials and by a group of people who were classified as "bureaucratic bourgeoisie" were confiscated by the city governments, and then handed over to the city's housing authority. The housing that did not fall into the above category forms the majority of today's private housing. Most of this private housing, though carefully maintained, has nearly reached the end of its useful life.
Urban Housing Conditions

2.09 Although most of China's cities have encountered serious housing problems, the housing condition has not been undifferentiated. Housing conditions for enterprises and institutions have been significantly different depending on various circumstances.

2.10 Housing for the newest state factories usually do not present problems, for besides the workshops and working space, housing and certain commercial and recreation facilities, which often form a "Worker's New Village", are normally also included in the construction budgets of these factories. For example, the Baoshan Steel Complex, located in suburban Shanghai, is a case in point. When completed, it is expected to significantly strengthen China's steel output capacity. By the end of 1984, the amount of finished housing at the Complex would be able to accommodate more than three quarters of the employees required for the Complex's eventual full production capacity.

2.11 For the old state-owned enterprises, housing has become a serious problem, due to a number of factors: (a) Some workers were young and single when they began working in the factory. They previously lived in bachelors' dormitories and shared rooms with several others. When later they got married, no spare housing was available. These workers have been officially classified as "households who have no room"; (b) Some young married couples might have been assigned a room when they entered the factory. After many years, despite growing families, they would still be living in the same quarters. Because there has been no housing market, the children have had to live with their parents until they themselves are assigned jobs. At that time, hopefully, they would be assigned housing. Because of the housing shortage, the phenomenon of two generations living in one room has become common. If the family had become larger, e.g., the parents had more children than normal (2 or 3), and if the children's grandparents needed to move in, or if the children needed to live with the parents after getting married, the situation becomes even worse. This type of problem has been described as "households who have inconvenient or congested rooms"; (c) With the expansion of the factory, new workers were hired, but no more grants (or only small amounts of grants) for housing construction have been allocated. The newcomers would be forced to join one of the above groups of housing problems.

2.12 If the housing situation of old enterprises seems bad, then the situations of the workers in small institutions and enterprises, who usually began their working lives with no housing, has been even worse. A large number of urban collective workers (30 million workers in 1983 out of a national total labor force of 110 million) fell into this category. These have had to join the long queues for the housing managed by municipal housing bureaus. If one of them was lucky enough to be assigned a housing unit, it has usually been such a big event in the person's life that it was usually wildly celebrated by all his or her relatives and friends.

2.13 According to an official survey of 192 large- and medium-sized cities in 1980, living floor space (excluding kitchens, lavatories and corridors) per urban resident had dropped from 4.5 m² in 1949 to 3.6 m² in 1978. Nationwide, 1.83 million urban families were living in warehouses, corridors, workshops, classrooms, and offices; 1.89 million families had three generations sharing one room, and each year newly-wed couples who could not find
housing amounted to several hundred thousand. In total, about 7.6 million urban households, approximately one-third of the total urban families, were classified into one of the above three housing problem groups mentioned in para. 2.11. In addition, it was estimated that more than one half of the total urban housing needed to be repaired, and some 8.6 million residents were living in buildings that were in imminent danger of collapse.20/

Causes of the Housing Shortage

2.14 The causes of housing shortage are complicated; probably the most direct and obvious cause is that the pace of urban population growth has been significantly faster than that of housing construction.

2.15 In the past 30 years, China has attempted to industrialize without substantially increasing the rate of urbanization. It has adopted strict policies to control the migration of rural population (see Appendix 2). It is estimated that China's urban population has increased from 70 million in 1953 to about 210 million in 1982, a net increase of 140 million of urban residents.21/ During the same period, completed urban housing units were only about 17 million.22/ If there had been 4.5 persons per households,23/ a deficit of 14 million housing units would have existed.

2.16 Slow urban housing construction was a direct result of insufficient investment. For a long time, China's investment has been lopsided in favor of the so-called "productive sectors" (for the terminology, see para. 1.11). After "productive" sectors have been funded, the residual available funds would go to "nonproductive" sectors.24/ Table 2.3 shows that between 1953 and 1980, more than 70%, sometimes as high as 85% of the state investment had been put on "productive" sectors, while urban housing only received between 4% and 10% of the total capital investment. Compared with the available data (1974) from other countries (Japan: 20.9%; United Kingdom: 18.9%; the United States: 23.6%; and the Soviet Union: 14.7% 25/), it is clear that China has underinvested in the housing sector.

20/ Lalkaka, 1984, pp. 63-73.
21/ The State Statistics Bureau, 1985, p. 81.
Table 2.3: THE STATE INVESTMENT PATTERN: 1953-80
"PRODUCTIVE", "NONPRODUCTIVE" SECTORS, AND HOUSING

<table>
<thead>
<tr>
<th>Years</th>
<th>&quot;Productive&quot;</th>
<th>&quot;Nonproductive&quot;</th>
<th>Include housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953-57</td>
<td>67.0</td>
<td>33.0</td>
<td>9.1</td>
</tr>
<tr>
<td>1958-62</td>
<td>85.4</td>
<td>14.6</td>
<td>4.1</td>
</tr>
<tr>
<td>1963-65</td>
<td>79.4</td>
<td>20.6</td>
<td>6.9</td>
</tr>
<tr>
<td>1966-70</td>
<td>83.8</td>
<td>16.2</td>
<td>4.0</td>
</tr>
<tr>
<td>1971-75</td>
<td>82.5</td>
<td>17.5</td>
<td>5.7</td>
</tr>
<tr>
<td>1976-80</td>
<td>77.1</td>
<td>22.9</td>
<td>11.9</td>
</tr>
<tr>
<td>1981</td>
<td>58.2</td>
<td>41.8</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Note: Housing - urban housing only.

Source: State Statistics Bureau.

2.17 The third cause of housing shortage has probably been the uneven distribution of housing. Compared to the situation in many developing countries, 3.6 m² per urban resident should not seem very bad. There are many developing countries whose entire construction sector only constituted less than 5% of total gross domestic product (GDP). Still China did have a large number of households which had terrible housing problems, and its housing distribution channels need to be examined.

2.18 The Chinese literature on housing have frequently pointed out that housing was a problem that "receives most of the complaints," and that "stirs a lot of discontent in the society."27 At one time, power, mainly administrative and political, had been directly related to housing distribution. Some corrupt cadres not only occupied a large amount of floor space which was much more than what they were entitled to, but also enthusiastically helped their children, relatives, and friends obtain extra floor space and housing units. The Central Committee of the Chinese Communist Party finally had to use its Discipline Inspection Committee and spell out the official living standards for its cadres at different levels. Uneven distribution of housing was an undeniable cause of housing shortage. In the future, China may consider not using "per capita living space" to measure housing construction because it is only an indicator of total housing space divided by total population; it does not reveal the fact of uneven distribution of housing. As a recommendation, "housing unit" may be more meaningful.

2.19 One of the less visible causes of urban housing crisis is the excessively low rents. A comprehensive survey in 1984 in Beijing showed that the


27/ Sun, 1983.
rent for brick-concrete structure housing was Y 0.076/m² of living floor space (i.e. excluding kitchen, lavatories, and corridors); for brick-wood structure, Y 0.112/m². Low-rent policy may turn out to be the most critical factor that undermines the growth of housing sector, as is shown later in Chapter 5.

2.20 There have been proposals for setting housing rents. If the factors such as depreciation, maintenance, operation, interests, profits, insurance, land rents, and inflation were considered (so-called 8-factor proposal), the rent for brick-concrete structure housing would be Y 3.48/m²; for brick-wood, Y 2.90. If only depreciation, maintenance, and operation factors were considered (so-called 3-factor proposal), brick-concrete structure would be Y 0.43/m², brick-wood would be Y 0.39/m².28/ Another survey, conducted by the State Statistics Bureau in 1983 and including 9,060 urban households in 47 cities, showed that the average per capita income of the urban household was Y 46.53/month, and average per household living expenditures amounted to Y 39.33/month. Rents constituted only Y 0.64/month, making up 1.37% of total income; while the total expenditures for tea, cigarettes, and liquor amounted to Y 2.29/month (4.9% of income). The expenditure on rent per capita was only about one quarter of expense on tea, cigarettes and liquor!29/ As a result, rent income collected by the state could only cover one half of the total housing operation expense.30/ (If rent were the only resource for housing construction and maintenance, the period for capital recovery for a typical house would be 700 years, if a house lasts that long.)31/

2.21 Low-rent policy created an extremely heavy financial burden for the state. In 1982, the subsidy from the state for housing maintenance and operation only in 237 cities amounted to Y 1.2 billion, or about 25% of the total state budget.32/ It is obvious that the financial burden for housing has been heavy for the state.

2.22 China's housing shortage is caused jointly by the above elements. It is important for us, therefore, to realize the approach to the housing problem has to be comprehensive. We will first, however, show some positive trends towards the solution.

New Trends Easing the Housing Crisis

2.23 The urban housing crisis comprised one of the most relevant reasons that China had to go through a period to readjust its growth strategy between 1978 and 1984. During this so-called "Readjustment Period," China spent 20 to 25% of its total capital construction funds each year on housing construc-

28/ (currently missing)
30/ Ibid.
31/ Sun, 1983, p. 61.
32/ Yang, 1984, p. 27.
According to the official statistics, some 310 million m² of new floor space, or 6.3 million units, were created between 1979 and 1982; the housing condition of 25 million urban residents had been significantly improved.33/

2.24 The housing construction in some cities, however, has been focused overwhelmingly on expedient solutions, e.g., many of newly constructed housing were hurriedly designed and poorly constructed, and a large proportion of them had only one small room, without any attached bathroom or kitchen facilities. Such hurried work may cause problems for future maintenance or possible conversion (to two- or three-bedroom apartments with bathroom and kitchen), and has led to some sharp criticisms.34/

2.25 If by the year 2000, another 75 to 100% of new residents were added to the 1980 urban population as has been projected (see para. 1.05), and if per capita floor space is to be increase from the present 4.9 m² to the officially announced goal of 8 m² and each urban household should have one unit of housing,35/ a total sum of 1.55 to 1.95 billion m² of new floor space, or about 50 million residential housing units would be required in the next 15 years, not counting the maintenance and replacement of old stock.36/ In other words, in each year, 100 to 130 million m² of floor space, or 20 to 30 million housing units, would need to be built. One hundred million m² was barely reached in 1982 and 1983, when one quarter of the total state capital funds was devoted to housing construction;37/ it can be seen that the task of providing adequate housing for urban residents is enormous and difficult.

