

1999

**CHINA HUMAN
DEVELOPMENT
REPORT**

Transition
and the State

undp



United Nations
Development Programme

**CHINA HUMAN
DEVELOPMENT REPORT
1999**

TRANSITION AND THE STATE

PUBLISHED FOR THE
UNITED NATIONS DEVELOPMENT PROGRAMME
CHINA FINANCIAL & ECONOMIC PUBLISHING HOUSE

Although the Report is commissioned by UNDP, the analysis and policy recommendations in this report do not necessarily reflect the views of UNDP China Country Office. The independence of views and the professional integrity of its authors ensure that the conclusions and recommendations will have the greatest possible audience.

The exposition of China in this report does not include Taiwan Province, Hong Kong Special Administrative Region and Macao of the People's Republic of China. The related tables and data do not include those about the three regions either. This note applies to all the chapters and sections of this book.

United Nations Development Programme

2 Liangmahe Nanlu
Beijing 100060, China
Tel: 86-10-6532-3731
Fax: 86-10-6532-2567
E-mail: registry@public.un.org.cn

FOREWORD

This second China Human Development Report examines a crucial current issue for China: the changing role of the state. Having provided a comprehensive survey of the status of human development in the first China HDR in 1997,¹ we turn in this one to a more focused look at a single issue, albeit a very broad one with widespread ramifications for human development in the future. Unlike the case in various European transition countries, China has followed an evolutionary course with respect to the role of the state, evolving from a particular nexus of political authority centered on the Chinese Communist Party and the organs of government. Change to date has included, *inter alia*, the separation of the Party from direct control of government operations, separation of government from direct control of economic enterprises, and a substantial relaxation of state intervention in the everyday civil, social and economic lives of citizens. Moreover, the development of a large and thriving market economy including cooperative, private, foreign invested and various kinds of joint venture enterprises has meant an enormous *de facto* change in the role of the Chinese state, which used to run -- or attempted to run -- virtually the entire economy.

These changes, which are still under way, have had complex ramifications for human development. The longevity and health status of the population have continued to improve, and literacy has advanced. People are much freer in their everyday lives than in the past, and access to global sources of information has made for a much better informed public. At the same time, social and economic inequalities of various kinds have widened rapidly. While the rate of poverty has continued to fall in China's countryside, where most of it has been located, urban poverty has increased, due in part to the reform of state operated enterprises, which have laid off many millions of workers. Large-scale unemployment, labor surpluses in the countryside and consequent rural-urban migration pose new challenges to social policy. New problems also afflict women in getting and retaining urban jobs. China's growing response to the environmental devastation of recent decades still falls short of what will be needed to reverse the decline and begin restoring ecological balance.

A number of aspects of the state's changing role has affected its responses to such human development problems. Among these are the decentralization of the fiscal system during the reform

¹ The China Human Development Report, 1997. New York, Oxford University Press, 1999.

period, which has left the central government with weakened fiscal capacity to implement social policies. Another is the retreat from the use of administrative controls, which has not yet been matched by an adequate development of regulatory tools. In the very high growth environment of the decades after reform began in the late 1970s, some aspects of human development more or less took care of themselves, pushed along by rapid economic advance. This is to some extent true of poverty reduction, for instance, although a growing government program aimed at eradication of poverty also played an important role. However, economic growth began slowing in the mid-1990s, and especially after the onset of the Asian economic crisis in 1997. In a slower growth environment, a vigorous and effective set of government policies to promote human development is likely to become more important than ever. Moreover, from a structural viewpoint, while the state necessarily withdraws from its former roles in the economic, political and social life of the nation, its responsibilities for supporting human development are likely to grow, albeit through the use of new policy instruments.

This Report is offered as a contribution to the ongoing discussion about the changing role of the state. It makes a case for a substantial and vigorous role for the state, but one quite different from its past role. The future course of human development, which is of prime concern to UNDP, depends greatly on the achievement of a successful metamorphosis of China's state into one appropriate to a modern civil society and market economy, transparent and accountable to the public, encouraging of widespread participation in governance at all levels, responsive to society's needs, and capable of implementing an enlightened human development agenda. While the particular views expressed in this Report are those of its authors and not of UNDP, I very much hope that the Report will play a constructive role in clarifying the way forward in this most essential area.



Kerstin Leitner
UNDP Resident Representative
UN Resident Co-ordinator in China

PREPARATION TEAM

EDITOR AND PRINCIPAL AUTHOR

Carl Riskin

AUTHORS OF BACKGROUND PAPERS

<i>Cui Zhiyuan</i>	<i>Ding Yuanzhu</i>
<i>He Zengke</i>	<i>Hu Angang</i>
<i>Li Shi</i>	<i>Barry Naughton</i>
<i>Carl Riskin</i>	<i>Wang Shaoguang</i>

ACKNOWLEDGEMENTS

Preparation of the 1999 China Human Development Report was a complex operation, involving coordination of participants on two continents. He Jin exercised administrative leadership of the project and Zhu Hua competently undertook the coordination effort. Hakan Bjorkman, Jim Carlson, Lanyan Chen, Yannick Glemarec, Dennis Fenton, He Jin, Kerstin Leitner, Lena Lindberg, Terry McKinley, Andy Wilkes, Sun Yongfu, Rong Jingben and Yu Keping all provided perceptive comments and criticisms of earlier drafts and caught many errors. The editor wishes to thank the authors, who also acted as valuable commentators on the draft as a whole. Special thanks go to Barry Naughton, whose sharp eye spotted a number of errors and inconsistencies, and whose challenges to certain formulations forced several useful reappraisals. Alison Swenton provided valuable assistance in assembling the bibliography and front matter and preparing the manuscript for publication.

TABLE OF CONTENTS

Introduction 1

Chapter 1 The Role of the State: A Theoretical Survey with Reference to China 3

Introduction: The State and Human Development	3
1. The State as the Corrector of "Market Failure"	3
1.1. Traditional Market Failures	3
1.2. New Market Failures	4
1.3. Government Failure	5
2. The State as the Creator of Market Institutions	5
2.1. The State and Transition to a Market Economy	6
3. The State's Role in Income Distribution	8
3.1. Reducing Rural-Urban Gap and Enlarging Domestic Demand	9
4. The Role of the State in Human Development	10
5. The State's Role vis-à-vis an International Economy	13
6. Strengthening State Capacity	13
6.1. The Political Condition	13
6.2. The Fiscal Condition	13

Chapter 2 The Role of The State Before The Reform Era 15

1. The Traditional State and Human Development.	15
1.1. The Evolution of the Traditional State	15
1.2. The Role of the State in Stimulating Modern Industry	16
1.3. The State in Human Development	17
2. The State and Human Development from 1949 to the Reform Era	20
2.1. The State's Planning System	20
2.2. The State and Economic Growth	22
2.3. The State and Human Development	24
2.4. The State and Mobilization Campaigns	34

Chapter 3 The State and Human Development in the Reform Era 39

1. New Trends in the Role of the State	39
1.1. The Separation of the Government from Direct Control of Production and Trade	39
1.2. The Decline of the State's Fiscal Role and Position	41
1.3. The Growth of Civil Society	41

1.4.	Increasing Independence of Individuals From the State	43
1.5.	The Separation of State From Party: Progress Toward an Independent Legislature and Judiciary	44
1.6.	Decentralization of Public Administration	46
1.7.	The Development of Village Democracy	47
1.8.	Growing Integration of China into International Society	48
2.	Enhancement of State Capacity	48
2.1.	Leaner Government with New Functions	49
2.2.	Modernizing Public Administration	49
2.3.	Government Transparency	50
2.4.	Coordination of Economic and Social Development	50
2.5.	Seeking Cooperation with Other Actors	52
2.6.	Strengthening Risk Management Caused by Globalization	52
3.	Effects of the State's Changing Role and Capacity on Human Development	54

Chapter 4 Major Human Development Issues in the Reform Process 57

1.	Unemployment	57
1.1.	Explosive Increase in Urban Unemployment	57
1.2.	Situation of Urban Laid-off Workers	58
1.3.	Why Does Urban Unemployment Increase Sharply?	60
2.	Regional Disparities	62
2.1.	The Change in Regional Social and Economic Development Disparities, 1978-1995	62
2.2.	Causes of Increasing Regional Disparities	64
3.	Urban-Rural Gap in Income and Public Services	66
3.1.	Relative Disparity in the Income of Rural and Urban Residents	66
3.2.	Urban-Rural Disparities in Public Services	69
4.	Environmental Degradation	70
4.1.	Major Environmental Issues	70
4.2.	Economic Losses from Disasters and Pollution	74
4.3.	Environmental Protection Plan	75
5.	Declining State Extractive Capacity and Its Consequences	75
5.1.	Public Goods and Services	76
5.2.	Deficient Infrastructure.	77
5.3.	Corruption.	77

Chapter 5 The Changing Role of the State, the Imperative of Growth, and Human Development 81

1.	Importance of Government Extractive Capacity	81
2.	The Issue of Extra-Budgetary Funds	82

3. Closing the Revenue Gap 83
4. Moving Towards a Diversified Financial System 85
5. Essential State Action for Economic Growth: Principles 85
6. State Activity to Support Development: Discussion 86
7. State Action Targeted at Human Development 89
8. Making the State More Accountable 91
9. Conclusion 92

LIST OF TABLES AND FIGURES

Tables

- 1.1. Rate of Capacity Utilization for Major Industries 9
- 1.2. Annual Growth Rates of Rural Per Capita Income and Rural Retail Sales 10
- 2.1. Population Indicators, 1912 18
- 2.2. Human Development Expenditures 23
- 2.3. Life Expectancy at Birth, 1950-1978 24
- 2.4. Population Growth, 1950-1979 25
- 2.5. Changes in the Structure of Urban Areas, 1952-1995 27
- 2.6. The Development of Health Care, 1952-1979 28
- 2.7. Distribution of Students Over Three Levels of Education 28
- 2.8. Educational Expenditures, 1950-1979 29
- 2.9. Women in the National People's Congress 30
- 2.10. Budget for Labor Insurance and Welfare, 1952-1979 30
- 2.11. Expenditures for Disabilities and Social Welfare, 1952-1979 31
- 2.12. Expenditures for Social Relief 31
- 2.13. Unemployment Rate, 1949-1979 32
- 2.14. Relationship between Accumulation of Funds and Wage Growth 32
- 2.15. Employees and Total Wages of State Enterprises, 1952-1978 32
- 2.16. Structure of Energy Consumption 34
- 2.17. Rustication of Urban Educated Youth 37
- 2.18. The Returned Urban Youth 37
- 3.1. Marketization Indices for China, 1979-1992 40
- 3.2. Structure of Industry, Gross Output Value of Industry by Ownership, 1978-1997 40
- 3.3. Total Imports and Exports and Utilization of Foreign Capital 41
- 3.4. Proportion of Total and Central Government Budget Revenue to GDP, 1979-1997 41
- 3.5. Private Social Organizations 42
- 3.6. Classification of Social Organizations in Xiaoshan City, Zhejiang Province 43

3.7.	Investment in Pollution Control, and Fees and Fines for Polluting	51
3.8.	Human Development Achievements in the Reform Period	53
3.9.	Sources of Educational Funds Since 1991	55
3.10.	Sources of Social Welfare Relief Funds	55
4.1	Estimated Real Urban Unemployment in China	58
4.2	Number of Laid-off Workers, Percentage of Laid-off Workers in Labor Force, Average Living Allowance, by Province, 1996	59
4.3	Urban Population Groups with Reduced Incomes, 1997, by Quintile of Income Distribution	60
4.4	Regional Disparities in Human Development Indicators (HDI) in China	62
4.5	Variation in Major Social and Economic Development Indicators of Different Regions	63
4.6	Ratio of Fiscal Surplus to GDP, by Province, 1978-1993	65
4.7	Annual Growth of Consumption of Urban and Rural Residents	66
4.8	Resident Consumption	67
4.9	Comparison of Per Capita Family Income of Rural and Urban Residents	68
4.10	Ratio of Urban to Rural Per Capita Consumption Expenditures by Category of Goods	68
4.11	Average Per Capita Food Consumption of Rural and Urban Residents	68
4.12	Average Possession of Consumer Durables per 100 Households in Rural and Urban Areas	69
4.13	Hospital Beds per 1,000 Persons in Urban and Rural Areas	69
4.14	Comparison of Urban and Rural Telecommunication Facilities	70
4.15	Area Subject to Water Erosion in Various Regions	71
4.16	Number and Frequency of Natural Disasters in Various Periods	72
4.17	Air Pollution Comparison of World Cities	73
4.18	Grain Losses Due to Disasters, 1952-1997	74
4.19	Master Plan for National Environmental Construction	76
4.20	Pollution Control Funds, 1985-1995	77
5.1.	Social Security Outlays, as Percent of GDP, 1996	82
5.2.	Breakdown of Extra-Budgetary Outlays, as Percent of GDP, 1995	83
5.3.	Revealed Unpaid Tax Revenue, 1985-1996	84
5.4.	Social Security Reforms, End of 1996	90
5.5.	Social Security Outlays, as Percent of GDP, 1996	91

Figure

2.1	Growth of Population from Xia Dynasty to 1949	17
2.2	Proportion of Total Government Revenue going to Central and Local Government	22
2.3	Women in State Owned Sectors, 1952-1979	29
3.1	Number of Laws and Legislative Resolutions Passed by NPC and its Standing Committee since 1979	45
3.2	Crude Birth and Death Rates, and Rates of Natural Increase	51
3.3	Government Expenditures for Education, Agriculture, Pensions and Social Welfare	54

4.1	International Comparison of Employment Rates by Total Population and Women's Participation in Labor Force, 1993	61
4.2	Ratio of consumption levels of nonfarming to farming population	67
4.3	National Direct Economic Losses From Natural Disasters	75
4.4	Railway and Highway Mileage in China, India and US	78
5.1.	Infrastructure Investment: Major Trends	87
5.2.	Central Government Fixed Investment	88
5.3.	Local Government Fixed Investment	88

Statistical Appendix	95
-----------------------------	-----------

Bibliography	107
---------------------	------------

INTRODUCTION

This Report is about the changing role of the state during the transition from central planning to a civil society with a market economy. One of the biggest challenges facing China in that complex journey is the need to forge a new role for the government. A modern society with a "mixed" economy assigns the government a role very different from the one associated with the central planning regime that China inherited from the Soviet Union in the early 1950s. In that regime, as modified in Chinese practice, the state tried to run the economy and, indeed, the entire society, as if it were a collection of workshops directly managed by the state. The planners used the method of material balance tables to allocate resources physically among the many sectors and industries in accordance with plan targets. Communist Party units in every enterprise and organization made the important policy decisions for their institutions. Market forces were suppressed almost in toto; the financial sector played no active role in the allocation of resources. Needless to say, economic efficiency was not an outcome of this system, although it produced growth in economic output.

Moreover, human development scored some important gains under the central planning system. Human development encompasses the change in basic human capabilities, such as that of living a long life, enjoying good health, acquiring knowledge, and participating in the life of the community, in addition to having the ability to obtain goods and services. Human development is concerned with the conditions of life of the entire population, not just the statistical average, and therefore is sensitive to matters of distributive equity, poverty, and the situations of women and of minorities. During the pre-transition period, such fundamental components of human development as health care and longevity improved; many infectious diseases were stamped out; real incomes rose; literacy spread, and women made significant advances. On the other hand, individual freedom and the political space for expression of ideas were both severely limited and mass cam-

paigns imposed great suffering on large numbers of people. Nor was the development of a vigorous civil society permitted. The human development record of the pre-transition years is reviewed in detail in the *China Human Development Report* for 1997.

The state plays a major role in human development in all societies, including China. Yet the role of the state in general has been changing during the transition period. The government is attempting to develop the capacity to interact with the society and economy in new ways, through regulation, fiscal and monetary policies, and a modern legal and judicial system. The overall design of its intended new role is not entirely clear. At present, the state still does many things in the old ways, while withdrawing perhaps excessively from some previous responsibilities and lacking the capacity to handle other new ones.

For our purposes, state is a convenient term for government. In China, however, the state has been defined as the nexus of political power consisting of the Communist Party and the organs of government since the founding of the People's Republic. Through most of that history, the state as such has had a high degree of autonomy, although there have always been interest groups and factions competing for resources within that nexus. Nor has this situation been fundamentally altered by the attempts of recent years to separate the Party from direct control of the organs of government.

While the links between the sources and uses of state authority must ultimately be recognized, this Report is primarily concerned with the latter, as indicated immediately by Chapter 1, which presents a theoretical discussion of the state's appropriate role in a modern mixed economy, with special reference to China's situation and to human development concerns. The second chapter reviews the history of the state's role in China before the current transition period began in the late 1970s. This is followed by a discussion of the changing role of the state during the past two decades of reform. Chapter 4 provides an account of

the most urgent human development problems facing China today and to which the state must respond. The final chapter contains a brief for developing, altering and improving the role of the state in China in the current context.

The discussion as a whole supports the case for a Chinese state that is vigorous and active, but in different ways than in the past. The study sees the state continuing to withdraw from direct control of production and further relaxing its control over the development of the normal institutions of civil society. Government needs to master the tools of regulation and macroeconomic policy to influence economic events. It is responsible for providing an essential institutional foundation for the operation of a mixed market economy. Moreover, when it comes to human development, the state needs to play a bigger role, doing what the market cannot do adequately to combat poverty and promote education, health care, social equity and preservation of China's threatened natural environment.

For this, the government needs a modern fiscal capability, which in turn requires that the proliferation of extrabudgetary revenue resources be brought within the formal budget mechanism, and thus within the scope of public policy, and that the tax base be broadened and tax compliance improved in order to generate a tax revenue commensurate with the government's essential responsibilities.

As in our last Report, statistical tables are appended which contain the most up-to-date Human Development Index (HDI) numbers for China's provinces. In addition, this year, the Gender Development Index is estimated for the first time, and a number of indicators are added that throw light on gender differences in various aspects of human development, such as employment, illiteracy and the allocation of time. We hope the information and frank discussion in this Report will be helpful in the ongoing debates over how to reshape the relationship between state and society in China.

Chapter 1

THE ROLE OF THE STATE: A THEORETICAL SURVEY WITH REFERENCE TO CHINA

Introduction: The State and Human Development

What role should the state play in China's human development as the transition to a market economy proceeds? Accepting common internationally current views about the efficacy of the market and the imperfections of government, some Chinese commentators suggest that the state should be restricted to providing defense, defining property rights, enacting and implementing laws, enforcing contracts, and maintaining the value of the currency.¹ They believe that if the government leaves economic actors alone, unfettered competitive markets will work effectively to generate socially desirable outcomes, including human development outcomes.

An alternative view is that the state should play a more active role in promoting China's human development and in a crucial aspect of it today – the transition to a market economy. This argument is built upon several observations. First, even in mature market systems, government interventions are indispensable for organizing efficient markets and remedying market failures. Second, improvement in human capabilities -- the core of human development--is an especially pressing responsibility of government in a developing country, such as China. Third, market institutions cannot be properly installed without the support of the state. Especially if China is to establish a "socialist market economy," the state has the obligation to mitigate the hardships caused by the market transition. Finally, as a giant developing country, China faces many challenges that cannot be settled by market forces alone.

Because the dominant laissez-faire strain in current international thinking about the state resonates strongly in a China still emerging from several decades of ubiquitous and heavy-handed state interventionism,

we begin by presenting a case for a different but active government role in promoting human development.

1. The State as the Corrector of "Market Failure"

1.1. Traditional Market Failures

The idea of market failure is a common rationale for government intervention. The traditional version of market failure occurs when the conditions that markets need to be able to work efficiently are not met. Two important examples of such failures – public goods and externalities – are discussed below.

Public goods

A prime example of a "public good" is national defense. It cannot be divided up among individual users, nor could non-purchasers be excluded from enjoying its benefits. Therefore, it cannot be provided for by means of market transactions between individual producers and consumers; it must be provided by the state and financed through taxation.

Infrastructure has some properties of a public good. An economy needs good infrastructure for development, but private investors may find the provision of infrastructure unprofitable, at least in the short-run. That is why much infrastructural investment is financed by governments in most countries (Kruger, 16-7).

Macroeconomic stabilization may also be considered a "public good." Market economies have always been characterized by business cycle fluctuations, periods of boom and bust. Economic stability is obviously desirable, for it benefits all. But precisely for this reason, few individuals or firms have an incentive to contribute to its realization. The government therefore has to bear the responsibility of

maintaining macroeconomic stability, including high employment. Although most economists do not treat unemployment as a market failure in its own right, but see it rather as a consequence of other market failures, some believe that "high unemployment is the most dramatic and most convincing evidence of market failure" (Stiglitz, 1986).

Externalities and Human Development

Externalities occur when there is a divergence between the private and the social costs or benefits of production or consumption. Environmental pollution is a prime example: the polluters use resources (air, water, land) to dump waste products, without paying for these resources, and thus impose their costs on the community at large. Government has an important role in "internalizing" such costs by taxing or fining the polluters or by imposing legal requirements for the use of cleaner technologies, such as waste water treatment facilities, catalytic converters for automobiles, or scrubbers in smokestacks.

The concept of externalities provides an important buttress for a vigorous government role in promoting human development. This is because the principal categories of human development are all rife with external benefits that reverberate throughout society and are uncapturable by the market. To take a simple example: inoculating children against disease protects

not only those children but also everyone who will come in contact with them. The total benefits are far greater than the private benefits to those getting inoculated. This is a prime reason why governments frequently subsidize public health measures such as child inoculations. The same argument applies to other aspects of human development, such as education, equal status for women, and reduced inequality.

To correct such traditional market failures, the government uses various tools at its disposal, such as enforcing public order and property rights, directly producing public goods such as roads and national defense, and using environmental laws to reduce pollution.

The intuition behind "traditional market failures" is simple. "Public goods" and goods with external benefits (education, vaccinations) will be under-supplied in the market, while goods with external costs (pollution) will be oversupplied. Box 1.1. illustrates the role of the state in reducing negative externalities via environmental regulation.

In the last two decades, a category of "new market failures" has gained currency, based upon new ideas about incomplete markets and imperfect information.

Incomplete Markets

In the real world, many markets are incomplete or non-existent. Markets for private risk and futures markets, for example, are far from adequate. Markets do not exist for many possible future contingencies and many of the important risks that we face are uninsurable. For example, futures markets for agriculture goods usually extend only a few months into the future, and many risks cannot be handled by insurance markets. Incomplete risk markets may lead to inefficient levels of investment. Moreover, prices cannot efficiently coordinate decisions about the composition of capital formation without a complete set of futures markets (Arndt, 1988).

1.2. New Market Failures

Information Failure

Information has two special features: Once

Box 1.1. China's Environmental Efforts at Cleaner Coal Production

The Chinese Environmental Protection Law of 1982 and many subsequent laws and regulations are indicative of a strong commitment by the government to the goal of sustainable development. For example, the Energy Conservation Law of the People's Republic of China went into effect on January 1, 1998. The Ninth 5-Year Plan (starting in 1996) requires all new and many existing coal mines to install coal preparation facilities. By 2000, the goal is that 30 percent of all coal produced and 58 percent of that produced by state-owned enterprises should be washed. And recently, the State Council issued new regulations on construction and renovation of coal-fired power plants, generally prohibiting construction of new plants inside large or medium cities or their suburbs.

produced, it cannot be destroyed; and giving it to one more individual does not detract from the amount available to others. Efficiency requires that information be made accessible to all who want it. However, private producers of information have an interest in keeping it to themselves. For this reason, the private market is unlikely to provide an adequate supply of information (Stiglitz, 1986). Government can play a part in remedying information failures, e.g., by regulating to protect consumer interests or by collecting, processing, and disseminating crucial information (e.g., about foreign markets) to those who need it in the national economy.

The recognition of "new market failures" points to various imperfections in labor, commodity and capital markets. A paradigmatic example is the "lemon problem" for used cars: since sellers know better the quality of the car they are selling, buyers suspect that the price exceeds the car's worth and may not buy it. Similar arguments can be applied to "used" labor and capital markets. Therefore, government can improve matters by providing unemployment insurance and social security and by regulating capital markets. An example of the state's role in correcting "new market failures" is, in fact, the Chinese government's decision to issue more government bonds in 1998 in order to stimulate domestic demand and provide more liquidity to capital markets.² Although the pervasiveness of market failure is by no means a license for the state to thrust its nose into everything, the "optimal" range of government interventions would appear to be larger than implied by the traditional "market failure" school alone.

1.3. Government Failure

Of course, governments also "fail" to act ideally, and some hold that "government failure" is likely to be more serious than "market failure" – in which case government ought to keep its hands off the economy even in cases of market failure (Stigler, 1975). Gary Becker makes this point clearly: "I am inclined to believe that monopoly and other imperfections are at least as important, and perhaps substantially more so, in the political sectors as in the market place ... does the existence of market imperfections justify government intervention? The answer would be "no" if the

imperfections in government behavior were greater than those in the market." (Becker, 1976: 37-380).

Reminders of the existence of "government failure" are important. Governments may well gear policies to special interests or other political considerations, rather than to the public welfare. Corruption is an ever-present threat when government handles public resources. Problems of timing, say, in macroeconomic stabilization policy, may render a policy ineffective or, worse, counter-productive. The concept of "government failure" puts the spotlight on the political process, forcing attention to such issues as the degree to which government truly represents and is accountable to the population at large, rather than to special interests. A pragmatic recognition of the possibility of both market and government failure – besides suggesting efforts to improve markets and governance, alike – would dictate careful and open-minded examination of each policy issue to determine the best way to proceed.

Government has the unique capacity to tax. This gives it some advantages over private actors in correcting market failures. For example, "moral hazard" is a major problem in insurance markets. An insured person may become less careful, e.g., smoke in bed. Although neither government nor insurance companies can monitor smoking in bed, government can impose a tax on cigarettes, thus discouraging smoking in general, which in turn reduces moral hazard in insurance markets.

2. The State as the Creator of Market Institutions

In those parts of the world where market institutions are well established, they did not simply emerge spontaneously, but rather often depended heavily on state actions (Polanyi, 1944). For instance, corporations (i.e., limited liability companies) evolved as a form of business organization in the West not because they competed more efficiently in the market, but because governments deliberately created them to do things that

rational businessmen would not do because they were too risky, too expensive, too unprofitable, or too public, that is, to perform tasks that would not have gotten done if left to the efficient operation of markets.....The state

not only defined what the corporation was and the particular rights, entitlements, and responsibilities that owners, managers, workers, consumers, and citizens could legally exercise relative to the corporation, it actively established and capitalized corporations. (Roy, 1997: 41)

Under China's "100-Firm Corporation Experiment", the central government from mid-1995 has been supporting the transformation of property rights and corporate governance systems of the pilot firms, as well as technical renovation and restructuring, with a view to paving the way for the transformation of state firms into modern limited shareholding corporations (World Bank: 4). While still not really recapitulating Western corporate history, this program has some obvious parallels to it.

One major way the state performs its role in the corporatization process in China is through "state share-ownership". Let us examine more closely the structure of shareholding: there are two stock exchanges in China, The Shanghai Stock Exchange (opened on December 19, 1990) and the Shenzhen Stock Exchange (opened in July 1991). The corporations listed in these two exchanges usually have three types of shares: state shares, legal-person shares and individual shares. *State shares* are the shares held by governments (both central and local) and solely-government-owned enterprises. *Legal-person shares* are shares held by other stock companies, non-bank financial institutions and other social institutions. *Individual shares* are shares held and traded by individual citizens. They are called tradable A shares, since there are also "B-shares" available exclusively to foreign investors.

A typical Chinese corporation listed in Shanghai or Shenzhen will have the above three types of shareholders, that is, state, legal-person and individual. Each holds about 30 percent of total outstanding shares.³ By the end of July 1997, there were a total of 590 companies listed in the Shanghai and Shenzhen Stock Exchanges. However, only individual shares are allowed to trade on these two exchanges. State shares and legal-person shares are not permitted to do so.

There has been a heated policy debate in China over whether state shares should be traded on the stock exchanges. Opponents of allowing the trading of state shares mainly voice ideological reasons: such trading

would amount to "privatization". Those who favor trading of state shares argue that the large proportion of state shares in a corporation permits governmental officials to continue to intervene arbitrarily in business decisions, since the state appoints its officials to the Board of Directors. The emerging consensus of this debate seems to be that the state should be a passive shareholder, i.e., a beneficial "residual claimant" without the power to control the corporation's day to day operations.

2.1. The State and Transition to a Market Economy

China is in the process of transition from a command to a market economy. In the course of transition, the market by definition is to be established as the central mechanism of resource allocation and the role of the state in the economy redefined. This redefinition involves two major changes. First, the range of state intervention should be narrowed. In particular, direct decisions about production and distribution should be left to individual economic agents. Second, policy instruments need to be changed. Rather than relying on administrative commands, the government should try to influence the allocation of resources through fiscal, monetary, and regulatory policies.

However, the market itself cannot be thought of merely as the absence of state intervention. Accepting Adam Smith's thesis about the natural human propensity to "truck, barter, and exchange", it is tempting to believe that once the stifling state of the pre-reform era is eliminated from the economic realm, "market forces" will emerge full blown. Such a belief in the naturalness and spontaneity of the market is probably one of the more dangerous illusions for market reformers to harbor. As Adam Smith himself appreciated, an effective government is in fact a precondition for the effective functioning of a market economy. There are at least three reasons why.

First, voluntary transactions cannot take place in an institutional vacuum. There must be effective legal, administrative, regulatory, and extractive institutions maintained by the state. Such institutions are needed to perform the following kinds of functions:

- define property rights;

- enact a system of laws;
- enforce contracts, and otherwise provide the legal context within which disputes between competing economic agents are resolved;
- collect taxes;
- oversee banks and other financial institutions;
- supervise corporate entities;
- promote and preserve competition;
- supply entrepreneurs with information that reduces uncertainty, cuts transaction costs, and secures private sector confidence in making investment decisions;
- dislodge and then prevent the reemergence of sub-national barriers to free factor mobility;
- facilitate communication and consultation with the private sector, labor organizations, and other important interest groups;
- conduct strategic planning and macro-economic analysis;
- administer a social security system;
- ensure that groups capable of sabotaging the expansion of markets are not excluded from the political process.

These institutions provide the stability, certainty, and predictability necessary for efficient economic transactions. Historically, the creation of national markets in the West coincided with the constitution and expansion of such state institutions. For example, America's Wall Street was originally established at the end of the 18th century "essentially...to handle the securities of governmental and quasi-governmental corporations" (Roy, pp. 122-123).

Similarly, a public debt market has been created in China after 1988 to help finance the state. More interestingly, the Chinese government deliberately connects the issuance of government bonds with the establishment of "open market operations" by the central bank -- the People's Bank of China. This is a major reform measure in macroeconomic management. In March 1994, the first limited open market operation was tried in Shanghai with foreign exchange. In April 1996, the People's Bank of China started open market operations with short-term government bonds. However, the use of open market operations has not been extensive, due mainly to the small quantity of government bonds held as assets in Chinese financial institutions.⁴

Late developers in the Third World have often failed to create functioning market systems and have resorted to interventionist regimes not because their governments were too "strong" but rather because they were too "weak." A weak state can be very intrusive, yet lack the capacity to construct effective legal and regulatory institutions (World Bank, 1991). In this sense, simply "shrinking the state" will not produce efficient market systems; these require new institutions to carry out indirect regulation and administration -- more delicate and difficult tasks than direct control.

Even if the state stands aside, market institutions cannot spring up spontaneously from voluntary transactions between economic agents. This is certainly not what happened historically in market economies. Market institutions, in a sense, represent the essential, irreducible minimum of "public goods" that must be provided if markets are going to work at all (Garnaut, 1991). Since they are public goods, people are unlikely to cooperate voluntarily with one another to provide them, just as in the case of other kinds of public goods. Of course, if the state does not provide market institutions, private economic agents would have to develop informal rules to stem uncertainty and introduce some level of predictability into commercial transactions. However, such agreements would tend to reflect only the preferences of those who possess economic power. Thus, as "public goods," market institutions initially have to be brought about by non-economic forces.

Moreover, even after the establishment of market institutions, the government still cannot stand aside. Individuals have incentives to break the rules -- to corrupt the legal basis of market exchange, collude in anti-competitive ways, misrepresent the nature of assets which are the subject of contracts, and so on. Enforcement costs of market-conforming behavior can be extremely high. In countries where there is already cultural and ideological support for self-restraint in maintaining the rules of the marketplace, such costs are lower. In countries where the market economy is still in the making, however, enforcement of the rules is likely to be more expensive, and to require a larger state role (Garnaut, 1991).

Third, market transition is a conflict-ridden rather than a consensual process. The market economy has its own ideological and moral basis, which is the economy

in transition is still lacking. When a great institutional change occurs, many find it hard to adapt. In the case of market transition, in particular, many people may not accept market values. It took a long time for attitudes in Europe to adapt to the formation of market systems in the eighteenth and nineteenth centuries; "rational" practices consistent with the market violated the principles of the pre-existing "moral economy" and generated confusion and resistance (Thompson, 1971).

The state socialist system in a sense was also a moral economy characterized by what Chinese call the "iron rice bowl" (economic security, lifetime employment) and "everyone eating from the same pot" (egalitarian income distribution). Creating a market economy requires the destruction of this "moral economy" and the cultivation of a new ethic, which is bound to trigger protests against the logic of the market. Market development thus requires an ongoing process of "legitimation", supported by education and the carrot of widespread opportunity together with the stick of economic necessity.⁵

Moreover, the market transition involves not only the transformation of norms and values but also the redistribution of resources and power. The transition may provide some social groups with new opportunities while depriving others of traditional privileges, and threaten the livelihood of still others. It is also likely to create new inequalities in income and wealth that do not match existing patterns of entitlement, status, and power. In a word, the transition tends to dislocate groups in both the political and the economic realms, which inevitably fosters social conflict and political struggle (Chaudhry, 1993). The creation of the market economy in England, for instance, was by no means a continuous and consensual process, but rather a product of struggles among social groups attempting to shape exchange relations in their own interests (Lie, 1993).

As former state socialist countries try to build market systems, "in the short-run reforms are likely to cause inflation, unemployment, and resource misallocation as well as to generate volatile changes of relative incomes" (Przeworski, 1991). Even in the best scenario, in China, where initially everybody benefited from reforms, the situation by the mid-1990s seems to have turned into one in which some people are gaining at the expense of others. Currently, the most pressing example of this is massive and growing unemployment

(see Chapter 4). The government could of course use its coercive power to impose the costs on particular social groups. In principle, however, as well as to encourage a relatively smooth transition, it is far better for the state to adopt measures alleviating transition pains – as it is in fact trying to do – by establishing new "safety nets" and compensating those whose interests are threatened by the reform. This is a very expensive undertaking, and requires the state to be capable of amassing the required resources for redistribution.

In his classic study of the rise of the market economy in England, Polanyi (1957) finds that "the road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism". Such interventionism was, if anything, greater in the countries that underwent industrialization after England did. There is thus good reason to believe that, in the developing countries of today, as well, a capable government will be required to supply the rules, norms, and institutions that are necessary for establishing a functioning market economy.

3. The State's Role in Income Distribution

Even if a competitive market generates an efficient allocation of resources, the result might entail an undesirable degree of inequality. The problem of achieving distributive justice according to society's norms is one the market cannot solve; the solution must evolve from the political process. In China, because of concerns about excessive egalitarianism in the pre-reform era, policy makers have adopted an approach to income distribution that puts "efficiency" first and is very tolerant of rapid increases in inequality (see Chapter 4).⁶

Most people would probably agree that, while some income inequality is socially useful as an incentive to hard work and creativity, it is just and right to alter the distribution of income to help the poor and improve equity. But excessive inequality is not only morally abhorrent; numerous studies have shown that it can also cause serious incentive problems (Stiglitz, 1989). Inequality has also often been associated with slower growth.⁷ Indeed, efficiency and equity are not always rivals; there are important areas of complementarity between them as well.

In 1955, Simon Kuznets argued that inequality typically rises when a developing country begins to grow, until some threshold level of development is reached at which inequality declines again (see Bruno: 119). Much empirical research has been done to investigate whether or not such an inverted U shaped time path of inequality is in fact a regular and necessary feature of economic development, and there is considerable evidence that it is not.

Moreover, reduced fertility – a major objective of Chinese development policy – has been shown to depend heavily upon social development. As Amartya Sen, 1998 Nobel Laureate in Economics, points out for India,

among all the usual candidates for causal influence, the *only* ones that have a statistically significant effect in reducing fertility are female literacy and female labour force participation. ... economic development may be far from the 'best contraceptive' that it is sometimes described as. On the other hand, *social* development -- especially women's education and employment -- can be very effective (Sen: 47-48).

Such social (or human) development implies an irreducible minimum degree of equality, in so far as the necessary resources (e.g., for women's education and employment) must reach the masses of poor for fertility to be affected.

Perhaps most important of all, the survival of a market economy may to a great extent depend upon its ability to coexist with social equity. If asymmetric rewards and punishments generated by market forces persist without any adjustments through redistribution, then the gap between those who flourish and those who stagnate or decline would continuously widen. Such a scenario is a recipe for social conflict. The market system must therefore be embedded in a framework of institutions that permit some modification in the direction of greater social equity. In the second half of the nineteenth and much of the twentieth century, mechanisms for sharing more widely the benefits of growth were established in varying degrees in all advanced capitalist countries, and these helped to defuse opposition to the market system.