2.26 However, some positive trends towards solving the urban housing crisis can be observed. In 1982, "commercial" housing was tried in four pilot cities. Now in many cities so-called "commercial housing" has been constructed whose rents are priced at a level so that the costs of construction could be recovered in a reasonable period. The original target groups for this type of housing included mainly young married couples who have no place to live, or people who work for the institutions or enterprises that did not own housing or had serious housing shortages. Most of the tenants have been subsidized by the employers for whom they worked. However, in some cases, especially on a temporary basis, tenants have not been subsidized. Recently, the "commercial housing" has been built on a large scale in many cities. Officials in Beijing announced that Fangzhuang, a new residential area that is under construction and may house more than 100,000 population, will be

---

completely "commercialized." This residential area will be the largest in the history of the People's Republic. The development of such "commercial housing" may be viewed as a corridor along which the housing burden will be shifted from the state to the enterprises and to individuals.

2.27 Another notable measure that has now been taken is the government's wish to encourage private housing ownership. With little or no down payment, urban workers can buy housing constructed by the municipal housing authority, which is priced at about "market" level. The state subsidizes one third of the price and the individual buyer's employer pays for another one third. A number of intermediate advantages in promoting private housing ownership are: (a) the builders (mainly the government) can get some monetary return to reimburse housing construction; (b) the builders do not need to maintain the housing units; (c) individuals will have the incentive to take good care of the housing they own, reducing future large-scale maintenance work; and (d) irrational use of public power to allocate housing for private interest would be greatly discouraged. The case of Shenyang, which has been one of the pilot cities for "commercialized housing", shows that the return for the first year what the city housing authority had invested was 28%.

2.28 In the years 1980-84, the employees' real wages have grown 4.7% per year. This could be a sustainable rate given that it is slower than the growth of the gross domestic product (about 10.2% per hear). If this trend continued, the state might consider reducing its subsidy for individuals in general, who would be better able to begin to pay full price for housing, and should focus only on low-income families. As housing becomes a more profitable business, other developers than the government may be expected to enter the housing construction business. The latter phenomenon has already been observed in some cities.

2.29 Another measure being used to alleviate the housing shortage has been to charge progressive rents for extra occupied floor space. This measure reportedly has been very effective in cases where tenants occupied more space than they needed, because they had an unfair advantage in the housing allocation process. They have now been given a choice of paying for additional space or of giving up the space to someone in need of, and willing to pay for, space.

2.30 Urban housing is one of the most important categories under urban physical forms. Restoring efficient and workable systems for housing construction and allocation is one of the most crucial tasks for the intermediate range of China's urban development. A great deal of work needs to be done for housing construction and maintenance. This work would determine to a great extent whether China would be able to house enough laborers to realize its goal of modernization. In the document of "Suggestions to the Seventh Five-Year Plan," the Central Committee of the Chinese Communist Party (CCP) recom-

---

39/ People's Daily (overseas edition), 9/15/83, p. 3.
mended that the state must commercialize its housing supply.\textsuperscript{41} Whether or not this would be a solution to the problem will be discussed further in Chapter 5, after the problems from urban infrastructure and services as well as urban financing are examined.

III. URBAN INFRASTRUCTURE AND URBAN SERVICES

3.01 Infrastructure in general is one of the basic instruments to enhance the efficiency and effectiveness of economic development in a country or a region.\textsuperscript{42} Three major macroeconomic objectives are often expected to be achieved through the provision of infrastructures: development, employment generation, and maintenance.\textsuperscript{43} Urban services are essential to residents of a city. It is a major reflector of the urban life quality. Provision of urban services has to be largely dependent on the amount of public and nonresidential buildings that are available in a city.\textsuperscript{44} Just like the situation of the urban housing, construction of urban infrastructure and nonresidential buildings has also greatly lagged behind urban population growth and economic development. There is no doubt China needs to handle its infrastructure problems properly in order to realize her modernization program.

Inadequate Urban Infrastructure

3.02 At a National Urban Infrastructure Conference in May 1985, the attendees, most of whom were China's experts and specialists in infrastructure planning, strongly urged that urban infrastructure in many cities was the most severe bottleneck holding back urban economic growth.\textsuperscript{45}

3.03 Energy shortage is a widely recognized problem of the country. Although the sector has been greatly developed in the last 30 years,\textsuperscript{46} the nationwide shortage of energy remains severe. In 1984, it was estimated that the country's generating capacity was short by 12,000 MW.\textsuperscript{47} Beijing could use a full load of some 1,400 MW and the demand has been increasing at a rate of 100 MW per annum. The grid, however, could only supply 1,100 MW. Because of the electricity shortage, a large number of new urban factories could not be put into full operation and people had to live in some housing (about one

\textsuperscript{41} The Central Committee of the CCP, 1985, p. 2.

\textsuperscript{42} Hirschman, 1958, pp. 83-86.

\textsuperscript{43} Currea and Polenske, 1985, pp. 52-72.

\textsuperscript{44} See paras. 1.08 and 1.09.

\textsuperscript{45} Mo, 1985, p. 2.

\textsuperscript{46} The World Bank, 1985a, pp. 66-90.

\textsuperscript{47} Mo, 1985, p. 2.
fifth to one fourth of the total newly built) without electricity for several years. Each time there has been a major cultural event, such as an international sport competition or national celebration, the electricity to many factories had to be disconnected; the loss from each interruption in production amounted to several million yuan. High-rise apartment buildings, despite their unpopularity among certain professional groups, may eventually need to be built on a large scale in China's cities, considering the real economic value of the land which was ignored in the past. Building the high-rises is not feasible at the present time, however, largely because of problems of power supply. Beside the difficulties that involve domestic ability to design and construct high-rise apartments and considering costs of construction and maintenance, the opponents of high-rise buildings have frequently mentioned the fear that power disconnection or shortage would affect the operation of elevators. Given the present power-generating capabilities, some high-rise buildings may be uninhabitable.

3.04 Water supply, one of the most important elements of urban infrastructure, has not been able to catch up with economic development and population growth in many cities. One hundred eighty-four out of 232 cities in 1984 were reported in shortage of water supply, and the situation for 40 key cities was serious. In Beijing, it has been common for residents living on higher floors to have to go down to lower floors to fetch water during the daytime, because of lack of sufficient water pressure beyond the second or third floors. Many cities have observed sharp drops in their water tables.

3.05 It was reported at the 1985 National Urban Infrastructure Conference that 80% of urban dwellers still used coal for cooking and heating, and 96% of housing in the northern part of the country did not have central heating. In Beijing, less than 10% of the total residential floor space was centrally heated. Most heat was generated by more than 10,000 small boilers of various types, plus tens of thousands of individual furnaces. During the winter, this has contributed to severe air pollution. Many other cities in the northern part of the country have had similar problems.

3.06 The most obvious problem of public transportation is that road construction has not caught up with the growth of traffic. Some experts have estimated that the average vehicle speed in some cities has declined from 30 km per hour in the 1960s to 15 km per hour in 1980, and for some central

---

48/ Liu, 1984, p. 303.
49/ Shen, 1979, pp. 49-55.
50/ Mo, 1985, p. 2.
51/ Liu, 1984, p. 304.
52/ Mo, 1985, p. 2; Liu, 1984, p. 303.
business areas the situation has been even worse. In Shanghai, for instance, the number of vehicles has increased 10 times and the number of bicycles 16 times, while during the same period the surface of urban roads increased only by 1.5 times. The situation for Beijing is similar: the number of vehicles have grown 80 times and bicycles, 20 times, while road surfaces have grown less than 10 times. Besides the insufficiency of road surface in cities, there have been very few traffic overpasses or underpasses, contributing to traffic congestion. Inadequate provision of transportation lines and facilities has been further aggravated by poor traffic management; in many cities, there have been dramatic increases in traffic bottlenecks.

The situation of municipal telecommunication is equal to, if not worse than, that of urban traffic. A survey of eleven cities with more than 2 million population in 1981 showed that between 1949 and 1979 the total installed number of telephones increased only 3.2 times (while water supply increased 141 times and the length of public transportation line 23 times). Though China has had the capacity to launch synchronous communication satellites, basic means of civil communication, such as telephones, have been still exceptionally luxurious goods for the overwhelming majority of urban households. The telephone service rate in China's cities normally has been below 5%. In Beijing, the capital city of China, the service rate was only 1.4% in 1979. Shanghai's rate was 3.25% in 1980, while Hong Kong's rate was 33, Singapore's was 26, and Bangkok's was 5.4. Insufficient number of lines has been further aggravated by poor service quality and a low connection rate. One researcher estimated that in Hangzhou, a picturesque city in Zhejiang on the eastern coast of China, about 30% of the daily traffic would not be necessary if the travellers could talk to each other over telephones.