3.1. Reducing the Rural-Urban Gap and Enlarging Domestic Demand

The single largest dimension of inequality in China today is the gap between average urban and average rural incomes,⁸ which substantially exceeds the

Table 1.1. Rate of Capacity Utilization for Major Industries

Products	(%) Rate of Capacity Utilization
Printed and dyed cotton	23.6
Sulfuric acid	84.7
Nitric acid	69.6
Paint	48.7
Dyes	88.3
Plastics	77.1
Synthetic polymer	77.9
Detergents	60.4
Tires	54.7
Inner tubes	37.4
Cement	80.0
Plate glass	84.2
Steel products	60.0
Industrial boilers	8.5
Internal combustion engines	43.9
Steam turbines	10.0
Machine tools	45.8
Forging and pressing machinery	51.2
Oil refining equipment	17.9
Forklifts	39.8
Bearing	34.7
Motor vehicles	44.2
Cars	64.9
Motorcycles	55.4
Pickup cameras	13.0
Micro-computers	13.4
Air-conditioners	33.5
Video recorders	40.3
Washing machines	43.4
Color TV sets	46.1
Refrigerators	50.4
Telephone sets	51.4
Bicycles	54.5
Cameras	57.7
Dust catchers	62.8

Source: Hu Cunli, 1998: 167.

urban-rural gap in most other developing countries. This gap, and in particular its implications for rural demand, have become relevant to China's current macroeconomic condition. Responding to the Asian financial crisis starting in 1997, Chinese policy makers have pinned their hopes upon expanded domestic demand to offset the declining demand from abroad due both to lower incomes in Asian markets and to lower exchange rates of Asian competitors. Moreover, since 1994, the Chinese economy has entered a new stage of relative overproduction. In that year, the banking sector's deposits exceeded loans for the first time since the economic reform began.

Table 1.1. shows clearly that production capacity has been seriously under-utilized for 35 major products.⁹ To increase utilization rates for these industries, strong domestic demand is essential. However, rapidly increasing income inequality, and especially the declining growth rates of rural income, have restricted the development of the potentially huge domestic market. Table 1.2. illustrates the relationship between declining rural income growth and the behavior of rural retail sales. It is evident that rural demand was affected by the slowing of rural income growth. Reducing the large gap between rural and urban incomes would thus not only benefit equality per se, but also increase the efficiency of the economy as a whole by enlarging domestic demand.

Table 1.2. Annual Growth Rates of Rural Per Capita Income and Rural Retail Sales (percent)

	Growth of Rural Income	Growth of Rural Retail Sales	Ratio of Rural to Total Retail Sales
1985	7.9	25.9	58.5
1990	1.8	-2.11	55.0
1991	2.0	7.39	53.6
1992	5.9	7.34	51.9
1993	3.2	-14.35	44.6
1994	5.0	4.07	43.9
1995	5.3	6.12	43.1
1996	9.0	12.1	43.5
1997	4.6	9.7	43.0
1998	3.5		40.0

Source: Liaoning Economic Internet Network.

4. The Role of the State in Human Development

What role should the government of a poor country, in particular, play in its economic and human development? There is no common model for state intervention that applies to all countries at all times. However, certain responsibilities related directly to human development, in addition to those detailed in section 2.1 above, can be identified. These include:

- provision of basic social services and ensuring equitable access thereto;
- ensuring equitable access to essential resources, such as credit;
- creating an enabling environment for the empowerment of people, especially disadvantaged and vulnerable groups;
- making poverty eradication a supreme priority;
- ensuring accountability and transparency.

Such responsibilities transcend the issue of the efficacy of markets; even where markets function smoothly, the need for government to shoulder these responsibilities remains. However, government may also have to undertake additional burdens in developing countries in supplementing the role of markets, because markets may work less well *in* such countries than in developed ones, and also may work less well *for* developing countries than for developed ones.

Structural rigidities are the main reason why markets may work less well in underdeveloped countries. For a market economy to function efficiently, the three components of the price mechanism--signaling, response, and mobility--all have to work properly (Arndt, 1988). Prices must be elastic in signaling changes in demand and supply conditions; producers, consumers, and workers must be willing and able to respond to market signals; and economic resources must be able to move readily and easily. But, in practice, these conditions are often lacking in developing countries. Prices, for instance, are often distorted by monopoly power, while responses to price signals may be weak and resources immobile.

Four problems may cause inadequate responses to market signals. First, even in China, with its long history of market-oriented entrepreneurial behavior, traditional values, habits, conventions, and work ethics may impede the inclination of many people to seek to "maximize" their own material well being. Second,

information crucial for making rational decisions is often hard to come by in developing countries, especially in areas far removed from the more cosmopolitan and developed regions. Third, people who lack education may not possess the skills – e.g., the computational ability – needed to make fully informed decisions. This point highlights the crucial importance of promoting human development early in the development process, not only for its own sake, but because an educated and healthy population is a prerequisite for adequate functioning of a market economy. Finally, inflexible prices, such as the downward rigidity of interest rates and nominal wages, are just as much present in developing as in developed economies, especially in those countries with a strong populist tradition.

Deficient infrastructure, bottlenecks, poor management, and other structural and organizational constraints can further thwart the "spontaneity" of the market mechanism. Factors of production are often immobile, unable to move quickly, or able to move but only at high cost (Arndt, 1988). High transport costs, for instance, may make sale of products in the market uneconomic. The lack of mobility of resources, or more precisely, the inability of some of the productive sectors to adjust in a timely fashion to changes in demand, thus makes the price mechanism less effective.

Even if markets work as well *in* developing as *in* developed countries, they may still work less well *for* developing than *for* developed countries. For poor countries craving development, dynamic growth is more important than static efficiency. As the Indonesian economist, Suhartono, points out, their fundamental concern is

how to accelerate economic and social development.... the problem involves an expansion in the production possibility frontier, not only a movement along it, through increasing productive capacities and through the productive employment of unutilized or underutilized factors of production. Since from the point of view of the developing countries the analysis for static gains addresses itself to the wrong question, it is not of particular relevance (Arndt, 1988).

Long-run development involves many "big" industrial decisions that cannot automatically flow from

decentralized, optimal decision making in the short run (Stiglitz, 1989). At best, markets can provide adequate signals only for marginal changes; if large changes have to be brought about in a short time, the price mechanism cannot be relied upon to induce the necessary resource transfers. Public interventions may therefore be required both to invest directly to break critical bottlenecks and to nourish a macroeconomic environment that encourages investment innovation from the private sector (Shapiro and Taylor, 1990).

A healthy and educated population is crucial to private entrepreneurial success. While private investment in education and health care is certainly possible, the extraordinary external benefits attached to these goods guarantee that private investment will be inadequate. Note that this is an instrumental argument for paying attention to human development; the more fundamental argument is that the enhancement of human capabilities is itself the chief goal of economic development. All the more reason for emphasizing the state's responsibility to supplement the inadequate attention of the market to social sectors and to matters of equity.

Motivated by "a passionate desire to organize and hasten the process of catching up," the government should probably also play a role in planning and financing key investments of the economy. Typically, capital in poor economies is scarce and diffused, especially in the early years of industrialization. Moreover, with the desire to jump into the modern industrial era, such countries may want to use production technologies that require capital investments in excess of what individual investors are capable of amassing. Private entrepreneurs thus may not have the capacity to invest and innovate, even if they have the will (Gerschenkron, 1962). When they have the capacity to do so, however, they may lack the will, for two reasons.

First, the returns to some prospective socially desirable or necessary investments (including R&D) may be too long-term and uncertain for private firms to undertake by themselves (Lazonick, 1991). Frequently, private firms underestimate private rates of return to long-run investments that would in fact have high private and social returns. As a result, the amount of investment may be socially suboptimal.

Second, investments often bring important ex-

ternal benefits, creating opportunities for others. It is commonly accepted, for instance, that investments in human capital and R&D are essential to economic development. But the external benefits arising from such investments cannot be converted into profits by private firms. Therefore, in the absence of government support, private investment in such areas is likely to be inadequate, even though it may pay over time, both privately and socially (Averch, 1990).

The above discussion suggests that the invisible hand by itself is likely to fall short in the provision of investment and innovation. By supporting the development of education, financial systems, communications networks, and other forms of physical and institutional infrastructure, the government can help private enterprises to employ their productive resources at lower unit costs or reap higher prices for their products (Lazonick, 1991). By sponsoring basic research or demonstration programs, it can give reluctant private firms incentives to undertake their own R&D projects. The state may also invest in building up nationwide information networks that keep track of and disseminate economic data of relevance to the economy as a whole. By providing missing information linkages between industries, the state can fill gaps that impede innovation in production (Averch, 1990).

Of course, no government has a bottomless pocket; capital and talents available to it are always limited. Resources at the government's disposal must be used carefully and strategic allocative choices are unavoidable. By employing various policy tools to adjust the industrial structure, for instance, the state can use its limited resources to stimulate lines of economic endeavor (but not particular firms!) needed to improve the economy's international competitiveness.

Such industrial interventions in the United States were huge during the nineteenth century. The government showered railroads and agriculture with land giveaways. It protected the home market, permitting business firms to develop and use their productive resources to the point where they could attain competitive advantage in open international competition. In the United States, protectionism did not recede until after the Second World War (Shapiro and Taylor, 1990).

Japan has of course gone much further. There the government played an important role in preserving the home market for Japanese firms. It has sought to limit

the number of enterprises competing in major manufacturing industries, thus creating incentives for existing companies to incur the high fixed costs necessary to attain competitive advantage. It has promoted cooperative research and development among major Japanese competitors; provided manufacturing corporations with access to inexpensive finance; and turned out a highly educated labor force to fill blue-collar, white-collar, and managerial positions. Without those "disequilibrating" initiatives of the state, Japan's transformation from an economically backward country into a heavyweight player on the global market would surely have taken much longer, if it would have been possible at all.

During the late 1970s and the early 1980s, the East Asian Newly Industrializing Economies (NIEs) were often praised as models of the *laissez-faire* approach. Closer inspection, however, reveals the guiding hand of government in the Japanese fashion in those economies (except for Hong Kong). East Asian governments have played a significant role in determining which sectors are most important to the future growth of their economies. Moreover, they have tried to divert resources to targeted industries through complex import controls, schemes of concessional loans, and export subsidies (Sabel, 1993). In the end, NIE governments have had a great influence upon the course and pace of industrialization and upon the evolving structure of the domestic economies. Some observers have put the blame on active state intervention for the current crisis in East Asia, and there is no doubt that some of it took the form of "crony capitalism". However, "the basic facts remain: no other region in the world has ever had incomes rise so dramatically and seen so many people move out of poverty in such a short time" (Stiglitz, 1998a).

As the cases of the United States, Japan and the East Asian NIEs illustrate, the historical route to human development has not been via *laissez-faire* regimes. This lesson is important for developing countries that are currently constructing market economies, because the "market" that they are "transiting" to is a truly global one, which is dominated by mammoth transnational corporations. To make its economy internationally competitive, a late developer may need a strategy for channeling public resources to those economic sectors that can best develop and utilize them,

yet without creating inefficient "rent-seeking" lobbies. Only a state that is relatively impervious to the influences of domestic and foreign special interests and that has broad popular support can undertake such a complex task.

5. The State's Role vis-à-vis the International Economy

Since the Asian financial crisis, the Chinese government has been justly praised by the international community for its decision not to devalue the *renminbi*. China is attempting to deal with the crisis by maintaining the capital account inconvertibility of its currency and turning to fiscal policy – in particular, the launching of large-scale infrastructure projects – to increase domestic demand in the face of falling export demand. Nevertheless, the autonomy of China's monetary policy has been under some challenge since 1994, when huge inflows of foreign capital threatened to destabilize macroeconomic management, which was then intent upon bringing down the rate of inflation. China resisted the increase in domestic money supply that would have accommodated the capital inflow, and the central bank moved to offset this inflow by reducing domestic credit availability. The net effect on the domestic economy was recessionary.

The Asian financial crisis made it clear that short-term international capital flows can be highly destabilizing, and there is an emerging consensus among the IMF, the World Bank and leading academic experts that some sort of regulation of them might be needed.

6. Strengthening State Capacity

After discussing the various aspects of the state's economic role, we come naturally to the political-economy question: does the state have the capacity to perform these tasks?

6.1. The Political Condition

The capacity of the state has been called its degree of "statishness" (by Roberto Unger), a term that refers to the state's independent capacity to change "current social practices" and "the present distribution of advantage" in society. The state should be capable of

"deploying resources and making plans in ways that disrespect and even destabilize custom and privilege".

However, a strong government also requires a strong society, one whose own various organizations are vigorous and self-constituted rather than dependent on the favor of current officeholders. The central problem of statishness results from the conflict between these conditions. "How may a government count on the interlocutors and partners it needs without being immobilized by them and becoming their passive representative?" (Unger, 1987: 81)

China can be said to meet the first condition of Unger's statishness relatively well: The state has considerable autonomy from the vested interests of society, as witness the tax reform of 1994 which disrespected and destabilized the vested interests of local governments to some extent. However, the second condition is an altogether different matter. Chinese society cannot at present be said to be strong. Having tried during the pre-reform era to control every nook and cranny of societal activity, and having permitted no autonomous organizations at all, the state still has a long way to go – and society as well – for China to meet the second condition. The tension between Unger's two conditions of statishness will be a crucial issue in China's political reform.

6.2. The Fiscal Condition

Closely related to the political condition, there is also a fiscal condition for statishness. Three main sources provide revenue for public finance: public enterprise profits, taxes and the public debt – among which the government must find the best mix. Since the start of economic reform, state enterprise profits have fallen sharply as a source of government revenue. The same is true of tax revenue, at least proportionally to GDP. This leaves public borrowing as a new source of state revenue.

Yet, in 1997 the total public debt in China amounted to only 3.3 percent of GDP, much smaller than the ratio for the U.S. (69 percent in 1994) and of many other countries. As Chinese economists have pointed out, the low ratio of public debt to GDP implies that China still has considerable potential for using debt to stimulate domestic demand. At the same time, however, China's low ratio of formal tax revenue to

GDP indicates that achieving a larger fiscal capacity is of first-order importance for China. Without improvement in the government's fiscal capacity, none of the state roles discussed in this chapter can be performed

effectively. We return to this important issue at some length in Chapter 5, since it will be a crucial determinant of the Chinese state's capacity to carry out its new responsibilities.

Notes:

- 1 See, for instance, Sheng, 1992; Jiang, 1993a; and Jiang, 1993b.
2. That government supply of liquidity is crucial in times of aggregate uncertainty such as recession, is suggested by the Holmstrom-Tirole model (Holmstrom & Tirole, 1998), which provides a rationale both for government-supplied liquidity and for its active management.
3. The governmental regulation requires that tradable shares should account for no less than 25% of a company's initial public offering.
4. In early 1997, the People's Bank of China temporarily suspended a special form of open market operation in "repos" (repurchase agreements: the central bank purchases securities with an agreement that the seller will repurchase them in a short period of time, anywhere from one to five days from the original purchase). In May 1998, "repos" were reintroduced.
5. We do not here take sides in the debate about social democracy. Market economic systems exist successfully along a wide spectrum of state commitments to providing for economic security and income redistribution. Our point is that the pre-reform practices of China were inconsistent with an effectively operating market economy.
6. A recent detailed discussion of trends in income inequality in China can be found in Khan and Riskin, 1999.
7. World Bank, 1991; Alesina and Rodrik, 1992; Persson, 1994; Perotti, 1996; UNCTD, 1998.
8. See Griffin and Zhao, 1993 and Khan and Riskin, 1999.
9. The figures in Table 1.1. come from the "Third National Industrial Survey" of 1995, which is an industrial census that covers each and every industrial enterprise.

Chapter 2

THE ROLE OF THE STATE BEFORE THE REFORM ERA

1. The Traditional State and Human Development

1.1. The Evolution of the Traditional State

The Chinese state has a history that can be traced back as far as the Xia Dynasty (2,100-1,600 B.C.). In 221 B.C., the first Qin emperor created an imperial bureaucracy that, in its most general form, constituted the institutional skeleton of China's dynastic political system right down to its end in 1911. Within this overarching structural continuity, however, there was considerable change in state function and behavior as Chinese society evolved over the centuries. One scholar¹ organizes premodern Chinese political history into four broad phases, of which the last – gentry government – was a relatively stable system that lasted from the Song dynasty (960 – 1279) through the first efforts at modernization in the late 19th century and, in some respects, right up to the beginning of the People's Republic. Under this system China was ruled by powerful monarchs at the center, while entrance to the bureaucracy and high social and political status in general were acquired by means of a demanding examination system (*keju*), which in turn required considerable economic means to finance the lengthy study of Confucian texts necessary for success. A complex and functionally specific bureaucracy – composed only of men – administered justice, collected taxes, oversaw education, controlled water flow, grain transportation and the salt trade, etc.

The wielders of basic political and social authority in this system were the “gentry”, who were a class of present, retired and potential officials, their status based upon higher degrees acquired through examination or purchase.² Gentry filled the ranks of government positions, from district magistrate up. At any given

time, most members of this social group were not serving as officials, yet they were nonetheless often instrumental in supplementing the activities of local government by undertaking a myriad of activities, such as settling local disputes, repairing Confucian schools or Buddhist temples, or organizing famine relief (Dull, 1990: 83). The gentry were thus the leaders of rural society and culture and also the brokers between the state and local society. Through their monopoly of literacy and familiarity with ancient texts they controlled knowledge and oversaw the traditional moral codes of conduct. Rural society was marked by the importance of custom and tradition. People living in the same place and doing the same things as their parents and grandparents -- acting out the same play on the same stage – could rely for guidance on the experience of their ancestors. In dealing with an environment that changed only slowly, traditional ways were effective.

China's confrontation with the modernizing West, beginning with the Opium War (1840-42), and its gradual subjugation by the imperialist powers thereafter, dealt a profound shock to the traditional system. In the 1860s, certain ministers and local leaders of the Qing Dynasty began advocating that China should open its doors and learn the new science and technology that were clearly the foundation of the West's military prowess. Some modern technology entered China and a few modern industries were set up, including ship-making, mining, arsenals, telecommunications, textiles, commercial activities, and the like. At the end of the 19th century, during the Government Reform Movement (*Bairiweixin*), many officials, including powerful cabinet ministers, began to promote new ideas about modernization. In rapid succession, their suggestions for reform policies were adopted by the imperial court. Wielding regional or local power, they put radically

new reform policies and measures into effect.

Yet these measures came too late to save the faltering Qing Dynasty which, along with the centuries-old dynastic system, was overturned in 1911. Its revolutionary successor, the Republic of China, was at first too weak to accomplish anything more than the tottering dynasty's overthrow, and China fell back into a period of political disunity, with regional military leaders wielding political power over their domains. It was in the light of these developments that the leader of the Revolution, Sun Yat-sen, moved to establish a highly centralized political power integrating a ruling political party with the government and the army. This idea was put into practice with the establishment of the Guomintang (Kuomintang) government by Jiang Jieshi (Chiang Kai-shek), who finally reunified China in the Northern Expedition of 1927 and then ruled the country through the Japanese occupation of China in the late 1930s and 1940s, and the ensuing civil war with the Communists, until the latter's victory in 1949.

The present state is the result of the rapid and fundamental changes that occurred over the previous century and of the enormous pressure put on the traditional state and society by the challenge of the rapidly modernizing West after 1840. A series of governments, unstable, temporary and buffeted by turbulent international forces, succeeded one another from the late Qing to the Guomintang government of 1927-49. Although the state expanded its power and took on new objectives, including economic development and modern education, it was a state that ruled over a social structure weakened by dynastic decline and imperialist incursion, and this circumstance gave the state an unusual degree of autonomy vis-à-vis the social forces it governed.³ Yet it remained a weak state, which constrained economic development in many ways. Government revenues were always very small relative to GDP and public spending was concentrated on security, administration, and debt service. Governments had few resources to stimulate economic growth directly or even to do it indirectly by manipulating the environment to the benefit of the private sector. "Even law and order, the most basic contribution of the public sector to a nation's economic health, was denied to China's economy in the tumultuous decades following the collapse of the Manchu regime in 1911" (See Rawski, 1989).

1.2. The Role of the State in Stimulating Modern Industry

The Treaty of Shimonoseki, which ended the Sino-Japanese War of 1894-1895, provided for China to accept foreign direct investment, and modern industries began to arise in China's coastal cities. New Qing policies also encouraged some officials, landlords, and merchants to invest in modern industry and commerce, and the state itself played a leading role in these sectors, beginning with ship-making, textiles, and mining. The Qing government controlled some large companies and various important industrial sectors directly.

The 1911 Revolution did not bring stability to China. On the contrary, it was followed by years of extraordinary shocks, including famine, foreign invasion, war and civil war. Only during the brief decade from 1927 to the Japanese attack in 1937 did any semblance of stability exist for most of China. The Republican period as a whole was not a propitious time for even the most progressive state to have promoted economic development.

Up to the 1930s, modern industry made very limited inroads in the economy as a whole. In 1933 the share of modern industry in GDP was no more than 3 percent and that of the entire modern sector no more than 13 percent. Recent debates over how dynamic was modern economic growth during the Republican period must be seen in this context.⁴ The Guomintang government sought to control the modern sector through links between the government and large "bureaucratic capitalists". After the war, it took over Japanese, German and Italian enterprises and came to control 67 percent of modern industrial capital. By 1947, the government's National Resources Commission controlled 90 percent of iron and steel production, a third of coal production, two-thirds of electric power generation, 45 percent of cement, all petroleum and non-ferrous metals, etc. The major banks, railways, highways and airlines, as well as much of shipping tonnage, were also in the "state capitalist" sphere (Riskin, 1987: 20)

Yet despite the importance of the state within the modern sector, the small size of that sector relative to the overall economy puts the state's economic role in

proper perspective as being, in fact, very limited. As Rawski writes, "National, provincial, and local governments controlled only a small share of the economic resources in prewar China. This means that resource allocation occurred primarily within the private sector and that most economic processes were strongly tied to the market-place" (Rawski, 1989: 48-49).

1.3. The State in Human Development

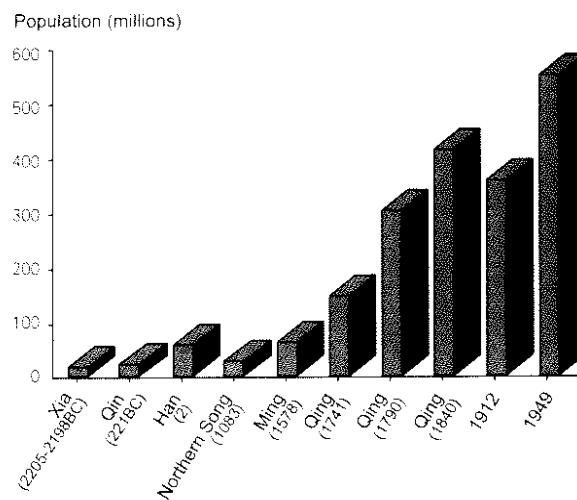
Population

Over the millennia of its existence, the traditional Chinese state never actively tried to control population growth, although it presided over a household registration system that produced a priceless historical record of demographic data and was an important tool for managing the population. This institution was also relied upon by local governments and became in modern times an important component of the police system.

Before the Qing dynasty, population in China grew slowly (see Figure 2.1.), the result of high pre-modern birth and death rates. Over the three millennia from the Xia (for which population estimates are highly speculative) to the Ming, the population may have increased some five times to reach 61 million, a long-run average annual rate of growth of only 0.05 percent. Of course, this very slow trend rate averages periods of faster growth with those of slower growth or even population decline, due to war or famine. It also includes the incorporation of non-Han peoples in the process of territorial expansion. Later, during the long Qing Dynasty (1644-1911), and especially during the peaceful and prosperous reign of the Qianlong emperor, the population growth rate accelerated: in the 49 year period from 1741 to 1790, population more than doubled from 143 million to 301 million, an average annual growth rate of 1.5 percent. By the eve of the Opium War in 1840 the population had surpassed 400 million. But during second half of the 19th century, with its massive Taiping and Nian rebellions, and the first half of the 20th century, with its wars and civil wars, the rate of population expansion fluctuated around a low average of about 0.025 percent per year.

According to the 1912 Census (see Table 2.1.), the

Figure 2.1. Growth of Population from Xia Dynasty to 1949



Source: Gui Shixun, 1986.

national average sex ratio (males/females) was 1.21, with substantial inter-regional variation. The average birth rate was 27.27 per thousand population and the average death rate was 15.43 per thousand population. That the male population exceeds the female has been a characteristic of China's population from early days and is evidence of a long tradition of son-preference.

Education

Education is a cherished value in Chinese culture and was a core component of the Confucian system of belief (See Tu Wei-ming, 1990). Traditional education was based upon the examination system, which was the channel of access to the gentry and bureaucracy. In theory, the examination system provided broad opportunity for social mobility, since it was open to all males. In fact, however, a family had to possess some wealth to be able to support its members through the years of study required for success in the examinations. Nonetheless, through adoption or clan support, talented children of poorer background occasionally did gain the means for an education, and the system therefore did provide a mechanism for social mobility. In the quest for official rank and high status, people from different social groups tried to acquire an education.

The traditional education embodied an interesting mix of idealism and pragmatism. Its goal was the self-cultivation of the individual through the mastery of ancient texts and the philosophy they taught. Yet such

Table 2.1. Population Indicators, 1912

Area	Population (millions)			Sex Ratio (women = 100)	Birth Rate (per thousand)	Death Rate (per thousand)
	Total	Males	Females			
Zhili	22.72	12.54	10.17	123.2	22.04	12.77
Jiangsu	8.55	4.46	4.09	109.1	-	-
Shandong	29.97	15.50	14.47	107.2	23.40	13.78
Shanxi	9.98	5.69	4.29	132.4	27.54	21.65
Henan	35.80	19.49	16.31	119.5	19.54	7.21
Shanxi	13.47	8.33	5.15	161.6	19.55	13.08
Gansu	4.87	2.71	2.16	125.6	35.13	21.11
Fujian	15.55	8.66	6.90	125.5	26.99	21.07
Zhejiang	20.39	11.00	9.39	117.1	21.20	15.83
Jiangxi	23.51	13.34	10.17	131.0	16.72	10.18
Hubei	28.51	15.42	13.09	117.8	25.64	9.56
Hunan	29.03	14.72	14.31	102.9	27.13	18.35
Sichuan	44.29	25.20	19.10	131.9	47.79	18.62
Yunnan	9.53	4.85	4.51	107.7	39.21	9.85
Guizhou	9.53	4.81	4.72	101.9	18.71	8.23
Fengtian	12.24	6.77	5.47	123.7	-	-
Jilin	2.84	1.61	1.23	131.0	22.70	12.62
Heilongjiang	1.97	1.15	0.82	140.8	25.89	13.97
Xinjiang	2.11	1.12	0.99	113.0	42.47	24.44
Suiyuan	0.62	0.37	0.25	144.8	29.29	25.39
Total	324.40	177.72	146.68	121.1	-	-

Source: The 1912 Census of China, 1931: 3-9.

training was thought to prepare the gentleman for service in the bureaucracy, where the values learned would be applied to the solution of a wide range of practical problems. Its provision of the key to social advance constituted a good instrumental reason for acquiring such an education. Moreover, at times the formal openness of the system and the possibility of social mobility it embodied must have provided a powerful underlying incentive to ordinary villagers to work hard, so that they, or their sons or grandsons, might have the opportunity to gain access to the gentry.

Whatever its merits, however, the old examination system did not provide a means of disseminating more up-to-date knowledge. From the 1860s on, new schools and colleges teaching modern ideas and subjects began to appear. In the early years of the 20th century, a new

public school system was instituted at the urging of modernizing officials like Zhang Zhidong. Missionary schools and colleges already formed a separate and alternative educational system, bringing modern subjects and ideas (including education for women) to thousands of young people. The old examination system continued to operate until 1906, when it was abolished by imperial decree. The same year, a Ministry of Education was set up – the first public educational management institution in China's modern history – and this was followed by the establishment of analogous institutions at the provincial level. The Qing government also supported projects for sending Chinese students to Japan, the U.S. or Europe for study, and rewarded them with official rank or status upon their successful return. Modern education began to develop quickly.

Education underwent further reform after the 1911 Revolution. By 1915 the Ministry of Education listed 120,000 government schools of various levels, with four million students. Missionary schools were educating another half million before protests in the 1920s brought government regulations prohibiting compulsory religion courses and requiring that the schools be controlled by Chinese (Fairbank and Craig, 1965: 660). Institutionally, the major advance of the Guomindang era was in bringing educational administration down to the county level. Management of education became an important function of local government.

In the 1920s and 1930s, the government as well as some gentry and community leaders promoted education, mostly vocational, for rural villagers. During this period, as well, the state financed the wages of urban schoolteachers and staff.

Status Of Women

No quick summary of the status of women from traditional to early modern China can do justice to this complex subject, in part because their role varied by social class, geographic location, ethnicity, etc. Yet it is not an oversimplification to say that women's lot was often a very hard one. Women were commonly subject to discriminatory treatment within both the community and the household. The practice of female infanticide, the lack of education for girls, the practice of foot binding, all signified a deeply inferior social status. Beginning in the latter part of the 19th century, however, Chinese women started to make significant progress in eliminating more egregious forms of discrimination and gaining opportunities for fuller participation in public life and employment outside the home. In the early days, women were employed in the textile industry and other industrial sectors, where they worked longer hours -- often 12-14 hour days without time off for meals or rest-- at lower pay than their male counterparts. In the 1880s, girls' schools established by American missionaries began producing increasing numbers of female graduates, who joined the ranks of teachers, doctors, nurses, and other professions. By the end of the 19th century, a body of more than 300,000 educated professional women had emerged in China.

After the 1911 Revolution, more women began entering public life, setting up schools, businesses and

even banks. But during the Northern Warlords Government, women were subject to government-formulated job restrictions and there was pressure for them to leave the labor market and return to the home. Nevertheless, far more women remained in the labor force than at the Republic's beginning, and this trend picked up even more in the 1920s. That decade also saw the election of the first women provincial government delegates, signaling the entrance of women into the country's political life (UNDP, *China Human Development Report*, 1997: 21).

Civil Society

Relationships based on family, school, trade and native place have historically been at the core of civil society in China. As early as the 17th century, guilds were appearing in places such as Hankou to advance particular trade interests (See Rowe, 1984). After 1840, various non-governmental institutions began to grow up in the expanding modern sectors. Merchants, with the support of the Ministry of Trade, founded business associations, especially in southern centers of modern economic activity, such as Jiangsu and Zhejiang provinces. These associations tried to integrate business communities into coherent interest groups to advance their goals, and they fought for the expansion of political rights, but made little headway against government prohibitions on involvement in politics or diplomacy. Nevertheless, they played an important role in developing China's legal system and in encouraging the spread of modern education. At the same time, professional associations and political organizations also began to form.

Rural Life

Hunger was the real issue in the countryside of late modern China; many villagers lived perpetually on the edge of starvation. The history of China's rural areas for the hundred years prior to the establishment of the PRC is one of economic decline, which began with the erosion of the family handicraft sector. Beginning in the late 19th century, due to technological backwardness, China's most important handicrafts gradually lost their competitive advantage to outsiders, such as Japan. The decline of rural family handicraft industries, an important source of rural income, drove craftspeople who had lived tolerably well into poverty. Many were

forced to sell their land, the only means on which they relied to live, and to become tenant farmers. Landless tenants had to pay very high rents to their landlords and extremely high interest rates for the loans they were forced to take for survival (See Moise, 1977). Still, many farmers retained ownership of the land they farmed, or part of it, and the pattern of land tenure was a complex one that varied by region and cropping pattern.⁵

2. The State and Human Development from 1949 to the Reform Era

2.1. The State's Planning System

With the founding of the People's Republic of China in 1949, China entered a new stage of economic and human development. Based on Marxist theory and the experiences of the Soviet Union in building socialism, the state launched a series of major initiatives. A monumental land reform was carried out in the early 1950s, redistributing 117 million acres of arable land to over 300 million farmers, and the property of large businesses with links to the Guomindang (the "bureaucratic capitalist class") was nationalized. The Chinese Communist Party, as the party in power, basically controlled the state; Party and government combined to form a highly centralized decision-making structure.

The general line of the Party for the transition period, formulated in 1956, was the basic guideline for both the Party and the government, indeed, for the whole country. In 1954, the First Session of National People's Congress put the Party's general line into the Constitution of the People's Republic of China, but there was only a rudimentary legal system. Mao Zedong, the Party Chairman, was himself the core of the Party and decision-making system. The will of this one individual played a dominant role in the state's decision-making system.

Some 35 percent of modern industrial output was already produced by state-owned industry in 1949 as a result of the takeover of the property of China's wartime antagonists by the Guomindang's National Resources Commission during the war, and this figure grew to 57.5 percent by 1953 due to further nationalization of enterprises by the new government. From this dominant position, the state occupied the "commanding heights" of the national economy and

could control the character of economic growth in each sector or field. It used that control to reform the remaining private firms, integrate them into the national economy, and begin changing the economic structure to favor the heavy, capital goods sector. The state was thus able to control and steer the entire national economy based on its dominance of industry and trade.

After the creation of its property rights system, the state set up a system based on central administrative planning, to manage economic development. The planning system, learned from the Soviet Union, was basically put in place by 1952, although important elements of it were added during the following several years (Riskin, 1987). The state, however, tried to rely entirely on central planning, without any consideration of the role of a market mechanism in helping to coordinate the allocation of resources either for present consumption or for economic construction and development. On the contrary, the market mechanism was thought – especially by Mao Zedong – to be a fundamental instrument of capitalism, and its survival to pose a constant threat of capitalist restoration. Therefore, the state, under Mao's leadership, was unremittingly hostile to market forces and repeatedly suppressed them. As early as the 1955-56 "Socialist Hightide" of collectivization in the countryside and takeover of remaining private enterprises in the cities, virtually all private enterprises and most free market activity had been eliminated.

At the core of the planning system was the concept of "Social Ration", meaning that the government attempted to allocate resources directly and physically among sectors and enterprises ("command planning"), as if it were the manager of a single huge firm. This approach assumes that the government can obtain accurate information about demand and supply conditions in all economic sectors; that it has the capacity to analyze this information and make economically rational decisions about allocation; and that it has the means to implement these decisions effectively. Regardless of the fact that these assumptions were very far from being met, the government planning departments nevertheless sought to control social development and economic growth directly and totally. In 1978, 94.4 percent of agricultural production and 97.5 percent of industrial production in China was sold at state-fixed prices. The state controlled almost 100

percent of output of services. Command planning was virtually the only means of allocating resources.

Under the central planning system, banks played the role of cashier for the government and did not exercise any independent control over the allocation of financial resources. The government could allocate any funds that it thought necessary, relying on its physical plans, and financial allocations became merely a means of facilitating and checking up on the underlying physical allocations. The State Planning Commission, under the State Council, was the organ in charge of financial planning, as well as investment and project planning, for both economic growth and the social sectors. The other ministries, such as those for education and public health, were coordinated by the State Planning Commission. In the early 1950s, the State Planning Commission was at the same administrative level as the State Council under the central government.⁶

The central government controlled almost half of all governmental revenue: 45 percent in 1953 and 48 percent in 1955 (Figure 2.2.). If we divide the entire pre-reform period into three phases, we would find that the central government's share of total revenue almost equaled that of local governments during the 1950s, was significantly less in the 1960s, and fell to a still lower plateau in the 1970s. However, in that decade local governments turned over much of their revenue to the center, which therefore had greater control over its disposition than suggested by Table 2.2. The failure of the Great Leap Forward (1958-60) -- which was Mao's attempt to forge ahead on the basis of popular mobilization and enthusiasm and without either markets or central command planning (the planning system was disabled during the Leap) -- and the famine of 1959-61 had resulted in a severe crisis for China (see section 2.3., below). One result was the re-imposition of command planning, but in a more decentralized form, with more authority given to local governments.

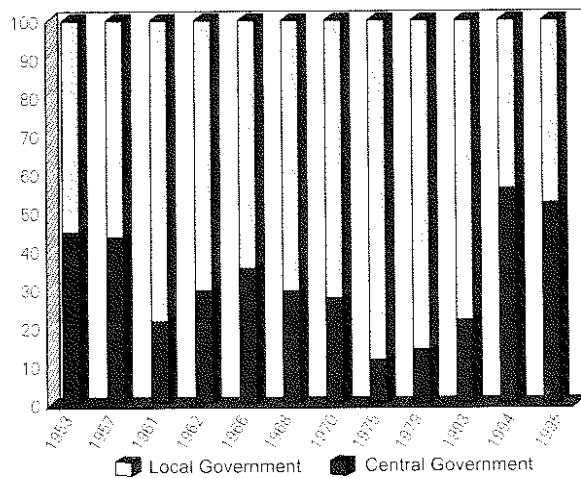
Between 1949 and 1979, human development -- generally referred to as "social development" in China -- was an integral part of the five-year plan framework. For instance, chapter eight of the First Five-Year Plan dealt with vocational and higher education and the sending of students abroad for study; and chapter nine dealt with improving the material well-being of the people, including public health and welfare, as well as with general education and culture (See *First Five-Year*

Plan for Development of the National Economy of the People's Republic of China in 1953-1957, 1956). The Central Committee of Communist Party of China and the State Council formulated policy, while departments specializing in human development-related areas (such as the Ministries of Public Health and Education) played a major role in working out policies and plans for their areas. During this period, state policies regarding social development focused principally on the following issues: employment of state enterprise personnel, university or college graduates and workers who took leave from their job for various reasons; provision of social insurance for workers, including temporary workers; employee welfare; building up the public health system; provision of subsidies for sick or injured workers, for newborn babies, and for home visits to one's family; handling the wage and bonus system; planning enrollment of new students in universities and colleges, etc.