Deteriorating Urban Services

Till the early 1980s, urban commerce and services had not been improved at all in many cities in China. The expansion of urban commerce and services, for the past three decades, did not seem to fit into the prevailing

53/ Mo, 1985, p. 2.  
54/ Ibid.  
55/ Liu, 1984, p. 304.  
56/ Mo, 1985, p. 2.  
57/ The ratio of the number of telephones per 100 residents.  
58/ Liu, 1984, p. 304.  
60/ Liu, 1984, p. 304.  
61/ Wu, 1984, p. 86.
political ideology, probably because most of the businesses in this sector were privately-owned. In contrast with urban housing and infrastructure, which grew slowly because they were believed to be "non-productive" and were benignly neglected, the commercial and service sectors experienced a net declining period, as a result of actual discouragement. In 1957, there were about 1 million commercial and services enterprises with 3.56 million employment in China's cities and towns. Twenty years later in 1978 when urban population and economy had greatly expanded, 78% of the enterprises had disappeared and the number of the employees had declined to 3.16 million.\textsuperscript{62/} The number of bookstores, for example, dropped from 342 to 139 in Beijing, from 115 to 45 in Tianjin, and from 80 to 38 in Nanjing.\textsuperscript{63/} The decline in the numbers of shops and employees naturally led to increasing inconvenience for urban customers. Worse still, the quality of services became appalling. Except in China, there may be few countries in the world where the duty of shop assistants was not to help customers, but to insult them or to try in every possible way to make their shopping miserable.\textsuperscript{64/}

3.09 China is a country with a long and splendid history of civilization; the present urban cultural facilities, however, do not seem to match her past glorious history. A survey in 1981 of 236 designated cities showed that on the average, each city had only 3.4 cinemas, 1 public library, 0.7 museums, 0.3 stadiums.\textsuperscript{65/} A city like Guangzhou (with 3 million population living in the city proper in 1983), for example, had only 2 public libraries.\textsuperscript{66/} In Beijing, there were 330,000 population per cinema, 430,000 per theater, 460,000 per public library, 700,000 per museum, 1.4 million per cultural center, 5.6 million per artistic exhibition facility.\textsuperscript{67/}

3.10 Cases like these can go on and on, they all reveal one fact, that China's urban infrastructure and urban services have not been adequately developed. There is reason to believe that China's existing urban physical forms may strongly prevent the cities from functioning properly as social and economic centers. Urban problems may be one of the major hindrances that hold back the progress of modernization in China.

3.11 China's urban infrastructure and urban services have created a major obstacle in carrying out its recent "Open-Door" policy. A quotation from an

\textsuperscript{62/} Li, 1984, p. 289.

\textsuperscript{63/} Jiao, et. al., 1984, pp. 315-316.

\textsuperscript{64/} Bad service quality in many cities has become untolerable. Recently the Minister of the Ministry of Commerce announced that the employees in the state commercial sectors who received bad comments from customers should be either fired or economically punished, depending upon how serious the matter was. (People's Daily (Overseas Edition), 11/19/85, p. 1).

\textsuperscript{65/} Jiao, et. al., 1984, p. 314.

\textsuperscript{66/} The State Statistical Bureau, 1985, p. 72.

\textsuperscript{67/} Jiao, et al., 1984, p. 314.
Infrastructure -- a major stumbling block that dissuades foreign investors from pursuing projects in particular localities is the nonavailability of water, sewage disposal, energy, transportation, and communications of sufficient quality to make an investment viable. This will be a key factor in pushing ahead the development programs of certain open coastal cities and holding back others...

China is now competing against other Asian countries and regions in attracting foreign investment, it faces an urgent task to improve the provision of urban infrastructure and services.

Causes of Inadequate Infrastructure and Urban Services

3.12 The reasons for the slow construction of urban infrastructure and deterioration of urban services are multiple and complicated. Three important ones are discussed below: lopsided investment pattern, low user charges, and bureaucracy. The most direct as well as obvious reasons is the lack of investment in this sector. Table 3.1 shows the state investment data on urban civil infrastructure. Between 1953 and 1983, only 3.5% of the state capital has been channeled to urban civil infrastructure. The proportion in the 1980s has been greatly increased, but only to a level of about 7%. It is estimated that investment made to civil infrastructure in most of the countries would amount to at least 10% of the total public investment. For example, Shanghai is a city encumbered by severe urban problems. In the past 35 years, its industrial output has increased 30 times, and the received capital construction grants have amounted to Y 35 billion. The amount used for urban infrastructure, however, has only 1.7 billion, less than 5% of the total capital construction grants.

3.13 One scholar suggested that in China the floor space for public and nonresidential buildings should be created at the same pace of urban housing, so as to maintain decent standards of urban life and to correct the problems accumulated from past lopsided investment. If this were done, another 100 million m$^2$ of floor space (in addition to the 100 m$^2$ for urban residential housing) would need to be created each year. Whether the cities could obtain such enormous grants anywhere for such capital construction is doubtful without fundamental changes in urban finance mechanisms in both resource mobilization and allocation.

69/ Mo, 1985, p. 2.
70/ Ibid.
Table 3.1: CAPITAL INVESTMENT IN INFRASTRUCTURE (Yuan in 100 billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>National total for all sectors</th>
<th>Civil infrastructure</th>
<th>% national total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1954-57</td>
<td>588.47</td>
<td>14.43</td>
<td>2.45</td>
</tr>
<tr>
<td>1958-62</td>
<td>1,206.09</td>
<td>27.55</td>
<td>2.28</td>
</tr>
<tr>
<td>1963-65</td>
<td>421.89</td>
<td>12.31</td>
<td>2.92</td>
</tr>
<tr>
<td>1966-70</td>
<td>976.03</td>
<td>17.38</td>
<td>1.78</td>
</tr>
<tr>
<td>1971-75</td>
<td>1,763.95</td>
<td>33.61</td>
<td>1.91</td>
</tr>
<tr>
<td>1976-80</td>
<td>2,342.17</td>
<td>95.12</td>
<td>4.06</td>
</tr>
<tr>
<td>1981</td>
<td>442.91</td>
<td>31.85</td>
<td>7.19</td>
</tr>
<tr>
<td>1982</td>
<td>555.53</td>
<td>42.22</td>
<td>7.60</td>
</tr>
<tr>
<td>1983</td>
<td>594.13</td>
<td>38.02</td>
<td>6.40</td>
</tr>
</tbody>
</table>


3.14 There are no aggregated data on how much capital China has spent on its urban public services. Some available information, however, indicate that in the past thirty years, the total national public expenditure on sport facilities was only Y 650 million.\(^{71}\) The per capita annual figures, therefore, was less than Y 0.05 (around 2 U.S. cents). The annual funds for athletics allocated to the middle school in Hangzhou was barely enough to buy 3 m\(^3\) of sand (for long and high jumping).\(^{72}\) In the XXIII Olympic Games, the Chinese sportsmen and women won eight gold medals and a number of other prizes. This achievement was really extraordinary, especially remarkable given the lack of sport facilities.

3.15 A second reason for the slow growth of urban infrastructure and deterioration of urban services was the lack of ability of self-financing. Urban infrastructure has been treated as social welfare. As in the case of housing, the prices for using the facilities and being served were set very low (sometimes gratis); in most cases, the user charges were not even enough to cover maintenance, to say nothing of generating capital for future investment. Prices for monthly bus-pass, gas, electricity, water, etc., were mostly set in the late 1950s and have never been modified. One comprehensive survey conducted in 1981 showed that bus companies of 17 major Chinese cities were all run at a loss, with one exception Shanghai's bus company was the only one which made a tiny profit, Y 0.004 for each monthly pass it sold. More than three-quarters of utility companies (water, gas, and electricity) have been running at a loss year after year. Beijing priced its monthly bus pass at

---

\(^{71}\) Zhang, Caizhen, 1983, p. 232.

\(^{72}\) Ibid., p. 324.
Y 3.5 since the early 1950s. The cost had risen to Y 5.08 by 1979. Since the price did not cover the costs, the city had to incur net losses of selling monthly passes of Y 100 million every year. 73 The number of available swimming pools in Shanghai decreased from some 200 in 1950s to 117 in the later 1970s, with many of them being abandoned for lack of maintenance grants.

3.16 Due to the underpricing policy, the important funding channel for the provision of urban infrastructure and services has been blocked, and urban infrastructure and services have had to heavily rely on public subsidies in order to survive. On the one hand public utility and infrastructure sectors have not been allowed to earn enough money to cover their costs, and on the other hand the state funds have been deliberately channeled to productive sectors.

3.17 Some profitable businesses, such as in trade and commerce, have not grown in the past, either, partially because of the way economic system was set up. According to the prevailing practice, the commercial stores owned by the state will turn in most of their profits to the state, while collective shops are taxed heavily. An example is catering business. Catering businesses have been frequently collectively owned, and had to turn in 80% of their profits to their administrators. As a result, the commercial sector had very limited financial capacity to expand its services. 74

3.18 The complicated administration system and bureaucratic hierarchy may be considered as the third cause for the slow growth of urban infrastructure and services. Provision of urban infrastructure and services in China is fragmented and in the hands of different central ministries and municipal authorities. Electricity is managed by the Ministry of Water Conservation and Electricity. Posts and telecommunications are run by the Ministry of Posts and Communications. Water and gas supply are the jobs of local public-utility companies. The work for setting traffic-control facilities is under the jurisdiction of the public-security bureau. Roads are designed and constructed by municipal engineering companies. Commercial facilities are provided by commercial departments or bureaus, hospitals by public-health bureaus, cinemas by cultural departments, and schools by education bureaus.

3.19 Provision of urban infrastructure and services is a task that requires high level of coordination. In the case of road construction, for instance, all the authorities concerning electricity, communication, water supply, drainage, gas, heating, landscape, public health and fire fighting, etc. have to be involved. However, all these related authorities have been subordinated to various hierarchies and systems, and each has had its own plans and priorities. Therefore, it has been very difficult, if not impossible, to work out an overall plan applicable to all of them. Very often, right after the gas company finished burying its pipelines, the electricity bureau would dig again to bury its cables, after which would come the water supply, then the heating pipes, etc. As a result, the road surfaces have had to go through endless cycles of being dug and covered, again and again. The


East Wind Road, one of the busiest roads in the City of Gangzhou, probably holds the nation's record in this respect, the road was dug three times within five months. When funds and grants for road construction have not been sufficient in the first place, wasting it like this certainly makes the fund shortage even more severe, not to mention other negative impacts, such as the traffic congestion that are usually caused by frequent road digging and reconstruction.

3.20 In each city or town, there is a city or town planning commission or office. However, this planning system has not been well incorporated to the state planning system. City planning agencies have been dominated by architects and civil engineers, with few economists or practitioners of law. The major responsibilities of city planning agencies have included working out a city's physical layout plan, controlling land-use pattern, and issuing building permissions. City planning agencies in China could be one of the more powerful centers to make a difference in urban construction; however, because the city plans are normally not formally legalized, and the city planning authorities themselves have had little political and financial powers, the implementation of the plans are often difficult. Also, there have been significant gaps between city planning (physical planning) and national or regional planning (economic planning). Ideally, city planning should be seen continuously as a part of regional and national planning. In order to integrate city planning with regional and national planning, city planning agencies would need to strengthen and diversify the expertise of their personnel, especially in law, finance, and economics.

3.21 The above three causes are related. Funds and grants for infrastructure construction have not been, and could not have been sufficient, given the magnitude of investments required. Low or no user charges for urban infrastructure and services further limited the financial resources for their continued survival and expansion. Wastage and misuse have made the fund shortages even more severe. Unless there are changes, these three forces jointly augur poor prospects for the future of urban facilities and services.

3.22 China's planning and administration of urban infrastructure and urban services have to be changed if the latter are to be greatly improved in the future. Recently, many Chinese experts have recognized that inadequate construction of urban infrastructure and urban public facilities would not only adversely affect the living quality of cities and towns, but also would hamper the growth of urban economy, and that of the whole economy. The phenomenon of having a relatively developed urban economy but a very awkward urban physical form and tertiary sector has been explicitly denounced. A term frequently appearing in the literature to describe this phenomenon is "the unbalanced 'flesh' and 'bones'" (imagine a body with all the bones but without flesh!). The policy of lopsided investment in productive sectors was sharply criticized by Deng Xiaoping as early as 1975, when he was first restored to power after the "Cultural Revolution."

3.23 Identifying the problem is the first step towards solving it; to find the solution, however, is difficult. The problems occurring in urban construction are directly related to insufficient urban investment and financing. This is not different from what is happening in other developing countries. The next chapter will be devoted to the discussions of urban
financing. Hopefully the discussion would help us to find a general solution for better construction of China's urban physical forms.

IV. URBAN FINANCING

4.01 Lack of financial resources has been one of the most obvious reasons the slow urban construction and deterioration of urban services in developing countries. China has not been an exception, as has been shown in Chapters 2 and 3. It is necessary to focus on the detailed issues of urban finance so that some underlying causes of the problems from urban construction and services may be examined.

4.02 The problems from urban finance are very closely related to the economic system of the country. Because China is a socialist country, state budgeting has been the most important financial resource for urban construction and services. Budgeting is a form of planning. The nature of the link between the plan and the budget is a test of whether or not a government is serious about its plan and whether or not it intends to carry the plan out. It is impossible to gain insight into the explicit policies spelled out by the government on urban infrastructure and services without really recognizing the dynamics of urban finance.

4.03 The purpose of this chapter is to explore the following questions: (a) How has China's planning system been set up? (b) How do the institutional factors affect urban construction and services? (c) How are civil programs and projects carried out? and (d) What are the problems in the financial system, especially in public budgeting? The discussion will help sum up some characteristics of the urban problems in China's particular environment. Because little disaggregated quantitative information is available, the discussion in this chapter will involve little data comparison and analysis, however, two recent case studies of urban finance are provided in the Appendix 3 to remedy this deficiency.

China's General Planning System

4.04 In urban finance, China shares many characteristics with other developing countries, such as insufficient financial resources, unclear and uncertain urban financial channels, previous-year-based budgeting process, etc. Because China is a large country with a strong central planning authority, however, it does not share some characteristics that many cities in developing countries have, such as uncertainty in budgeting, localized financial resources (revenues for local expenses generated mainly from local taxes, etc.).

75/ Goode, 1984, pp. 32-34.

76/ The previous fiscal year's budget normally formed the base to determine the amount of grants a government agency or department would receive for the current fiscal year. This is a common practice of most developing countries. See Matthews, 1973, pp. 233-259.
surcharges, and fees), and until two or three years ago, China's budgeting officers did not have to struggle with high rates of inflation.

4.05 China's planned economic system has four major components: economic target planning system, financial planning system, material supply and labor supply system. The most important and fundamental component has been the economic target planning system, based upon material balance guided by the state development policies, with which the planners in the State Planning Commission (SPC) have worked out the national economic development plans (production targets). Results from these plans are in physical units (tons of steel, meters of clothing, horsepower of agricultural machinery, etc.). These plans also normally identified the number and scale of new factories that would have to be built or existing factories expanded, and indicated the amount of the state capital investment that would be needed. The typical output of the SPC are the five-year and annual national economic and social development plans. After going through certain legislative procedures for approval, these plans would then be disaggregated to the local levels and implemented by the enterprises and organizations.

4.06 In parallel with the SPC, another group of planners in the Ministry of Finance (MOF), most of whom are financial experts, worked on the state financial plans. Based upon the tentative development targets submitted by the SPC, the financial planners would decide on the amount of capital investment that the state required for each economic sector, the amount of working capital that should be provided, the amount of loans for different sectors that should be provided, and the amount of national income that would be available for consumption, etc. The financial plans are expressed in monetary units; an important function of the MOF is to check whether or not the development targets proposed by the SPC were financially reachable.

4.07 For a long time, the state has set its goal to develop the "productive sectors" (see para. 1.11), especially the heavy industry. There has been no question that China has actually chosen the strategy of "development via social overhead capital shortage," described by Hirschman. The priority of financing has been assigned to "productive" sectors. Funds that went to construction of urban physical forms (see para. 1.08) and services were from residual available income, when all the grants for "productive sectors" have been decided. The disposable resources have been very limited. Since the state has been committed to achieving some unrealistically high development targets at rapid rates there has not been much "leftover" funds for "nonproductive" sectors. Many urban problems described in Chapters 2 and 3 are the direct result of this deliberate lopsided investment program.

---

77/ A study of 17 major cities in developing (excluding China) revealed that between 60% and 90%, with a median of 79%, of local expenditures were financed from local resources. Linn, 1981, pp. 245-283.

78/ The presentation here is based on an unfinalized research paper the author did with the World Bank during the summer of 1985.

79/ Hirschman, pp. 86-89.
4.08 An advantage of this funding system is the certainty in budgeting: in the beginning of the fiscal year, budget officers at every level know whether the projects they proposed have been funded or not. Normally, they avoid the situation, which is a quite usual situation for many developing countries,\textsuperscript{80} where the funds are not forthcoming until close to the end of the fiscal year, and they have to rush to spend their allocated funds prior to the close of the fiscal year.

4.09 The other two major planning components include material supply system and labor supply system. These would not be treated in detail as the roles of these two components are not the focus of this essay. They are also heavily based on the state development plans of the SPC.

Urban Finance Patterns before the Economic Reform

4.10 In examining urban finance patterns, analysts tend to focus on budget sheets of municipal governments: from where do they receive their revenues and on what are the revenues spent? China's municipal finance, however, is quite different. Under the pre-reform system, the major responsibilities of municipal government were to "manage" or regulate enterprises under their administration, including setting up production targets, financial, material, and labor supply plans for the enterprises. Thus, the maintenance and improvement of urban facilities and services, which are major tasks of most of the municipal governments in other countries, constituted only a minor task in the overall duties of China's municipal authorities.

4.11 The major financial sources of municipal governments have been the following: (a) retained profits (municipal governments would collect all the profits made by enterprises under their administrative -- not geographical -- jurisdictions; a proportion of which would be turned over to the central government, and the rest could be retained by municipal authorities for its budgetary funds); (b) various taxes and surcharges; (c) special grants disbursed by the state or governments at higher level; and (d) extra-budgetary funds (profits from the plants that were built, managed by local governments) and other reserved funds. No funds similar to block grants or government revenue sharing, which are the most important sources of funding from the federal government in the US for community development, exist in China. In addition, China's city authorities are not allowed to issue municipal bonds in generating revenues.

4.12 For each city, there have been four major categories enterprises: (a) type A enterprises that were located in the city but were built, financed, and managed by the central ministries or governments at higher level. Industries such as the railways, ocean shipping, banking, petrochemical, posts and telecommunications, military and high-technology, some major machine-building, etc. might belong to this category; (b) type B enterprises were those that have been built through the state budget but have been financed and managed by the municipal governments. This type of enterprises probably made up the largest proportion in terms of numbers in most of the cities. During the decentralization campaigns in 1957, the mid-1960s, and early 1970s, many

\textsuperscript{80} Caiden and Wildansky, 1974, pp. 45-65.
industries that were previously centrally managed and were handed over to municipal governments could be listed under this category: (c) type C enterprises were those built, financed, and managed by municipal governments, forming so-called extra-budgetary projects; and (d) type D enterprises that were collectively owned, usually small-scale, and mostly engaged in services and manufacturing, the majority of which were responsible for their own losses and profits.

4.13 In terms of profit retention, the profits made by type A enterprises have gone directly to the central government or governments of higher levels. They had nothing to do with city's profits retention. The profits of type B enterprises would first go to municipal governments, and then were subject to a division between the municipal government and the central or provincial governments; a proportion of the total profits could be retained by municipal government. Profits made by type C enterprises would form part of the municipal government's extrabudgetary funds. And as for type D enterprises, because they were responsible for their own profits and losses, the entire profits would be, theoretically, kept by them.

4.14 Each enterprise has had to pay the state taxes, local taxes and surcharges, but taxes never made up a significant amount of municipal revenues. The largest proportion of taxes in China has been the industrial and commercial tax (ICT). The ICT from type A enterprises would be collected by, in most cases, municipal bureaus of finance, then distributed among local and central governments; that for types B, C, and D enterprises would be collected and distributed more or less the same way, with a minor difference. Most of the distribution would not depend upon various share proportions but on various items: some items would entirely go to the central government.