The five-year plan was the vital instrument for the state's management and control of economic growth and human development. Put forward by the State Planning Commission and approved by the People's Congress, it took on the authority of law and had to be carried out by governments at all levels. The five-year plan set broad targets and put forward relevant measures to realize them. The latter included investment in fixed assets (still a key macroeconomic instrument for the state), and a host of policies concerning finance, pricing, income, individual sectors and industries, the rural economy, infrastructure, water conservancy, transportation, communication, energy, raw materials, and so on. In addition, the plan covered international trade policy, investment in science and technology and in education, culture, medical care, sports, population control, employment, environmental protection, and the reduction of poverty.

The system of central administrative planning was rigid, administratively demanding and voraciously in need of information. As the economy grew and became more complex, the burdens it placed on the planning system became geometrically heavier. The system fostered bureaucratism and gave all initiative to a small number of organizations and people at its center. The decentralization of the budget, shown in Figure 2.3., represented an attempt to reduce this rigidity by passing more responsibility for plan implementation down to

Figure 2.2. Proportion of Total Government Revenue Going to Central and Local Government



Source: *State Statistical Data on Revenue and Expenditure*, May 1982.

Note: Figures for 1993-1995 are shown for comparison purposes, and are from the *Statistical Yearbook of China*, 1996. They refer to within-budget revenue, and may not be strictly comparable to the earlier figures. See Chapter 5 for additional discussion of fiscal decentralization in the reform era.

lower levels of administration. While very good at building new factories and mines and staffing them with new workers, the central planning system was not good at motivating individual workers and managers to be efficient and creative. Productivity improvements came chiefly from the building of new facilities, not from the continuous enhancement of existing enterprises. Established originally to oversee development of heavy industries like steel and machine building, central planning was ill-equipped to deal with the fast-changing technologies and demands of the new information and electronics age.

Some Chinese leaders, especially Mao Zedong, were aware of the limitations of the central planning system as learned from the USSR, and sought to change it. From one perspective, the Great Leap Forward and aspects of the Cultural Revolution can be seen as attempts to do away with central planning without allowing a market economy to replace it. Such efforts gave rise to economic anarchy, and each time had to be supplanted eventually by central planning once again. The many attacks on planning and the planners

weakened it badly, however, so that by the end of the pre-reform period, central planning was being done in a weak and truncated form at best.

Under the traditional management system, improvements in human development depended principally on funds allocations to relevant projects, including construction of universities, colleges, schools, libraries, hospitals, clinics, etc. The state began investing in family planning in 1964, and in earthquake detection and survival starting from 1976, influenced by the great Tangshan earthquake (Hebei Province) of that year. Even at present, after Party Central Committee resolutions that set overall strategy, project finance is still the single most important instrument for realizing the state's goals with respect to human development (Table 2.2.).

2.2. The State and Economic Growth

Before the reform period, a plurality of funds was allocated to the building of infrastructure and an industrial base. Over the entire period from 1950 to 1980, infrastructure funds claimed about 39 percent of annual state expenditure on average. This concentration of construction activity succeeded in building a heavy industrial base in a fairly short period of time. Fixed asset investment, always an important tool for the state to promote economic growth, was and is still also an instrument for exerting macroeconomic control. Determined by the State Council, it is implemented by the State Planning Commission, the Finance Ministry and certain policy banks.

Between 1952 and the mid-1970s, China was able to establish a substantial industrial base that included the chemical, iron and steel, metallurgical, machine building, electrical, and nuclear industries. The Anshan and Benxi Iron and Steel Companies (Liaoning Province), their Wuhan counterpart (Hubei), the Changchun Automobile Factory (Jilin), and the Harbin Boiler Company (Heilongjiang) are examples of major enterprises that were set up during this period that played a great role in developing the Chinese economy.

Modern Science And Technology

Intellectuals have undergone several changes in their treatment by the state. Many were persecuted as "rightists" in the mid-1950s and again during the Cultural Revolution period (1966-76, especially 1966-

Table 2.2. Human Development Expenditures (million yuan)

Year	Culture	Education	Health Care	Media	Family Planning	Earthquake Planning & Relief	Cultural Relics
1950	29	376	72	8			
1952	68	895	297	17			
1957	124	1,952	482	34			
1958	134	1,983	454	46			
1960	231	3,178	814	81			
1965	168	2,912	929	89	27		
1966	202	3,443	987	88	44		
1969		2,704	931				
1970	206	2,756	1,047	170			
1975	354	4,828	1,992	285	169		
1979	475	7,696	3,173	437	251	102	108

Source: *State Statistical Data on Revenue and Expenditure*, May 1982.

69). In between, during the early 1960s, and from the late 1970s on, the state took a more positive view of intellectuals and of the development of science and technology. Much progress and many achievements have been made in science and technology over the entire period. In the 1960s, China tested nuclear weapons and in the 1970s launched and recovered earth satellites. Several industrial sectors emerged as a by-product of scientific and technological development, such as electronics, the nuclear industry, and missile production. As these facts suggest, however, this development was focused on the defense sector, and science and technology for civilian uses was neglected. Human development was not a major beneficiary of science and technology resources.

Commune and Water Conservancy Facilities

Although the state undertook to build large-scale water conservancy works before the "Great Leap Forward", its efforts increased greatly during this movement. A host of irrigation works on a large scale were constructed, including the Yellow River and Yangtze River Irrigation Systems. From 1958 to 1966, before the beginning of the Cultural Revolution, the state invested 13.79 billion yuan to build water conservancy facilities, about 3.2 times of amounts of the First Five-Year Plan, and 290 irrigation projects were completed. These great works played a major role in developing agriculture and in controlling floods and

preventing natural disasters. The rural people's communes built many large water conservancy works, and some of them are still of great benefit to farming and the rural population generally. However, during the feverish days of the "Great Leap Forward", little or no attention was paid to proper scientific site selection and construction methods, and the result was a vast destruction of natural ecologies and the salinization of large areas of the North China plain, one of China's most important farming regions.

Energy Industry

The state played a central role as China successfully laid the foundation of its energy industry. An electrical grid was established to network most of the areas of the country. China's power industry depends primarily on coal (which has created severe environmental problems: see Chapter 4). The coal industry has grown into a modern industry with geology, design, construction, engineering, and research and development. The oil industry made great progress during the 1960s with the discovery of a few large-scale oil fields, such as Daqing in Heilongjiang Province, Shengli in Shandong and Dagang in Hebei. These discoveries not only guaranteed the progress of economic development, but they also provided a new energy source that is somewhat cleaner than the low quality coal that provides most of China's energy; switching from coal to oil therefore reduces emissions of toxins and greenhouse gases.

Transport

Chinese transport is heavily dependent on railroads, and much effort went into developing them early in the PRC's history. Some 21.7 billion yuan were invested in transport and communications during the period 1958-65, twice the amount invested during the First Plan period. A complete railway network across the country was established. The technologically advanced Yangtze River Bridge in Nanjing was begun in 1959 and finally completed in 1968. Nevertheless, as will be discussed in Chapter 5, China's transport network is underdeveloped relative to its needs, as well as to that of other developing countries, such as India.

Rural Industry

During the Great Leap Forward, millions of farmers and villagers were organized into communes, and mobilized to make iron and steel in "backyard furnaces" and to set up small village workshops to produce goods for local consumption. This was in keeping with the government's development policy at that time of "walking on two legs", i.e., pursuing both modern, large-scale capital-intensive industry in urban areas and small-scale, labor-intensive industries using indigenous technologies in rural areas. Though the Great Leap Forward led to a great disaster for human development in China, the commune system survived it, since this system embodied a convenient administrative mechanism for organizing rural development, including rural industrialization. Throughout the 1960s and the early 1970s, the state pushed for the development of the "five small industries (cement, chemical fertilizer, machinery, power, and iron and steel) in the countryside as a vital component of the overall development policy of self-reliance. This early form of rural industry was referred to as commune and brigade industry, and some of these enterprises evolved into the township and village enterprises (TVEs) that in the 1980s became a dynamic driving force of rural and even national economic development. However, aside from the "five small industries", the development of rural nonfarm activities, such as handicrafts and other household subsidiary activities was held down by the extreme hostility of the state to individual or private economic initiatives, as well as by the policy of promoting local self-sufficiency in foodgrain

production (see sec. 2.3. below). This undoubtedly suppressed the growth of rural incomes.

2.3. The State and Human Development

From 1949 to the beginning of the reform period in the late 1970s, the state played a complex role with regard to human development, contributing to it in some ways, and detracting from it in others. The most basic human capability, that of survival to old age, made substantial gains during this period, as is shown in Table 2.3. Life expectancy at birth advanced from only a little above 50 years in 1950 to about 68 years in 1978. As is discussed below, great progress was made toward the goal of eliminating mass infectious diseases, and basic literacy spread widely through the population. Yet, freedom of expression and of movement were rigidly curtailed, mass campaigns claimed many victims, and a major famine, made possible in large part because of these political aberrations, killed millions of people. Such tragedies were an important part of the human development story, too, and help explain why the Chinese people turned to reform with alacrity when the opportunity finally came.

Table 2.3. Life Expectancy at Birth, 1950-1978 (years)

Year	Area	Average For Total Population	Men	Women
1950	Beijing	--	53.9	50.2
1953	Beijing	--	61.2	60.5
1957	11 provinces	57.9	--	--
1957	4 cities	64.0	--	--
1964	Shanghai	--	69.3	72.3
1972	Shanghai	--	71.7	73.8
1978	23 provinces	68.2	67.0	70.0
	Cities	71.3	69.4	73.2
	Counties	67.9	66.7	69.2
1996	China	70.8	68.7	73.0

Source: Statistical Data on the National Economy of the PRC, State Statistical Bureau, 1982.

Note: 1996 life expectancy figures from China Human Development Report, 1997, UNDP, 1998, Table 3.2. Life expectancy figures for China's provinces in 1990 can be found in Appendix Table 5 of the current volume.

Population

Until 1964, the state did not take an active role in controlling population growth. Mao believed that people, organized and motivated, were China's most precious resource, and the more of them there were, the better. The population issue became highly politicized in the first decade of the PRC. The first national census was carried out in 1953 and revealed that the population had reached 581 million. The Party Central Committee and state then began preparing to implement a family planning policy. However, during the Anti-rightist Movement (1957 – see below), the idea of population control was subjected to attack as a rightist view, and after that such a policy became impossible to implement. Considering the hostile international environment surrounding China in the 1960s, Mao felt that China must prepare for foreign invasion, and his doctrine of “people's war” – which is aided by a large population – was thought to be the best way to defend the country. The population reached 963 million in 1979, some 65 percent higher than in 1953. Uncontrolled population growth has imposed long-term burdens on the economy as well as on the natural environment.

The state failed to change attitudes toward family size in rural areas during the first three decades of the PRC, although it inaugurated many campaigns, such as the socialist education and anti-feudalism movements, in order to destroy the old value system. Moreover, in rural China, where the population is not covered by pensions or social security of any kind, parents' security in old age depends crucially on their children, and especially their sons, since girls traditionally marry out of their family and village and become responsible for their husbands' parents. Therefore, there was a rational basis for rural people to seek to have more children, and especially more sons.

An unprecedented rate of population growth emerged during this period (see Table 2.4.). First, the health care system had greatly improved, and even in the villages people had access to medical care based on clinics, health care stations and paramedics (“barefoot doctors”) provided by the communes. Second, long-run conditions of relative peace and better nutrition brought down the death rate and raised the rate of natural increase. For the entire period birth rates averaged almost 30 per thousand, and death rates close to 11.3,

yielding a natural increase rate of close to 18.7.

The famine of 1959-61 was a demographic catastrophe of major proportions which has profound implications for assessing the state's role in China at that time. Most scholars agree that government policies during the Great Leap Forward themselves created the conditions for crop failure and starvation. Moreover,

Table 2.4. Population Growth, 1950-1979

Years	Total (mills.)	Birth Rate (‰)	Death Rate (‰)	Natural Increase Rate (‰)
1950	551.96	37.00	18.00	19.00
1951	563.00	37.80	17.80	20.00
1952	574.82	37.00	17.00	20.00
1953	587.96	37.00	14.00	23.00
1954	602.66	37.97	13.18	24.79
1955	614.65	32.60	12.28	20.32
1956	628.28	31.90	11.40	20.50
1957	646.53	34.03	10.80	23.23
1858	659.94	29.22	11.98	17.24
1959	672.07	24.78	14.59	10.19
1960	662.07	20.86	25.43	-4.57
1961	658.59	18.02	14.24	3.78
1962	672.95	37.01	10.02	26.99
1963	691.72	43.37	10.04	33.33
1964	704.99	39.14	11.50	27.64
1965	725.38	37.88	9.50	28.38
1966	745.42	35.05	8.83	26.22
1967	763.68	33.96	8.43	25.53
1968	785.34	35.59	8.21	27.38
1969	806.71	34.11	8.03	26.08
1970	829.92	33.43	7.60	25.83
1971	852.29	30.65	7.32	23.33
1972	871.77	29.77	7.61	22.16
1973	892.11	27.93	7.04	20.89
1974	908.59	24.82	7.34	17.48
1975	924.20	23.01	7.32	15.69
1976	937.17	19.91	7.25	12.66
1977	949.74	18.93	6.87	12.06
1978	962.59	18.25	6.25	12.00
1979	975.42	17.82	6.21	11.61
---	---	---	---	---
1997	1,236.26	16.57	6.51	10.06

Source: *Statistical Data On National Economy*, State Statistical Bureau, July 1990. 1997 figure, provided for reference, is from *China Population Statistics Yearbook*, 1998, Population and Employment Division, State Statistical Bureau, 1998.

the absence of independent news media made impossible the early warnings that a vigorous independent press would have voiced. The state thus blinded itself to impending disaster, supplying a classic example of Amartya Sen's well-known observation that in modern times, no country with a relatively free and adversarial press has suffered a major famine.⁷

The state has had different population policies for urban and rural areas. In the early days of the PRC, people could migrate freely between city and countryside. Villagers could leave rural areas and move to urban areas or migrate to other parts of China without any restrictions, but the scale of migration was not large. The Common Programme, which served as China's Constitution until the first national constitution was adopted in 1954, stipulated that citizens had a right to move freely.

Ever since the 1954 Constitution was adopted, however, the words, "move freely", have disappeared from China's constitutions, owing to the implementation of the household registration system. Nevertheless, migration was not considered illegal. Indeed, the early 1950s were a relatively normal period for the development of urban-rural relations. The period from the late 1950s to the late 1970s was when relations between city and countryside deteriorated. In 1956, in response to increasingly large movements of farmers into the cities in search of new jobs in construction and in the industries being set up by the First Five-Year Plan, the state promulgated regulations prohibiting "blind migration" of rural population to urban areas. That was a time of rapid and disorienting social and economic change in the countryside; the "socialist hightide of collectivization" was under way, in which almost all farm households were moved from private farming into "agricultural producer collectives" in a period of less than two years. Although many villagers were able again to find jobs in towns and cities during the Great Leap Forward, the barrier between urban and rural societies was finally hardened during and just after the great famine that ended the Leap, when the state, unable to employ or feed them, sent some 20 million people back to their villages. From then on, not only the ban on rural-urban migration, but also the state monopoly on purchasing and marketing of grain, cotton, and other essentials, and the work unit-based welfare and distribution system,

combined to make unauthorized population movement impossible. Even if one could get to the city, there would be no way to obtain food, medical care, education or other essentials. This system strictly cut off the urban and rural areas from regular contact with each other.

The state created an integrated system of population management at all levels from central to local. Everyone was to register his or her household in his or her birthplace. Without permission from local government, one could not move from urban to rural areas or vice versa. One who moved without permission was referred to as "Heihu" (literally, "black household"). Thus, migration was effectively controlled, and a dual social structure emerged. Urban residents, based on their household registrations (*hukou*) obtained food, clothing, articles for daily use, such as bicycles, watches and sewing machines from their work unit or the state, whereas rural inhabitants had access to no such privileges.

During the Cultural Revolution, China emphasized a policy of "taking grain as the key link", i.e., pressuring all rural communities to be self-sufficient in production of basic foodgrains. The state prohibited farmers from engaging in side occupations and family handicrafts. Many localities that had historically specialized in economic crops (e.g., sugar, tea) now could not do so, both because they had to grow grain instead, and because the markets for their crops had declined, in any case. Without household sideline production, villagers had no money to purchase daily necessities and their standard of living could not improve. In the Cultural Revolution period, residents of towns and cities lived largely on a supply system, with purchases of ordinary goods limited by ration coupons, such as those issued for grain, cloth, oil, bicycles, and cotton, rather than by money. Markets were strictly prohibited.

The *hukou* system prevented people, especially farmers, from moving to towns. Small towns decreased in numbers and vigor, and the number of smaller cities decreased, also. Only medium and larger cities increased in numbers during this period (see Table 2.5.). Increasing numbers of rural people were forced to remain working in agriculture while more and more urban residents were concentrated in a small number of large cities. Throughout the 1970s the commune

system persisted in the rural areas with its smallest unit – the production team, corresponding to a hamlet within a village – as the basic unit of work organization and income distribution. This system disguised the fact that agriculture now had too many workers by providing them all with food and basic income under the collective system. However, work incentives were poor, labor productivity was low and incomes stagnated.

Health Care

The government early on set up a management system for the country's health care. In rural areas, emphasis was put on maternal and child health, vaccination especially, on controlling major diseases, and developing Chinese medicine hand in hand with western medicine. Prevention was stressed. Investments in health care facilities, personnel and treatment were the vital instruments used by the state to develop the health care structure. The proportion of investment in health, education and culture averaged close to 9.5 percent of total national investment between 1952 to 1978.

The state's focus in rural areas was on creating a comprehensive health care network and investing special funds to control the worst infectious and parasitic diseases. China created its rural health care system on three levels: county, township and village. At the county level, the health care institutions provided technology and policy guidelines to the other two levels; township hospitals played a pivotal role between county and village, taking more serious cases from below and passing along the most serious to the county; the village clinic was the base of the system, providing routine care and diagnosis. This system was effective in improving the health status of the rural population. In general, the number of medical technical personnel in the country as a whole grew to 2.6 million in 1978 from 659 thousand in 1952. The total number of hospital beds reached over 1.9 million in 1979 from 160 thousand in 1952 (Table 2.6.).

In rural areas, supported by the state, a collective system for health care was set up. During the Cultural Revolution period, the Party and state pressured urban doctors to go to the countryside and encouraged the training of "barefoot doctors", i.e., villagers with

Table 2.5. Changes in the Structure of Urban Areas, 1952-1995

Types of City or Town	1952	1957	1965	1978	1995
Cities with more than one million population	9	10	13	18	32
Cities with population between 500,000 and one million	10	18	18	27	43
Cities with population 200,000 to 500,000	23	36	43	60	192
Cities with population below 200,000	115	114	97	92	373
Towns	5,400	3,621	3,000	2,600	n.a.

Source: Zhou and Zhang, 1991. 1995 figures from *Statistical Yearbook of China*, 1996.

rudimentary medical training who could provide basic paramedical services to their neighbors. The collective medical system (CMS) that spread widely throughout the countryside in those years, reaching over 85 percent of villages at its peak in the mid-to-late 1970s, provided a cost-effective way of improving the health status of China's huge rural population (See UNDP, *China Human Development Report*, 1997). Many diseases were eliminated or controlled. For instance, smallpox was eradicated in China as early as 1961. As we have seen, national life expectancy increased from 57.9 in 1957 to 67.9 in 1978. However, with the dismantling of the communes and the shift to the "household responsibility system" in the countryside after 1980, the CMS quickly disappeared, leaving a serious gap in China's rural health care network. In recent years, the state and public have both come to realize the advantages of the CMS and moves have begun to re-establish something similar in order to restore the orientation toward public health and prevention that CMS had embodied.

The workers and staff who had jobs in state owned units (*danwei*) enjoyed the right to free medicine and health care. Both free medical service and medical

Table 2.6. The Development of Health Care, 1952-1979

Year	Health Care Institutions	Hospital Beds (1,000)			Medical Technical Personnel (1,000)	
		Total	County Level	Percent County Level	Total	Rural
1952	38,987	160	39	24.3	690	343
1957	122,954	295	74	25.1	1,039	408
1958	196,829	426	113	26.5	1,329	409
1960	261,195	655	200	30.5	1,505	414
1962	217,985	690	253	36.7	1,414	474
1965	224,266	766	308	40.2	1,532	494
1969	153,891	993	538	53.9	1,471	455
1972	135,127	1,337	785	58.7	1,708	453
1975	151,733	1,598	961	60.1	2,057	510
1979	176,793	1,932	1,192	61.7	2,642	607

Source: Statistical Data on the National Economy, State Statistical Bureau: July 1990; Statistical Yearbook of China, 1998: 770. Note: Total hospital beds include those at city and county levels. County hospitals are accessible to some rural residents. Medical technical personnel include all permanent medical staff and employees of medical institutions, including doctors (Chinese and Western), paramedics, nurses, pharmacists, laboratory specialists, etc. For figures on hospital beds for selected years from 1980 to 1997, see Chapter 4, Table 4.13.

service based on labor insurance were established in emulation of the Soviet Union. The funds came from either state finances or the *danwei*. Of course, only government staff, state enterprise workers and some workers in collective enterprises had access to these systems.

Education

At the end of 1950s, the state tried to establish a management system for education that would encourage greater initiative from below. Enterprises and rural communes were encouraged to provide part

Table 2.7. Distribution of Students over Three Levels of Education

Year	Proportion of Students in Population	Students per 10,000 population		
		University or College	Middle School	Primary School
1949	4.76	2.2	23	450
1952	9.47	3.3	55	889
1957	11.11	6.8	110	994
1962	11.65	12.3	124	1,029
1965	18.09	9.3	197	1,602
1970	15.97	0.6	321	1,276
1975	21.40	5.4	493	1,641
1979	21.41	10.5	621	1,510

Source: Brief Statistical Data on the National Economy (1949-1988), July, 1989.

-time and after-work education and allocations were increased for basic, vocational and higher education (see Table 2.7.). From 1950 to 1979, 91.14 billion yuan were allocated to educational development, averaging about 6.6 percent of total national expenditure. During the Cultural Revolution period in the 1960s, rural and remote areas were made the focal point of attention, with the goal of narrowing the cultural gap between rural and urban areas, and between advanced and backward areas.

Educational development made considerable progress in the pre-reform period (see Table 2.8.), especially in rural and remote areas. In the early days of new China, the state promoted mass education. The Movement to Eliminate Illiteracy gave workers and villagers the opportunity to learn to read and write. The education of minorities made much progress as well. Numbers of students and their proportion of the population both increased greatly. However, a distinction must be drawn between the earlier and later phases of the pre-reform period as a whole; during the later phase, in particular, education was compromised by the impact of repeated political campaigns. The Cultural Revolution destroyed the pre-existing school system and left a generation of students poorly educated. Replacing normal school curricula with a program of ideology and dogma, it left behind a great gap in trained personnel, for most of the students who graduated during that period were not well qualified for

their positions after the reform era began.

The State And Women

The Party and state have promoted the goal of equality between men and women, and the status of women advanced significantly during the first three decades of the People's Republic in various fields, including economic sectors. The state guaranteed women equal rights with men by law, regulation and policy. In the economic field, women were to get land and work points (*gongfen*, i.e., credits for work distributed by the agricultural collectives and communes that determined the amount of income earned) on an equal basis with men. Although there is much evidence that women in the countryside were commonly awarded fewer work points than men for equivalent work, the stated principle of equality was important. In urban areas, more and more women moved into the labor force and took jobs in government and enterprises (see Figure 2.3.).

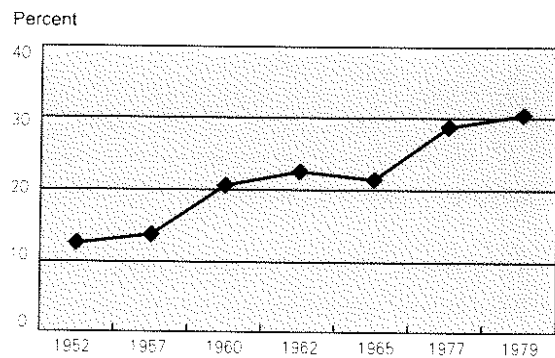
In the political field, the state provided opportunities for women's participation in political affairs and administrative management. Female representatives in the National People's Congress, while remaining always a distinct minority, increased session by session (see Table 2.9.), reaching a high of 21 percent in the Fifth NPC of 1978.

Table 2.8. Educational Expenditures, 1950—1979

Year	Educational Funds (millions of yuan)	Total Govt. Expenditure (millions of yuan)	Education's Share of Total Expenditure (percent)
1950	376	6803	5.53
1957	1,952	30,421	6.42
1958	1,983	40,940	4.84
1960	3,178	65,414	4.86
1961	2,678	35,602	7.52
1966	3,443	54,156	6.36
1969	2,704	52,586	5.14
1972	3,854	76,636	5.03
1975	4,826	82,088	5.88
1979	7,996	127,311	6.28

Source: State Statistical Data on Revenue and Expenditure, May 1982

Figure 2.3. Women in State Owned Sectors, 1952-1979



Source: Statistical Data on *Chinese Labor and Wages: 1949-1985*, July 1987.

The government adopted policies and measures to guarantee the rights of women, provide them with opportunities for education and training, establish maternity support system, increase female employment, help women foster a spirit of self-respect, self-confidence, independence and self-improvement, and encourage them to take the initiative in social life. Policies and measures were also adopted that prohibited various forms of discrimination against women and maltreatment of women. Much of the state's interaction with women took place through the All China Women's Federation, formally a mass organization but which had close ties to the state.

Despite this record of improvements, women have often found themselves discriminated against. They have sometimes had difficulty in finding and keeping good jobs, and are not infrequently victims of domestic violence, especially in the countryside. In rural areas the strong preference for sons has survived, being compatible with the cultural custom of girls marrying out of their village and family.⁸

Social Security

Based on the experiences of pre 1949 China and of the Soviet Union, the government established a social security system for urban residents, beginning with the Labor Insurance Regulations of People's Republic of China, promulgated by the State Council in 1951. This covered state, joint venture and private enterprises with more than 100 members. Later, the regulations were implemented on a wider scale, but they never covered rural areas. The state and its

Table 2.9. Women in the National People's Congress

	First NPC 1954	Second NPC 1959	Third NPC 1964	Fourth NPC 1975	Fifth NPC 1978
Sum Total of Representatives	1,226	1,226	3,040	2,885	3,497
Women Representatives	147	150	542	653	742
% of Women among Representatives	12.0	12.2	17.8	22.6	21.2

Source: Statistical Summary of National Economy: 1949-1979, State Statistical Bureau.

agencies played the role of formulating policies and regulations for social insurance and providing financial resources to public institutions to finance their social insurance obligations.

The social security system in urban areas covered retirement pensions, health care, industrial accident insurance, and childbearing security. These protections had only limited coverage, however, chiefly of workers in state-owned units. Management of the social security system was differentiated by industry and ownership sector. There were essentially three variants of the system. The first, implemented in state owned enterprises and in government and other institutions, was financed by government allocations (see Table 2.10.) and covered unemployment insurance, medical care, industrial injuries, child birth insurance, social relief, social welfare, and pensions for the disabled and the families of deceased workers. The second covered urban collective enterprises: their workers received coverage similar to that mentioned above, but it was financed by the enterprises, themselves, or by local government. Third, there was an emergency relief program for urban residents without jobs.

The state also formulated policies for contract and temporary workers who held either urban or rural household registrations. These workers were given access to some social insurance – for instance, for industrial injury. If they worked for state owned enterprises or institutions, their social insurance came from the state through their work unit. Enterprises enjoyed almost no autonomy from the state: wage and welfare standards were determined by the government, profits were taken by it, and any financial responsibility enterprises bore would ultimately fall to it, as well. The state thus controlled social insurance, in reality, although the system was based formally on the work unit.

During the first three decades of the PRC, some

units tried to set up a social insurance system at unit level, based upon member contributions. For example, in the 1950s Qinghua University in Beijing created such a system for medical care, under which faculty made monthly payments into a health care account, which could then be tapped by those needing medical attention. In fact, this system still exists in some urban enterprises, government agencies and institutions as a complement to the old social security system.

The government has provided some support for rural social insurance, welfare and relief, and special care for disabled service people and family members of revolutionary martyrs and service men and women (see Table 2.11.). In most respects, however, urban and rural areas were treated very differently. In cities and town, only workers in state owned firms and staff of government offices and institutions were eligible for social insurance, welfare and relief. Citizens without jobs were ineligible, except for social relief. Urban

Table 2.10. Budget for Labor Insurance and Welfare, 1952-1979

Year	Total	Index (1952 = 100)	Percent of Total Wage Bill
1952	9.5	100.0	14.0
1957	27.9	293.7	17.9
1960	36.8	387.4	14.0
1961	31.5	331.6	13.2
1965	29.6	311.6	12.5
1969	32.6	343.2	12.3
1972	41.5	436.8	12.2
1975	46.3	487.4	12.0
1979	92.1	969.5	17.4

Source: Statistical Data on Chinese Labor and Wages, 1987.

Note: Figures are in current yuan.

Table 2.11. Expenditures for Disabilities and Social Welfare, 1952-1979

Year	Total	Social Welfare		Disabled	Natural Disasters
		Total	Rural		
1952	2.95	0.66	0.16	1.23	1.06
1957	5.29	1.36	0.66	1.52	2.41
1958	2.22	1.15	0.63	1.20	0.87
1960	7.94	2.15	1.12	1.46	4.33
1961	10.09	2.44	1.15	1.45	6.20
1962	8.14	2.39	1.21	1.73	4.02
1964	17.04	2.87	1.43	2.06	12.11
1967	8.16	2.91	1.32	2.44	2.81
1970	6.53			2.67	
1975	12.88	3.47	1.75	3.75	5.66
1979	22.11	6.46	5.41	2.63	10.24

Source: State Statistical Data on Revenue and Expenditure, May 1982.

residents without jobs or family support, such as the disabled, elderly, orphans and other hardship cases, could get relief funds from the Department of Civil Affairs, but at very meager levels.

Rural areas lacked a social security system, but the government allocated some financial support to social relief and welfare each year (see Table 2.12.). During the collective era, the government also advocated that production brigades create their own social security system relying on the collective economy and mutual aid. In fact, under the communes the rural areas did create such a system, known as the "Five Guarantees". Five Guarantee households (*wubao hu*) included old people without relatives to support them, the disabled, orphans, and dependents of PLA personnel. A modicum of collective support was provided through the commune system, supplemented by small government allocations and special expenditures to deal with the effects of natural disasters. Other than that, however, rural residents had no access to social insurance, just as they lacked the higher quality education and better health care available to workers in state owned enterprises.

Housing

The housing system has been reformed several times since the 1950s. Under the original system

Table 2.12. Expenditures for Social Relief

Year	Total	Rural Areas	Ratio, Rural to Total (%)
1952	0.66	0.16	24.24
1957	1.36	0.66	48.53
1958	1.15	0.63	54.78
1960	2.15	1.12	52.09
1965	2.92	1.65	56.51
1967	2.91	1.32	45.36
1971	2.67	-	-
1975	3.49	1.75	50.14
1979	5.27	2.63	49.91

Source: State Statistical Data on Revenue and Expenditure, May 1982

formulated in the 1950s, most employees of state enterprises obtained apartments from their work units at very low rent. Residents had use rights to their apartments, but did not own and could not sell them. Government staff and workers in the state and collective enterprises were allocated housing that differed in size and quality according to their rank and seniority. The government, both directly and through its enterprises, provided the enormous financial resources needed to build and then maintain the housing stock.

Jobs And Wages

Employment data referred only to the workers and staff in formal enterprises which, from the mid-1950s until the reform era, meant state and urban collective enterprises. The rural majority of the population are still not included in most employment data. For the covered population, official policy long recognized a right to a job for every worker, and the state sector basically absorbed the urban labor force more or less completely from the mid-1950s until the dawn of the reform era. Therefore the employment rate was very high, for both men and women. Except for a few years during this period, the employment rate rose steadily (Table 2.13.). The People's Republic had inherited an economy wrecked by war and civil war, with a very high unemployment rate. However, the combination of high investment in economic construction and control of urban population size made it possible to bring unemployment down to low levels. Still, the formal unemployment rate of 3.8 percent in 1978 probably understates the actual rate of joblessness.

In order to carry out the policy of priority development of heavy industry, the government accumulated funds by maintaining wages at a low level and controlling their growth. As Table 2.14. shows, there was a rough negative correlation between the accumulation rate and the rate of growth of wages: during periods of very high accumulation, wages fell. When the accumulation rate came down, wage growth resumed.

There were several wage reforms after 1952. Until 1956, government cadres and administrative personnel were paid by means of an in-kind supply system (a ration of basic necessities plus a small cash supplement) that harked back to the practice of the Party and army during the war and civil war period. A major wage reform occurred in 1956, in which graded money wage systems were adopted for workers and for cadres and administrative personnel. Total employment and the wage bill are shown in Table 2.15.

In rural areas, early in the era of the people's commune, villagers' means of production and even part

of their household belongings and consumer goods, including furniture, were taken by the commune. Members' remuneration was distributed in a unified manner according to work points acquired by performing labor, their work activities and daily life were run along military lines, and they took their meals in public dining halls. During the famine that ended the Great Leap Forward, however, many of these measures were abandoned and members resumed a more normal life. During the Cultural Revolution years some radical policies returned to the countryside, including highly egalitarian payment methods. These measures were taken under the guiding ideology of "restricting bourgeois rights", realizing a purer form of socialism and then achieving a swift transition to communism. During most of the collective period, rural income was collected and distributed to members at the level of the production team, consisting of some 20 or 30 households that constituted a hamlet or neighborhood within a village. Although income was to accord with skill and actual work done, within each team it tended to be very equally distributed. Among different teams, however, big differences in average income could occur because of differences in natural conditions (soil, availability of water, etc.).

Civil Society

Under China's central planning system, the work unit replaced the community as the basis of social life. The work unit took care of most of the workers' needs,

Table 2.13. Unemployment Rate, 1949-1979

Year	Total (mills.)	Percent
1949	4.74	23.6
1950	4.38	13.2
1951	4.01	10.8
1952	3.77	10.5
1953	3.33	10.1
1954	3.21	6.6
1955	3.15	5.9
1956	2.13	5.3
1957	2.00	5.4
1978	5.30	4.9
1979	5.68	3.8

Source: Statistical Data on Labor and Wages in China: 1949-1985, July 1987.

Table 2.14. Relationship between Accumulation of Funds and Wage Growth

Years	Accumulation Rate (%)	Growth Rate of Real Wages (%)
1953-1957	24.2	5.4
1958-1962	30.8	-4.4
1963-1965	22.7	7.2
1966-1976	30.3	-0.7

Source: Xu Songtao, 1989.

Table 2.15. Employees and Total Wages of State Enterprises, 1952-1978

Year	Employees (millions)	Total Wages (billion yuan)
1952	15.80	6.8
1957	24.51	15.6
1958	45.32	18.0
1960	50.44	26.3
1961	41.71	24.4
1965	37.38	23.5
1970	47.92	27.8
1975	64.26	38.6
1978	74.51	46.9

Source: Statistical Data on National Economy, July 1990.

from income to housing, from childbirth to schooling to funeral expenses, from health care to old age pension, and it even supplied common consumer goods. In some large industrial bases, especially those located in the north and west of the country, enterprises founded schools, hospitals, shopping centers, hotels, clubs, public baths, and restaurants for their workers, to supplement their well-being. The enterprise was thus not only a production unit but also an independent unit for social management. Some Chinese referred to this as an "enterprise-created society", and it was a common social phenomenon in towns and cities.

Enterprises created communities, as well. Common sensibilities and common feelings were shaped by shared surroundings. In some areas, huge enterprises of national scope were physically isolated from their local environment. For instance, the Baotou Iron and Steel Co. in Inner Mongolia, had almost nothing to do with its host locality, its government, local economic growth or local social development. At present, these communities have become hardship areas with more laid-off workers, lower income, fewer job opportunities. Their "unit" (*danwei*) was the basic community of their workers' lives. The *danwei* provided almost all their needs, including even marriage. The sociologist, Fei Xiaotong, has noted that the relationship among the workers in Baotou Iron and Steel transcended mere working relations to resemble those of a family. Many sons and daughters of old workers were in fact related by marriage. The all pervasiveness of the *danwei* has put serious impediments in the way of reform at the present state owned enterprises, because there is a strong emotional attachment of furloughed workers to their *danwei*, making it very difficult for them to part from it, even when the "unit" faces bankruptcy. Accustomed to having their needs taken care of by their *danwei*, they are extremely reluctant to enter the labor market and look for another job under vastly different conditions.