---

81/ Zhou, et. al., 1983, pp. 53-56.
82/ In cities of developing countries, local tax typically provided more than half of locally raised revenue. See Linn, 1981, p. 216.
83/ A set of nationwide budget source share is provided by the World Bank (1983, p. 51):

<table>
<thead>
<tr>
<th>Item</th>
<th>Composition (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise profits</td>
<td>44.7</td>
</tr>
<tr>
<td>ICT</td>
<td>42.9</td>
</tr>
<tr>
<td>Agricultural tax</td>
<td>2.7</td>
</tr>
<tr>
<td>Other</td>
<td>9.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

84/ The World Bank, 1985a, p. 261.
government, while some others would go to local governments. Some other local taxes and surcharges (such as the real property taxes, license fees for vehicles and vessels, slaughter taxes, taxes on trade in animal husbandry, surcharges on the ICT and on agricultural taxes, etc.) have accrued entirely to municipal revenues. Fines and profits from expropriation were also retained by municipal governments, while customs duties taxes would be entirely handed over to the central government.

4.15 It is well known that there has been a great deal of conflict between the central government and localities in China's planning system. Looking into revenue allocation system is one way to understand the conflict. While the central government (its ministries) wants to expand its industries in order to generate more revenues, local governments will not be so enthusiastic in cooperating, even if the latter do not react adversely, because they do not have a share on the revenues generated by the central enterprises located within their boundaries. The scope of the conflict, of course, goes far beyond revenue sharing. The difference in allocating resources, in setting production targets, etc., are additional sources of conflict.

4.16 Other extra revenues that may be obtained by municipal governments (not on regular basis) have included some special subsidies from the central government, such as: (a) subsidy grants for urban utility companies, notably municipal bus and gas supply companies; (b) funds for urban construction (size and stability may vary with the importance of the city in question); (c) funds for special projects that were beyond the municipal financial capacity or programs in which the state has had a special interest (funds for building a long bridge or a tunnel, major municipal traffic roads, planting trees, the rehabilitation of the people who were persecuted during the "Cultural Revolution," etc.). Revenues of types (b) and (c) above have been the most important resources for urban construction. No systematic data for individual cities are available, but we do know the sum of the nationwide expenditures on these activities were lower than 5% of the total state capital construction budget before 1975 and between 5-10 years after 1976 (please refer to Table 3.1).

4.17 After examining the revenue side, it is time to turn to the expenditure side of municipal funds. Typically, the expenditure of municipal funds would be divided into three areas: (a) expenditures for capital construction, equipment upgrading, and products innovation of enterprises that are financially managed by municipal governments; (b) expenditures for urban maintenance, utility companies, and environmental protection; and (c) expenditures for "nonproductive sectors," such as administration, culture, education,
An informal set of data from Shanghai municipality showed that the capital construction expenditures in fiscal 1984 made up 60% of the city's total expenditures. This figure under the normal circumstances would have been even higher except that in that particular year the municipal government decided not to allocate expenditures for general equipment upgrading funds.

4.18 Expenditures for urban maintenance, utility companies, and environmental protection from the municipal government budget would go to the areas such as: (i) constructing and maintaining urban housing; (ii) constructing and managing urban water and gas supply, drainage and sewage system; (iii) building city traffic roads and managing municipal public transportation systems; (iv) constructing and maintaining buildings to shelter the municipal "non productive" sectors such as administration, education and culture, health, etc.; and (v) providing and maintaining structures for environmental protection or beautification, sanitarium facilities, etc.

4.19 One of the results of this type of funding pattern is, of course, underinvestment in urban construction. As is shown above, the revenues of the cities have consisted mostly of the profits of the industries they administered. The more revenues they desired, the more efforts they made to invest in industries. A vicious cycle resulted against the investment in urban construction, most of which do not generate profits.

4.20 While city governments have devoted most of their time and energy to manage their industries, some responsibilities for urban construction and services have been passed on to the central government. Substantial funds for urban physical construction and services have been channelled by various central ministries or by government agencies at levels higher than cities. Since this type of funds has not been under the control of the city governments, the size, resources and channels of funds could be very unstable. Funds for urban housing construction, for instance, mostly came with capital construction grants (see para. 2.04).

4.21 The construction and provision of urban services, such as electricity supply, posts and telecommunications, etc., are the responsibility of the concerned central ministries. Therefore, grants for capital construction and service improvement have been mostly disbursed directly from the central government programs. Many enterprises have had their own systems of water supply, electricity generation, and sewage disposal, as the construction grants for these use to be incorporated into the state construction budgets. Because most of these projects have been often small and could not attain

---

88/ The data is from a letter of the Shanghai Municipal Government to the Department of East Asia and Pacific Projects, the World Bank, 1985.
minimum scale economies, the waste of financial resources have been substantial.

4.22 Most of the commercial buildings have been built by commercial departments at various levels. Because these expenditures have been mostly at the hands of municipal governments and such information has not been readily available, it was difficult to determine the size of the grants that would be available for a particular city in specific years.

4.23 The grants for constructing colleges, hospitals, stadiums, and other major public buildings or structures have not necessarily appeared on budgets of municipal governments. Grants for the facilities required by higher education have come mainly from the central Ministry of Education (which is now the State Education Commission), especially if the school is directly under the administration of the Commission. Grants for hospitals and clinics (excluding the ones belonging to a particular enterprise) might have been disbursed by the Central Ministry of Health, or by provincial bureaus of public health. Some industrial systems, such as the railroads and petrochemical firms, would have their own hospitals. The cultural, sports and some recreational facilities might have been built by central ministries or higher functional bureaus.

4.24 Up to now, the financial capacity of the state has been very strong, and more than 60% of total national expenditures are under the state budget plans. Thus, due attention should be paid to the financial capacity of the central ministries and commissions when the issues on financing urban construction and services are discussed.

4.25 The typical situation in developing countries has been that between 60-90% of local expenditures were financed from local resources. These local resources included about 50% from local taxes and another 25% from service charges. Although there is no corresponding data for China, its urban finance pattern from the discussion above can be seen to be quite different from the norm of developing countries in terms of resource shares.

4.26 When the local authority has little control over the local expenditures on urban infrastructure and services, it is difficult to achieve any degree of coordination between various central departments. Each subsystem tends to maximize its own interests, often resulting in undesirable overall system. An example is the road digging case in cities mentioned in Chapter 3. This suboptimization by various agencies contributes to the conflict between the central ministries and local authorities.

Current Funding Trends

4.27 At present, China is undergoing a fundamental economic restructuring. Market principles are being introduced into domestic economic system;

89/ "Interview with Xue Muqiao," 1981, pp. 58-60.
and externally, the country is opening up to the outside world. The four planning systems, discussed in paras. 4.05-4.09, have been the focus of the reform. It is impossible to predict what the urban financial system will look like after the reform, because the country is only halfway through its reform, but it is possible to identify some trends of the present reform on urban finance.

4.28 It can be predicted that local taxes and surcharges will become the major revenue resources of municipal governments. So far, the direction of the reform has been clear: the relationship between the government and the enterprises would be changed. Enterprises would gain legal status as economic entities. The state and municipal authorities will no longer be asked to administer the enterprises under the jurisdiction. The system of profit retention would be switched to a taxation system. Municipal governments would also be encouraged to adopt the same practice in the future for all of their extrabudgetary enterprises. Therefore, as a result, the municipal revenue income in the future will rely heavily on taxes. Sophisticated taxation programs are being studied, with a view toward redefining the taxing jurisdictions among the central and local governments. Taxes would be collected, based on geographic location of firms and companies rather than their administrative jurisdictions. Some of the taxes would accrue to the central government, while other would be kept by the municipal governments, and still others would be shared.

4.27 Almost every enterprise has established collective welfare funds, which sometimes comprise about 30% of its income after having turned over the profits to the corresponding agencies and after being taxed. The large part of such funds has been channeled to build houses for employees or to run kindergartens and other employee welfare activities. Because private ownership of housing has now been encouraged, the proportion spent on private housing may rise substantially in the future. With the modification of the low rent policy, there has been some evidence that privately or collectively-owned real estate companies have entered the housing business. Some rich peasants around Shijiazhuang City (the provincial capital of Hebei Province), for instance, have used their income surplus to build 7,000 units of housing

91/ China has shown its anxiety to complete the present economic reform in five years (by 1990). This view has been expressed a number of times in the speeches addressed by the Chinese decision-makers. See, for instance, Zhao Ziyang, 1985.


in the city and then sold them at competitive market prices to the urban residents.97

4.30 Currently, a new trend of funding urban physical forms has come into being. Under the slogan of "People's city will be built by the people," the municipal governments have begun to push enterprises and sometimes individual residents to contribute capital or labor, especially to civil infrastructure. The successful experiences from cities and towns such as Tonghua,96/ Ziyang,97/ and Weihai are summarized below.98/ The various forms of organization have included: (a) all the prospective beneficiaries would pool their money together to start a project. If they could not collect enough capital, the remaining part may be subsidized by municipal governments. This measure has been frequently used to the projects such as to connect individual enterprise road or pipeline systems to the municipal system; (b) the prospective beneficiaries would devote labor, while the civil engineering authority would contribute materials and technicians. This pattern has worked well for the projects whose target groups were low income people, such as the provision of running water to some residential areas. Since the reform, most of the enterprises have obtained more and more autonomous power as well as reserved funds. It has been possible for the municipal governments to obtain more capital for the projects that directly benefit the enterprises and their employees. This resource for urban construction in the future will probably become more significant, especially for small-sized and medium-sized industrial cities where many rich enterprises are located. It is now apparent that a multi-channel funding system for urban construction is emerging in China.

4.31 If the present reform is carried further, the role of municipal governments will be drastically changed. In the future, the municipal governments may not be asked to manage industries any more. The latter will be independent of government administration. They will be responsible for their own profits or losses. What the municipal government will do is to collect taxes from them. Therefore, the majority of resources of the municipal government will not be devoted to industry, but to improving urban infrastructure and facilities. The better environment they can provide, the more they can invest and the more taxes they can collect. This will form a "virtuous cycle" for urban construction. Some cities, such as Wuhan in the central part of China, has already been moving towards this direction.99/ 

4.32 It is almost certain that municipal governments would have to finance public expenditures of the cities mostly through locally generated

95/ People's Daily (Overseas Edition), 8/31/85, p. 3.
96/ Tonghua City CCP Committee, 1/83, pp. 6-8.
97/ Rong, Zi, 3/83, p. 31.
98/ Weihai City CCP Committee, 4/83, pp. 66-68, p. 45.
funds. Local taxes and surcharges would probably constitute the major source of such financial sources. User charges and fees may become another important revenue resources. Issuing bonds, which is one of the most important revenue sources for municipal governments in the western industrialized countries, could be another possible channel to generate funds for urban construction.