Protecting The Environment

The government and leaders of China showed no awareness of the serious nature of the country's environmental problems until the early 1970s. Due to enforced isolation and its own closed-door policy, the country lacked knowledge of the environmental issue that had emerged two decades earlier in the developed

countries. On an international scale, the issue of environmental protection began to gain attention in 1972 with the first United Nations Conference on Human Environment. However, environmentalism was lumped together with many other western ideas regarded by the then dominant Party ideology as capitalistic and therefore anathema for China. Although the government sent a delegation to the UN Conference in Sweden, environmental protection was not recognized as a priority in China for many years to come.

Nevertheless, in the years from the establishment of the PRC until 1972, the government did pay some attention to protection and management of the environment. For instance, public health departments inspected and acted to control air and water pollution in some areas. The state issued *Standards of Health for Industrial Design* (implemented from April 1, 1963). Environmental protection was treated as a component of public health work and managed by the Ministry of Public Health. Before 1972, only one national environmental management department existed; a sub-office of the Ministry of Construction, it was the predecessor of NEPA (National Environmental Protection Agency). No such agencies existed at the local level.

The Great Leap Forward, with its the many large-scale but ill-conceived water conservancy projects and its movement to produce iron and steel locally, caused large-scale destruction of local ecosystems. Several hundred thousand small blast furnaces and some 60 million people were thrown into the "backyard iron and steel" movement. Without sufficient coal and coke, people engaged in massive tree cutting to get fuel for the furnaces, and the country lost much of its surviving forest cover. The present problem of growing desertification can be traced in part to the Great Leap Forward. What is more, most of the iron and steel produced was of such poor quality as to be useless.

Agriculture was also a source of pollution. In order to increase grain production, the state invested substantial sums in setting up farm chemical factories, and farmers began using increasing amounts of fertilizers, pesticides and plastic film. There was little recognition at first of the side effects of farm chemicals in polluting the land and water supply, damaging soil structure and producing pesticide-resistant pests. Many

farmers have become highly dependent on chemical fertilizers and use them indiscriminately, which depletes the soil's organic content, harms its structure and makes it more vulnerable to erosion.⁹

At the same time, local governments opened for tilling large areas of wasteland, grassland, and forest, in order to achieve local self-sufficiency in grain production. Devastating floods along the Yangtze and Songhua Rivers in the summer of 1998, which cost over 4,000 lives and US\$31 billion, were in part a legacy of the terrible erosion caused by such policies. Indiscriminate logging in the upper reaches of the Yangtze and reclamation of land bordering lakes increased the difficulty of controlling the floods. Dongting Lake in Hunan Province is one of the largest lakes in the Yangtze's middle reaches, and it plays an important role in absorbing flood waters coming down the Yangtze. However, the total area of the lake has been greatly reduced by decades of reclamation for use as farmland. The same has happened to other major lakes in Jiangxi and Hubei provinces. Farming along the Yangtze embankment and lakes has, since 1949, never been conducted in an environmentally sound manner, and the region has accordingly become increasingly prone to severe flood damage.

In the industrial sector, the state focused on heavy industry, including power, steel, machinery, chemicals, automotive industry, paper, and building materials. These were all heavily polluting industries. Reliance on major fossil fuels, especially coal (see Table 2.16.), produced a huge problem of sulfur dioxide emissions. Air pollution became a serious threat to health in that era and also, in the form of acid rain, caused widespread damage to forests, especially in the Southwest. With development of the chemical industry, large amounts of untreated chemical wastes were poured into the rivers and ran down them into the ocean. There was no wastewater treatment. During the Cultural Revolution, the goal for each locality was to build an independent economic system and local governments, such as those of Beijing, Hangzhou, Suzhou, Guilin, Jinan, Xi'an, Luoyang, Kunming, etc. – all cities with long histories and rich cultural heritages – sought to construct heavy industrial bases, including enterprises making steel, chemicals, and construction material. These industries destroyed the urban environment and ecosystem, as well as seriously

Table 2.16. Structure of Energy Consumption

Year	Total Consump- tion	Share of total (percent)			
		Coal	Petroleum	Natural gas	Hydro- power
1957	96.4	92.3	4.6	0.1	3.0
1965	189.0	86.5	10.3	0.9	2.7
1970	292.91	80.9	14.7	0.9	3.5
1978	571.44	70.7	22.7	3.2	3.4

Source: Statistical Yearbook of China, 1998.

harming development.

The rate of energy utilization was very low under central planning. Firms were primarily concerned with meeting plan targets, not with efficiency, cost or conservation of resources. The basic character of energy utilization during the PRC's first three decades was that of high input and low efficiency.

Since 1973, environmental protection has made some progress, although not enough to offset accelerating destruction (see Chapter 4). 1973 was the year of the first National Conference on Environmental Protection, held in Beijing. The State Council then approved the State Planning Commission's report on National Environmental Protection, and its attachment: *Several Policies on Protecting and Improving the Environment*. Based on these documents, environmental protection agencies were set up at different levels of government. In the mid-1970s, the government began to implement environmental planning in urban areas.

2.4. The State and Mobilization Campaigns

The state launched a great many mass campaigns off and on during the years between 1949 to 1979. These campaigns had major effects on human development in China, some positive and others negative. Only a few of the most important will be described here.

Eliminating Illiteracy

Immediately after the founding of the PRC, the state decreed that educational policy must serve the needs of socialist construction and provide opportunities for most of the population, particularly workers and farmers. At the same time, the state took measures to eliminate illiteracy among adults aged 15 to 50, stipulating that all educational institutions should open

their doors to people seeking basic education in reading and writing. A large number of programs were set up by governments at various levels to bring literacy to the people, such as accelerated courses, after-work educational programs for workers, etc. In rural areas, governments and education offices set up adult schools and launched the Campaign to Eliminate Illiteracy. According to statistical data for 1952, more than 80 percent of students in primary schools, 60 percent in middle schools, and 20 percent in universities were from worker and peasant backgrounds. This campaign made the rudiments of education available to millions of people who had never had the opportunity of learning before, and contributed immeasurably to rapidly raising the level of human development in China.

The "Hundred Flowers" and Anti-Rightist Campaigns of 1956-57

In the early days of the PRC, the state and Party controlled the press and education much more tightly than the Guomindang government ever had, and expended great efforts on the "thought reform" of intellectuals, in the hope that study of political texts, small group discussion, and criticism and self-criticism, such as the Communists themselves had long practiced, would in time succeed in changing attitudes and habits.

In 1956, Mao Zedong launched a "Hundred Flowers" campaign, inviting intellectuals to speak out freely and express their views about government policies. In the summer of 1957, however, alarmed by the bitter criticisms made by many intellectuals who resented its monopoly of power, the state launched an Anti-Rightist Campaign. Half a million people were labeled rightists, criticized harshly, persecuted, and subjected to serious discrimination for more than 20 years afterward. Ma Yinchu, president of Beijing University at the time, was labeled a rightist for his advocacy of the need for birth control as an integral component of national economic policy. Other well-known intellectuals who favored birth control, such as Fei Xiaotong, Wu Jingchao, and Chen Da were also branded rightists. The Anti-Rightist Campaign cost China the participation of its best intellectuals in national development, made free discussion impossible for decades, and established the coercive and irrational atmosphere that permitted the disastrous Great Leap

Forward (see below) to occur unchallenged. It also gave rise to a period of uncontrolled population growth that greatly complicated the twin missions of developing the economy and protecting the natural environment.

Great Leap Forward

Mao Zedong and the state he led launched the Great Leap Forward and people's commune movement in 1958. This campaign lasted almost three years, from autumn 1958 to early 1961. One of the key policies of the Great Leap Forward was that the central government transferred much authority, including the recruitment of workers and examination and approval of construction projects, to local levels and reformed the economic management system so that the localities could have a free hand in developing local industry. The state demanded that local governments establish their own independent industrial systems. In the autumn of 1958, rural people's communes were set up by amalgamating the advanced agricultural producer cooperatives (collectives) that had been established in a prior campaign (the "Socialist Hightide in Agriculture") in 1955-56. Members of the same commune worked on the land under collective ownership and unified direction. The means of production and other personal property of members was taken by the commune, members' production activities and daily life were run along military lines, and members had to take their meals in public dining halls. Objective statistics were attacked as rightist; the information required for sensible planning disappeared, and central planning, itself, was abandoned. After an initial period of great enthusiasm, in which many heroic construction tasks were carried out by armies of people, the economy moved toward chaos. Ideology dictated farm technology and practice ("deep ploughing and close planting"). A campaign to make local iron and steel throughout the country caused enormous environmental damage, wasted vast amounts of resources and pulled excessive numbers of farmers out of agriculture (see section 2.3. above). The Great Leap Forward resulted in a major famine (1959-61). Government statistics indicate that there were some 15 million excess deaths during the famine period, and demographers have estimated that there were many more unreported deaths. The Great Leap Forward was a major setback to human

development in China and the famine it helped produce provides evidence of negligent state behavior toward the most fundamental aspects of human development (see also section 2.3.).

Cultural Revolution (1966-1976)

The Cultural Revolution proper lasted from 1966 to 1969, although aspects of Cultural Revolution policies survived until 1976, so that the phrase "Cultural Revolution Decade" is commonly used in China. This all-consuming campaign was launched by Mao Zedong after the struggle among competing factions within the Party became acute. For a few years, all of China was consumed by factional struggles, sometimes including armed struggle. Liu Shaoqi, then China's President, was treated cruelly during the Cultural Revolution and died in November 1969. Many people were victimized, and the whole country suffered from the deterioration of discussion and debate into sloganeering.

The economy suffered, as well, during the Cultural Revolution. In many cities production was actually suspended for sustained periods of time so the workers could "make revolution". With planners, statisticians and other specialists condemned as "bourgeois experts", the planning and management system could hardly function. Some urban industries were transferred to rural areas, and many technical personnel from urban factories were compelled to do so as well. Due to this and other factors, large numbers of small factories run by communes or production brigades began to appear in the Yangzi Delta. Later, during the reform period, many of these became dynamic "township and village enterprises" that made the Yangzi Delta one of China's most prosperous regions.

In rural areas, early in the era of the people's commune, villagers' means of production and even part of their household belongings and consumer goods, including furniture, were taken by the commune. Members' remuneration was distributed in a unified manner according to work points acquired by performing labor, their work activities and daily life were run along military lines, and they took their meals in public dining halls. During the famine that ended the Great Leap Forward, however, many of these measures were abandoned and members resumed a more normal

life. During the Cultural Revolution years some radical policies returned to the countryside, including highly egalitarian payment methods. These measures were taken under the guiding ideology of "restricting bourgeois rights", realizing a purer form of socialism and then achieving a swift transition to communism. During most of the collective period, rural income was collected and distributed to members at the level of the production team, consisting of some 20 or 30 households that constituted a hamlet or neighborhood within a village. Although income was to accord with skill and actual work done, within each team it tended to be very equally distributed. Among different teams, however, big differences in average income could occur because of differences in natural conditions (soil, availability of water, etc.).

Although agriculture was somewhat less affected, the combined effects of several policies drastically reduced farmers' production incentives. These policies included the promotion of grain production at the expense of sidelines and rural industries; the suppression of rural markets; the issuance of bureaucratic commands to farmers by higher level cadres; and an excessive egalitarianism in the distribution of income. Proof that Cultural Revolution policies had provided very poor incentives to farmers lies in the record of the early reform years, when agricultural output leaped forward at unprecedented rates of growth at the same time that millions of people were leaving farming for more lucrative pursuits.

During the Cultural Revolution nobody talked about human rights, and the human rights situation deteriorated badly. Many people, because of things they had once said, or their class background, were beaten, imprisoned, and otherwise treated harshly without any semblance of due process. Freedom of expression was severely limited. The educational system created by the state in the early days of the PRC was destroyed, textbooks simplified, the examination system canceled. Universities closed their doors for a long period. The state encouraged educated people, old and young, to go to the countryside and factories to learn from workers and peasants and put theory into practice (see below). The Cultural Revolution did serious harm to the lives and livelihoods of millions of people, and damaged the national economy, education, and culture. China suffered heavy losses.

Table 2.17. Rustication of Urban Educated Youth

Year	Total	Worked in Villages	Worked on Collective Farms	Worked on State Farms
Total	17,764,800	12,822,100	2,030,800	2,911,900
1962-1966	1,292,800	870,600		422,200
1967-1968	1,996,800	1,659,600		337,200
1969	2,673,800	2,204,400		469,400
1970	1,064,000	749,900		314,100
1971	748,300	502,100		246,200
1972	673,900	502,600		171,300
1973	896,100	806,400		89,700
1974	1,724,800	1,191,900	346,300	186,600
1875	2,368,600	1,634,500	496,800	237,300
1976	1,880,300	1,228,600	415,100	236,600
1977	1,716,800	1,137,900	419,000	159,900
1978	480,900	260,400	189,200	31,300
1979	247,700	73,200	164,400	10,100

Source: Statistical Data on Labor and Wages in China: 1949-1985, 1987.

Table 2.18. The Returned Urban Youth

Year	Total	Went to College	Joined the Army	Became Workers	Returned Without Job	Other
1962-63	4,013,500	433,500	241,000	2,496,000	827,000	16,000
1974	603,500	169,800	42,400	286,300	102,000	3,000
1975	1,397,900	149,300	20,000	1,058,100	162,400	8,100
1976	1,352,500	73,000	112,700	992,400	170,300	4,100
1977	1,030,100	79,000	55,700	694,400	197,800	3,200
1978	2,553,200	270,900	298,100	1,307,800	666,400	10,000
1979	3,953,900	89,100	90,400	2,288,100	1,406,600	79,700
Total	14,904,600	1,264,600	860,300	9,123,100	3,532,500	124,100

Source: Statistical Data on Labor and Wages in China: 1949-1985, 1987.

Rustication of Urban Educated Youth

In order to reduce the pressure of urban unemployment, the state encouraged educated urban youth go to the countryside to work and be re-educated by the rural majority. From 1962 to 1978, almost 18 million urban youth were sent to the countryside to live and work (Table 2.17.). The tide was particularly great at the height of the Cultural Revolution, when rustication was used as a way to end the fighting between rival groups.

Rustication was not a popular policy, and it was not easy for the state to mobilize so many youths to go to rural areas. The state used the mass media to whip

up public opinion. The movement was not really voluntary and conditions in the countryside were not carefully arranged to benefit both the urban young people and their rural hosts. In sum, the movement brought great suffering to the younger generation, and when the rusticated youth returned to the cities years later (Table 2.18.), many suffered divorce, left their children behind and faced unemployment. A policy that, implemented voluntarily and with careful planning, might have helped overcome the wide urban-rural gap in China instead turned into a disaster for many of its participants.

The campaign approach to social and economic progress, despite its undeniable achievements early in the PRC's history, turned out to be highly flawed because it inevitably over-simplified the complex environment of Chinese society. Thus, even non-political campaigns made serious mistakes: the campaign to eliminate flies and birds took no note of their ecological niche and unknowingly encouraged the proliferation of other pests. Especially when it took on

political and ideological colors, however, the campaign approach obliterated all-important considerations in the drive to enforce political orthodoxy and left no room for cool heads to weigh costs and benefits. The state clearly over-stepped its legitimate role in promoting economic development and political change by such means, and the results during the Great Leap Forward and Cultural Revolution periods were devastating setbacks to human development.

Notes:

1. See Dull, 1990: 55-56. See also Mote, 1981.
2. A classic definition and discussion of the gentry is Ho Ping-ti, 1964. See, e.g., chapter 1.
3. See Meisner, 1977: 8. "In a situation in which no social class was dominant, in which all were weak, political power tended to be increasingly independent of social class and to dominate society in general."
4. Rawski, 1989, summarizes this debate.
5. A mammoth study of agrarian structures and practices in the 1930s can be found in Buck, 1937 and 1964.
6. At present, the Social Development Department under the State Development Planning Commission is the sole comprehensive department under the State Council that coordinates social development, and it is in charge of coordination of social development in the areas of public health, education, wages and incomes, tourism, culture, etc.
7. Sen's discussion of the Chinese famine, his argument that major famines are not difficult to prevent, and his view that "a relatively free newspaper system may be the most effective 'early warning' system a famine-prone country can relay on" can be found in Dreze and Sen, 1989: 264.
8. A fuller discussion of women's status in China can be found in UNDP, *China Human Development Report*, 1997.
9. Chemical fertilizer usage rates on some crops average almost three times those of the U.S. See Ash and Edmonds, 1998: 870, fn. 84.

Chapter 3

THE STATE AND HUMAN DEVELOPMENT IN THE REFORM ERA

The period of economic reform, transition to a market economy, and opening to the outside world began in 1978. Over the subsequent years, China has been undergoing transition not only from a planned to a market economy, but also from an authoritarian political regime to a more democratic one, although this transition remains in its early stages. Through the years since 1978, the role and capacity of the state in promoting economic, social and political development have been evolving. Changes include some movement toward greater independence from Party control for the three basic pillars of government: its executive, legislative and judicial branches. The ongoing changes and their significance for the state's relation to human development in the reform period are the subject of this chapter.

1. New Trends in the Role of the State

Unlike in the pre-reform period, the state is no longer the sole actor promoting development. At the same time, the methods and means used by the state in promoting development have also changed greatly. The new trends in the role of state are manifested chiefly in the following aspects:

1.1. The Separation of the Government From Direct Control of Production and Trade

Before the reform period, the state managed the economy through the central planning of resource allocations and by exercising direct "command and control" authority over state-owned enterprises (see Chapter 2). Even in the nominally non-state (collective) sector, the government's directives had to be followed. The transition to a market economy in the past two

decades has promoted the separation of government from such direct control of production and trade.

First, the market mechanism is playing an increasingly important role in governing resource allocation. According to one estimate (Table 3.1.), the degree of market reliance (roughly, the proportion of economic activity occurring under market conditions – see note to Table 3.1.) had risen from 25 percent in 1979 to 63 percent in 1992, indicating that the market economy had begun to occupy a dominant position in the national economy by the early 1990s. However, economists have different views regarding the degree of marketization of the Chinese economy. Hu's estimate is among the optimistic ones. According to more prudent opinions, the degree of marketization of the Chinese economy is between 45-50%.

Second, there has been an extensive development of enterprises outside the state sector. After the Third Plenum of the 11th Party Congress held in 1978, the Party and government undertook a series of measures to encourage the development of various types of non-state-owned enterprises. As a result, output from such enterprises has grown faster than that of the state sector, as illustrated by the figures for industrial gross output shown in Table 3.2.

Due to the rapid development of the private, collective, joint venture and other kinds of enterprises, the proportion of the state sector in gross industrial output value has declined dramatically from over three-quarters in 1978 to only one-quarter in 1997. China has thus moved decisively to a mixed-ownership economy with the non-state sector predominating.

Third, the separation of government and state-owned enterprises (SOEs) has made some progress in the reform period. In the planned economy, SOEs were subordinate organs of government and under its direct control. At present, except for the appointment of managers, which is still done by government, SOEs have been delegated almost all authority over business

Table 3.1. Marketization Indices For China, 1979-1992 (Percent)

Year	Index of Marketization	Index of Investment Marketization	Index of Farm Price Marketization	Index of Production Marketization	Index of Trade Marketization
1979	25.6	23.10	11.60	21.53	46.01
1980	32.3	38.90	17.70	24.03	48.57
1981	34.0	39.60	20.90	25.24	50.15
1982	35.9	45.00	21.70	25.56	51.30
1983	41.9	64.00	23.90	26.64	53.01
1984	45.3	63.00	32.90	30.91	54.45
1985	55.4	63.90	63.00	35.14	59.58
1986	56.8	64.30	64.70	37.73	60.59
1987	59.7	64.00	70.60	43.20	60.90
1988	62.5	70.20	76.00	43.20	60.54
1989	58.5	64.40	64.70	43.94	60.90
1990	63.1	71.70	74.80	45.40	60.41
1991	63.6	69.70	77.80	47.06	59.81
1992	64.4	71.70	81.80	45.39	58.71

Source: Hu Angang, 1995: 3-5; Statistical Yearbook of China, 1998: 187, 433, 595.

Note: Investment marketization refers to the proportion of 'foreign investment, fundraising and the other investment' to total investment; Farm price marketization refers to the proportion of agricultural sales taking place at market-determined prices; Production marketization refers to the proportion of gross industrial output value produced outside the state sector; Trade marketization refers to the proportion of total retail sales of consumer goods occurring outside the state sector; finally, The index of marketization is the simple average of the above four indices (using the 1992 number for prices after 1992, for which years data are unavailable).

Table 3.2. Structure of Industry: Gross Output Value of Industry by Ownership, 1978-1997

Item	1978	1997	Composition (percent)	
			1978	1997
Gross output value of industry (billions of yuan), of which:	424	11,373	100.0	100.0
State-owned industry	329	2,903	77.6	25.5
Collective owned industry	95	4,335	22.3	38.1
Individual-owned industry		2,038		17.9
Industry of other types of ownership		2,098		18.4

Source: Statistical Yearbook of China, 1998: 433.

Note: Data in this table are calculated at current prices.

operations. The focus of SOE reform has now shifted to establishing a modern management system in large and medium SOEs, and to restructuring small SOEs in the

direction of becoming collective, private or joint stock companies. For reasons discussed elsewhere in this report, the reform of SOEs is extremely difficult and has resulted in the furloughing of large numbers of workers in recent years. The pace of reform appeared to slow somewhat in the aftermath of the Asian financial crisis and its impact on China's economic growth. But Premier Zhu Rongji reiterated strong support for it in his 1999 Report on the Work of the Government.¹

Finally, foreign trade liberalization has progressed in the past two decades. Through gradual deregulation of market entry, the government has promoted liberalization of trade, encouraged the expansion of imports and exports, and favored the absorption of foreign investment. Tariff and non-tariff barriers to trade have been lowered gradually as domestic enterprises have become more competitive.² These policies liberalizing trade have helped to advance the rapid growth of foreign trade and investment, as shown in Table 3.3.:

Table 3.3. Total Imports and Exports and Utilization of Foreign Capital (Bills. of \$US)

	1978	1997
Total imports & exports	20.64	325.06
exports	9.75	182.70
imports	10.89	142.36
Total amount of foreign capital committed through signed agreements and contracts	4.79*	61.06
Total amount of foreign capital actually used	2.71*	64.41

*: data refer to 1984.

Source: Statistical Yearbook of China, 1998: 620, 637.

China ranked tenth in the world in total trade volume in 1997 and has also become the second largest recipient of foreign capital. One measure of China's integration into the world economy is the serious effect that the Asian financial crisis has had on its economic development.

Thus, the state has promoted marketization of production, denationalization of enterprise ownership and trade liberalization. Because the market's role is now basic and ubiquitous, the state's own role has necessarily begun changing toward one of supplementing the market in the ways discussed in Chapter 1.

Table 3.4. Proportion of Total and Central Government Budget Revenue to GDP, 1979-1997 (Percent)

	Total revenue to GDP	Central government revenue to GDP
1979	28.4	5.7
1981	24.1	6.4
1983	23	8.3
1985	22.4	8.6
1987	18.4	6.2
1989	15.8	4.9
1991	14.6	4.3
1993	12.6	2.8
1995	10.8	5.6
1997	11.7	5.7

Source: Statistical Yearbook of China, 1998: 55, 269, 281.

1.2. The Decline of the State's Fiscal Role and Position

The fiscal role and position of the state have declined dramatically in the reform era. This is mainly reflected in the continuous decline of the share of government budget revenue in GDP in the past two decades, from over 28 percent in 1979 to 11.7 percent in 1997 (Table 3.4.). This figure is not only far below that of the industrial countries and the newly industrializing countries, but it also falls short of that in many low income countries. The decline of state's fiscal role and position has gravely undermined the government's capacity to promote economic development and human development, as discussed further in Chapters 4 and 5.

1.3. The Growth of Civil Society

Before the reform period, virtually all social organizations and institutions in China were controlled by the Party and state, and there was no independent development of the groups, organizations and institutions of a normal society. Except for a few mass organizations run by the Party-state, such as the China Youth Federation and the All-China Women's Federation (called here "official social organizations"), and a large number of not-for-profit public institutions (*shiyue danwei*), there were no private social organizations (*minjian zuzhi*) or non-profit private institutions (*minban feiqiye danwei*). This situation has changed since 1978. According to the Ministry of Civil Affairs, the number of private social organizations above the county level reached 181,318 in 1997 (see Table 3.5.), and there are about 700,000 not-for-profit private institutions.

In sum, the institutions of a normal civil society have proliferated in the past two decades, but within strict limits. Organizations must register with the government, and neither independent organizations of a political nature nor independent labor unions are tolerated. However, the government has tolerated and even encouraged the emergence of non-political organizations that are not thought to pose a potential threat to the Party's dominant role. One reason is that the government itself benefits; the separation of the state from direct control of production and trade calls

for new organizational links through which the government can communicate with enterprises. Governments at various levels have thus directly established or encouraged the establishment of trade associations, organized by enterprises in a common industry or sector. In 1996, there were 410 trade associations, which amounted to 23 percent of national-level social

organizations (Wu Zhongze, 1996: 7). The government has also established groups such as the Consumer's Association and the Association of Individual and Private Entrepreneurs, which implies that the government still seeks to exercise control in domains that elsewhere would be strictly private and voluntary.

Table 3.5. Private Social Organizations

	Total number, end of 1997	Registered in 1998	Deregistered in 1998	Actual number, end 1998	At provincial level	At prefecture level
Country-wide total	186,956	8,357	13,995	181,318	21,406	56,003
National	1,845	6	5	1,846		
Beijing	2,122	34	95	2,061	1,016	1,045
Tianjin	2,905	51	847	2,109	867	966
Hebei	7,623	479	670	7,432	810	1,814
Shanxi	3,574	257	222	3,609	595	1,499
Inner Mongolia	3,182	68	370	2,880	490	1,107
Liaoning	7,411	337	660	7,088	669	3,382
Jilin	5,053	169	400	4,822	586	1,673
Heilongjiang	5,153	226	392	4,987	573	1,694
Shanghai	3,235	50	125	3,160	996	486
Jiangsu	14,696	445	1,970	13,171	793	3,975
Zhejiang	12,021	747	193	12,575	846	3,166
Anhui	5,570	226	199	5,597	756	2,366
Fujian	8,875	385	143	9,177	778	2,448
Jiangxi	5,173	222	615	4,780	580	1,410
Shandong	17,236	590	1,338	16,488	944	4,988
Henan	8,983	686	354	9,315	816	2,638
Hubei	7,850	355	960	7,245	720	2,387
Hunan	7,351	845	817	7,379	700	1,822
Guangdong	10,011	485	372	10,124	931	4,727
Guangxi	4,882	158	200	4,840	646	1,997
Hainan	872	72	21	923	477	153
Chongqing	4,575	106	168	4,513	820	
Sichuan	14,813	420	1,738	13,495	1,044	2,829
Guizhou	3,179	64	190	3,053	556	952
Yunnan	5,284	197	99	5,382	675	1,897
Tibet	172	22	5	189	136	48
Shaanxi	4,812	212	173	4,851	612	1,516
Gansu	3,263	110	203	3,170	651	1,236
Qinghai	1,264	116	195	1,185	367	175
Ningxia	1,100	50	133	1,017	412	186
Xinjiang	2,871	167	123	2,915	544	1,421

Source: Statistical Yearbook of China Civil Affairs, 1998: 274.

Second, the Party and state have encouraged the establishment of academic and professional associations. Here too there is an instrumental purpose: the national leadership realizes the importance of science and technology in economic development, and wants to make full use of intellectuals. Academic and professional associations have thus multiplied to reach a total of 1200, constituting two-thirds of the established national-level social organizations (Wu Zhongze, 1996: 8).

Societal development has also been stimulated by the enlargement of the market economy. Various profit-seeking economic entities, including private enterprises and farm households have gained autonomy. In order to strengthen lateral economic ties among them and to deal with government organizations, these entities have organized associations within their particular sectors. In addition, the multiplication of interests inherent in the transition has stimulated various groups to band together to protect and advance their rights and interests. Moreover, the new pattern of distribution of the national income, under which the share going to enterprises and individuals has risen relative to that going to the state, provides an economic base for the formation of independent civil organizations and not-for-profit private institutions. Finally, the transition provides more room for the activities of a civil society and its institutions. The state has withdrawn from many aspects of social life and relaxed somewhat the control it previously exercised over individuals and organizations. All of this creates openings for the development of civil society.

However, there are some unique characteristics to civil society in China during the transition. The most important one is that most of the new institutions are not fully independent at all, but rather are semi-official organizations. Thus, most civil organizations and not-for-profit private institutions are established by administrative units, public institutions or state enterprises and maintain close links with the latter. An example is given for Xiaoshan City, Zhejiang Province, in Table 3.6.

According to the regulations for registration and management of civil social organizations and private nonprofits, they must accept the supervision and management of the government departments responsible for their work. The Ministry of Civil Affairs and its

Table 3.6. Classification Of Social Organizations In Xiaoshan City, Zhejiang Province

	Official	Semi-official	Civil	Total
Political	6	2		8
Economic		20		20
Science and technology		42		42
Culture and arts			9	9
Sports			9	9
Health			2	2
Social welfare and aid		1		1
Religious			2	2
Friendship		1	2	3
Public affairs		3		3
Total	6	69	24	99

Source: Wang Ying, Zhe Xiaoye and Sun Bingyao, 1993: 72.

local branches are responsible for the registration and management of these institutions, while the departments in charge of particular kinds of professional work are responsible for supervising and guiding it.³ Leadership positions in civil institutions are often held by present or former senior government officials. This can be very convenient to the organizations concerned in smoothing the way for their activities; in fact, for that reason, most of them invite senior officials to take leadership positions or at least honorary posts. But it also signifies the degree to which China still lacks a truly independent civil life. Government has taken some measures to increase the independence of civil institutions, such as separating them formally from the administrative units, public institutions and state enterprises that established them; prohibiting senior officials from holding leading posts in civil institutions; and forbidding civil institutions to use their administrative patrons to advance their own profit-seeking activities.

1.4. Increasing Independence of Individuals From the State

Market-oriented reform in the past two decades has made individuals increasingly independent of the state. Individuals can now find jobs on the labor market rather than having to rely solely on the

government to provide jobs. Over the years, a labor market has gradually developed. Rapid industrialization and the growing non-state sectors have provided millions of new job opportunities. The numbers of employed persons in the secondary and tertiary sectors have increased respectively from 69.45 million and 48.90 million in 1978 to 164.95 million and 183.75 million in 1997, while the numbers of employed persons in the non-state sectors have increased respectively from 20.48 million and 28.27 million in 1978 to 66.63 million and 132.80 million in 1997 (*Statistical Yearbook of China*, 1998: 128, 130-131).

Moreover, relaxation of the household registration system, together with the development of a free market in food and other basic necessities, has made it possible now for people to move more freely around the country. Free mobility of labor, in addition to being desirable in itself, is essential to the proper functioning of a market economy. The biggest beneficiaries are the rural population who are now able to seek more lucrative work in urban areas, often with temporary residence permits. Recently published regulations permit rural residents who own commercial apartments and have legal urban jobs to apply for permanent resident certificates in urban areas. The government has also promoted the development of small cities and towns and encouraged villagers to relocate in them. Urban residents can also move to a different city and apply to become a permanent resident there. Rapid urbanization has encouraged these trends. The urban population has increased in numbers from 172.45 million in 1978 to 369.89 million in 1997, the ratio of urbanization rising from 17.9 percent to 29.9 percent.⁴ This rapid urbanization has itself put increasing pressure on government to provide the necessary amenities, including public utilities, education and health facilities, transport, garbage disposal, etc.

Finally, workers in the urban public sector have become less dependent on their work units for health insurance, pensions and housing. Although this is producing some serious transitional problems, discussed elsewhere in this report, the trend itself is inevitable and necessary. The work unit system was a phenomenon peculiar to China's version of central planning in which people in the public sector were totally dependent on their work units for health insurance, pensions and housing. Reform of the social security system, while a

symptom of the evaporation of job security, is also reducing the risks inherent in quitting or losing a job. The government has established a preliminary new unemployment insurance system and institutions for job training, as well as new health insurance and pension systems and mortgage mechanisms for house purchases. The fundamental principle of the social security system reform is that government, work units and individuals share its cost. This principle has also been applied to the establishment of a social security system in the private sector. The government opens accounts for funds accumulation. Government, work units and individuals make regular payments into the account or to labor and social security departments. If a worker loses his job, he can get regular compensation from the unemployment relief fund, and his work unit is obliged to provide re-employment training. If a worker changes jobs, her housing accumulation fund will be transferred to her new work unit, and her health insurance and pension will not be lost. The difficulties being encountered in establishing this new system were discussed in the *China Human Development Report* for 1997.

Housing reform aims at encouraging individuals to buy their apartments from their work units and own the property rights to their apartments. The State Council has decided to end in-kind distribution of apartments. In sum, the reform of the social security system and the housing reform are reducing the dependence of individuals on their work units and, thereby, increasing their independence from the state.

1. 5. Separation of State From Party: Progress Toward and Independent Legislature and Judiciary

Many of the so-called second generation of political leaders, including Deng Xiaoping, Peng Zhen, and Chen Yun, were victims of the Cultural Revolution, an event that was able to occur in part because of the highly centralized and inter-connected system of party and state. These leaders had a strong incentive to change that aspect of the political system, and the separation of state from party became a major reform goal. However, such a reform is risky for the ruling Party because, by removing the functions of government from direct control of the Party, it constitutes a

potential threat to the latter's dominance. Within the Party, much thought has gone into the search for an optimal balance between preservation of the Party's dominant position, on the one hand, and promotion of an autonomous and efficacious role for the organs of state, on the other. Some progress was made until the events at Tiananmen in 1989, at which point this particular reform was set aside. Nevertheless, there has been some improvement since 1989 in the position of the legislature and of the judicial system.

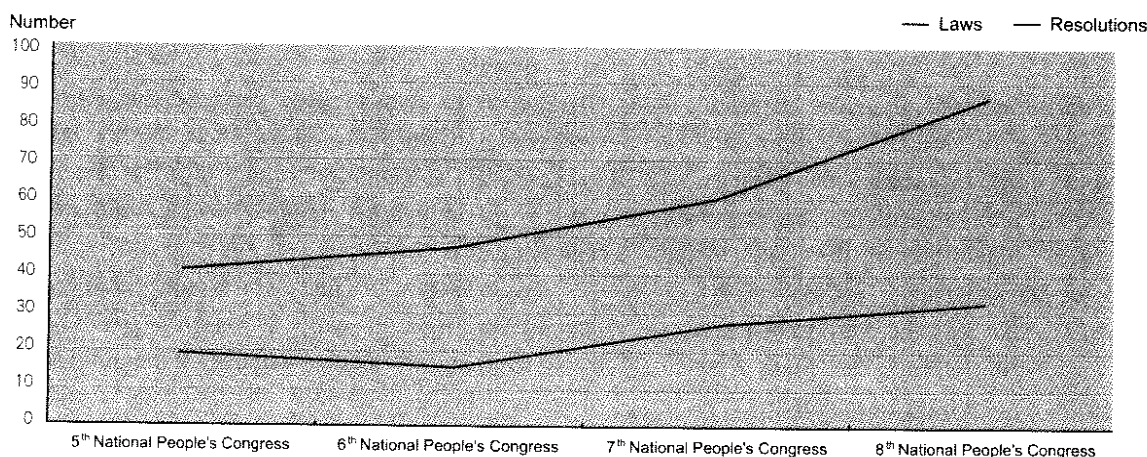
Before the 1980s, there was virtually no division of functions between Party organs and the government. Party organs commonly stepped in and shouldered aside government departments in implementing policy. Since then there has been some progress in separation of powers. For instance, Party organs at various levels have disbanded their units that overlapped with government institutions. Also, an executive responsibility system has been established for heads of government at various levels, and for their departments; formally speaking, Party organs within the government are supposed to be subordinate to government executives at the same level. Another change puts government firmly in charge of matters deemed to be ordinary daily administrative work, but leaves the Party committees at various levels in control of matters deemed important. The obvious contradiction between this change and the one just before it shows how difficult it is to establish formal procedures that conflict

with the real distribution of power.

The role of the legislature has also been somewhat enhanced. Since 1978, the roles of the National and Local People's Congresses (NPC, LPC) in making laws, supervising law enforcement and the work of other state organs, and making decisions about state affairs, have all been strengthened. The numbers of laws and regulations issued by the NPC, the LPCs and the State Council have increased steadily (see Figure 3.1.). NPC and LPC representatives increasingly vote their consciences, and the number of vetoes has risen accordingly. It is not rare for LPCs to turn down candidates for head of local government nominated by higher level Party committees. Even in the NPC the number of negative votes on important matters has increased. For example, in 1997, over a thousand representatives (one-third of the total) voted against the annual work report of the Supreme Procurate of the PRC to protest unsatisfactory progress in the campaign against corruption.