4.33 Whether or not the above predictions will come true would greatly depend on the progress made in social aspects, particularly the institution of an effective legal system and the effective mobilization of mass participation. Hopefully, Chinese decisionmakers will recognize that properly managed social reforms would enhance, rather than impede, the achievement of economic reforms.

V. PROBLEMS RECONSIDERED

5.01 As discussed in earlier chapters, there have been various reasons for the slow urban construction and deteriorating urban services. They included: lack of investment in urban construction, bureaucracy, and under-pricing of urban facilities. However, these have all been manifestations of an even more fundamental problem which is the subject of the chapter, that is, the economic system per se, especially the lack of a properly functioning pricing mechanism. In this chapter, a broader perspective of the problems, including a review of some macroeconomic factors and social policies, would be undertaken, bringing in the issues related to the present China's urban reform.

Prices and Socialist Welfare Policy

5.02 Socialist societies have devoted great attention to the social welfare of their people. One of the important aspects of the socialist welfare policy is the low-price treatment to the urban workers. The low-price policy was adopted by the Soviet Union, right after the October Revolution in 1917.\footnote{Lalkaka, 1984, p. 72.} The situation in China has been very much similar. The Chinese decisionmakers sincerely believed that the low-price treatment was the superior characteristic of the socialism over capitalism. In the past thirty years, low prices have been maintained for most of the commodities, especially the ones essential to people's daily life. Prices for monthly bus fare, gas, electricity, water, etc., were set up in the late 1950s and have not been significantly increased since then (see para. 3.17). Housing rents even experienced several major deduction.\footnote{"Urban Housing Rental," 11/23/82, p. 28.}
5.03 One of the most serious adverse consequences of carrying out the welfare policy has been the creation of distortion in price system. Under this distorted price system, pricing mechanisms lost the power to adjust the relations between real demand (not needs) and supply; scarcity of different resources were poorly reflected; wrong signals were sent to producers and consumers to guide their production and consumption. In short, misallocation and misuse of resources were a natural consequences of a distorted price system, and they induce all sorts of undesirable institutional behavior.

Institutional Behavior of Service Producers and Consumers

5.04 Because the prices for urban facilities have been seriously distorted, extreme undesirable institutional behavior of producers and consumers has been observed in China's cities. First, there is no incentive for the government to invest in urban facilities. The reason is simple and straightforward: since the facilities have had to be operated at a net loss, the more the government invested to expand the scale of operations, the greater its losses would be, and the greater the future pressure for subsidies would be. Therefore, the government has become very reluctant to invest in urban infrastructure and housing. Worse still, it often tried in every possible way to channel its available capital to so-called "productive" sectors, where its funds would hopefully earn some profits, or at least not require heavy subsidies, in the future. Regarding urban construction, the central government has been very generous in providing funds for building factories, and very conservative in providing for urban infrastructure, housing, and other civic facilities. Municipal authorities have been known to covertly shift funds earmarked for urban construction to other more profitable uses. These behaviors will become understandable by looking at how the business related to urban infrastructure and services are run.

5.05 The low-price practice also has built an insurmountable entry barrier to nongovernmental organizations who had extra funds and might have been interested in entering the business. This is because there are no economic organization, except the government, which could, albeit involuntarily, spend large sums of money to support the existence of the net-loss businesses. No individual, for example, would normally be willing to rent out the superfluous floor space to tenants, because the rent charged may not cover the maintenance, to say nothing about profits. No enterprise or organization would want, for the purpose of profitably using its grants, to build more houses than the business and its employees require. No nongovernmental housing developer could have existed. Since there has been no economic incentive for nongovernmental organizations and individuals to enter the

---

102/ To distinguish the meaning of demand from that of need is not a new idea, but is is necessary to be made here. "Need" is more subjective, it can be very flexible, depending upon individual's personality, desire, etc. While "demand" is more objectively determined by willingness to pay. A person may need a good but not demand it, because of financial or other reasons.
businesses, the construction of urban facilities has had to be the sole responsibility of the government, and therefore the low-price practice has restricted potential resources for financing urban facilities.

5.06 Because revenue income can by no means cover operation costs, and heavy subsidies have to be required, the existence of utility companies and specialized urban construction authorities is constantly in jeopardy. Their proposals frequently appeared at the bottom of the government rosters for projects to be funded and at the top to be cut. These companies have had no other financial resources. As a result, the facilities and equipment tended to be worn out, and the quality of services tended to be bad and to deteriorate. The growth of the business, improvement of the service quality, and technological innovation of these sectors are greatly hampered. Under the circumstances, the companies and authorities could not be held responsible for the deterioration of the services; they usually had many reasons to explain, unashamedly and with righteous justification, why they had done a bad job.

5.07 Encumbered by the poor quality and unreliable services provided by municipal authorities, enterprises have to build their own infrastructure facilities, such as water and electricity supply systems, transportation, sewage disposal and drainage. Because the enterprises were financed by the government grants, an "extra investment" expected by Hirschman's followers could not be obtained. There has been the contradiction that on one hand, the state's financial capacity has been very tight, and yet on the other hand, a large number of redundant constructions and projects have been made. The redundant infrastructure projects further aggravated the misallocation of scarce resources.

5.08 Under the low-price system, the behavior of producers and suppliers have been extremely uneconomic and undesirable. The behavior of the consumers has been equally undesirable. From conventional economics, it is known that if the price of a good or service is set significantly lower than the market clearing level, there would be excess demand. China's housing problem might be considered a good example to demonstrate this theory. Since the rent for housing has been set exceedingly low (typically lower than 2% of urban household's monthly wage, see para. 2.20), almost every family could afford more than one unit of housing. Typically, residents who under normal circumstances would have been satisfied with what they have would demand more space. Since the housing allocation was not determined by price, other means have been employed, including walking through "backdoor," that is, bribery and using "guanxi" (corrupt relationships between family members, relatives, and friends). Under this system, the people who were in need but were willing to pay, could not get housing, while some others might enjoy more than their fair share. This has a tremendous negative impact on society.

103/ Hirschman argues that shortage of infrastructure may force enterprises to make an extra but effective investment on the facilities. Therefore, the region as a whole may gain more investment than if there has been an excess capacity in infrastructure (1958, pp. 89-96).
5.09 If a commodity were priced at zero, the consumers would continue to consume each extra unit of that commodity until their marginal utility approaches zero; in other words, they will consume until the consumption of the one more unit would hurt themselves. The phenomena observed in consumption of urban water and the allocation of urban lands might solidly support the theory.

5.10 A shortage of water has been viewed as a potential crisis to the future growth of most China's cities and economy as a whole, no less severe than the shortage of energy which has been widely acknowledged.

However, the industrial water-recycling rate in China is only about 10%, the lowest rate in the world (the comparative figure for the industrial in developed countries were around 70%). According to available statistics, more than half of cities, especially those located in the North China Plain and along the Yellow River Valley, experienced deficiencies in water supply. The water supply situation has been further aggravated by locating factories consuming large amount of water in water deficient cities, since the cost of supplying water could be ignored. Tianjin, for instance, has spent tens of millions of yuan each year to channel water from the Yellow River to the city, and recently the state had to conduct a multi billion-yuan project channeling water to the city from hundreds of kilometers away. In Beijing, the household water was priced at Y 0.002 per cubic meter, while the production cost was Y 0.021. Given that the wages for average workers would be at least Y 100 yuan, the price of water has been really negligible. As a consequence, precious water was wasted or very inefficiently utilized. Only by installing water meters (still charging at low prices), Shanghai reduced the water consumption from 170 gallons per person per day to 156.

5.11 China has the third largest territory in the world, but ironically, it is also a country short of land. Its per capita arable land is ranked among the lowest in the world (1/17 of that of Canada, 1/8 of the U.S., and 1/7 of the USSR). Worse still, the majority of the cities are located within traditionally agriculturally rich zones, owing to the historical development process and factors such as physical landforms, climate, etc. A sharp decline of arable land has been reported, because of conversions of farming land to urban and transportation uses (per capita figure in 1949 was

---

104/ Lampton, 1983, pp. 10-17.
105/ Ibid.
2.68 mu, and in 1979 it had dropped to 1.55 mu.\(^{109/}\) and it is difficult to increase new farming land.\(^{109/}\)

5.12 With such shortage of land, it is surprising that there has been no significant charge on urban land-use. The urban lands were allocated basically by administrative means. As a result, all the urban enterprises and organizations, including military units, tended to acquire as much land as possible, but no one seemed to have been concerned about how to use land more intensively and efficiently. Once the land had been allocated, it has been almost impossible for the city authority to regain or reallocate it, even if it were unused or underused; meanwhile, almost every urban unit would clamor for use of more land.

Lessons from the Chinese Experience

5.13 Every society, either market economy or planned economy, has to face the same problem on how to most effectively allocate scarce resources. China is surely not an exception. The above analysis shows that China has not been able to allocate her scarce resources efficiently, and Chinese urban problems actually have had some more fundamental causes that are associate with her economic and social structure.

5.14 The following lessons can be learned from the Chinese experience:

(a) The provision of social welfare can not be at a level higher than the development level of productive forces. It is important for governments to live within their means. Urban housing, infrastructure, and urban services at China's relatively low stage of economic development should not be treated as social welfare. Many socialist countries seemed to have recognized this in the early 1960s.\(^{111/}\) The lessons from China and other socialists countries may be relevant to the developing countries whose governments are anxious about advancing the social welfare without seriously considering their nation's economic capacity.

(b) Pricing mechanisms, which are one of the most important market principles, should not be overlooked. Ignoring pricing mechanisms may lead to a serious misallocation of scarce resources, as the case of China's urban construction and financing.

Intricacy of the Solutions

5.15 Distortion in the price system has primarily caused the undesirable behavior of various economic actors. Is it possible to conclude that the

---

\(^{109/}\) Ibid.