The legislatures' first priority has been to create a legal framework for the market economy. Since the first session of 8th NPC in March 1993, two-thirds of the 98 laws and legislative resolutions passed have dealt with economic matters.⁵ But there have been other important actions, including the issuance of a new Constitution, a new criminal law, a law of criminal procedure, an administrative litigation law, and an administrative supervision law.

Figure 3.1. Number of Laws and Legislative Resolutions Passed by NPC and its Standing Committee since 1979



Source: The Office of Legal Work Committee of NPC.

Note: The figures exclude the new Constitution.

Finally, the judicial system, which had been paralyzed during the Cultural Revolution period, now plays an increasingly important role in law enforcement and has become more independent, as can be seen from the following developments: (1) Party and government interventions in legal cases have become less frequent. This is a relative matter: political interference in legal cases still exists and, at the local level, even occurs frequently. The more important an issue is to the government, the more likely there is to be interference. (2) Local judicial systems are put under a dual leadership system: on the one hand, they must accept leadership and supervision from the Party committee and People's Congress at their administrative level; on the other hand, however, they are also subject to guidance from their professional superiors. In recent years, the influence of this vertical leadership has become stronger, and this has led to some increase in judicial independence. However, the dual leadership system cannot solve the problem of the judiciary's dependence on the government for financial support. (3) The judicial system has become more open to the public and the news media. Nevertheless, China's judicial system is still tarnished by widespread corruption.

At present, the Party's continued exercise of direct control over government personnel appointments and important decisions compromises the objective of separating Party from state and undermines the capacity of the executive, legislative and judicial organs to carry out their functions independently.

1. 6. Decentralization of Public Administration

Just after the reform period began, the national government launched a round of administrative decentralization in order to enhance the capacity of local governments to promote economic development. Some powers were relinquished by the center to the provinces and localities, which opened the way for local governments to take bold and innovative measures in promoting economic reform. The State Council began to implement a fiscal contract system in the early 1980s, under which local government expenditures were closely linked with their revenues; thus, localities that raised more revenues were able to increase their expenditures accordingly. This measure of course

encouraged a more aggressive approach to raising revenue on the part of governments eager to bring about local economic development. However, it also greatly reduced the redistributive role of the central government and thus created difficulties for poorer localities that had been dependent upon central subsidies (see Chapter 5).

Management authority over most state-owned enterprises, other public institutions and many government departments was also transferred down to the provinces and localities. A dual leadership system, under which government departments, state enterprises and public institutions are under the jurisdiction of both a central Ministry (vertical leadership system) and the local government (regional leadership system), is one of the characteristics of China's public administration. But in the 1980s, the focus within this system shifted away from vertical and toward regional leadership. In practical terms, this means that regional and local governments have greater power over personnel appointments and enhanced fiscal control over various departments and most state-owned enterprises and public institutions.

The main advantage of decentralization is the incentive it provides for local governments to promote regional economic and social development. During the past two decades, the provinces have used their power to achieve development at varying growth rates. However, decentralization has also brought some disadvantages. As we have seen, the central government's capacity to assert macroeconomic control has been undermined; its fiscal position has declined; the gaps in development level among the different regions have expanded and the capacity of the national government to reduce these gaps has been greatly weakened. Central to all of these is the state's weakened fiscal condition, which directly affects its capacity to implement national policies and reduce regional gaps.⁶

To respond to these problems, the central government from the early 1990s once again began trying to strengthen its own authority through a variety of means: frequent transfers of provincial party and government leaders; restrictions on the legal and policy-making powers of provincial and local governments; establishment of a revenue-sharing system to increase the share of total revenue going to the center,

etc. These efforts at re-centralization have met with strong resistance from local governments. It seems evident that China has yet to find an optimal division of labor between the central and local levels of government.

1.7. The Development of Village Democracy

With the economic reform in the countryside and its "household responsibility system", farm households have got back a measure of economic independence, in the form of long-term contract rights to use of the land and freedom to manage their own labor. The commune system was dismantled in the early 1980s and their governmental powers were taken over by township (*xiang*) governments. In the vacuum that temporarily existed at the village level (corresponding more or less with the old production brigade under the communes), some villagers as early as the late 1970s began to elect their own leadership committees to handle public affairs. This practice was affirmed by the NPC and its standing committee. The Villagers Committee (*cunmin weiyuanhui*) was recognized by the 1982 Constitution as an organization of popular self-government. In 1988, the NPC standing committee passed a 'Provisional Villagers Committee Organizational Law', which was passed in final form ten years later (*People's Daily*, 5 Nov. 1998).

Village elections are thus now legal and institutionalized. Rural dwellers in more than 60 percent of China's nearly 1 million villages are exercising some degree of self-government, and 25 provinces have worked out specific methods for implementing the law (*China Daily*, 26 Nov. 1997). Because it appears that some village democracy is critical to maintaining political stability and to solving the many social and economic problems of rural areas, the central government has gradually warmed to the idea. Moreover, to encourage free and competitive elections, a number of procedures have been established. For instance, the number of candidates should exceed the number of elected places, secret ballots should be used, vote-counting should take place in public, etc. Also, village affairs, including financial affairs, are now commonly made public to the rural population. Every household is directly affected by decisions about the choice of village head, the

collection and use of various local funds, the distribution of house-building and contract land, the allocation of family planning quotas, etc. Conditions for village democracy were strengthened by the way land was allocated to individual households when the communes were dismantled: distribution was on an equal per capita basis in most areas, so that a population of independent families and individuals emerged without large wealth gaps among them. While the Party controls or attempts to control the results of village elections in some areas, the promulgation of the 'Organizational Law' provides a legal weapon for village residents to use in resisting various undemocratic and illegal practices.

Despite this progress, however, there are major problems in the spread of village democracy. One is the great unevenness of its progress in the countryside as a whole. Only a small number of villages fully meet the requirements of the new 'Organizational Law'. Development of village democracy is more pronounced in the more advanced south and east coastal regions. Progress is also highly dependent upon the support of the village Party branch and the local (township) government. Village Party leaders who favor expanded democracy play a critical role in organizing the democratic experiments, and township leaders who are favorably disposed encourage or at least tolerate these experiments. Conversely, opposition by the local Party leadership can abort or distort the process. The relationship between the village Party branch and the villagers committee is still not clear. The village Party branch takes a leadership position in all village organizations. In practice, the power of elected villagers committees to deal with village affairs is very limited. Under the relevant regulations, the villagers committee must do what it is told by the township government, which, as the representative of the state with financial resources to wield, is a much more powerful organ. When the directives of the township government conflict with the wishes of the villagers committee, things become very difficult for the latter. Such conflicts between directly elected village committees and appointed township governments have become increasingly frequent in recent years. Finally, both the revival of the influence of clans in some rural areas and the increasing differentiation of income among villagers within the same village constitute emerging

problems.

A big decision for China is whether and when direct elections will be permitted at the township level, where formal government powers and substantial resources are involved. While this would be a natural progression toward a more democratic system of governance, there appear to be no immediate plans to encourage it.⁷

1.8. Growing Integration of China Into International Society

The policy of greater openness to the outside world and the accelerating globalization of economic activity have combined to integrate China more closely into the international community and the world economy. China's dependence on foreign trade has increased steadily, and the free flow of capital, population and information have become irreversible trends. China's involvement in international affairs has deepened and the interaction of citizens with the outside world has also greatly increased. All of these developments pose both opportunities and challenges to development as well as to the traditional role of the state.

China's economy has been increasingly integrated into the global economy. Dependence on foreign trade, measured as the proportion of two-way trade to GDP, has risen from less than 10 percent in 1978 to over 36 percent in 1997. The role of foreign capital has also increased sharply. By the end of 1997, there were almost 305,000 foreign funded enterprises registered in China, the amount of foreign capital actually used was almost 222 billion US dollars, and employment in foreign funded enterprises had reached 17.5 million. With deepening dependence on foreign trade and capital, however, fluctuations in the world market will inevitably influence China's economy and rate of growth, as the Asian financial crisis already has done. How to respond to such challenges posed by the advance of globalization is a major question facing the state in the new era.

China has established official foreign relations with more than 160 countries, participated actively in inter-governmental and international organizations, and signed onto various international treaties. This increasing involvement in international affairs also

provides both opportunities and challenges for China in reshaping its traditional world role. A multi-polar world provides many opportunities; yet China also becomes subject to the obligations and duties imposed by international organizations, agreements and treaties, and must accept the international community's supervision in these respects.

The interaction of Chinese citizens with the outside world has increased dramatically. Tourism by foreigners and outbound tourism by Chinese citizens constitute the most important direct interaction between foreigners and Chinese citizens. From some 5.7 million tourists coming to China in 1980, the number surged to 57.6 million in 1997. In the latter year, the total number of Chinese outbound tourists exceeded 5.3 million.⁸ Study abroad is another kind of interaction with the outside world. For the entire period from 1952 until the end of 1997, 130,000 students had gone abroad to study, most of them since 1980, and almost 46,000 had returned to China (*Statistical Yearbook of China*, 1998: 685). The rapid spread of computer links to the Internet is an increasingly important means of interaction between Chinese citizens and the outside world. The number of personal computers has risen dramatically and by mid-1998 there were 1.175 million internet users (*Guangming Daily*, 11 Dec. 1998). In addition, various non-governmental international organizations based in the developed countries provide channels for Chinese citizens to interact with the outside world. Such organizations support the development of counterparts in China and encourage international exchanges. Indeed, the increasingly frequent exchanges of people in culture, education, sports and arts also provides numerous opportunities for Chinese to understand the outside world. The freer flow of people and information across national borders inevitably creates new problems for the state, from smuggling to the spread of pornography and politically sensitive ideas. How to deal with such problems is a new challenge for the state.

2. Enhancement of State Capacity

The new trends of the reform era pose challenges to state capacity. The state can no longer manage economic, social and political affairs in the old ways of the planned economy. No longer the sole actor in

promoting development, it must seek cooperation with others, and also learn how to use modern policy approaches to influence events. In adapting to the requirements of the market transition, the state has been attempting to enhance its capacity.

2.1. Leaner Government with New Functions

The ever-greater importance of the market mechanism in resource allocation and the increasing autonomy of enterprises require a new approach by government. Since the 1980s, the government has initiated four rounds of reform aimed at transforming government functions and reducing the size of staff and number of departments; the fourth reform began in 1998 and is still in progress.

The first round occurred in 1982-83, and focused on promoting a younger generation of leaders, eliminating overlapping institutions, strengthening departments responsible for coordination, statistics and supervision, and cutting back on staff. As a result of this reform, departments under the State Council were reduced in number from 100 to 61; size of staff was reduced by 25 percent at the central level and by 20 percent at the level of provincial, municipal and county governments (Wu Peilun, 1990: 32-42).

The second round reform took place in 1987-88 and had three aspects: (1) Reform of government institutions under the State Council: the purpose here was to transfer some government functions to enterprises, public institutions, industrial associations, and developmental corporations, and to shift emphasis in economic management work away from direct management and toward overall supervision. Permanent government institutions under the State Council were reduced in number from 72 to 66, and temporary institutions were reduced from 75 to 49. The size of staff was reduced from almost 53,000 to under 45,000. (2) Reform of Party Central Committee institutions, with the emphasis on separating government functions from Party functions. (3) Reform of local government institutions (Wu Peilun, 1990: 43-64).

From 1993 to the end of 1996 another reform round aimed at separating enterprises from government and strengthening departments responsible for law enforcement and administrative supervision. The number

of permanent government institutions directly under the State Council was reduced from 68 to 59, the number of temporary institutions was reduced from 85 to 29, and the size of staff fell from about 50,000 to 30,000. At the local level government staff was cut back by about 2 million (Dai Zhou, 1998: 2,908).

The fourth round began in 1998 and is scheduled to be completed at the end of 2000. The purpose of this reform is to further separate enterprises from government, enhance government capabilities in the area of macro-economic control, social management, and public service provision, and greatly cut back the number of government institutions and the size of staff. As of this writing, the reform of the State Council structure has basically been completed. Most ministries and commissions responsible for professional economic management have been eliminated, permanent departments have been reduced from 40 to 29, and the authorized staff size of government bodies has been cut back by over 47 percent (Zuo Ran, 6 July 1998: 18-20). Reform of the national Party organization, public institutions and local government institutions will be implemented in the next two years.⁹

It is fair to say that the transformation of government and its role is a long, ongoing process that is likely to change time and again with changing perceptions of the appropriate role of government in a mixed economy.

2.2. Modernizing Public Administration

The government has given priority to the modernization and reform of public administration. These efforts have concentrated on the establishment of a modern civil service system and of a better system for fiscal management.

China's pre-reform system of personnel management was unique. All public officials were called 'state cadres' and were managed by Party committees and their organizational departments. This is inappropriate for the reform era. State enterprises and other public institutions must have autonomy in personnel management. Since the 1980s, the Party has held on to control of the appointment of top leaders of state enterprises, organs and public institutions, but has transferred personnel management powers regarding other state cadres to the enterprises and organizations.

The reform of the personnel management system was initiated in the mid-1980s. In 1988, a Ministry of Personnel was established and made responsible for implementing a modern civil service system. Provisional regulations governing state civil servants and their recruitment were promulgated in 1992 and 1993, indicating that the establishment of a civil service has joined the track of the emerging legal system. At the same time, other state and Party organs also began to implement a state civil service approach to their personnel management system. Recruitment through examination and promotion in terms of assessed performance have progressed. There are now 28 provinces in which provincial level civil servants are recruited by examination (Dai Zhou, 1998: 2,908).

A central objective of fiscal system reform was to stem the decline in the government's fiscal position, as described above. China changed the tax system in 1994 with the aim of expanding both the share of government revenue in GDP and the proportion of total government revenue going to the center. The new system, which altered revenue-sharing formulas and shifted to reliance on broad-based taxes such as the value-added tax (VAT), did raise the latter ratio from 22.0 percent in 1993 to 48.9 percent in 1997 and at least stemmed the decline in the former ratio, raising it slightly between 1995 and 1997 (*Statistical Yearbook of China*, 1998: 281).

2.3. Government Transparency

Public administration and legal affairs have been made more transparent. In the mid-1980s, a few government departments made public parts of their official business so that people could better judge what their taxes were accomplishing. This experiment got support from top leaders and has gradually spread into more government departments. Some have established web sites to disseminate information to the public. Moreover, starting in the 1990s, some local People's Congresses have allowed the public to attend their sessions and even to make statements. The goal of greater transparency has also spread to the judicial system: e.g., the Supreme People's Court in 1998 began to allow the public and the news media to attend trials. Sensitive trials, however, such as those of political dissidents, remain closed to public view.

Finally, the Party and government have turned increasingly to consulting public opinion in various ways in the process of making leadership appointments, and the Party has encouraged the various "democratic parties", as well as the National and Local People's Political Consultative Conferences, to participate in management of state affairs (Jing Jinquan and Jiang Shan, 9 Nov. 1998: 3).¹⁰ These policies are meant to ensure wider consultation and participation in governmental decision-making, but they fall short of being institutions of formal democracy.

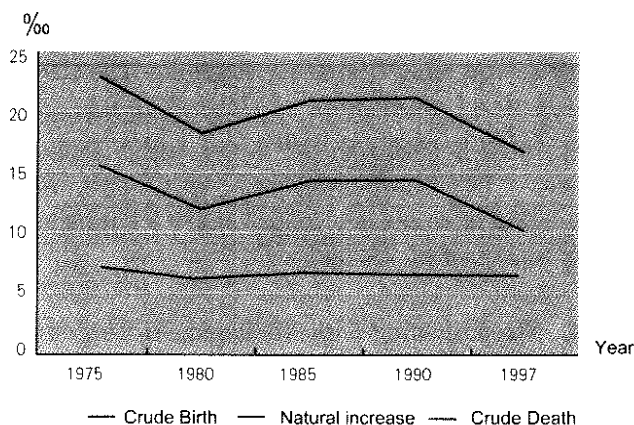
2.4. Coordination of Economic and Social Development

The reform process has brought new – or newly recognized – social problems that have challenged the traditional single-minded focus of development strategies and policies on achieving rapid economic growth. Formation and implementation of social policies have been put on the agenda of governments at all levels, and expenditures on social policies have increased.

First, family planning has increased in priority. Beginning in 1979, family planning policy has been a basic state policy and has been implemented strictly. The promotion of senior officials has been linked to the birth-control results in their localities; this is one reason for the success in reducing birth rates during the reform period, as a result of which the population growth rate has fallen (Figure 3.2.). It is also an administrative method that is rooted in the old command planning system, and that invites and has given rise to abuse.

Second, protection of the environment has received increasing prominence in policy formation. The government began to grasp the need for protection of resources and eco-systems in the mid-1980s and began moving to control environmental pollution. Much basic legislation for environmental protection was put on the books, although great difficulties remain in enforcing compliance. Environmental protection policy was elevated to a basic state policy in the 1990s. Local governments and enterprises must now make environmental impact reports in connection with any new project they want to undertake. Fees and fines on

Figure 3.2. Crude Birth and Death Rates, and Rates of Natural Increase



Source: Statistical Yearbook of China, 1998: 106.

polluting enterprises have increased. Moreover, the state has encouraged citizens, civil organizations, NGOs, etc. to become sensitive to environmental issues, educate the public about their importance, and begin to play roles supplementing the framework of official laws and policies to limit pollution, safeguard biodiversity, and protect natural resources. Although such measures have produced some good results, China still has a long way to go to stem and then reverse the environmental devastation of recent decades (Table 3.7).¹¹

Table 3.7 Investment in Pollution Control, and Fees and Fines for Polluting (million yuan)

Item	1995	1996	1997
Total amount of fees & fines for polluting and discharging waste	3,712.8	4,095.9	4,534.4
Investment in pollution control projects, of which	9,873.8	9,561.4	11,643.9
Treatment of waste water	4,559.1	4,735.8	7,279.1
Treatment of waste gas	3,315.6	2,811.6	2,872.3
Treatment of solid waste	1,407.7	909.9	630.9
Noise abatement	215.3	95.9	82.8
Other	376.1	1,008.2	778.8

Source: Statistical Yearbook of China, 1998: 802.

Note: Data are for county level and above.

Third, poverty alleviation has been elevated to a central place on the agenda of the Party and state. Since 1984, the government has been carrying out a poverty alleviation program in poor rural areas. The approach treats poverty as a regional phenomenon and has aimed at reducing it through regional development programs. Poor counties are identified according to an official poverty standard. The State Council and individual provinces have established poverty alleviation funds to support economic development there. The size of poverty alleviation funds has grown from 3.2 billion yuan in 1985 to 106 billion yuan in 1997.¹² Urban poor households began to receive government attention in the 1990s. Since 1993, over 300 cities have provided relief funds for poor households whose incomes fall below the city's poverty line, a threshold that varies by city from as low as 70 yuan per capita to as high as 230 yuan. The number of urban poor receiving relief funds and subsidies dropped from 6.33 million in 1990 to 2.61 million in 1996 before rising slightly to 2.68 million in 1997 (*Statistical Yearbook of China*, 1998: 793). As discussed elsewhere in this report, growing unemployment occasioned by the reform of state enterprises has been an important contributor to rising urban poverty. Poverty and poverty alleviation efforts were treated extensively in the 1997 *China Human Development Report*, to which readers are directed for further information on this topic.

Fourth, the growing income and development gaps among provinces, and especially between those in the relatively advanced eastern coastal regions and those in the less developed western regions, has become an important target of government policy. In particular, the central government in the 1990s has stepped up efforts to promote economic development in inland and western provinces.

Finally, the work of establishing new social security and social insurance systems has been under way since the mid-1980s. In the market economy context, the old work unit-based systems (see Chapter 2) can no longer function. Rural areas had weak social insurance systems based on funds from collectives and individuals, or none at all. Since 1986 the Department of Civil Affairs has worked at establishing a social security network in rural areas. By the end of 1996, some 34 percent of towns and townships had established some kind of social security network (Chen

Jinhua, 1997: 314). In addition, by the end of 1995 some 253 counties had established old-age insurance institutions and 5.14 million households were covered by some kind of old-age insurance (*China Development Report*, 1996: 271).¹³ The cooperative health system in rural areas, which had declined precipitously after the demise of the rural communes, has recovered somewhat. By the end of 1996, between 10 and 15 percent of administrative villages were participating in a cooperative health system, still a far cry from the 85 percent coverage of the collective period.¹⁴

The main principle of the new urban social security system is to raise funds from both individuals and work units. The scope of the old-age insurance system is gradually expanding to cover workers outside the state sector. Moreover, about 70 percent of urban workers have joined a new unemployment insurance program.¹⁵ A medical insurance fund covering serious illness has expanded to cover 18 million workers and more than 1 million retired workers. By the end of 1996 1,300 counties, 300,000 enterprises and 31 million workers were participating in an insurance program covering industrial injuries.¹⁶ All these systems are works in progress, and major problems, not least that of financing heavy current obligations while accumulating funds to meet future requirements, remain to be solved, even after formal coverage has been instituted.¹⁷

2.5. Seeking Cooperation with Other Actors

With the decline in the state's fiscal role and position and the proliferation of civil and social life outside the state sector, the government is no longer the only actor affecting political, economic and social affairs. Non-state enterprises and various semi-official associations and non-profit organizations are all playing an increasing role.¹⁸ In addition, international organizations and their representatives in China have contributed greatly to China's economic and social development. Citizens constitute a growing political force, as shown by the increasing number of complaints about manipulation of elections in recent years. Over 500 legal aid centers throughout the country now provide legal assistance to the poor.

The state has sought to cooperate with and even to promote these new actors. For instance, it has with-

drawn gradually from some social and economic areas, creating room for others, and it has encouraged non-profit public institutions to seek financial support from other sources other than public allocations (Luo Gan, 7 March 1998). Such efforts as a whole, however, have only begun to elicit cooperation and support from the public. Full expansion of the voice of other social actors will be essential to the building of a true partnership between them and the state.

2.6. Strengthening Risk Management Caused by Globalization

The globalization process has been a source of both opportunities and risks for China. Fluctuations in the world economy and the free flow of capital across borders impact developing countries more heavily than developed. The strengthening of risk management in the age of globalization is thus an essential task, especially within the developing world. The Chinese government has taken some measures to reduce these risks. First, while trade liberalization has been extensive, it has been undertaken step by step rather than all at once. This reduces the shock effect from the entry of foreign goods and gives domestic enterprises time to improve their competitiveness. Second, the government has moved to increase the independence of the People's Bank of China and reduce administrative interventions from local governments, although the adequacy of the PBC's independence remains doubtful. The central bank has in turn strengthened its regulations and its supervision of commercial banks and insurance corporations. Finally, the government has sought international cooperation in confronting the economic difficulties caused by the Asian financial crises. Because of the close economic links that now exist among countries, it is impossible for one country alone to deal completely with the ripple effects of regional economic disturbances. Based on this consideration, the Chinese government has undertaken to maintain the value of its currency, provided financial support to its neighbors, called upon Japan to take forceful measures to promote economic expansion, and asked western countries and multilateral organizations such as the World Bank and International Monetary Fund to provide more aid to those developing countries affected by this financial crisis.

Table 3. 8. Human Development Achievements in the Reform Period

Item	1952	1978	1997	Average annual growth rate	
				1953-1978	1979-1997
Population (millions)					
Year-end Population	574.82	962.59	1,236.26	2.0	1.3
Urban	71.63	172.45	369.89	3.4	4.1
Rural	503.19	790.14	866.37	1.8	0.5
Employment (millions)					
Total Employment	207.29	401.52	696.00	2.6	2.9
Primary sector	173.17	283.13	347.30	1.9	1.1
Secondary sector	15.31	69.45	164.95	6.0	4.7
Tertiary sector	18.81	48.90	183.75	3.7	7.2
National Economy					
Gross Domestic Production (billions of yuan)	67.90	362.41	7,477.24	6.1	9.8
Per Capita GDP (yuan)	119	397	6,079.4	4.0	8.4
Education					
Full Time Teachers (thousand)					
Tertiary institutions	27	206	405	8.1	3.6
Secondary schools	130	3,281	4,186	13.2	1.3
Primary Schools	1,435	5,226	5,794	5.1	0.5
Students Enrollment (millions)					
Tertiary institutions	0.191	0.865	3.174	5.9	7.1
Secondary schools	3.15	66.37	69.95	12.4	0.3
Primary Schools	51.10	146.24	139.95	4.1	-0.2
Illiterate and semi-illiterate population aged 6 and above (millions)	315.3 ^b	283.7 ^c	161.9 ^d	-1.46 ^e	-1.27 ^f
Health Care					
Number of hospitals	3,540	64,421	67,911	11.8	0.3
Number of doctors (thousand)	425	1,033	1,985	3.5	3.5
Number of hospital beds (thousand)	160	1,856	2,903	9.9	2.4
Infant mortality rate ^j (per 1000)	195 ^a	41 ^a	31.4 ^{aj}	-6.42 ^g	-0.51 ^h
Life Expectancy at birth (years)	40.8 ^a	65.8 ^a	70.8 ^a	1.04 ^g	0.25 ⁱ
Standard of Living					
Per capita consumption (yuan)	80	184	2,936.2	2.3	7.3
Farmers	65	138	1,930	1.8	7.2
Non-farmers	154	405	6,048	3.0	6.2

Source: *Statistical Yearbook of China*, 1998; UN Database of Population.

Notes: GDP and standard of living data are in current prices, but growth rates are based on comparable prices.

a. Data respectively refer to 1950, 1975, and 1996, except aj, which refers to 1995.

b and c. Data drawn respectively from the National Population Censuses of 1964 and 1982.

d. Data obtained from Sample Survey on Population Change in 1997, the sample proportion is 1.016.

e and f. Data refer respectively to annual growth rate during the 1964-82 and 1983-97.

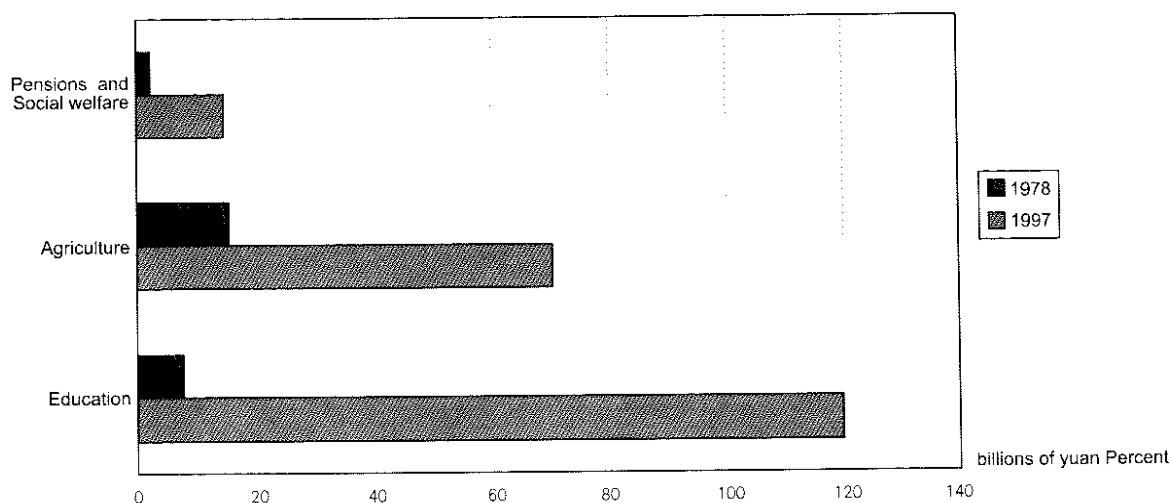
g. These two groups of data refer to annual growth rates from 1950 to 1975.

h. Data refer to annual growth rate during 1975-95.

i. Data refer to annual growth rate during 1975-96.

j. UNICEF reports higher infant mortality rates for the most recent period. See UNICEF, *Children and Women of China, A Situation Analysis*, 1997.

Figure 3.3. Government Expenditures for Education, Agriculture, Pensions and Social Welfare
(billions of yuan, percent)



Source: Statistical Yearbook of China, 1998: 278-280.

Note: 1 and 2 data respectively refer to data for 1995 and 1996. All data are in current prices.

3. Effects of the State's Changing Role and Capacity on Human Development

The changes in the government's role and capacity in the reform period have had both positive and negative effects on human development. In general, these changes and the efforts to strengthen state capacity have promoted human development, as indicated by the listing of recent human development achievements in Table 3.8.

Government expenditures in major human development areas have grown during the reform period. Expenditures in current yuan on education, agriculture, pensions and social welfare are shown in Figure 3.3. While the increases look substantial in nominal terms, it must be kept in mind that inflation proceeded at an average rate of over 7 percent (higher in the cities) during the period in question. Thus, expenditure growth in real terms, and relative to real GDP growth, is less impressive. Moreover, pensions have been largely the responsibility of work units; the increase in government budgeted expenditures thus reflects to some degree the shift in responsibility as a new social security system is introduced.

Contributions to human development by non-state actors have also increased, as indicated in Tables 3.9. and 3.10. For example, private schools have emerged rapidly in recent years; by 1997 some 50,000 educational institutions with over 10 million enrolled students were being run by civil organizations (*Guangming Daily*, 8 Dec. 1998). Non-governmental institutions have also contributed substantially to environmental protection and health care.

The growing role of non-governmental actors raises a fundamental issue about the appropriate role of government in core human development areas, as outlined in Chapters 1 and 5. Growing dependence on private and other sources of funding for health and education carries with it the danger of excessive differentiation by income of access to these crucial resources. The medical and school services available to poor rural communities already are greatly inferior to those of the richer towns and suburban communities. If such inequalities in the basic foundations of human capabilities continue and deepen, they will inevitably contribute to a widening of the regional and other inequalities that have been growing in recent years.

Table 3.9. Sources of Educational Funds Since 1991 (billions of yuan, percent)

Item	Year	1991	1993	1995	1997	1991/1997 (%)
Total		73.15	105.99	187.80	253.17	346.10
Government appropriations for education		61.78	86.78	141.15	186.25	301.47
Funds of social organizations and citizens for running schools		NA	0.33	2.04	3.02	302.00
Donations and fund-raising for running schools		6.28	7.02	16.28	17.07	271.82
Tuition and miscellaneous fees		3.23	8.71	20.12	32.61	1,009.60
Other educational fees		1.85	3.15	8.20	14.23	768.67

Source: Statistical Yearbook of China, 1998: 714.

Table 3.10. Sources of Social Welfare Relief Funds (millions of yuan)

Item	1990	1995	1996	1997	1990-1997 (%)
National Total	4,267.72	7,972.89	9,307.92	10,774.96	252.48
Government Funds	2,024.56	3,753.13	4,118.64	4,617.10	228.05
Collective Funds	2,243.16	4,219.76	5,189.28	6,157.86	274.52

Source: Statistical Yearbook of China, 1998: 793.

While advancing on many fronts during the reform period, human development has also confronted many problems, some of them already touched upon. These include the following areas: (1) growing unemployment associated with the reform of state-owned enterprises; (2) rising inequality; (3) growth of corruption; (4) weakening capacity of the public finance system; (5) rural-urban migration; (6) housing reform; (7) renewed discrimination against women; and (8) continued deterioration of the natural environment. The next chapter takes up several of these problems in detail.

Notes:

1. Delivered at the second session of the Ninth National People's Congress, 5 March 1999.
2. *China Whitepaper on Foreign Trade and Economic Cooperation*, 1998: 266. Further promises of liberalization were made in April 1999 in the negotiations with the U.S. over the terms of China's entry into the World Trade Organization.
3. *People's Daily*, 4 Nov., 1998; *People's Daily*, 9 Nov., 1998.
4. *Ibid.*
5. *People's Daily*, 3 Sept. 1997. This is of course a small number, in comparison with the number of new laws passed in any given year by a European parliament or the US Congress.
6. This fiscal decline was discussed in section 1 of this chapter and will be considered in detail in Chapter 5.
7. A township election took place in Buyun, in Sichuan Province in the autumn of 1998. While criticized in the media, the election was treated as experimental and allowed to stand.

8. *Statistical Yearbook of China*, 1998: 653; *Report of State Affairs of China: 1978-1995*: 255.
9. In his 1999 Report on the Work of the Government, Premier Zhu Rongji called for local governments to end their administrative control of enterprises under their jurisdiction, and for a 50 percent reduction in staff of provincial level government institutions.
10. The PPCCs are composed of representatives from different regions, social strata, nationalities, and religions.
11. More discussion of China's environmental problems can be found in Chapter 4. For an extensive discussion of this issue, see also *China Human Development Report, 1997*, Chapter 3, section 6.
12. UNDP, *China Human Development Report—Human Development and Poverty Alleviation, 1997*: 79.
13. "Old age insurance" refers to a contributory annuity covering participating rural residents. Being self-employed, most rural residents do not receive a pension from a work unit.
14. China Report on the National Economy and Social Development, 1997: 311. See the 1997 China Human Development Report for an extensive discussion of rural health care and the cooperative medical system.
15. Ibid, 311. See Chapter 5 for more discussion of the unemployment insurance program.
16. Ibid, 311-312.
17. See Chapter 4 for additional discussion of this issue. Also, see the *1997 China Human Development Report*, and World Bank, *Old Age Security: Pension Reform in China, 1997*.
18. For instance, environmental protection organizations such as 'Friends of Nature' have contributed to raising citizens' awareness of environmental issues

Chapter 4

MAJOR HUMAN DEVELOPMENT ISSUES IN THE REFORM PROCESS

The *China Human Development Report 1997* presented, as part of its comprehensive survey of the state of human development in China, a discussion of the major problems facing human development in the mid-to-late 1990s. In this chapter, we look again at a sub-set of those issues, focusing on those that appear most urgent at present, and taking advantage of the latest available information.

We begin with the unbalanced nature of China's recent economic growth. For some regions, sectors and population groups, the increase in income has been exceptionally fast, while for others it has been relatively slow. Thus, development disparities among regions and groups have increased. Moreover, the changes in society associated with rapid growth have far exceeded people's expectations and have challenged their ability to adapt. Together with the discordance from political change and conflicts among social interest groups, these changes have increased the threat of social and political instability. In addition, fast economic growth has involved massive destruction of the natural environment and rapidly escalating pollution. In this respect, China is not so different from other nations and regions that have achieved economic growth at the cost of the environment and of massive exhaustion of natural resources, except perhaps in the speed with which it has occurred in China.

While solving some problems, fast growth and structural change have brought about new challenges. Among these, the most urgent are: the rapid surge in the unemployment rate; the growth of income disparities; the augmentation of social inequality; and the imposition of new dangers and risks on the weak of society (including the aged, the ill, women and unemployed people) due to the melting away of the previous social safety net and its lack of replacement by a new one. Although the most socially vulnerable and

at risk groups are still but a small proportion of the population, in absolute terms they constitute a large number whose circumstances present a challenge that cannot be neglected.

1. Unemployment

China's huge population is a source of enormous pressure for employment. The current unemployment problem in China has two characteristics: one is the sharp increase in urban unemployment and layoffs, the other one the vast surplus of rural labor and massive labor mobilization.

1.1. Explosive Increase in Urban Unemployment

The figures for urban registered unemployment announced by the State Statistical Bureau (SSB) greatly underestimate the true level of urban unemployment.¹ The SSB has begun to survey total urban unemployment,² not only those unemployed who have registered with labor bureaus. If urban registered unemployment prior to 1993 can be regarded as a fairly close approximation to the actual unemployment rate, the number of layoffs from state owned and collectively owned enterprises since then has increased very quickly. Because these furloughed workers were still technically connected to their enterprises, they were not registered or counted as unemployed, and the registered unemployment rate stopped reflecting the real unemployment situation in China.

Based on standard international definitions of unemployment, the urban unemployed population in China should include the following three groups of people: (a) registered unemployed workers; (b) workers furloughed from their enterprises who are not working elsewhere; these account for 40-60 percent of

Table 4.1. Estimated Real Urban Unemployment in China (millions)

Year	Registered Unemployed	Surveyed Unemployed	Laid-off Workers	Laid-off Unemployed	Unemployed Rural Migrants in Urban Areas	Actual Number of Unemployed	Actual Unemployment Rate (%)
1993	4.20 ^a	NA	3.00 ^b	1.20-1.80 ^d	NA	5.40-6.00	3.3-3.7
1994	4.76 ^a	5.95 ^a	3.60 ^b	1.44-2.16 ^d	NA	6.20-6.92	3.6-4.1
1995	5.20 ^a	7.90 ^a	5.64 ^b	2.26-3.38 ^d	0.55 ^e	8.00-9.13	4.4-5.0
1996	5.53 ^a	8.15 ^a	8.92 ^a	3.56-5.35 ^d	0.60 ^e	9.70-11.48	5.1-6.0
1997	5.70 ^a	9.80 ^a	14.35 ^a	6.70-7.70	0.69 ^e	13.1-15.1	6.8-7.8
1998	5.70 ^e	11.45 ^e	17.6-18.2 ^c	8.60-9.60 ^e	0.80 ^e	15.4-16.0	7.9-8.3

Sources: a. Labor Statistics Yearbook of China, 1997: 213 and 1998: 230. b. Yang Yiyong, 10 March 1998. c. Xinhua News Agency (22 Jan. 1999) reports Ministry of Labor and Social Security data indicating that the re-employment rate of laid off workers is 50 percent. d. Hu Angang, 1998. e. Estimate by Hu Angang.