\(^{110/}\) Zhang Tong, 1982, p. 73.

solutions for better urban construction and financing can be found in the domain of overall urban pricing? As usual, matters in a developing country are seldom so simple and straightforward.

5.16 First of all, the low-price treatment is not a Chinese invention; it has its deep theoretical roots. According to the orthodox Marxist theory, value surplus created in a public ownership society should be considered as having two components for purpose of consumption: (a) individual wages, which will be paid to workers according to their work; and (b) social wages, which will be turned into social welfare and shared by all the members of the society. With the rapid growth of social productive forces, more and more surplus will be produced and social welfare will become better and better. Workers will eventually become less and less dependent on the individual wages they earn. A day will come when there is no more need for allocating individual wages, since the society would be able to state, "From each according to his ability, to each according to his needs." The arrival of this day marks the realization of Communism.112/

5.17 In today's Chinese society, public ownership indeed represents the leading force in the national economy; the social productivity, however, is undeniably far from the state described by Karl Marx and his followers in their century-old works on communism. Since the social productive forces have not been fully developed and the nation can only allocate a very limited amount of social surplus to social welfare, the workers have to be highly dependent on their individual wages. It is now widely acknowledged that the Law of Value, 113/ from the viewpoint of political economy, still maintains a dominant role in allocating resources and distributing products in the economy.

5.18 China's present policy regarding redistribution of enterprise surplus is that the "larger proportion adds to the state stock, smaller proportion goes to the collective accounts, and still smaller to individual workers." Therefore, the wage system has been set in such a manner that urban workers will not be able to afford to live, if the users' charges for the urban facilities and services are designed to cover operation costs (not to mention any profit markups or amounts set aside for future investment). Rent for housing alone, for instance, will cost at least Y 45 a month for a household, if the renewal period is set as ten instead of 700 years.114/ Therefore, reform on wages should be singled out as a crucial factor to the future economic performance. Proper readjustment of the proportions of social surplus value allocated to individuals and society should be a major task of the reform.

113/ Xue Muqiao, 1981, pp. 135-141.
114/ Sun, 1983, pp. 61.
5.19 The readjustment of the wage system, however, cannot be done without the price reform, because the wage reform has to relate the workers' income to their economic performance and contribution. Under a distorted price system, it is difficult to judge the real surplus created by the workers in various sectors and the peasants in the country. Therefore, any allocation based on the present nominal surplus may enlarge a lopsided income distribution between the workers and the peasants, and among the workers in different sectors.

5.20 Before the wage system is fully readjusted, it is not feasible to simply go ahead and raise the housing rents and utility prices. At the present time every move involving price has to be elaborately designed. Besides continuing to promote an even distribution of social welfare, some other negative effects from price rising, that is, an unstable social and political situation due to a price-rising, should be seriously considered. Even so, the role and scope of social welfare should be reevaluated.

5.21 Though the process of dividing the proportion of social surplus is difficult and complicated, it is not impossible. In 1983, for instance, the state spent ¥12.5 billion of its grants on housing construction. If this amount had been disbursed to the employees numbering 87 million people,115/ every employee's monthly wage could be raised by ¥12. With the addition of a proper subsidy from collective welfare funds (hopefully, most of this amount of funds could eventually be transferred to worker's individual wages), rents could be raised. It does not appear to make too much sense for the state on the one to collect a large proportion of social surplus and involuntarily spend on subsidy, and on the other hand to block the entry of other social groups and encourage an irrational and inefficient allocation process.

5.22 Prices for some commodities, e.g., water, have to be raised. A number of economists have argued that, theoretically, the price of water should be charged at the long-run marginal costs level.116/ This may not be feasible, both in terms of techniques and in reality. At the present time, consideration may be given to adopt a different tariff system (in terms of industrial use and domestic use). Hopefully, a pricing system which would gradually raise water prices would help to correct undesirable behaviors of enterprises and individuals and help to alleviate water shortage in some cities.

5.23 Competition, wherever possible, should be promoted, since it is the most effective and efficient way to allocate resources. Diversified ownerships should be encouraged so as to promote competition. Some more detailed policies to foster growth of collective and private enterprises need to be worked out. Concrete and detailed policies, regulations and laws have to be formed so as to ensure a fair competition and a healthy producer-consumer relationship.

115/ Ibid.

116/ See, for example, Carruthers and Brown, 1977, pp. 133-136; Saunders and Warford, 1976, pp. 164-190.
5.24 A trend of privatization public utility companies (contracting out public infrastructure) is emerging in some industrialized countries. It is expected that the involvement of private companies in public utilities may reduce bureaucracy and corruption in the public sector, while enhancing the efficiency of domestic resource allocation. China may consider learning some lessons and experience from this practice.

5.25 Utilization of market forces is of course not the only solution for China. Infrastructure, in standard economics textbook, is treated either as a public good or as a natural monopoly. The supply and demand for the infrastructure may respond differently to market forces. Low income housing is an issue that has to be dealt with by almost every government, regardless of whether they are in a developing or developed country. Therefore, the government must carefully examine the urban construction. In some cases, even though markets exist, a long adjustment period might be needed for creating an ideal market environment. During this period, most of the urban facilities in China would still be run at a net loss, and the government subsidy would continue to be crucial to keep most of the utility companies and municipal construction authorities in business.

VI. AFTERWORD

6.01 China has made striking achievements in removing extreme poverty and in meeting basic needs of the people. But China is still a very poor third world country. Its per capita gross national product in 1984 was only about US$300, among the lowest in the world. Probably just because China has been better in income distribution, among the other things, its development pattern has appeared to be more desirable. There are, however, many intrinsic problems that hinder China's future economic development. Problems arising from the provision of urban housing, infrastructure, and services have shown clearly that a new level of economic development, which is what the modernization program is all about, would not be attainable unless some fundamental changes are done to remove the economic, financial, and institutional constraints. If the problems raised from urban construction and finance could be thought as a misinterpretation and miscarriage of socialist

117/ See, for example, Dehoog, 1984; Fisk, 1978.

118/ Yeh, Anthony G. O. and Peter K. W. Fong, 1984, p. 79.


120/ In his research book Economic Growth and Employment in China, Rawski (1979) has shown the relationship between economic growth and employment in China. In the past thirty years, China has made tremendous efforts in creating full employment, even in the cost of losing economic efficiency. One of the direct consequences of the full employment development pattern is, of course, a desirable income distribution.
welfare policy, other problems relating to misallocation and misuse of scarce resources in the economy which were not examined in detail in this essay, may be traced to the general economic system itself: where pricing rules have been largely ignored, the balance between the moral incentives and material incentives was poor, the main state planning system could not function in the most effective and efficient ways. In this respect, it is absolutely necessary that China continue in its nationwide economic reform.

6.02 A comprehensive economic reform in a socialist country is a very intricate task. The issues on the urban physical forms shown in this essay is a good example: the inadequate provision of urban facilities and services resulted from a lack of investment, while the deficiency in financing was caused by distorted behavior of economic actors under an environment which encouraged the misallocation and misuse of scarce resources. To correct the undesirable behavior of the economic actors, more rational price rules reflecting principles of cost recovery would have to be adopted. The raising of prices may stir some political instabilities, and will have to be done carefully and slowly. Social surplus would, as a consequence, be redistributed due to the potentially undesirable income distribution patterns that may emerge from "letting some people get rich first." A large number of low-income urban residents may be excluded from the proper urban services, as in many third world countries. It would be interesting to see China facing the challenge of attaining a high level of economic efficiency in allocation resources on the one hand and social equity on the other hand.
URBAN CONSTRUCTION RECONSIDERED

Chinese Urban Definitions

Designated Cities by the State Council in 1955

1. Geographic place where the permanent residents are more than 100,000, or where the permanent residents are less than important industrial or mine base, large commercial center, and important town in remote or broader areas. Only the central government has the authority to designate a city. (Zhang, Wudong, 1983, p. 220.)

Towns by the State Council in 1963

2. Geographic place where the permanent residents are above 3,000, with more than 75% of them are engaged in nonagricultural activities; or where the permanent residents are above 2,500, with more than 85% of them are engaged in nonagricultural activities (Kirkby, 1985).

Agricultural and Nonagricultural Population

3. In 1958, the State Council issued the document of "Directive for Checking the Blind Outflow of Rural Population." According to the document, people who had permanently lived in cities and towns were granted "nonagricultural resident card," the rest were given "agricultural resident card."

4. Later, people who held agricultural resident cards were persuaded to go back to country, while nonagricultural residents were given the privileges of obtaining ration food and being assigned job in cities and towns.

Urban Population

5. Before 1982 census, urban population was defined as the total nonagricultural residents who were permanently living in cities and towns. After 1982, urban population has been defined as the total residents who are permanently living in cities and towns. The former is still adopted in China's City Planning Regulation of 1985; the latter has been used by formal state statistical report.

URBAN CONSTRUCTION RECONSIDERED

China's Migration Policy and Evolution

1. China is a country with a regulatory system that controls the population migration from rural to urban areas, and from small cities to large cities. Because provision of urban housing and facilities are closely related to the magnitude of urban population, some detailed information as well as some comments on the evolution of China's migration control policy is provided here.

2. As early as 1952, only three years after the foundation of the People's Republic, the administrative organs had begun to look into the issue of rural to urban migration. A memorandum of the Central-South Military and Administrative Commission declared: "After the autumn harvest in the rural areas, a slack period has set in, and a large number of peasants are bound to move blindly to the cities, thereby increasing the number of unemployed."\(^1\) The formal passage of the regulations restricting rural to urban migration, however, was made only in January 1958 by the National People's Congress.\(^2\) With the passage of the regulation, people who were living in rural areas at the time were issued agricultural residence cards, while those in cities and towns were issued non-agricultural residence cards. Later on, the residence card system has turned out to be essential means of controlling the growth of urban population through rural urban migration.