Note: Actual unemployment = registered + laid-off unemployment + unemployment of rural labour in urban areas.

total unemployment; and (c) unemployed rural migrant workers. In 1997 there were about 46 million rural workers who went to cities and towns to work or look for work.³ The unemployment rate for this group of workers is very conservatively estimated at 1.5 percent (*China Yearbook of Labor Statistics*, 1998: 74). These workers are covered neither by social security nor unemployment insurance. An estimate of the actual unemployment rate is presented in Table 4.1.

The laid-off unemployed workers keep labor contracts with their units. Some of them are engaged in "hidden employment", and receive a subsistence allowance as well. They must not be considered to be the same as the unemployed of the other two types.

In recent years, especially since 1993, open unemployment in urban areas has increased sharply. From 1993 to 1998, registered unemployment increased by 36 percent to 5.7 million and surveyed unemployment rose by 92 percent to 11.45 million. Total urban layoffs have increased by almost 4 times, with an annual increase rate of more than 40 percent. We estimate that total real urban unemployment has risen from around 5.4-6.0 million in 1993 to between 15.4 and 16 million in 1998, when the real unemployment rate was 7.9-8.3 percent. In addition, the salaries of 10 million workers were suspended or reduced, causing a substantial decrease in real income.

In the coming years, layoffs will continue to

increase rapidly and China will experience the highest urban unemployment since the establishment of the People's Republic of China (*People's Daily*, 9 Feb. 1998). According to Ministry of Labor estimates, state owned manufacturing enterprises alone employ 8 to 10 million workers who will be laid off during 1999-2001. Since workers in state owned enterprises account for two-thirds of all laid-off workers, during these three years we can anticipate that there will be 12 to 15 million layoffs in all. By the year 2000, accumulated layoffs will reach 23.5 to 26.5 million, and on average layoffs will increase by 4 to 5 million annually. 20 million workers will be laid off in 2000 alone, and actual urban unemployment nationwide may reach as high as 18 million, which would constitute a new peak for the PRC.⁴ At present, the explosive increase in unemployment has become the most challenging issue in China's economic and human development.

1.2. Situation of Urban Laid-off Workers

There are large disparities among economic sectors in the distribution of laid-off workers. In 1996, workers furloughed from state owned, collectively owned and "other" economic entities accounted for 64.3 percent, 32.2 percent and 3.5 percent of the total number of furloughed workers, respectively.

There are also big regional differences in the

percentage of workers. The old industrial base areas have the highest share. Based on the total number of enterprise workers, in 1996 Liaoning Province had 1.18 million laid-off workers, or 14.2 percent of total workers, followed by Heilongjiang (13.8 percent,

935,000 furloughed workers), Hunan (11.2 percent), Shanghai (11.1 percent), Jiangxi (11 percent), Hubei (10.5 percent), Jilin (10.3 percent), Sichuan (9.5 percent) (See Table 4.2.). All of these provinces exceed the national average share of workers laid off.

Table 4.2. Number of Laid-off Workers, Percentage of Laid-off Workers in Labor Force, and Average Living Allowance, by Province, 1996

No.	Regions	Laid off workers	As share of all workers	As share of enterprise workers	Monthly average living allowance per worker (yuan)			Equivalent to share of average local money wage
		1,000 persons	(%)	(%)	Total	State units	Collective units	(%)
1	Beijing	156	3.4	4.7	250.0	266.8	191.7	31.3
2	Tianjin	186	6.5	8.1	71.9	93.0	40.3	11.3
3	Hebei	282	4.1	5.5	74.1	93.3	28.8	16.8
4	Shanxi	177	3.4	5.0	51.2	63.8	12.1	11.9
5	Inner Mongolia	175	4.6	6.3	31.2	44.6	7.24	7.9
6	Liaoning	1179	11.8	14.2	44.8	59.4	21.8	10.2
7	Jilin	415	8.1	10.3	43.8	62.1	7.4	9.8
8	Heilongjiang	935	11.5	13.8	26.5	32.9	7.3	7.0
9	Shanghai	414	9.1	11.1	188.8	187.1	179.3	21.2
10	Jiangsu	468	5.2	6.7	147.1	166.0	114.8	26.7
11	Zhejiang	203	4.1	5.4	146.5	164.7	116.9	23.7
12	Anhui	293	5.8	7.8	84.5	99.5	56.3	19.6
13	Fujian	155	4.4	6.1	77.9	84.5	50.3	14.0
14	Jiangxi	316	7.7	11.0	55.5	71.4	20.9	13.7
15	Shandong	344	3.7	4.9	94.6	106.3	66.0	19.5
16	Henan	374	4.4	5.9	47.2	59.5	20.8	11.5
17	Hubei	574	7.8	10.5	73.4	82.1	50.2	17.3
18	Hunan	480	8.0	11.2	55.4	64.7	35.6	13.0
19	Guangdong	384	4.2	5.5	103.3	119.0	58.3	13.6
20	Guangxi	97	2.8	4.4	69.2	68.7	34.7	15.4
21	Hainan	72	7.0	9.2	76.4	82.5	44.5	16.7
22	Sichuan	687	7.0	9.5	85.7	103.3	41.6	19.9
23	Guizhou	87	3.8	5.7	81.4	86.4	47.9	19.9
24	Yunnan	43	1.4	2.1	104.9	119.3	42.0	20.2
25	Tibet	0.4	0.2	0.6	333.9	353.6	137.4	36.1
26	Shaanxi	268	6.7	9.5	73.8	86.4	23.4	18.1
27	Gansu	71	2.8	3.9	60.9	68.1	29.7	12.4
28	Qinghai	27	4.0	6.2	44.2	51.4	9.1	8.1
29	Ningxia	15	2.00	2.8	92.1	110.6	37.2	19.6
30	Xinjiang	40	1.3	1.7	120.9	127.1	69.7	24.2
31	National	8916	6.0	8.0	77.1	89.7	46.5	14.9

Source: Calculation based on *China Labor Statistics Yearbook*, 1997: 139, 406, and *Statistical Yearbook of China*, 1997: 123.

There is also a large difference among economic sectors in the share of workers being laid off. Among all sectors, the timber industry has the highest rate of layoffs, namely, 39 percent of all workers, followed by the textile industry (31 percent). On the other hand, the lowest rate is that of finance and insurance (only 0.79 percent), followed by government entities and social organizations (0.88 percent), and culture, education, broadcasting and television (1.18 percent). Most of the industries with low rates are characterized by monopolistic structure with high rates of return. Average salary plus non-salary income in these industries far exceeds the national average level of worker income. Such double inequality is a reflection of labor market segmentation. Excessive protectionism and monopoly in some industries have reinforced the inequality and unfairness in the distribution of income among workers. Middle aged workers are the majority of those furloughed: 52 percent are between the ages of 36 and 50.

As of 1997, the average layoff period of laid-off workers was 3 years and 9 months. About 77 percent had been laid off before the end of 1995. Although they still keep nominal labor contract relationship with their original units, in fact they are long term "unemployed".

The real income of the furloughed workers has of course fallen, but by different amounts for different workers. Many workers receive a subsistence allowance from their work units which is much lower than the local minimum income standard. In 1996, the average living allowance paid was 77 yuan per month nationwide. For state owned enterprises the allowance was 90 yuan, for collective enterprises 47 yuan (see Table 4.2). There are big regional differences in the monthly living allowance provided to furloughed workers. In Heilongjiang, Inner Mongolia, Jilin and Liaoning, this allowance was very low, averaging 27, 31, 44 and 45 yuan, respectively; while in politically sensitive regions, it was much higher: 333 yuan in Tibet, for instance, and 250 yuan in Beijing. In all regions, the living allowance for collectively owned enterprises was low, verging on inconsequential. For instance, in Inner Mongolia, Jilin and Heilongjiang workers furloughed from collectively owned enterprises get a mere 7 yuan per month, while in Ningxia and Hebei the allowance was 9 and 29 yuan, respectively. Although some furloughed workers have found other

Table 4.3. Urban Population Groups with Reduced Incomes, 1997, by Quintile of Income Distribution (percent)

	Percent reduction in income	Percentage of families with lower incomes
Total(100%)		39
Low Income Group (20%)	30	60
Relatively Low Income (20%)	29	53
Middle Income Group (20%)	16	33
Relatively High Incomes (20%)	16	39
High Income Group (20%)	9	20

Source: Annual of Prices and Family Incomes and Expenditures in Chinese Cities, 1998: 9.

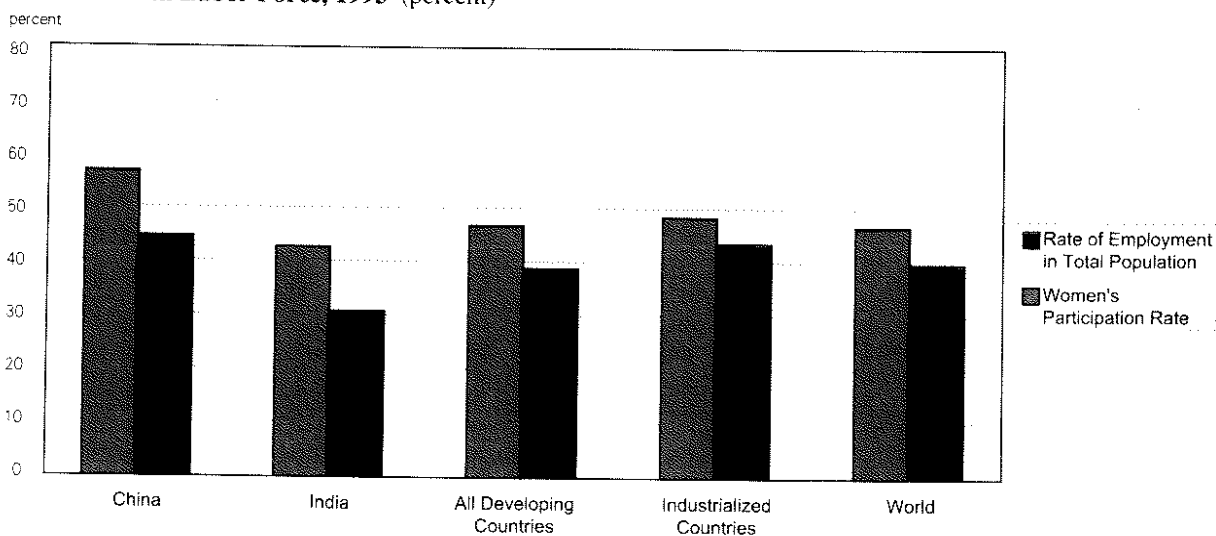
work and their real income is higher than the living allowance, in general their living standard has been substantially reduced. Many of them have fallen under the urban poverty line and become eligible for government attention and assistance.

Unemployment and the inadequate financial support available to the unemployed are undoubtedly major contributors to the recent trend of growing intra-urban income inequality. This is illustrated in Table 4.3., which shows that income reductions in 1997 were both deepest and most widespread among low-income urban residents. With more of the relatively poor than the relatively rich becoming poorer, the spread between rich and poor grew wider.

1.3. Why Does Urban Unemployment Increase Sharply?

The first key to resolving the unemployment crisis is to understand its causes. First, China has been experiencing a continuous increase in size of labor force. The rate of growth of the economically active population has been greater than that of the total population, due to the maturing of the baby boom generation born in the 1960s and early 1970s, before population control policies began to reduce the fertility rate. The total employment rate (i.e., the employed as a proportion of the total population) of China is about 56 percent at present, which is much higher than the international average level. At present, the participation rate

Figure 4.1. International Comparison of Employment Rates by Total Population and Women's Participation in Labor Force, 1993 (percent)



Source: UNDP, Human Development Report, 1996: 168-169.

of Chinese women in the labor force is 45 percent, which is also much higher than that of developing countries (See Figure 4.4.). Indeed, the provision of employment opportunities for women has been one of China's great accomplishments in human development.

Second, China is undertaking structural adjustment of its economy on a large scale. Too many people in the past were kept in agriculture, too few in services; heavy industry was over-developed at the expense of consumer goods industries, trade and services, etc. All this is in process of changing; therefore, much of the increase in unemployment can be assigned to the category of structural unemployment. During the 1980s, agriculture on average absorbed 4 million new workers annually, while in the 1990s labor used in agriculture fell by 6.1 million annually, on average. Former farm workers either transferred to non-agricultural jobs or moved to urban areas. The capacity of manufacturing to absorb labor has decreased, while services have become the major channel for creating new jobs. Within manufacturing there is profound structural transformation occurring: many enterprises in traditional sectors have closed, merged, transformed, or gone bankrupt, producing sharp increases in layoffs. The textile, coal mining, machinery, metallurgy, forestry, railway and military industries have had to lay off more than 1 million workers each.

Third, China is in the process of transformation to a market economy. High employment was sustained in the past by extra-economic forces, especially the state's policy of preserving surplus labor in state enterprises as a means of providing income security to the urban population. The preservation of surplus labor in the agricultural collectives accomplished the same purpose for the rural population. As China moves toward a market driven economy, these institutional foundations of the high employment rate have disappeared or are melting away. The share of labor force employed in the state sector has fallen sharply. The non-state sector has been unable to absorb all the workers laid off from state enterprises.

Fourth, economic development in China has been undergoing a process of de facto capital deepening; state enterprises especially have been rapidly increasing their capital intensity. From 1990 to 1995, China achieved extremely high speed economic growth (the average annual growth rate being 11.9 percent) and growth of investment (20.6 percent) (at constant price). However, this was not accompanied by comparable growth of employment. The average annual rate of increase of employment has fallen from 3 percent in the 1980s to 1.3 percent at present, which constitutes the lowest employment elasticity of growth in the history of the PRC. To a large extent, the employment aversion

Table 4.4. Regional Disparities in Human Development Indicators in China (1997)

Region	HDI	World Ranking	Average Life expectancy (year)	Rate of Adult Literacy (%)	General Enrollment Rate	Adjusted Real per Capita GDP (Year 1990, US\$)
China ^a	0.701	98	69.8	82.9	69.0	3130
Shanghai ^b	0.877	25	74.9	89.8	67.4	14470.9
Beijing ^b	0.867	27	72.9	92.4	67.4	9404.7
Qinghai ^b	0.528	135	60.6	56.4	50.6	2285
Tibet ^b	0.452	147	59.6	45.9	38.5	1795
Hong Kong ^a	0.880	24	78.5	92.4	65.0	24350

Source: (a) UNDP, *Human Development Report*, 1999, pp.134-135. (b) Figures are taken from Table 1. Human Development Index by Province in 1997 of this Report.

Note: per capita GDP denominated in US\$ (Year 1990) is calculated in purchasing power parity terms after adjustment. The world ranking refers to that among 174 countries and regions.

of growth is the product of the forces discussed in the last paragraph, namely, the sloughing off of surplus labor by the state and collective enterprises under the new conditions of market competition. However, there is also evidence of adoption of more capital-intensive technologies by enterprises. Thus, net value of fixed assets per worker in industry more than doubled from 1990 to 1997; for state enterprises the increase was about 70 percent.⁵ Such a growth pattern fits very poorly with China's basic situation of labor surplus and growing unemployment.

2. Regional Disparities

One of China's fundamental characteristics is the great geographic, topographic and climatic variety over its many regions, and these are in part responsible for the existence of substantial regional disparities in economic and human development. The most pronounced such difference is that between the eastern coastal and western interior regions. The development disparity between north and south, by contrast, is less obvious but it is nevertheless substantial (China Research Group, Chinese Academy of Science, 1992: 126-132). While China as a whole is in the middle range of human development, by global standards, some individual regions, such as Shanghai and Beijing,

score well above that and would separately rank as high as 25th and 27th in the world; while such poor and minority nationality regions as Tibet and Qinghai belong in the lower range of human development, and would rank 147th and 135th, respectively (See Table 4.4.)

2.1. The Change in Regional Social and Economic Development Disparities, 1978-1995

Changes in the inter-regional variation in economic and social development indicators have been quite complex since the reform. For instance, inter-provincial variation in GDP per capita has declined (see Table 4.5. and Lin, et al., 1997). Yet, if the provinces are assembled into three regional groups representing different levels of development -- east (most developed), center and west (least developed) -- the disparity among these groups widens. Moreover, whether grouped or not, the regional variation in *personal income* increases sharply.⁶ When it comes to social indicators, there is similar complexity. Some, such as officially reported incidence of infectious disease and per capita electricity, have become substantially more equally distributed over the provinces. Others, such as birth rate, rate of natural increase, and enrollment rates of school-age children, have experienced pronounced increase in inter-provincial disparities (see Table 4.5.).

Table 4.5. Variation in Major Social and Economic Development Indicators of Different Regions
(coefficients of variation)^a

Indicators	1978	1980	1982	1985	1990	1995
Economic Indicators						
Per capita GDP ^b	99.3	96.8	93.8	88.2	83.6	88.9
Per capita GDI ^b	74.7	88.8	94.4	122.7	112.3	121.5
Personal income, rural ^c					33.0	55.0
Personal income, urban ^c					37.0	46.0
Demographic Indicators						
Birth rate	23.5	23.3	16.3	22.5	20.3	29.1
Death rate	14.9	14.8	17.0	20.4	11.4	13.3
Rate of natural increase	33.4	34.9	22.4	31.1	28.0	46.3
Total Fertility Rate			31.3		26.8	
Education Indicators						
Enrollment rate of school-age children	3.7	5.4	7.9	11.0	6.8	7.2
Percent of graduates of primary schools entering junior secondary schools	9.9	15.9	21.1	20.2	14.9	8.9
Percent of graduates of junior secondary schools entering senior secondary schools	32.7	32.9	34.6	30.9	40.6	33.9
Health Indicators						
Number of doctors per 1000 population	51.1	52.5	52.2	52.8	49.3	47.3
Number of hospital beds per 1000 population	36.9	31.7	37.9	32.9	36.9	38.6
Incidence of infectious disease		65.0			36.8	36.4
Science And Technology Indicators						
Number of persons engaged in scientific and technological activities per 1000 population				84	77	54.6
Number of persons engaged in scientific and technological activities per 1000 employees				20.9	19.0	17.1
Number of patent applications granted per 1000 population				164.5	154.7	149.9
Cultural Indicators						
Per capita newspapers published		65.8			61.7	62.1
Per capita books sheets printed		76.5			100.7	106.1
Broadcasting listener rate		39.4			24.3	15.2
TV viewer rate		44.9			16.0	11.0
Environmental Indicators						
Volume of industrial solid wastes produced per 100 million yuan of GDO ^b				66.8	59.0	63.1
Volume of waste water per 100 million yuan of GDP ^b				37.4	36.6	32.5
Infrastructure Indicators						
Per capita electricity	105.8	92.8	89.5	82.8	67.8	55.9
Length of highways per 1 million population	120.4	144.1	141.8	132.3	124.2	114.3
Length of railways in operation per million population	74.0	81.6	76.3	104.6	107.6	110.1

Indicators	1978	1980	1982	1985	1990	1995
No. of telephone sets owned per 100 persons	83.7	80.9	81.6	87.7	96.1	89.7
Per cap. volume of post and tele-communications service ^b	140.6	135.3	113.7	122.5	130.6	110.3
Human Development Indicators						
Years of education			24.3		20.6	19.7
Literacy rate			9.5		9.2	8.3
Life expectancy			5.1		5.2	
HDI			9.0		10.2	

Sources: (1) Statistical Yearbooks for 1995 and 1996 of various regions; (2) *Chinese Regional Economies for the 17 Years Since Reform*, State Statistical Bureau, Chinese Statistics Press, 1996. (3) Figures for urban and rural personal income are from Khan and Riskin. The urban estimate is for a sample of 10 provinces, the rural for a sample of 19 provinces.

Notes: (a) coefficient of variation (CV) is a measure of dispersion relative to the mean, and is equal to the standard deviation divided by the mean. Here, the result is multiplied by 100 so as to be expressed as a percent of the mean. If mean and standard deviation grow at the same rate, then the CV remains constant.

(b) calculations are based on constant price of 1978 of various regions.

(c) 1990 figure is actually for 1988.

Regional disparities in major social development indicators are generally lower than those of per capita GDP; i.e., provinces are less unequal in human development level than in production level. For instance, the variability of indicators of population and education is much lower, and those of health, culture, infrastructure and environment somewhat lower, than that of per capita GDP. Reducing regional disparities will take considerable time. Meanwhile, however, regional disparities in human development can be further reduced before those in economic development, as suggested in the 1997 *China Human Development Report*.

2.2. Causes of Increasing Regional Disparities

The level of development in different regions is highly dependent on natural resource endowments, human resource and infrastructure development, and proximity to urban and international markets. In a still largely agrarian country like China, some provincial disparities in income resulting from natural conditions are inevitable. However, all these factors together cannot fully explain the existing regional disparities. In the early stages of reform, not only were these disparities in fact reduced, but the income gap between urban and rural areas also fell substantially. However, starting in the mid-1980s, income inequality increased again and in the 1990s the enlargement of some important disparities among regions and between urban

and rural areas accelerated. This changing time path of inequality obviously cannot be explained by reference to natural conditions.

There are some additional factors affecting regional disparities. First, the weakened ability of the central government to raise revenues has clearly contributed to the rise in these disparities. Before the reforms, the central government played a critical role in determining regional income distribution, and significant fiscal revenues were transferred from rich to poor provinces. This practice was altered by the massive fiscal decentralization introduced after 1978, which greatly reduced the ability of center to raise revenues.

Under the fiscal contract system (*caizheng baoganzhi*) as practiced between 1980 and 1993, taxes to a great extent were collected and expenditures undertaken on a jurisdiction by jurisdiction basis. Consequently, the ratio of central revenue to GDP quickly shrunk. Under severe fiscal strain, the central government was no longer able to redistribute resources across the country (Wang, 1997b). The explosive growth of funds outside central control (See Chapter 5) has exacerbated the trend toward growing inter-regional, inter-sectoral, inter-unit, and thereby interpersonal inequality.

Table 4.6. reports average ratios of fiscal surplus (deficit) to GDP for China's 30 provinces in four periods. It shows how fiscal transfers evaporated in the age of decentralization. In the period 1978-80, half of

China's provincial units had surpluses. Shanghai at that time turned over to the center a surplus equivalent to more than 50 percent of its GDP; other developed provinces at the time, such as Beijing, Tianjin, and Liaoning had to do the same, although to a lesser degree. On the other hand, subsidies from the central government to the 15 deficit provinces could be as high as a fifth to a quarter of their GDP. After 1980, remittances from richer provinces to the central coffers rapidly dwindled. Correspondingly, the relative size of central subsidies to poor provinces decreased sharply.

By 1991-93, Shanghai, the richest provincial unit in China, submitted only about 8.5 percent of its GDP to the center. The newly rich province, Guangdong, contributed barely 0.4 percent of its GDP. Consequently, for most of those provinces running deficits in the initial 1978-80 period, the relative sizes of central subsidies in 1993 were much smaller. Many poor areas have had difficulty financing basic services, such as education, and have no resources for investing in economic development.⁷

Table 4.6. Ratio of Fiscal Surplus to GDP, by Province, 1978-1993 (percent)

Region	1978-80	1981-85	1986-90	1991-93
Beijing	25.63	14.29	3.54	1.05
Tianjin	26.33	16.20	5.83	3.85
Hebei	6.00	2.38	-0.21	0.10
Shanxi	-0.28	-0.95	-2.28	-0.82
Inner Mongolia	-20.77	15.94	-11.12	-7.14
Liaoning	22.38	11.50	2.68	0.99
Jilin	-2.88	4.72	-5.74	-3.66
Heilongjiang	-7.33	-3.41	-2.51	-1.71
Shanghai	51.07	38.68	17.26	8.54
Jiangsu	11.26	9.09	3.34	1.37
Zhejiang	6.98	6.84	3.16	2.03
Anhui	3.17	1.19	-0.90	-2.30
Fujian	-1.38	-2.19	-2.47	-0.93
Jiangxi	4.48	-2.73	-3.51	-2.82
Shandong	10.18	4.39	-0.81	-0.01
Henan	2.65	1.45	-1.06	-0.61
Hubei	2.19	4.09	-0.09	-0.30
Hunan	3.23	2.01	-1.12	-0.56
Guangdong	4.76	1.38	-0.66	0.38
Guangxi	-7.97	4.20	-5.97	-2.25
Hainan	-3.14	-5.12	-7.75	-5.87
Sichuan	0.50	0.43	-1.50	-0.84
Guizhou	-11.70	-8.04	-6.30	-3.34
Yunnan	-9.71	-5.07	-5.89	-1.19
Tibet	NA	-61.6	-50.8	-49.6
Shaanxi	-1.24	-3.72	-3.85	-2.44
Gansu	6.56	-3.36	-5.61	-3.83
Qinghai	NA	-25.59	-16.20	-11.57
Ningxia	-22.01	-23.03	-17.57	-10.17
Xinjiang	-24.15	-18.17	-11.72	-7.02

Source: Wang and Hu, 1999, p.190. Wang Shaoguang and Hu Angang: The Political Economy of Uneven Development, the Case of China, PP.190.

This is not to say that the redistributive patterns of the pre-reform era were ideal. The lack of a firm and predictable relation between a province's extractive effort and its authorized expenditures constituted a strong disincentive to raise tax revenues and unduly compromised local initiative. However, the reform period alternative has gone to the other extreme; it has almost entirely eliminated the means by which the center can act to alleviate inter-regional inequalities and help the poorer areas and people of China (Wang and Hu, 1999). A further discussion of fiscal decentralization from a more general perspective is found at the end of this chapter.

Second, the government has followed a policy of "building on the strongest", i.e., giving differentially favorable treatment to coastal regions and thus implicitly discriminating against poorer inland regions. While it helped to achieve a very high GDP growth, this strategy also reinforced the increase in regional disparities and, as the 1990s have progressed, its negative effects have grown more prominent. In September 1995, the government adopted a guideline that called for adhering to "coordinated regional development and gradually reduced regional disparities." Policies are to be adjusted to abolish the privileged treatment of coastal regions.

3. Urban-Rural Gap in Income and Public Services

The basic contradiction in modern Chinese society is the economic and social structural gap between urban and rural residents, which is reflected in the differences in income, consumption structure and public services.

3.1. Relative Disparity in the Income of Rural and Urban Residents

Although consumption of both urban and rural residents has improved greatly since the beginning of reform, the relative gap between them is very large, both absolutely and in international comparative

Table 4.7. Annual Growth of Consumption of Urban and Rural Residents (percent per year)

Period	National Residents	Rural Residents	Urban Residents
1981-1985	9.4	11.0	5.7
1986-1990	4.0	2.5	6.1
1991-1995	8.9	7.7	8.7
1996-1997	6.1	8.5	2.1
1979-1997	7.3	7.2	6.2

Source: Calculated in comparable price, from *China Statistical Abstract*, 1998:76 and *Statistical Yearbook of China*, 1998.

perspective. The years of reform have seen this gap narrow, then widen, then narrow again, leaving it at 2.5-to-1 in 1997, marginally lower than in 1978 (see Tables 4.7. and 4.8. and Figure 4.2.).

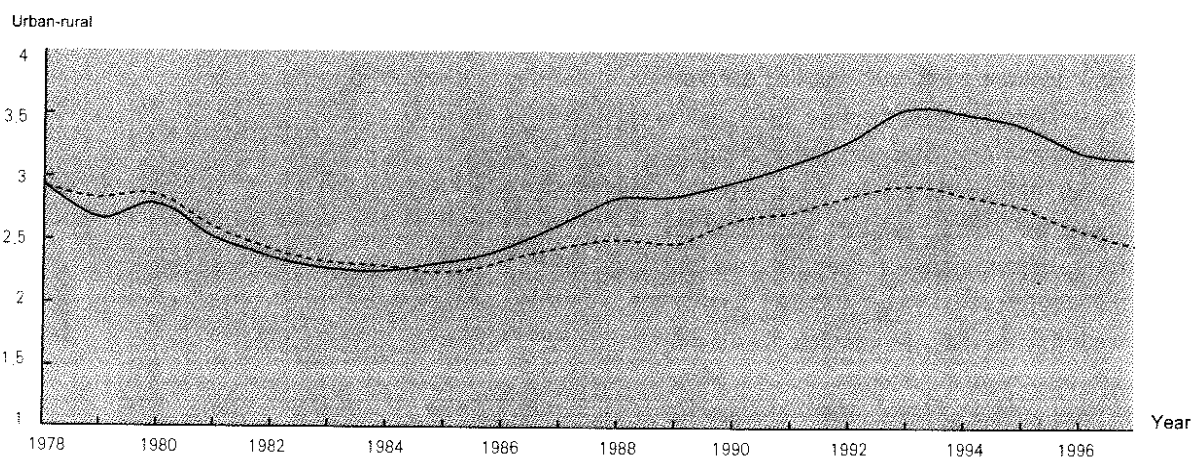
The relative income disparity between urban and rural residents behaved similarly to that of consumption, ending at 2.97-to-1 in 1997 (see Table 4.10.). It should be noted that urban residents have been the recipients of large government price subsidies, including those for food, cooking oil and meat, a subsidy to offset food price increases, and others. In 1997, the national budget allocated 55.2 billion yuan to price subsidies (*Statistical Yearbook of China*, 1998: 290). These subsidies are not included in the SSB's definition of household income, yet they are in fact transfer income that in the past accounted for a large proportion of average urban household per capita income. With the disappearance of urban food rationing, these subsidies have declined. Nevertheless, if various hidden subsidies to urban residents were included in their incomes, then urban per capita income would be substantially higher and the real urban-rural income gap even larger. On the other hand, if rural-urban migrants living in the towns and cities were to be included among the urban population, average urban income would be somewhat lower, and the gap reduced.

Table 4.8. Resident Consumption

Year	Current yuan			Constant yuan		
	Rural residents	Urban residents	Ratio between rural and urban residents (times)	Rural residents	Urban residents	Ratio between rural and urban residents (times)
1978	138	405	2.9	138	405	2.9
1979	152	406	2.7	149	422	2.8
1980	178	496	2.8	159	453	2.9
1981	194	487	2.5	177	454	2.6
1982	212	500	2.4	190	462	2.4
1983	234	531	2.3	207	480	2.3
1984	266	599	2.3	231	528	2.3
1985	347	802	2.3	268	597	2.2
1986	353	850	2.4	270	626	2.3
1987	417	1,089	2.6	287	697	2.4
1988	508	1,431	2.8	304	759	2.5
1989	553	1,568	2.8	302	747	2.5
1990	571	1,686	3.0	303	802	2.6
1991	621	1,925	3.1	323	877	2.7
1992	718	2,356	3.3	355	1,012	2.9
1993	855	3,027	3.5	376	1,102	2.9
1994	1,138	3,979	3.5	401	1,147	2.9
1995	1,479	5,044	3.4	440	1,215	2.8
1996	1,756	5,620	3.2	482	1,245	2.6
1997	1,930	6,048	3.1	516	1,265	2.5

Source: China Statistics Survey, 1998: 76; Statistical Yearbook of China, 1990:291.

Figure 4.2. Ratio of Consumption Levels of Nonfarming to Farming Population



Note: Solid line gives ratio in current yuan, dotted line in constant yuan.

Table 4.9. Comparison of Per Capita Family Income of Rural and Urban Residents

Year	Rural net per capita household income (yuan, current prices)	Urban net per capita household income (yuan, current prices)	Ratio of urban to rural per capita income (rural=1)
1978	133.6	316.0	2.36
1980	191.3	439.4	2.30
1985	397.6	685.3	1.72
1986	423.8	827.9	1.95
1987	462.6	916.0	1.98
1988	544.9	1,119.4	2.05
1989	601.5	1,260.7	2.10
1990	686.3	1,387.3	2.02
1991	708.6	1,544.3	2.18
1992	784.0	1,826.1	2.33
1993	921.6	2,336.5	2.54
1994	1,222.0	3,179.2	2.60
1995	1,577.7	3,892.9	2.47
1996	1,926.1	4,377.2	2.27
1997	2,090.1	5,160.3	2.47

Source: China Statistical Summary, 1998: 78.

The urban-rural gaps in per capita expenditures on various kinds of goods are quite large. For instance, urban residents spent 2.2 times as much as their rural counterparts on food in 1997, and the ratios for clothing, and transportation and communications were 4.76 and 4.32, respectively (Table 4.10.). A comparison of quantities of foods consumed by urban and rural residents is shown in Table 4.11.

A significant disparity shows up in the purchases of durable goods in rural and urban areas (Table 4.13.). Rural ownership of more traditional types of durables, such as bicycles, has grown rapidly since 1985, and is only marginally lower than in urban areas. But for some newer types of durable goods, urban areas are virtually saturated, unlike their rural counterparts. For instance, urban ownership rates for color TVs, washing machines, and refrigerators were 100, 89 and 75 percent, respectively, in 1997, as compared with only 27, 22 and 8.5 percent in rural areas.⁸ These newer durables have great market prospects in the countryside, if rural incomes are permitted to rise sufficiently.

Table 4.10. Ratio of Urban to Rural Per Capita Consumption Expenditures by Category of Goods (Rural = 1)

	1985	1990	1997
Per capita consumption	2.12	2.19	2.59
Food	1.92	2.02	2.18
Dress	3.18	3.76	4.76
Family facilities and services	3.56	3.51	3.71
Health and medical	2.18	1.35	2.88
Transportation and communications	2.63	4.81	4.32
Entertainment, education and cultural services	4.42	3.58	3.03
Housing	0.56	0.60	1.54
Miscellaneous	13.89	15.34	5.42

Source: Statistical Yearbook of China, 1998: 326, 348.

Table 4.11. Average Per Capita Food Consumption of Rural and Urban Residents (kg)

	1985	1990	1995	1997
Rural				
Fine grains: flour and rice	209	215	211	209
Vegetables	131	134	105	107
Cooking oil	4.04	5.17	5.80	6.16
Pork, beef, mutton	10.97	11.34	11.29	12.72
Fowl	1.03	1.26	1.83	2.36
Eggs	2.05	2.41	3.22	4.08
Aquatic products	1.64	2.13	3.06	3.75
Sugar	1.46	1.50	1.28	1.35
Alcohol	4.37	6.14	6.53	7.13
Urban				
Foodgrains	135	131	97	89
Vegetables	144	139	116	113
Cooking oil	5.76	6.40	7.11	7.2
Pork, beef, mutton	18.72	21.74	19.68	19.04
Fowl	3.24	3.42	3.97	4.94
Eggs	6.84	7.25	9.74	11.13
Aquatic products	7.08	7.69	9.20	9.30
Sugar	2.52	2.14	1.68	1.63
Alcohol	7.80	9.25	9.93	9.55

Source: Statistical Yearbook of China, 1998: 327, 353.

Table 4.12. Average Possession of Consumer Durables per 100 Households in Rural and Urban Areas (units)

	1985	1990	1995	1997
Rural				
Bicycles	80.64	118.33	148.50	141.95
Sewing Machines	43.21	55.19	65.74	63.97
Color TVs	0.80	4.72	16.92	27.32
Refrigerators	0.06	1.22	5.15	8.49
Washing Machines	1.90	9.12	16.81	21.87
VCRs			1.12	1.79
Urban				
Bicycles	152.27	188.59	194.26	199.10
Sewing Machines	70.82	70.14	63.67	57.48
Color TVs	17.21	59.04	89.79	100.48
Refrigerators	6.58	42.33	66.22	72.98
Washing Machines	48.29	78.41	88.97	89.12
VCRs			18.19	21.32

Source: *Statistical Yearbook of China*, 1998: 327, 353.

One amenity for which rural residents have an advantage over their urban compatriots is housing space. This has increased much more rapidly in the countryside than in the cities. From 14.7 sq. meters per capita in 1985 it grew to 22.5 m² in 1997. The same figures for urban residents were 5.2 m² in 1985 and 8.8 m² in 1997; the urban increment was less than half the rural. This result is a product of the difference in housing mechanisms. Villagers have a strong incentive

to build new houses because they own their house, and it constitutes a relatively safe vehicle for investing their savings; while in the city, housing is still part of the welfare allocation system carried over from the planned economy, and people are reluctant to buy. Incomplete privatization, high prices, and lack of a developed mortgage market are factors contributing to the slow growth of urban housing space.

3.2. Urban-Rural Disparities in Public Services

Rural communities lag far behind their urban counterparts in access to national public health resources. The total number of hospital beds in the countryside has remained at 800,000 since 1980, while the net rural population grew by 70 million. The ratio of rural hospital beds to the national total was 40 percent in 1980, and only 27.6 percent in 1995; urban dwellers have six times the number of hospital beds per capita as rural residents. Although the latter accounted for 70 percent of the national population, their share of national health resources is only about 30 percent (Table 4.13.).

Telecommunication facilities are another area in which there is significant imbalance in distribution between rural and urban areas. The telephone sets going to the countryside as a proportion to the total of the country keep declining, and the coverage rate of telephone in the rural areas is 9 times less, as shown in Table 4.14. The fact that the countryside lags behind the towns in access to public communication increases the rural disadvantage in obtaining and distributing knowledge, information, and technology.