3. Three other important measures together with the residence card system worked effectively to control rural-urban migration in China: the system of resident registration, food and goods supply, and labor recruitment and employment practices. (a) Registration system. Citizens must register their permanent residence status according to where they were born, and their permanent address. Permission from the authorities is required for anyone in China to move from one place to another, on a permanent or temporary basis. Normally only the movement from city to country, or from large city to small city was permitted. Residence card and the registration system have been administered by local Public Security Bureaus. (b) Grain and other daily necessity goods supply system. The state has had the responsibility to supply non-agricultural residents with certain amount of reasonably-priced (usually highly subsidized) food and some other ration goods (by issuing food coupons and ration tickets). Food and goods allocation is managed by local Grain and Oil Bureaus and Commercial Bureaus. (c) Labor recruiting and employment system. Factories could only hire workers according to the state annual plans. To reduce urban unemployment rate as well as the state burden of supplying urban residents with cheap food and goods, the labor recruiting plans usually allowed the factories to hire only local urban residents.

---

\(^1\) Kirkby, 1985, p. 24.

\(^2\) Ibid. 24.
addition to having ration food and goods, an urban worker also has the privilege of being assigned housing. The existence of these three systems has basically blocked unauthorized migration from rural areas to urban. If a peasant insisted on moving to a city, he or she would find there are no jobs (except perhaps as household help), that there is no cheap food (an extra price has to be paid if a person has no food coupon), and that there is no housing.

4. There are a number of reasons why China has had to, and was able to, carry out such a migration control policy. China has experienced rather rapid industrialization since the 1950s. A stable urban social and economic environment was considered critical for maintaining the progress. Achieving a low urban unemployment rate and securing the basic needs of urban residents were considered essential to sustain a stable urban environment. However, since China could only support a small proportion of the population with guaranteed food, job, and housing, to mention a few, it has had to strictly control rural to urban migration.

5. Studies have shown that income gaps between urban and rural areas is one of the most important factors for migration to take place. This gap does exist in China. However, a more fundamental cause is not whether a gap exists, but whether the gap can be bridged through employment opportunities. In a centrally planned economic system, the labor and goods markets do not work well. Chinese cities did not provide peasants the opportunity to improve their incomes, even if the peasants moved there.

6. While restricting rural to urban migration, the state also took measures to encourage the peasants to remain in the rural areas. The most notable measure was to organize People's Communes. The communes created opportunities to absorb all the rural labor, although whether or not the labor was efficiently utilized was debatable. The state-controlled price system seemed also to function in favor of farm products; price increases for farm products in general have been significantly faster than that for non-farm products. Between 1957 and 1976, tens of millions of urban youth and cadres moved to country, either by force or voluntarily. To a great extent, this "sending down" movement alleviated the discontent of the peasants.

7. This migration control policy has very strong social impacts, both positive and negative. In general, it helped the country eliminate poverty in the urban areas, and the state has been able to maintain a relatively stable urban environment with very limited resources. The steady industrial growth in turn greatly benefitted the rural economy, since the output of agricultural tools and equipment, chemical fertilizer, pesticide, etc., have been greatly increased. It is not difficult to visualize the ensuing chaos if China suddenly announced that the population control policy would be removed.

8. This policy, however, has had strong negative impacts on society. It has worked to maintain the gap between the urban and rural areas not only

economically, but also socially. A person with non-agricultural residence card, for instance, will be entitled to more privileges of obtaining cheap food and ration goods than an agricultural resident. In addition to the question of social equity whether or not it is right, many other negative consequences are identifiable. A worker may have to work in one place until the retirement; many married couples cannot live together if they happen to be assigned jobs in different cities; labor becomes practically immobile and efficiency of labor resources are not fully realized.

9. China is now modernizing itself, and to do this effectively, factor markets must be established. The establishment of labor market would first require labor mobility. With the introduction of market economy in recent years, cities have increasingly presented opportunities to the peasants. Although the government is still issuing food coupons and other ration tickets, grain and other goods from the "free market" do not appear to be much more expensive than the goods in state stores. Accompanied by rapid increase in agricultural productivity in recent years, the issue of rural labor surplus in some areas has also become pressing. There has been some evidence that the country is considering modifying its migration control policy.

10. In October 13, 1984, the State Council made an official announcement on the new migration control regulation regarding the rural market towns. According to the government estimates, there are some 60,000 towns in the country to which this new policy is applicable. The main point in this announcement include: (a) a residence card should be issued to a peasant who wants to move to a town that is below the county-seat level, with the understanding that the government will not be responsible for food coupons and ration tickets; (b) the migrating family must not allow its contracted land to be abandoned, the land must be legally transferred to another party before migration is permitted; (c) statistically, this type of household will be counted into non-agricultural population; and (d) migration regulations concerning suburban towns can be decided by the local governments. Essentially, this is the creation of a second class of urban dwellers without the privileges of the holders of urban residence cards.

11. No official state announcements regarding the migration to cities have yet been found. A unique case of Wuhan, however, has been reported.

12. Wuhan is a multi-million population city located in the central part of China where two major transportation lines -- Beijing-Guangzhou Railroad and Changjiang (Yangzi River) meet. Wuhan was also designed as a pilot city for the urban reform prior to the nation-wide urban reform starting in October 1984. The city's new policy is to invite the competition to the city. The mayor extended his personal welcome to all the business people, including peasants, to come to do business in the city. Since the reform, collectively-owned enterprises and extra-budgetary construction (which are not incorporated

4/ People's Daily, p. 1. 10/22/85.
into the state budget plans and, therefore, is not subject to the state labor hiring plans) contributed to a big surge in labor demand. The city's "floating population" (people who do not hold permanent resident status) amounted to tens of thousands.

13. In May 1983, the Public Security Bureau of the Wuhan Municipality announced that non-resident workers should go to the bureau to obtain a "work permit" which would be valid for six months and could be extended for another six months. The employers were warned not to hire any person who did not have work permits. Wuhan may have demonstrated one of the ways that China could deal with migration problems in the future.

14. There are some reservations if all the other cities in China only duplicated Wuhan's measure. Firstly, Wuhan's measure may be too weak and ineffective in controlling population migrations at this state to truly relieve migration constraints. A sudden urban population increase will cause further deterioration in the urban environment, since most cities already have serious housing shortages, and urban amenities and services are already overloaded. Besides, if the supply of food and other goods are limited are forced up (due to bad weather, for instance), there may be problems of food sufficiency for the urban population. Whether the city has the ability to evacuate the people who do or do not have food coupons is questionable. If the city is unable to do so, maintaining the city's order and security may be difficult.

15. Secondly, if cities have the privilege of choosing who should move (by issuing work permits), the income gap between urban and rural would tend to widen, because the most able-bodied peasants may find jobs in cities and become richer, while those remaining behind would tend to be less capable and remain poor.

16. China's migration policy will become a crucial component of its economic reform and the general modernization program. Migration control must be abolished eventually, if the country aims to establish a labor market and to improve the utilization of its resources. However, much time may be required to achieve this goal. A sudden relaxation of migration controls may result in chaotic situation in which one is better off.
URBAN CONSTRUCTION RECONSIDERED

I. Case 1

Huangchun: A Newly-Built Satellite Town of Beijing

A case study of Huangchun City, a new satellite town of Beijing, gives some detailed information on urban construction financing. In 1979, Huangchun was designated as a new town by Beijing City authority in its master plan. The target population was set at 170,000. It was estimated the capital investment for the city would total to Y 3.02 billion, with the average of Y 17,000 per resident. By the end of 1981, the city had managed to generate Y 0.45 billion (the sources were not identified in the article). The remaining Y 2.6 billions came from various sources: (a) Facilities for housing industry, commerce, schools and colleges, and offices amounted to Y1.4 billions. As these would directly come from the investors (i.e. various government departments and bureaus at different levels) the amount of expenditures would not directly appear on the city's budget; (b) Housing and civil engineering within residential areas would cost another Y 0.72 billion, and, again, this amount would be offset by investors; (c) Construction grants for railroads, post and telecommunication, and electricity supply (Y 80 millions) would be provided by the related central ministries, as is the usual practice; (d) Hospitals, cinemas, shopping centers, service centers, a cultural center, and a stadium would need Y 0.1 billion. Investors for these projects have not been found; and (e) Y 0.3 billion were for urban infrastructure, with two-thirds allocated for service roads to Beijing. This particular project had been incorporated into the state plan.

The city still needed Y 0.2 billion grants to cover the total urban construction costs. A number of resources and channels were suggested by the paper: (a) Continuing to apply for the state grants or loans; (b) In each year, Beijing city government had the privilege of retaining 5% of the city's industrial and commercial profits for its urban construction, which amounted to Y 0.22 billions; the state also granted the city another Y 0.02 billion subsidy for urban construction. Of the city's total Y 0.42 billions each year for urban construction, a certain proportion of it can be disbursed to Huangchun; (c) Huangchun may levy land-use and land development taxes; and the city could also entitle to all or part of its 5% retaining of industrial and commercial profits. In addition to the grants for urban construction, the City of Beijing City was guaranteed Y 0.1 billion by the central government as urban maintenance fee. Part of these funds may go to Huangchun to meet the future needs of city's maintenance.

II. Case 2

Small Towns: Self-Financing 2/

3. One comprehensive survey was conducted in 1984 in Yichun Prefecture, Jiangxi Province. Twelve small towns under the country-seat level were studied. None of the townships in the study had ever received any direct construction grants from the government at higher levels. Some of the official buildings, such as the ones for Tax Collection Station (the major township financial institute accredited by county financial bureau) and county-run enterprises and commerce were built by the county. The funds for infrastructure (sewerage disposal system, surface of the roads, etc.) and most of the public buildings (the town halls, cinemas, playgrounds, etc.) came, with no exception, from the commune-run enterprises. Therefore, during the years when the enterprises made profits, large sums of grants for town construction became available; in other years when few profits were made, few or no grants would be disbursed for town construction. This self-financing pattern certainly explained why the towns in rich agricultural zones have developed much faster than those that are not so rich.

---


People's Daily (Overseas Edition), 9/5/85. "Beijing Speeding up Housing Construction."


People's Daily (Overseas Edition), 11/19/85. "New Methods to Praise or Punish Employees."