Table 4.13. Hospital Beds per 1,000 Persons in Urban and Rural Areas

	1980	1985	1990	1995	1997
Hospital Beds (1,000)					
Below county level (rural)	790	742	777	783	
County level and above (urban)	1,192	1,487	1,847	2,053	
National	1,982	2,229	2,624	2,836	2,903
Beds per 1,000 persons					
Below county level	1.0	0.9	0.9	0.9	
County level and above	6.2	5.9	6.1	5.8	
National	2.01	2.11	2.30	2.34	2.35

Source: *Statistical Yearbook of China*, 1997: 726.

Note: Hospital sickbeds at county level serve some rural residents.

Table 4.14. Comparison of Urban and Rural Telecommunication Facilities

	1980	1985	1990	1995	1996
Telephone Capacity					
Rural share (%)	32.2	24.0	19.4	18.3	21.4
Urban share (%)	67.8	76.0	80.6	81.7	78.6
Telephone sets per 100 persons					
Rural	0.2	0.2	0.3	1.2	1.7
Urban	1.5	1.9	3.4	13.4	15.4

Source: *Statistical Yearbook of China, 1997*: 542.

Social structure, policy, technology and the management arrangements of the economic system are all responsible for the urban-rural gap and its perpetuation. These have led to restrictions on the movement of population from countryside to city, and to the establishment of different social levels and identities for rural and urban people. Major public expenditures have been diverted to benefit the quarter of the population living in cities. The open and hidden subsidies to urban residents are neither fair nor efficient.

4. Environmental Degradation

China's population is close to 1.3 billion, and by 2030 will reach 1.6 billion. Industrialization has caused per capita use of natural resources by this huge population – including the common supply of fresh air and water – to grow rapidly. As a result, destruction and pollution of the environment have been massive and severe. Our general comments on present environmental conditions in China could be summarized as follows: unfavorable natural endowment; uncontrolled human destruction; simultaneous existence of erosion and pollution; partial improvement on some fronts accompanied by overall deterioration; capacity to protect the environment lagging behind the speed of destruction. Thus, environmental quality continues to worsen and this has evolved into the most severe, large-scale and profound ecological destruction in Chinese history (Hu Angang, Wang Yi and Niu Wenyuan, 1990).

4.1. Major Environmental Issues

The Chinese government has undertaken various measures to reduce air and water pollution, as well as implementing quite a few environmental projects, including the "Sanbei" Forest Preserve (referring to the dry areas of western northeast China, northern north-central China and most of northwest China); a forest preserve at the middle and upper reaches of the Yangzi River; coastal forest preserves; and a comprehensive environmental control project for controlling water-based erosion at seven river basins such as the Yellow and Yangzi Rivers. However, the trend of environmental deterioration has not been stemmed effectively. The major issues are manifested in the following aspects:

Worsening Land Erosion.

At the founding of the People's Republic of China, an area of around 1.16 million square kilometers was affected by serious erosion from water; this has increased by 2.16 times to reach 3.67 million km², which is about 38 percent of the national territory (Table 4.15.).

As Table 4.15. indicates, the region with the most serious erosion problem is the Loess Plateau, which covers an area of about 0.64 million km² and is the largest yellow soil area in the world. The arid weather and sparse vegetation there have made more difficult the control of erosion, which affects about 70 percent of the total area and is the major source of sedimentation in the Yellow River. However, difficult climate and terrain, assisted by human intervention in the form of irrational cultivation, over-grazing of grasslands, and massive deforestation and removal of vegetation have given rise to extensive soil erosion in other major regions of the country, as shown in the table.

Expansion of Desertification

China has 2.62 million square kilometers of desert, which is equivalent to fourteen times the area of Guangdong Province and accounts for 27 percent of the total territory. The area of desert is increasing by 2,460 square kilometers per year which means that every year an area equivalent to a medium-size county is lost. The principal desert areas are in the northeast, north-central China and most of the northwest. Due to unfavorable

natural conditions, such as a dry and windy climate, sparse vegetation, and degradation of the original grasslands, desertification and salinization are severe in these areas. About a quarter of the rural poor live in arid areas. Since the establishment of the PRC, about 0.67 million hectares of farmland and 2.35 million hectares of grassland have turned to desert. The desertified areas are the source of some 1.2 billion tons

Table 4.15. Area Subject to Water Erosion in Various Regions

Area	Total Area (1000 km ²)	Area Subject to Erosion (1000 km ²)	% of Erosion Area to Total Area
Upper & Middle Reaches of Yellow River Area, Loess Plateau ¹	640	450	70
Upper & Middle Reaches of Yangzi River ²	1,700	550	32
Red Soil Area in South China ³	1,200	340	28
Stony Mountain Area of North China ⁴	440	210	48
Black Soil Hilly Area of Northeast China ⁵	1,000	420	42
Qinghai & Tibet Plateaus ⁶	1,760	220	13
National	9,600	3,670	38

Source: State Council, Master Plan for National Eco-Environment Construction, Xinhua News Agency, Beijing, 6 Jan. 1999.

Notes:

1. Includes most parts or parts of Shanxi, Shaanxi, Inner Mongolia, Gansu, Ningxia, Qinghai, Henan Provinces.
2. Includes most parts or parts of Sichuan, Guizhou, Yunnan, Chongqing, Hubei, Hunan, Gansu, Qinghai, Henan, Shaanxi Provinces.
3. Includes all parts or parts of Fujian, Jiangxi, Guangxi, Guangdong, Hainan, Hubei, Hunan, Anhui, Jiangsu, Zhejiang Provinces and Shanghai Municipality.
4. Includes parts of Beijing, Tianjin, Hebei, Shandong, Henan, and Shanxi Provinces and North of Huai River Areas in Jiangsu and Anhui Provinces.
5. Including major parts of Heilongjiang, Jilin and Liaoning Provinces and East part of Inner Mongolia.

of mud and sand that flow annually into the Yellow River, raise its bed and greatly increase the threat of flooding. A major cause of desertification is the disappearance of China's forest cover, dealt with next.

Reduction of Forest Coverage.

Massive deforestation has seriously damaged natural vegetation and impacted negatively on many ecological functions of forests, such as wind blockage, containment of sand, conservation of water resources, preservation of topsoil, cleansing of the air and maintenance of biodiversity. Deforestation of land and filling in of lakes for cultivation, as well as planting on steep slopes have all reinforced the frequency and severity of natural disasters.

China has one of the sparsest forest covers in the world: the coverage rate is only 14 percent of land area, compared with 66 percent in Japan, 62 percent in Indonesia, 55 percent in Russia, 32 percent in the United States, and 23 percent in India. UNDP reports that "in the last four decades, almost half of China's forests have been destroyed".⁹ Massive reforestation campaigns have taken place, but with high loss rates; even when successful they have replaced mature, bio-diverse forests with sparse mono-species plantations of much inferior quality (UNDP, Aug. 1996: 8, and Smil, 1993: 59-64). In belated recognition of the seriousness of the situation after the devastating floods that hit China in 1998, the State Council in September of that year ordered a ban on deforestation around the Yellow River and the middle and upper reaches of the Yangzi River.

Degradation of Grassland.

About 135 million hectares of grassland have been degraded, desertified and salinized, accounting for one third of China's grasslands, and this destruction progresses at the rate of two million hectares annually. For a long period of time, due to the population growth, arid weather and especially to over-grazing and abusive cultivation, grassland degradation has progressed apace at the sources and middle and upper reaches of rivers. In many such places, there is no longer any pasture for grazing (State Council Abstract, 1999).

Worsening Natural Disasters.

Since the establishment of the PRC, the history

Table 4.16. Number and Frequency of Natural Disasters in Various Periods

Period	Medium Disasters	Large Disasters	Very Large Disasters	Extra Large Disasters	Total Number	Frequency (%)
1952-1959		1			1	12.5
1960-1966	1			2	3	42.9
1970-1979	4	2			6	60.0
1980-1989	3	4			7	70.0
1990-1997	1	5	2		8	100.0

Source: Calculation based on the data in *Statistical Yearbook of China*, 1991: 201 and 1992: 352, and *China Statistical Abstract*, 1998: 92, 98.

Note: Frequency is the percentage of years in the period suffering above medium disasters. The definition of various disasters is according to the rate of affected area.

of natural disasters in China can be summarized with the following figures: from the 1950s through the 1990s, the frequency of medium and large-scale natural disasters increased decade by decade, as did the total area and percentage of cropland affected by disasters (Table 4.16). During the 1990s, about one-third of farmland has been affected by disasters every year. Of the affected areas, 50 percent has suffered real loss from the disaster, and crop yields have been reduced by at least 30 percent (Hu Angang, et al., *Nature Disasters, 1998 and Economic Development of China*, Hubei Science and Technology Publishing House, 1998).

Air Pollution and Acid Rain

The principal cause of China's serious air pollution problem is coal smoke, since coal is by far the dominant energy source, accounting for about three-fourths of total energy consumption. Coal output has increased by 1.37 times from 610 million tons in 1980 to 1.4 billion tons in 1996. Cleaner energy sources, such as hydropower and natural gas, account for only 5.7 percent and 2.2 percent, respectively, of total energy use.

Industry is the main coal consumer and a major polluter discharging waste gases. The manufacturing sector burned over 1.2 billion tons of coal in 1996, accounting for 86 percent of total coal consumption (*Statistical Yearbook of China*, 1998: 253). In 1997, this sector emitted over 9,000 cubic meters of waste gas for each ton of coal consumed.

Thermal power generation is one of the main sources of waste gas emissions and of acid rain. From

1980 to 1996, coal consumption for thermo-power generation almost tripled to reach 488 million tons, over one-third of total coal consumption (*Statistical Yearbook of China*, 1998: 253).¹⁰ Emissions by thermal power plants of sulfur dioxide, the main cause of acid rain, account for one-third of total SO₂ emissions and have given rise to a massive acid rain problem.

Production and use of automobiles and motorcycles have grown rapidly and become a major source of urban air pollution. Since the mid-1980s, output of cars, motorcycles and trucks has increased at an annual rate above 10 percent. Oil consumption for transportation doubled between 1980 and 1996, when it reached 29.4 million tons. Half of the petroleum refined in China is leaded gasoline used mostly for high-compression automobile engines. The density of lead concentration in the air of big cities has grown in step with the use of automobiles; for instance, average density of lead in Guangzhou's air increased by 12 times between 1988 and 1995.¹¹

Indoor air pollution is also very serious. Many people, especially in rural areas, are exposed to indoor pollution that exceeds all environmental quality standards. Most households still depend for heat and other energy needs upon solid fuels such as coal and wood, smoke from which contains particulates, sulfides, carbon dioxide and carbon monoxide, which have caused a very high incidence of diseases of the respiratory tract. Such diseases constitute the number one killer in rural areas and the third cause of death in urban areas.¹²

Table 4.17. Air Pollution Comparison of World Cities

Country	City	Population (1,000)	Total Suspended Particles (mg/cubic meter)	SO ₂ (mg/cubic meter)	CO ₂ (mg/cubic meters)
China	Shanghai	13,584	246	53	73
	Beijing	11,299	377	90	122
	Tianjin	9,415	306	82	50
Australia	Sydney	3,590	54	28	NA
Austria	Vienna	2,060	47	14	42
Brazil	Rio	10,181	139	129	NA
Canada	Toronto	4,319	36	17	43
US	New York	16,332	NA	26	79
	L.A.	12,460	NA	9	74
	Chicago	6,844	NA	14	57
Singapore	Singapore	2,848	NA	20	30
Spain	Madrid	4,072	42	11	25
France	Paris	9,523	14	14	57
Germany	Frankfurt	3,606	36	11	45
	Berlin	3,317	50	18	26
India	Delhi	9,948	415	24	41

Source: World Bank, World Development Indicators, 1998:162.

In many big cities, air concentrations of particulates, SO₂ and CO₂ are very high, as a result of emissions from industrial boilers, cars and residential burning of coal. The health of residents of Shanghai, Beijing and Tianjin has been seriously threatened by suspended particulates. Nor is urban pollution an attraction to foreign tourists, good air quality being a common feature of major tourist cities throughout the world, from Paris and Madrid to Sydney, Toronto and Singapore (see Table 4.17.). Recently, Beijing, Tianjin and Shanghai have all adopted stringent measures to control air pollution.

The area affected by acid rain continues to expand. Research indicates that in the last eight years, it has spread by about 1 million square kilometers and its acidic content increased by 2-8 times. This is very severe, by international standards. By 1995, total sulfur emissions had increased to 11 million tons and acid rain was spreading rapidly in regions along the middle and lower reaches of the Yangzi, the upper reaches of the Yellow River and most parts of the industrialized Northeast. Although China appears to export less than 2 percent of its total emissions to surrounding countries,

the absolute amount is fairly large (Ren Zhenhai, Wang Wenxing, Feng Zongwei and Chen Fu, 1998).

In China, high rates of energy consumption go hand in hand with heavy pollution. According to the World Bank, total energy use rose from 6.6 percent of the world total in 1980 to 9.9 percent in 1994, which was greater than that of Japan (6.0 percent) and ranked second in the world after the U.S. (25.4 percent). Although China's energy utilization and CO₂ emissions per capita are much lower than those of the U.S. or Japan, China has already become the second largest emitter of greenhouse gases after the U.S.¹³ In 1995, after industrialized countries banned the production of goods using ozone-depleting chloroflourocarbons (CFCs), China became the biggest producer of such products.

Water Pollution and Water Shortage

China suffers from a serious shortage of fresh water, especially in the north,¹⁴ and rampant water pollution is worsening the situation. Water pollution has the following sources:

- (a) Industrial wastewater. In 1997, the total

discharge of industrial wastewater was almost 19 billion tons. The major industries discharging wastewater include paper, metallurgy, chemicals, mining, food processing, breweries, tanning, printing and dyeing. In the past decade, the quantity of untreated industrial wastewater discharged has fallen and wastewater treatment increased.

(b) Urban residential wastewater discharge continues to increase. About 40 percent of total wastewater comes from urban residential discharge. From 1981 to 1995, the volume of such discharge increased by 3 times.

(c) Rural wastewater includes industrial discharge from village and township enterprises and runoff of agricultural water containing nitrogenous fertilizers and pesticides. These farm chemicals dissolve easily in rainwater, change into liquid pollution and flow into the local and regional water supply. In addition, with the development of the livestock industry, animal wastes are discharged directly and indirectly into water supplies, where they become sources of water-borne parasitic, virus and bacterial diseases (World Bank, 1997).

Among 532 Chinese rivers surveyed, 82 percent are polluted to some extent. Among the fifteen major cities located along China's seven major rivers, thirteen have polluted river water. Pollution in primary tributaries of large rivers is very common. The higher the level of tributary, the more serious its pollution. In lakes and ponds eutrophication is an increasingly serious problem.

4.2. Economic Losses From Disasters and Pollution

The World Bank estimates that losses from air and water pollution alone generates costs equal to 3 - 8 percent of China's GDP.¹⁵ Behind such figures lie the many kinds of damage to health from pollution of urban air, indoor air and water, as well as the mental and nerve system damage to children exposed to high levels of lead; reductions in farm crop yields and deforestation due to acid rain, etc.

Losses Due to Natural Disasters

Reductions in grain output and other direct economic losses due to natural disasters are getting larger over time, as shown in Table 4.18. From 1990 to 1997, the average annual loss reached 23 million tons, five times that of the 1950s. More significantly, the **proportion** of the crop damaged has also increased, to 5 percent of total grain production in the 1990s. Annual direct economic losses from natural disasters added up to 3-5 percent of national GDP in the first half of the 1990s (Figure 4.3.). At present, Japan loses around 0.6 percent of its GDP and the U.S. less than 0.1 percent of its GDP to flooding annually. Both in absolute and relative terms, China is unusually prone to huge losses from natural disasters (Hu Angang, Aug. 1998).

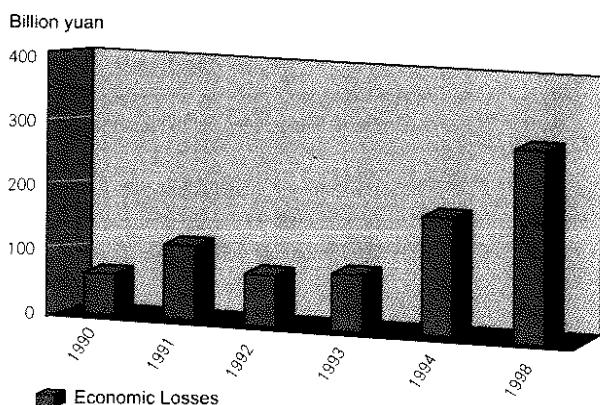
Table 4.18. Grain Losses Due to Disasters, 1952-1997

Year	Annual Grain Losses Due to Disaster (million tons)	Annual Grain Yield (million tons)	Proportion of Loss to Yield (%)
1952-1959	3.79 [1.52]	180.251 [14.372]	2.1 [0.8]
1960-1966	6.12 [1.71]	173.861 [25.975]	3.5 [1.0]
1970-1979	6.63 [3.56]	276.124 [28.970]	2.4 [1.3]
1980-1989	15.95 [3.25]	276.990 [32.546]	4.2 [0.9]
1990-1997	23.03 [4.25]	461.388 [25.396]	4.99 [1.9]

Source: Calculation based on data in *Statistical Yearbook of China*, 1992: 35, 358, 365, 385; and *China Statistical Abstract*, 1997: 92, 98.

Note: Data in brackets are standard deviations.

Figure 4.3. National Direct Economic Losses From Natural Disasters



Source: Calculated by Hu Angang based on *China Disaster Report: 1949 to 1995*, 1995: 403-407. Data for 1998 are from the Ministry of Civil Affairs, *People's Daily*, 7 July, 1999.

Notes: Based on current prices.

4.3. Environmental Protection Plan

China's leaders have come to grasp the importance of environmental protection and have taken measures to combat pollution and ecological destruction. In 1994, the State Council passed *China's Agenda 21: White Paper for China's Population, Environment and Development in the 21st Century*. *China's Agenda 21* provides some guiding principles for protecting the environment and achieving sustainable development during the ninth five-year plan (1996-2000) as well as an outline of longer-term objectives for the year 2010. The government has promised to control the discharge of industrial wastewater, improve the rate of wastewater treatment, and restrict emissions of SO₂ and CO₂. In January, 1999, the State Council established a National Environmental Construction Plan to set environmental plans for the period until 2010 (see Table 4.19.), the medium term (from 2010 to 2030) and the long run (from 2031 to 2050). These objectives include: protecting natural forests and biodiversity; promoting afforestation; controlling water erosion; preventing and controlling desertification; promoting sustainable agriculture; and establishing a complete warning and protection system for the natural environment by the middle of the next century.

To make progress in accomplishing these goals will require increases in the material and human resources devoted to environmental protection as well

as the factoring of environmental impact into policy decisions affecting economic structure. The World Bank has recommended a pollution abatement program costing some 3.1 percent of GDP. This is four times the present level of 0.7-0.8 percent, and double the target of 1.5 percent of GDP frequently voiced within China, itself (World Bank, *China 2020*: 80, and Vermeer, Dec. 1998: 955).

The record of the recent past does not generate confidence that the needed commitment will be forthcoming. Table 4.20. shows the funds earmarked for pollution control between 1985 and 1995. Among the various funds, only "capital construction fund" and "environmental protection subsidy fund" come from the government budget, in all likelihood.¹⁶ Budgetary allocations for pollution control accounted for only 0.12 percent of GNP in 1985, and never exceeded that level through 1995, in which year it actually fell to 0.06 percent. If the central government does not take the lead in efforts to control pollution, China's environmental problems will only worsen.

5. Declining State Fiscal Capacity and Its Consequences

In the planned economy, the government harvested revenues from state-owned enterprises (SOEs), particularly those in the manufacturing sector. Because the government controlled prices, it could ensure that SOE profitability was high, and thus that national saving was ample. SOE profits ensured large current surpluses for the government, and these current surpluses were used to fully fund new investment. With economic reform, the government gradually abandoned control over most product prices, and encouraged entry and competition in most fields. One result was that SOE profitability eroded substantially. Operating surpluses as a share of GDP sharply declined and government revenues as a share of GDP fell from 35.8 percent of GDP in 1978 to only 11.2 percent of GDP in 1995. Only when the fiscal system was fundamentally restructured and redefined, and revenue shifted to a primary reliance on broad-based taxes such as the value-added tax (VAT) in 1994, did fiscal trends begin to shift. Between 1995 and 1997 the revenue share of GDP increased slightly to 12 percent of GDP.

Table 4.19. Master Plan for National Environmental Construction

Key Area	Targets for 2003	Targets for 2010
Upper and Middle Reaches of Yellow River	Water run-off treatment of 70,000 square km. Afforestation of 3.5 million hectares. Slope plantation of 300,000 hectares	Water run-off treatment of 150,000 square km. Afforestation of 9.7 million hectares.
Upper and Middle Reaches of Yangzi River	Water run-off treatment of 80,000 square km. Afforestation of 3 million hectares. Slope plantation of 700,000 hectares.	Water run-off treatment of 160,000 square km. Afforestation of 15 million hectares.
Wind and Sand Area ¹	Wind and Sand Area Treatment of 40,000 square km. Construction of farmland protection forest of 750,000 hectares Restoration to farmland of 450,000 hectares of sandy soils.	Wind and Sand Area Treatment of 90,000 square km. Construction of farmland protection forest of 1.6 million hectares.
Grasslands ²	Grassland improvement of 10 million hectares. Construction of high standard of grassland of 3 million hectares. Insects and rats control of 25 million hectares	Grassland improvement of 26.7 million hectares. Construction of high standard of grassland of 8 million hectares.
National	Treatment of 300,000 square km. of water run-off area. Land desertification treatment of 9.6 million hectares. Forest incremental of 25 million hectares. Forest rate reaches 17.6%. Slope plantation treatment of 3 million hectares. Conversion of 3 million hectares of cultivated land to forest. Grasslands improvement of 20 million hectares.	Treatment of 600,000 square km. of water run-off area. Land desertification treatment of 22 million hectares. Forest increment of 39 million hectares. Forest rate reaches 19%. Slope plantation treatment of 6.7 million hectares. Conversion of 5 million ha. of cultivated land to forest. Grasslands improvement of 50 million hectares.

Source: State Council, Master Plan for National Eco-Environment Construction, 6 Jan. 1999.

Notes:

1. This region includes dry areas of western Northeast China, the northern part of North China, and most parts of Northwest China.
2. This region includes 400 million hectares in Inner Mongolia, Xinjiang, Qinghai, Sichuan, Gansu and Tibet.

Excessive decentralization has significantly weakened the central government's capacity to perform its appropriate functions, which has made it more difficult to cope with the human development problems discussed in this chapter. In addition to these, other problems exacerbated by fiscal inadequacy and impacting on human development include the shortage of public goods and services, the underdevelopment of infrastructure and the spread of corruption.

5.1. Public Goods and Services

The shortfall of revenue makes it difficult for the central government to provide an adequate supply of

public goods and services. A prime example is the attempt to establish a new social security system to cover the urban population. In order to implement a thorough reform of state enterprises, their current responsibilities for pensions, as well as for the income security of their workers, must be replaced by viable alternatives. Thus, new retirement and unemployment programs are being established. But these programs are still greatly inadequate to the scale of the problems facing them, in large part because of insufficient funding. The transitional needs of these programs while they are being established require an appropriately large infusion of public funds, but the government's fiscal weakness makes this impossible.

Table 4.20. Pollution Control Funds, 1985 - 1995 (billions of yuan)

	(1) Total	(2) Capital Construction Fund	(3) Environmental Protection Subsidy Fund	(4) Technical Renovation & Transformation Fund	(5) Retained Profits	(6) Loans	(7) (1)/GNP (%)	(8) (2+3)/GNP (%)
1985	2.21	0.51	0.49	0.06	0.06	0.32	0.26	0.12
1988	4.25	0.96	0.66	1.21	0.01	0.83	0.30	0.12
1989	4.35	0.95	0.63	1.46	0.11	0.75	0.27	0.09
1990	4.54	0.09	0.68	1.34	0.11	0.75	0.26	0.04
1991	5.97	1.40	1.02	0.72	0.21	0.56	0.30	0.12
1992	6.47	1.40	1.09	1.79	0.22	0.60	0.27	0.10
1993	6.93	1.31	1.07	2.09	0.32	0.62	0.22	0.08
1994	8.34	1.88	1.03	2.48	0.33	0.60	0.18	0.06
1995	9.87	2.48	1.03	2.86	0.46	0.59	0.17	0.06

Source: *Statistical Yearbook of China*, 1993: 822; and 1996: 742.

With the rate of economic growth slowing and unemployment rising sharply, the state is committed to proceed with a reform that will leave many more millions of workers without income support or pensions (see sections 1.1 and 1.2 above).

5.2. Deficient Infrastructure

Although investment in infrastructure has generally been strong during the transition period (see Chapter 5), parts of China's industrial infrastructure are deficient. Consider railroad and highway transportation. India, which is at a stage of development similar to China's but is only one third as large in area, has considerably more railroad and highway mileage than China (Figure 4.4.). The deficiency of transport infrastructure has become a bottleneck in China's economic development, as is acknowledged by both government officials and economists.

5.3. Corruption

Widespread corruption was an important factor contributing to the social unrest in the late 1980s. One cause of this corruption, however, is the legitimization of rent-seeking activities (in China called "*chuangshou*" or "creating income") by state agencies.

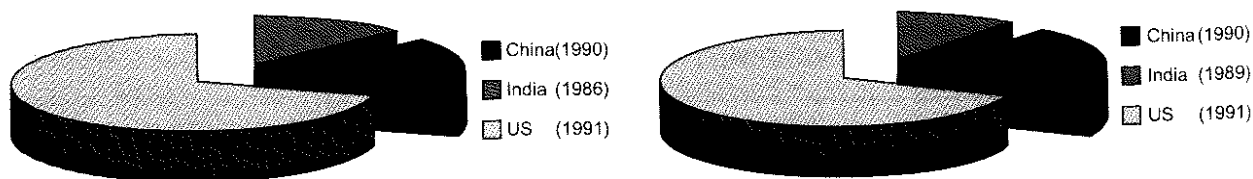
With budgeted funds inadequate to support their

routine operations, not to mention to provide competitive earnings for their staff, government agencies have desperately sought new sources of income, and the central government thus was compelled to permit "*chuangshou*." Army units, the police force, courts, hospitals, public libraries, universities, neighborhood committees, tax bureaus, party schools, propaganda departments, and all sorts of party and state agencies were told "if you want more funds for your routine operations and for paying your staff's bonuses, go out and find money yourselves" (An 1992). State agencies proved extremely creative in "making money" in three principal ways: (1) investing in subsidiary companies that operate in the market place; (2) using their monopoly of information and bureaucratic distribution networks to engage in arbitrage, buying at low planned prices and selling at market prices; (3) simply imposing ad-hoc charges (*tanpai*) on individual households and enterprises.

"*Tanpai*" is not only a way for local governments to raise capital for investment but also a vehicle for state agencies at large to increase their operational and bonus funds. That is why *tanpai* has greatly proliferated in recent years.

While the dual track system¹⁷ provides one vehicle for the expression of *chuangshou*, the latter would continue to exist even without it. To deal with the problem of corruption, the state thus has to stop

Figure 4.4. Railway and Highway Mileage in China, India and US



Source: CIA, *The World Factbook*, 1992: 22, 156, 359

chuangshou by state agencies; but this in turn requires that the government's extractive capacity be restored.

Thus, a common theme in thinking about the state's response to the serious human development problems outlined in this chapter is its fiscal weakness,

which compromises its capacity to implement vigorous corrective policies. We return to this issue with some positive suggestions for addressing it in the final chapter.

Notes:

1. *China Statistical Yearbook*, 1997; a registered urban unemployed worker is defined as a non-farming person within working age range, who has the ability to work, and declares herself to be unemployed and registers at a local employment service institution for finding a job. According to this standard, the national urban unemployed population reached 5.53 and 5.7 million respectively in 1996 and 1997, and the unemployment rate was 3.0% and 3.1% accordingly. *China Statistical Yearbook*, 1997, pp.143.

2. In the survey of 1995 and 1996, urban unemployment was 7.9 million and 8.15 million respectively. *China Labor Statistics Yearbook*, 1997, pp.3.

3. Of these, some 30 million went to cities outside their home provinces. See *China Yearbook of Labor Statistics*, 1998, p. 135.

4. China Study Research Group, Chinese Academy of Science, 1998. These figures do not include rural unemployment. In 1995, Mr. Li Boyong, Minister of Labor estimated that by the end of this century, total urban unemployment will reach 16 million and the unemployment rate will be 7.4%. This is an estimate without taking into account of the massive layoffs of the state owned enterprises.

5. These figures are in constant prices. They are estimated from data in *Statistical Yearbook of China*, 1997, pp. 412, 425, 439; and 1998, pp. 432, 445; and *China Yearbook of Industrial Statistics*, 1998, pp. 22, 53, 54; and deflated using the prices indexes of investment in fixed assets, from the *Statistical Yearbook of China* of various years.

6. See Lin et al, 1997. Also, Khan and Riskin. Regional disparities are discussed in the UNDP 1997.

7. See Wong, et al. for a detailed discussion of local finances.

8. These statistics do not include the migrant population living in towns and cities without full urban residency status. Undoubtedly, the ownership rates of common consumer durables by migrants is well below those of full status urban residents.

9. *China Environment and Sustainable Development Resource Book II: A Compendium of Donor Activities*, Aug. 1996: 7. The degree of disappearance of forest cover must be judged in reference to the original cover, which in China was a far smaller proportion of total area than, say, in Japan. This observation is owed to a comment by Barry Naughton.

10. Thermal power generation is listed under "consumption by usage", whereas industry is listed under "consumption by sector". Power generation is in fact a branch of industry. Hence the two figures given in the text do not conflict.

11. World Bank, *Clear Water and Blue Skies, China's Environment in the New Century* 1997.
12. Ibid.
13. World Bank, *World Development Report 1997: World Government in Transition*, 1997.
14. See UNDP, *China Human Development Report*, 1997, for a discussion of the water shortage problem. See also Nickum, Dec. 1998: 156.
15. World Bank, *China 2020*, 1997: 71; and World Bank, *Clear Water, Blue Skies: China's Environment in the New Century*, 1997. The higher figure results from the most reasonable method of estimation.
16. The "technical renovation and transformation fund" and "retained profits" are from extrabudgetary income and loans come from the bank.
17. This refers to a system instituted in the 1980s, in which state enterprises sold part of their output to the state at low fixed prices, and the rest on the market at market prices. The price differences provided ample opportunity for profiteering by well-placed bureaucrats.

Chapter 5

THE CHANGING ROLE OF THE STATE, THE IMPERATIVE OF GROWTH, AND HUMAN DEVELOPMENT

As China works to reform its economy, evolve new forms of governance, and change the relations of state to economy and society, it has avoided the grave setbacks to human development that have afflicted many transition countries in Europe; indeed, levels of human development have continued by and large to improve. Yet the difficult problems discussed in Chapter 4 are merely the most immediately pressing of many human development problems currently facing the Chinese people and state. Together, they pose a formidable challenge to the capacity of the state to complete the transition without losing ground in the battle to promote human development. While the attempt to fashion detailed solutions to these problems is beyond the scope of this report, we offer in this concluding chapter some important principles that should guide the process of redefining the state's role.

Sustainable human development requires economic growth as well as equitable distribution and enlightened public policies. In the planned economy, the government directly promoted growth; in particular, the state budget financed nearly all fixed investment, just as government directly ran most industries. China has already successfully made a substantial initial transition away from the central planning model. However, this initial transition still leaves many unresolved problems. The state still needs to withdraw from roles left over from the era of central planning; reduce its direct controls over economy and society; shift to the use of fiscal and monetary policies and regulation to influence economic affairs; increase its commitment and capacity to support education, health, poverty reduction, environmental protection and other human development goals; and work to establish an enabling environment for the emerging civil society to play its own increasing role.

Much of the redefinition of state role concerns changes in the government financial system and its uses.

This system still needs to go through an additional transition to complete the change-over to a mixed market economy. In the short run, however, the government's reduced fiscal circumstances lead to an important summary principle:

- *Government revenues are extremely limited, and will not allow the government to perform all the important tasks worth doing; as a result, government should rigorously select for direct government support those activities with clear public goods attributes or that cannot be adequately performed by other social actors.*

One of the purposes of a shift to a regulatory approach is simply to free the government of a series of fiscal burdens so that, given limited tax revenues, government revenues can go to the things that are not just arguably more important, but also the things that non-governmental sectors absolutely cannot take over.

- *Regulation of non-governmental activity can be an effective substitute for direct government action, saving resources and achieving social interests more economically.*

We return to this theme later in the chapter. First, however, we discuss the longer run need to strengthen the government's fiscal position.

1. Importance of Government Fiscal Capacity

For government to be effective, it must be fiscally viable. Indeed, the mobilization of fiscal resources is a precondition for the state to perform any of its basic roles discussed in Chapter 1. It is self-explanatory that public financing is required for the provision of collective goods and services, the redistribution of income, and public investment. To be operative, macroeconomic stabilization as well has to be conjoined with various fiscal policies, which can be costly. For countries that are in the process of market

Table 5.3. Revealed Unpaid Tax Revenue, 1985-1996 (billion yuan)

1985-1992	1993	1994	1995	1996
90.1	12.7	20.4	22.7	22.4

percent). Why has the ratio of total government revenue to GDP continued to fall under the new fiscal system? Very simply, the government loses a huge amount of revenues to various holes in the system.

One such hole is tax evasion. Table 5.3 gives the figures for unpaid taxes revealed during annual tax inspections. These figures, of course, represent only the tip of the iceberg. It is estimated that China can collect only 50 to 75 percent of its taxes (Ding, 1996; Liu, 1996). In other words, tax evasion costs China more than 200 billion yuan per year (An & Liang, 1996).

A second source of fiscal leakage was unauthorized tax reductions and exemptions. In principle, under the new fiscal system, local governments no longer had a right to grant tax breaks and exemptions without central approval, but some local governments continued past practices. It was estimated that authorized and unauthorized preferential tax policies together cost the government at least 150 billion yuan of annual revenue.²

A third hole is extra-budgetary funds, discussed above, which amounted to more than 389 billion yuan by the end of 1996, double what they had been in 1994 (Ministry of Finance, 1997).

Finally, an additional category of "extra-extra-budgetary funds" has been growing in recent years. Derived from ad hoc charges, unauthorized fees, forced "contributions," and the like, such funds are subject to no budgetary control whatsoever. Consequently, no official statistics about such funds are available. By rough estimate, they amounted to 60 to 200 billion yuan in 1996 (Ding, 1996; Xu & He, 1996; Li & Liu, 1997).

Of these four fiscal holes, the first two and the last are illegal. The appropriate remedy, therefore, is greater resolve in obtaining compliance with the law. The third hole, however, is a legitimate one. As long as it is permissible for local governments to have extra-budgetary funds, the central government can do little to

prevent them from exploiting this loophole. Here, the appropriate remedy is to incorporate extra-budgetary funds into the formal system of budgetary accounting.³ The primary purpose of reclassifying irregular public outlays as budgetary revenues and expenditures is to improve the current system of management, such that transparency is increased, and public oversight and monitoring is enhanced. Moreover, improved management of expenditures is essential so that distribution can be steered by public policy objectives and be made more equitable. For instance, local public works and education require national support to compensate for regional differences in economic development.

- *Public revenues and expenditures should be reclassified as budgetary revenues and expenditures, and subjected to standard procedures of accounting, auditing and monitoring by government bodies, in order to achieve more transparency, better management, public oversight and greater equity.*

China's 1994 fiscal reform aimed at replacing the old discretion-based system with a rule-based system. The rules became much more comprehensive, unambiguous, and transparent; and rule enforcement mechanisms more reliable. China's fiscal reform seems to be moving in the right direction. However, the institutional arrangements between the central and subnational governments in China are still far from optimal: rules concerning some key aspects of the relationship (e.g., expenditure responsibilities) are still absent; there is still no constitutional constraint binding the center to abide by its own rules; huge loopholes continue to drain state revenues; and enforcement mechanisms have few teeth. In short, China still has a long way to go to perfect its central-local fiscal relations (Wang, 1997a).

Nonetheless, if greater compliance with existing tax codes can be obtained, then the government's total revenue share will increase. China's tax code certainly has a built-in buoyancy greater than one, because it falls predominantly on the rapidly growing manufacturing sector. We can expect to see an increasing revenue share, reflecting three different processes: (1) reclassification of government extra-budgetary revenues as formal budgetary receipts; (2) plugging of the other holes and tightening collection of existing

taxes at existing rates; and (3) incorporation of a growing social security system into the formal budget.

These processes should bring the formal revenue to GDP ratio to the range of 22-25 percent of GDP. That would be roughly adequate to allow the Chinese government to fund the highest national and social priorities. Such a change would reflect trends in administration and spending that have been in evidence since 1995. At the same time, even a revenue effort of this magnitude, which is considerable, would provide little or no surplus for non-essential outlays. The demands on China's public purse would continue to require a concentration of spending on crucial public goods outlays.

4. Moving Towards a Diversified Financial System

Of equal importance with changes in handling budgetary revenues are related changes in the overall financial system. As direct government revenues declined, household saving has taken up the slack, increasing in the form of direct investment in rural housing and small businesses, but also as an explosion of financial saving in the banking system. The vast majority of these funds were loaned to state-owned enterprises. As a result, investment rates remained high and crucial infrastructure investments remained robust. Thus, China successfully made the transition from a financial system in which government saved and invested directly, to one in which the banking system served as an intermediary, channeling household saving to investment in (state-owned) productive businesses.

However, China was left with a *monolithic* financial system. It was *institutionally* monolithic in that banks were the predominant formal financial institution, accounting for 90 percent of flows through formal institutions. Very little fund-raising was done via bonds (except for Treasury bonds) or stock issuance. The system was also monolithic in directing funds overwhelmingly to SOEs. This monolithic financial system was devoid of the efficiency benefits of competition and easily distorted by government allocations of credit. More recently, however, this has begun to change. Not only are non-state owned enterprises increasingly significant, but credit is beginning to flow to households as well, particularly in

the form of mortgage finance for housing reform. Yet farmers and small entrepreneurs still have difficulty obtaining needed credit. Thus, another general principle is:

- *The financial system must be adapted to a multiplicity of different borrowers with different requirements; and a multiplicity of lenders with different assets. The financial system must therefore become diversified.*

5. Principles of Essential State Action for Economic Growth

Put more broadly, the above principle leads to the first of a series of essential state functions:

- (1) *In order to sustain growth, the government must provide the institutional framework to support a diversified financial system, one which can meet the needs of a broad range of savers and investors with differing requirements.*

This principle provides the public finance aspect of an enabling environment to stimulate the development role of a multiplicity of individuals and institutions in the new market environment. But in this transition, the government also needs to maintain certain essential functions that only the government can provide. These are particularly important in the transition process, because deregulation associated with transition will inevitably lead to sudden re-allocations of portfolios, accompanied by destabilizing financial flows. In this context, it is essential that:

- (2) *The government, through the People's Bank of China, implement a monetary policy that promotes sustainable growth over the long term by keeping monetary and credit expansion in step with the economy's non-inflationary output potential.*
- (3) *The government, again working through the central bank, must insure that the banking system can function effectively as a liquidity provider. This implies a monetary policy that provides for the short-run cash and payment needs of society.*

Those are the key financial functions. But development is not solely given by financial institutions. Some investments have differentially powerful effects

on overall development, because of their public goods character or the presence of externalities. Given that government resources are inadequate to fund all projects with positive returns, government must focus on identifying and fostering those investments that have a strong public goods character, or that have important external benefits (see Chapter 1). The most important such investments are those relating to infrastructure, as well as those relating to health, education, science, technology, and innovation. Core parts of the human development agenda clearly come under this category.

(4) *The government should create systems to ensure adequate investment in public infrastructure, through direct provision of budgetary resources, subsidies, or other forms of institutional support.*

(5) *The government must foster investment in public health and in knowledge creation, including adequate funding of education, the protection of returns from innovation, and investment in technological improvement.*

The government can accomplish many of its objectives in these areas with relatively little revenue outlay. Of course, there may be substantial demands on the time, attention and skill of policy-makers, for these are complex systems that are difficult to run well. But at the same time, some of these activities generate considerable revenue, and government institutions, such as the central bank, can easily be self-supporting. Only moderate amounts of budgetary revenues are likely to be required. This in turn means that scarce budgetary resources can be devoted to activities with a direct impact on human welfare and social livelihood, activities that are more expensive and much more difficult to shift onto non-governmental actors.

Finally, given the depth of the distortions introduced under the planned economy, and the complexity of the transition, government still needs to take firm actions to eliminate remaining barriers that fragment the country and segment markets. This is true for capital, for labor, and for goods. Most important—and most directly relevant to human welfare—is the creation of unified markets for labor. This is already underway, and it a difficult, and long-term process.

(6) *Government must act to unify markets nationwide, remove barriers, and create a "level playing field."*

These six principles guide the discussion in the following section.

6. Discussion of State Activity to Support Development

6.1. Supporting a Diversified Financial System

The Chinese government has been directly engaged in operating a state-owned financial system for almost fifty years. For practical rather than ideological reasons, the government needs to replace its ownership and direct management of this system with indirect regulation and supervision.

Government ownership developed out of a sense that the financial system should serve the public interest, and not become subservient to purely private interests. However, experience has showed that principal-agent problems⁴ are particularly intractable in financial institutions because of the difficulty of devising incentive systems that reward agents for bearing the right amount of risk.⁵ Public ownership makes it more difficult to solve these problems because hard budget constraints, "security deposits," and effective motivational systems are harder to devise within the public sector. At the same time, regulation has become more sophisticated during the last fifty years. Effective regulation can solve many of the problems public ownership was originally designed to solve.

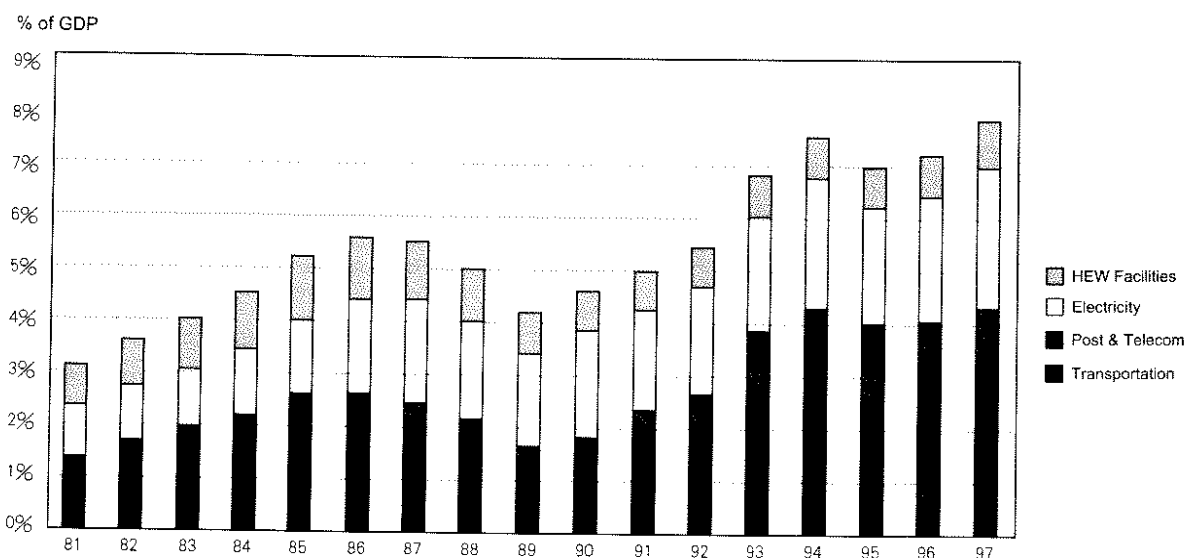
6.2. Macroeconomic Management

The government must work through the financial system to achieve macroeconomic stability. The government must have the ability to influence the growth of the money supply and credit, thereby providing the twin objectives of internal and external balance.

6.3. Liquidity

The government must ensure that the financial system is able to provide liquidity where needed. This includes: (a) providing liquidity despite regional and seasonal fluctuations in demand for liquidity; and (b) serving as lender of last resort when financial institutions fail.

Figure 5.1: Infrastructure Investment: Major Trends



6.4. Infrastructure Investment

An essential government function—particularly critical for developing economies—is ensuring the healthy growth of infrastructure investment. In the area of infrastructure there are two major requirements. The first is that the government actively or passively provide financing for infrastructure investment; this includes direct government finance, as well as the creation of a regulatory and market environment that facilitates private investment in infrastructure provision. The second requirement is that the government provide a framework for infrastructure planning, in order to resolve land use conflicts, ensure rational allocation of resources among alternative strategies, and provide guidance to private decision-makers.

China's performance in infrastructure provision has in general been strong. Despite major changes in the structure of national saving and the organization of financial institutions, China has been able to maintain a robust level of investment in infrastructure. Figure 5.1. displays the major trends in four important categories of physical infrastructure. Since 1993 investment in these four categories of physical infrastructure together has been around or above 7 percent of GDP, quite a healthy level by comparative standards. Other

categories of urban and rural infrastructure investment have also shown strength in recent years.

However, within overall infrastructure investment, the amounts going to transport and, especially, to the social sectors, health, education and welfare (HEW) have been less satisfactory. Investment in HEW facilities, as a share of GDP, actually peaked in 1985-86 at around 1.2 percent of GDP. It then declined to 0.8 percent in 1989, and has remained about that level since.⁶ The main component fluctuating here is education investment, which is about three times the value of health and welfare construction. China needs to improve public education resources at all levels of the educational system, especially in poorer communities, and restore the public health orientation of its health care system, including devising an adequate successor to the Cooperative Medical System in the countryside. All of this will require increased public fund commitments.⁷

- Overall, then, while the level of total physical infrastructure investment has been substantial, there is a strong case to be made for increasing resources going to the social sectors, especially in poorer areas hurt most by fiscal decentralization.

Figure 5.2.
Central Government Fixed Investment

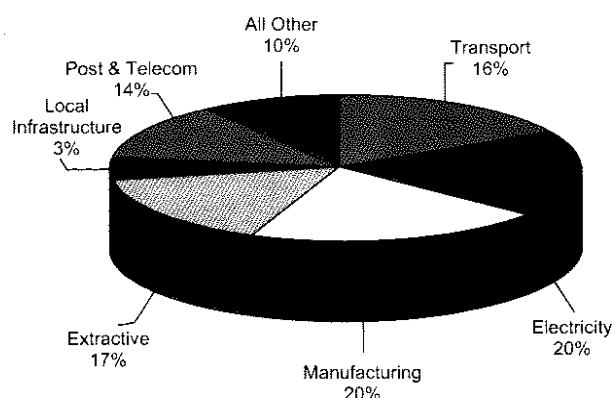
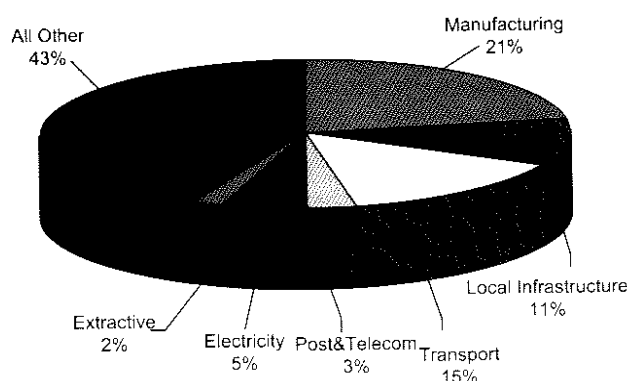


Figure 5.3.
Local Government Fixed Investment



6.5. Management Responsibility

Central and local governments have dramatically different types of responsibility for infrastructure provision. The central government has predominant responsibility for some types of transport (railroads and air), post and telecommunications, and electricity. Local governments have nearly total responsibility for urban utilities, roads, health and welfare facilities. Local governments also have predominant responsibility for education facilities and rural water conservancy projects. The difference in responsibility by level of government reflects a clear, and basically

reasonable, division of labor.

Figure 5.2 shows total central government fixed investment in 1996, revealing a profile not too different from that of other mixed market developing or developed economies. The three main categories of central government infrastructure (transport, PTT, and electricity) account for exactly 50 percent of central government fixed investment. We can say that most central government fixed investment goes for public purposes, for infrastructure provision and government activities.

It is true that central government investment contains a substantial amount of investment in productive activities: 20 percent of the total goes to manufacturing, and 17 percent to extractive activities. However, this investment is fairly concentrated in a small number of sectors, relating to natural resource extraction and a few capital-intensive industries.⁸ It is not unusual for such sectors to be publicly owned in mixed market economies.

Local government investment is significantly different overall (Figure 5.3). Infrastructure provision accounts for only one-third of the total. Investment is much more diverse. Local government investment is about 50 percent larger than central government investment, and accounts for over three-fifths of total government investment. A large and diverse group of industrial sectors are important recipients of investment, including many that do not have significant economies of scale and are rarely subject to public ownership in mixed market economies. Much local government investment also goes to real estate and services. It is hard to resist the conclusion that these are areas in which local government need not be so deeply involved.

6.6. Investing in Knowledge Creation

Investment in knowledge creation is an appropriate activity for government because it generates important external benefits that prevent it from being adequately supplied through the market. Moreover, it is fundamental to the human development goal of increasing human capabilities.

- *Increasing direct government investment is appropriate in a range of research and development activities, and especially in agricultural research and development, which*

yield high social returns.

- *More broadly, regulation can substitute for direct outlay of resources in the creation of an enabling environment for production of new knowledge.*

Providing better intellectual property rights, particularly in the form of trademarks and patents, can greatly increase the private incentives for knowledge creation. Most important, this type of intellectual property rights also provides important incentives to decentralized actors to improve quality, which is a pressing problem in China. With better protection of intellectual property, decentralized investment in knowledge creation will substitute for some of the investment burden that the government is no longer able completely to assume.

6.7. Dismantling Barriers and Facilitating Unified Markets

The need for government action to break down barriers is most obvious in the case of rural-urban migration, where migratory flows directly interact with all of the urgent social security, unemployment and wage issues. The current system places most of the responsibility for managing labor and migration issues with local governments, which are also responsible for minimizing unemployment in their own jurisdictions. Inevitably, local governments are more responsive to the demands of their own constituents (state enterprise workers) than to the needs of outsiders, even when those outsiders contribute significantly to the local economy. Moreover, as state enterprise restructuring has accelerated, many local jurisdictions have increased barriers to incoming labor in an effort to provide protection and new work for laid-off state workers.⁹ These barriers are in addition to the more fundamental restrictions which make it difficult for migrant workers to establish residency, put their children in schools, and otherwise become full members of urban society.

The existence of these barriers is understandable, as is their widespread evasion by firms, including SOEs. Nonetheless, the national government should work toward phasing out these restrictions on labor mobility in a relatively short time. The government has long recognized that barriers to the inter-regional exchange of commodities are harmful to economic development,

and has forbidden local governments to obstruct commerce. The same principle should apply to labor.

- *Barriers to the flow of labor across regions are harmful to human and economic development, and especially to the alleviation of poverty. The national government should work toward a policy that explicitly protects the right of workers to move across regional boundaries and find work in new locations.*

This policy should include a regulatory component, setting a legal framework for local governments that prohibits them from protecting their own workers at the expense of other Chinese workers.

The current system creates conflicting incentives with respect to migrant workers. Because employers do not contribute to pension and welfare funds for them, they are cheaper to hire than urban residents.¹⁰ A solution would be to partially integrate the migrant worker into the social security system. Full coverage (entitlement to a pension calculated according to universal formulas) is not necessary at this stage. Indeed, many migrant workers sojourn in the cities for greater or lesser periods, but intend to return to their native villages. When they return, they bring valuable capital and entrepreneurial experience with them. Government policy should therefore encourage their mobility in both directions. A recommended alternative to full coverage is to require firms to pay into a retirement account for all workers. From the enterprise's standpoint, the contribution should be an identical percentage for all workers. However, the worker should face a relatively long period before s/he is vested with full pension rights. Until becoming fully vested, the migrant worker should be able to withdraw funds accumulated when returning to the native village. This would also contribute to human development in the home villages.

7. State Action Targeted at Human Development

This section discusses the sphere of government action that addresses human development directly. The present discussion is limited to the current pressing issues of urban employment, pension and unemployment issues.¹¹

A substantial amount, perhaps as much as 7.5 billion yuan, is currently being spent on coping with the

human development is not automatic, but "depends on the quality and distribution of economic growth, not only on the quantity of such growth" (Haq, 1995: 15). Sustainability must be made an essential component of any sensible development strategy. If development is to improve human well-being, then everyone should be able to enjoy its fruits, including better nutrition, more secure livelihood, greater access to knowledge and health services, and higher living standards. Therefore, equity must be another essential component of development strategy.

The government should certainly adjust its development strategy toward one that puts greater emphasis on sustainability and equity. However, "getting the strategy right" is also not enough.

- *To ensure that the new development strategy will be enacted and implemented, it is important to create an institutional environment in which state policies are not biased towards any special interests. This cannot be achieved unless all social groups are given full opportunity to participate in the policy-making process.*

Government should not favor any of the conflicting claims of interest groups. In the decision-making process, "participation of the different groups involved in these conflicting claims is a basic necessity" (Sen, 1996: 21). A system of decision-making that allows broad participation provides the enabling environment that can best resist pressure from the powerful. When the voices of all are heard in the corridors of power, the government will become more accountable and transparent, and its policies will be less likely to undergo sudden and precipitous changes (Stiglitz, 1998).

9. Conclusion

China is in the process of the transition from a command economy to a market economy. The transition, by definition, aims at gradually establishing the market as the central mechanism of resource allocation. The market is not a panacea, nor is it an end in itself, but it is rather a means to promote social and

individual well-being. Active state engagement is indispensable for facilitating both market transition and human development, two goals high on China's agenda.

All governments intervene in their economies by default or design. As many comparative studies have shown, it is in those countries where governments have played active and constructive roles that economic structural adjustment has been swifter, international competitiveness stronger, growth more sustained, and distribution of income and wealth more equitable (Katzenstein, 1978; Johnson, 1982; Zysman 1983; White, 1988).

In the course of the transition from a command to a market economy, the role of the state needs to be redefined and governance improved. The redefinition involves three changes. First, the range of state intervention should be narrowed. The state should continue its withdrawal from roles involving the direct administration of economy and society, and concentrate its attention on those areas where market performance is inherently inadequate, including the core human development areas. Second, policy instruments need to be changed. Rather than relying on administrative commands, the government should influence affairs through fiscal, monetary and regulatory policies, in addition to investing in human development infrastructure (schools, health facilities) and, where necessary, providing social services. Governance can be improved by strengthening state capacity and increasing openness, accountability and participation in the process of policy-making and implementation. Third, the state should permit and encourage the full flowering of civil society, not only as a means of divesting itself of some responsibilities, but more importantly as the only way to take advantage of the inherent creativity of the population at large, and to bring into existence the worthy societal partner needed by an effective state. Evidence from the annals of successful development suggests that when state, society and market operate in tandem and play complementary roles, the whole is greater than the sum of the parts and human development flourishes.

Notes:

1. This calculation uses the conservative assumption that Pension Funds contributions as a share of GDP were unchanged from 1996.
2. See Yu, 1995; Cong, 1996; Herschler, 1995.
3. In August 1996, the central government overhauled extrabudgetary funds. Thirteen major categories of extrabudgetary funds were re-classified as budgetary funds (Zhao, 1996)
4. Principal-agent problems refer to the issue of motivating actors to implement the objectives of those they represent.
5. For detailed discussion of risk-return trade-offs in the principal-agent relationship, see Arshadi, 1989: 31-52; Flannery, 1989: 24, 235; Pennacchi, 1987: 19, 340-60; Pennacchi, 1987: 11, 291-312.
6. There has been some apparent recovery in recent years, and the 1997 figure was 0.94 percent.
7. These issues were dealt with in some detail in the 1997 *China Human Development Report*.
8. Of extractive industry investment by the central government, over 90 percent is in coal and petroleum. Of manufacturing investment, more than two-thirds is in three sectors: petroleum refining, chemicals, and steel.
9. Barriers that have become common in China's cities include the requirement that in-migrants come through organized programs sponsored by local governments in their home regions; that migrant workers register, pay fees, and carry migrant identification cards; that firms must first advertise for a local worker before hiring a migrant. Also, lists of occupations in which migrants may not be hired; fees imposed on production enterprises that hire migrant; and restrictions on the length of contracts under which migrants are hired (for example, contracts should not be longer than two years).
10. Indeed, one of the justifications for such fees is to equalize the cost of hiring an outsider. Despite the fees, it is usually cheaper to hire a migrant worker
11. Equally important rural issues, especially poverty reduction, were dealt with extensively in the 1997 *China Human Development Report*, which included an evaluation of state anti-poverty policies.
12. Scattered statistics on these programs indicate that individual cities spend significant sums: In Shenyang RMB 100 million was set aside for re-employment projects; in Wuhan 30 million; whereas Shanghai spent 626 million. These three cities employ a total labor force of 10 million, compared to 150 million total nation-wide urban labor-force. Thus, if these cities spend more than the average per capita, they might still account for 1/10, indicating a total national outlay of 7.5 billion. See Wang Chengying, *Zhongguo Zaijiuye* [Re-employment in China], Chengdu: Sichuan Daxue, 1998, p. 203 for Shenyang; Yang Yiyong et al, "Shiye Chongjibo" [The Shock Wave of Unemployment], Beijing: *Jinri Zhongguo*, 1997, p. 230 for Shanghai; for Wuhan, "Wuhan shi Zhuazhu," *Zhongguo Jiuye*, 1998:2, p. 16, and Jiangnan daxue ketizu, "Studies of Wuhan's Implementation of the Reemployment Project," Wuhan, 1998, p. 61, cited from a manuscript by Dorothy Solinger.
13. This calculation is based on a joint State Statistical Bureau and Ministry of Labor survey of urban worker households in December 1997 and January 1998. The total number of laid-off workers of 11.51 million laid-off enterprise workers reported in most sources was adjusted upward to 12 million by the author to account for laid-off workers from administrative and government units.
14. Beijing University Chinese Economics Research Center, Urban Labor Market Research Group, 1998: 103.
15. Beijing University Chinese Economics Research Center, Urban Labor Market Research Group, 1998: 109.

Table 1. Human Development Index by Province in 1997

PROVINCE	Life expectancy index	Education index	GDP index	HDI	HDI rank	GDP rank
Shanghai	0.832	0.824	0.975	0.877	1	1
Beijing	0.798	0.840	0.963	0.867	2	2
Tianjin	0.789	0.810	0.957	0.852	3	3
Guangdong	0.792	0.789	0.949	0.843	4	4
Liaoning	0.754	0.801	0.939	0.831	5	8
Zhejiang	0.780	0.735	0.949	0.821	6	4
Jiangsu	0.773	0.735	0.945	0.817	7	6
Fujian	0.726	0.737	0.944	0.802	8	7
Shandong	0.760	0.702	0.849	0.770	9	9
Heilongjiang	0.700	0.790	0.809	0.766	10	10
Hebei	0.756	0.759	0.676	0.730	11	11
Jilin	0.716	0.804	0.610	0.710	12	15
Hainan	0.750	0.745	0.632	0.709	13	14
Hubei	0.704	0.761	0.655	0.707	14	13
Xinjiang	0.627	0.773	0.656	0.685	15	12
Shanxi	0.733	0.782	0.522	0.679	16	16
Hunan	0.699	0.776	0.511	0.662	17	18
Henan	0.753	0.745	0.487	0.661	18	19
Guangxi	0.729	0.741	0.478	0.649	19	21
Anhui	0.741	0.713	0.482	0.646	20	20
Inner Mongo	0.678	0.740	0.517	0.645	21	17
Chongqing	0.689	0.727	0.489	0.635	22	22
Jiangxi	0.685	0.764	0.455	0.635	22	22
Sichuan	0.689	0.723	0.441	0.617	24	26
Shaanxi	0.707	0.741	0.404	0.617	25	28
Ningxia	0.699	0.669	0.440	0.603	26	27
Yunnan	0.642	0.665	0.442	0.583	27	25
Gansu	0.704	0.667	0.339	0.570	28	30
Qinghai	0.593	0.545	0.445	0.528	29	24
Guizhou	0.655	0.659	0.233	0.516	30	31
Tibet	0.577	0.435	0.345	0.452	31	29

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1998, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (5) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996. (6) SSB, National 1% Population Survey 1995, China Statistical Publishing House, 1997.

Table 2. Human Development Index by Province in 1990

PROVINCE	Life expectancy index	Education index	GDP index	HDI	HDI rank	GDP rank
Shanghai	0.832	0.800	0.952	0.861	1	1
Beijing	0.798	0.821	0.688	0.769	3	3
Tianjin	0.789	0.800	0.776	0.788	2	2
Guangdong	0.792	0.746	0.506	0.681	5	5
Liaoning	0.754	0.775	0.573	0.701	4	4
Zhejiang	0.780	0.694	0.446	0.640	6	6
Jiangsu	0.773	0.695	0.442	0.637	7	7
Fujian	0.726	0.679	0.373	0.593	12	11
Shandong	0.760	0.684	0.379	0.608	10	9
Heilongjiang	0.700	0.751	0.425	0.625	8	8
Hebei	0.756	0.694	0.302	0.584	14	18
Jilin	0.716	0.757	0.363	0.612	9	12
Hainan	0.750	0.697	0.329	0.592	13	13
Hubei	0.704	0.683	0.322	0.570	16	14
Xinjiang	0.627	0.717	0.375	0.573	15	10
Shanxi	0.733	0.753	0.316	0.601	11	16
Hunan	0.699	0.719	0.250	0.556	18	21
Henan	0.752	0.674	0.219	0.549	20	28
Guangxi	0.729	0.719	0.214	0.554	19	29
Anhui	0.741	0.601	0.239	0.527	23	24
Inner Mongo	0.678	0.698	0.305	0.560	17	17
Chongqing						
Jiangxi	0.685	0.668	0.228	0.527	23	25
Sichuan	0.689	0.679	0.223	0.530	22	26
Shaanxi	0.707	0.673	0.253	0.544	21	21
Ningxia	0.699	0.621	0.286	0.535	25	19
Yunnan	0.642	0.581	0.249	0.490	28	23
Gansu	0.704	0.571	0.221	0.499	26	27
Qinghai	0.593	0.566	0.322	0.494	27	14
Guizhou	0.655	0.585	0.158	0.466	29	30
Tibet	0.577	0.323	0.260	0.387	30	20

Sources: (1) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (4) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996.

Table 3. Change in Human Development Index, 1990 - 1997, by Province (percentage points)

PROVINCE	HDI index	Education index	GDP index
Shanghai	0.016	0.023	0.024
Beijing	0.098	0.019	0.275
Tianjin	0.064	0.010	0.182
Guangdong	0.162	0.043	0.443
Liaoning	0.131	0.026	0.366
Zhejiang	0.181	0.041	0.503
Jiangsu	0.181	0.039	0.503
Fujian	0.210	0.057	0.571
Shandong	0.163	0.018	0.470
Heilongjiang	0.141	0.039	0.383
Hebei	0.146	0.065	0.374
Jilin	0.098	0.046	0.246
Hainan	0.117	0.049	0.303
Hubei	0.137	0.078	0.333
Xinjiang	0.112	0.056	0.280
Shanxi	0.078	0.029	0.206
Hunan	0.106	0.056	0.262
Henan	0.113	0.070	0.267
Guangxi	0.096	0.023	0.264
Anhui	0.118	0.112	0.243
Inner Mongo	0.084	0.041	0.212
Chongqing			
Jiangxi	0.108	0.097	0.228
Sichuan	0.088	0.044	0.218
Shaanxi	0.073	0.067	0.151
Ningxia	0.068	0.048	0.155
Yunnan	0.093	0.084	0.194
Gansu	0.071	0.096	0.118
Qinghai	0.034	-0.021	0.123
Guizhou	0.050	0.073	0.076
Tibet	0.066	0.111	0.085

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1998, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (5) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996. (6) SSB, National 1% Population Survey 1995, China Statistical Publishing House, 1997.

Table 4. Profile of Human Development by Province in 1990

PROVINCE	Life expectancy at birth (years)	Adult literacy rate (%)	Combined 1,2,3 level gross enrolment rate(%)	Adjusted real GDP per capita (ppp\$)	Real GDP per capita (ppp\$)
Shanghai	74.90	86.70	0.667	4771.17	6376.89
Beijing	72.86	89.19	0.679	3478.70	3478.70
Tianjin	72.32	88.41	0.630	3907.06	3907.06
Guangdong	72.52	84.65	0.546	2584.21	2584.21
Liaoning	70.22	88.76	0.551	2911.14	2911.14
Zhejiang	71.78	77.53	0.530	2289.64	2289.64
Jiangsu	71.37	77.71	0.532	2269.14	2269.14
Fujian	68.57	76.96	0.499	1929.25	1929.25
Shandong	70.57	77.62	0.501	1958.39	1958.39
Heilongjiang	66.97	85.60	0.539	2188.21	2188.21
Hebei	70.35	78.37	0.514	1580.74	1580.74
Jilin	67.95	86.21	0.548	1883.93	1883.93
Hainan	70.01	79.49	0.500	1714.53	1714.53
Hubei	67.25	77.48	0.500	1678.92	1678.92
Xinjiang	62.59	81.59	0.519	1941.12	1941.12
Shanxi	68.97	87.09	0.518	1648.71	1648.71
Hunan	66.93	83.06	0.497	1325.01	1325.01
Henan	70.15	77.35	0.475	1177.19	1177.19
Guangxi	68.72	84.34	0.470	1150.21	1150.21
Anhui	69.48	66.47	0.473	1275.38	1275.38
Inner Mongo	65.68	78.85	0.518	1594.76	1594.76
Chongqing	66.33
Jiangxi	66.11	76.04	0.482	1217.11	1217.11
Sichuan	66.33	78.64	0.464	1192.30	1192.30
Shaanxi	67.40	75.04	0.519	1342.28	1342.28
Ningxia	66.94	67.52	0.513	1503.05	1503.05
Yunnan	63.49	64.40	0.455	1320.70	1320.70
Gansu	67.24	60.84	0.496	1185.82	1185.82
Qinghai	60.57	61.45	0.468	1681.08	1681.08
Guizhou	64.29	64.32	0.469	873.99	873.99
Tibet	59.64	31.74	0.335	1376.80	1376.80

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1998, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (5) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996.

Table 5. Profile of Human Development by Province in 1997

PROVINCE	Life expectancy at birth (years) (in 1990)	Adult literacy rate (%)	Combined 1,2,3 level gross enrolment rate(%)	Adjusted real GDP per capita (ppp\$)	Real GDP per capita (ppp\$ in 1990 price)
Shanghai	74.90	89.83	0.674	4886.81	14470.96
Beijing	72.86	92.36	0.674	4826.34	9404.72
Tianjin	72.32	90.16	0.626	4799.71	7753.06
Guangdong	72.52	90.39	0.559	4757.45	5860.32
Liaoning	70.22	91.79	0.568	4709.19	4790.87
Zhejiang	71.78	81.62	0.572	4758.86	5909.21
Jiangsu	71.37	80.72	0.590	4736.42	5251.13
Fujian	68.57	82.55	0.559	4734.33	5202.80
Shandong	70.57	77.36	0.559	4265.42	4265.42
Heilongjiang	66.97	90.82	0.553	4070.42	4070.42
Hebei	70.35	85.70	0.563	3416.27	3416.27
Jilin	67.95	91.87	0.573	3093.13	3093.13
Hainan	70.01	85.89	0.517	3202.16	3202.16
Hubei	67.25	84.95	0.585	3315.12	3315.12
Xinjiang	62.59	88.48	0.550	3317.93	3317.93
Shanxi	68.97	90.13	0.544	2661.53	2661.53
Hunan	66.93	88.73	0.553	2609.27	2609.27
Henan	70.15	85.12	0.531	2489.57	2489.57
Guangxi	68.72	84.88	0.527	2447.98	2447.98
Anhui	69.48	79.83	0.543	2467.09	2467.09
Inner Mongo	65.68	83.22	0.554	2636.24	2636.24
Chongqing	66.33	83.18	0.518	2501.93	2501.93
Jiangxi	66.11	87.53	0.542	2335.02	2335.02
Sichuan	66.33	82.00	0.529	2264.21	2264.21
Shaanxi	67.40	82.66	0.568	2083.26	2083.26
Ningxia	66.94	74.17	0.524	2261.97	2261.97
Yunnan	63.49	74.78	0.500	2271.52	2271.52
Gansu	67.24	73.23	0.536	1762.93	1762.93
Qinghai	60.57	56.38	0.506	2285.01	2285.01
Guizhou	64.29	74.12	0.493	1244.78	1244.78
Tibet	59.64	45.92	0.385	1794.96	1794.96

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1998, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (5) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996.

Table 6. Trends in Human Development by Province, 1990-97

PROVINCE	Adult literacy rate (%)		Combined 1,2,3 level gross enrolment rate(%)		Adjusted real GDP per capita (ppp\$)		Real GDP per capita (ppp\$)	
	1995	1990	1995	1990	1995	1990	1995	1990
Shanghai	89.83	86.70	0.674	0.667	4886.8	4771.2	14471.0	6376.9
Beijing	92.36	89.19	0.674	0.679	4826.3	3478.7	9404.7	3478.7
Tianjin	90.16	88.41	0.626	0.630	4799.7	3907.1	7753.1	3907.1
Guangdong	90.39	84.65	0.559	0.546	4757.5	2584.2	5860.3	2584.2
Liaoning	91.79	88.76	0.568	0.551	4709.2	2911.1	4790.9	2911.1
Zhejiang	81.62	77.53	0.572	0.530	4758.9	2289.6	5909.2	2289.6
Jiangsu	80.72	77.71	0.590	0.532	4736.4	2269.1	5251.1	2269.1
Fujian	82.55	76.96	0.559	0.499	4734.3	1929.35	5202.8	1929.3
Shandong	77.36	77.62	0.559	0.501	4265.4	1958.4	4265.4	1958.4
Heilongjiang	90.82	85.60	0.553	0.539	4070.4	2188.2	4070.4	2188.2
Hebei	85.70	78.37	0.563	0.514	3416.3	1580.7	3416.3	1580.7
Jilin	91.87	86.21	0.573	0.548	3093.1	1883.9	3093.1	1883.9
Hainan	85.89	79.49	0.517	0.450	3202.2	1714.5	3202.2	1714.5
Hubei	84.95	77.48	0.585	0.500	3315.1	1679.0	3315.1	1678.9
Xinjiang	88.48	81.59	0.550	0.519	3317.9	1941.2	3317.9	1941.1
Shanxi	90.13	87.09	0.544	0.518	2661.5	1648.7	2661.5	1648.7
Hunan	88.73	83.06	0.553	0.497	2609.3	1325.1	2609.3	1325.0
Henan	85.12	77.35	0.531	0.476	2489.6	1177.2	2489.6	1177.2
Guangxi	84.88	84.34	0.527	0.469	2448.0	1150.2	2448.0	1150.2
Anhui	79.83	66.47	0.543	0.473	2467.1	1275.4	2467.1	1275.4
Inner Mongo	83.22	78.85	0.554	0.518	2636.2	1594.8	2636.2	1594.8
Chongqing	83.18		0.518		2501.9		2501.9	
Jiangxi	87.53	76.04	0.542	0.482	2335.0	1217.1	2335.0	1217.1
Sichuan	82.00	78.64	0.529	0.464	2264.2	1192.3	2264.2	1192.3
Shaanxi	82.66	75.04	0.568	0.519	2083.3	1342.3	2083.3	1342.3
Ningxia	74.17	67.52	0.524	0.516	2262.0	1503.1	2262.0	1503.1
Yunnan	74.78	64.40	0.500	0.455	2271.5	1320.7	2271.5	1320.7
Gansu	73.23	60.84	0.536	0.496	1762.9	1185.8	1762.9	1185.8
Qinghai	56.38	61.45	0.506	0.468	2285.0	1681.1	2285.0	1681.1
Guizhou	74.12	64.32	0.493	0.469	1244.8	874.0	1244.8	874.0
Tibet	45.92	31.74	0.385	0.335	1795.0	1376.8	1795.0	1376.8

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1998, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1995, China Statistical Publishing House. (5) China Education Commission, Statistical Yearbook of China Education 1995, Press of People's Education, 1996.

Table 7. Gender Development Index by Province in 1995

PROVINCE	Gender development index	Equally distributed index of life expectancy	Equally distributed index of gender education	Equally distributed index of income
Shanghai	0.840	0.832	0.842	0.846
Beijing	0.836	0.800	0.846	0.862
Tianjin	0.831	0.789	0.820	0.884
Guangdong	0.774	0.793	0.788	0.741
Liaoning	0.736	0.755	0.809	0.643
Zhejiang	0.767	0.783	0.756	0.764
Jiangsu	0.717	0.774	0.768	0.609
Fujian	0.703	0.729	0.719	0.662
Shandong	0.677	0.761	0.750	0.520
Heilongjiang	0.665	0.702	0.789	0.504
Hebei	0.647	0.758	0.779	0.405
Jilin	0.646	0.718	0.807	0.414
Hainan	0.635	0.751	0.746	0.408
Hubei	0.595	0.707	0.748	0.332
Xinjiang	0.592	0.626	0.760	0.391
Shanxi	0.624	0.736	0.802	0.336
Hunan	0.580	0.701	0.760	0.278
Henan	0.602	0.754	0.751	0.301
Guangxi	0.587	0.730	0.756	0.275
Anhui	0.584	0.743	0.731	0.278
Inner Mongo	0.566	0.681	0.748	0.269
Chongqing	--	--	--	--
Jiangxi	0.563	0.686	0.730	0.272
Sichuan	0.568	0.689	0.755	0.260
Shaanxi	0.557	0.708	0.736	0.225
Ningxia	0.549	0.699	0.667	0.279
Yunnan	0.505	0.642	0.630	0.243
Gansu	0.500	0.705	0.610	0.185
Qinghai	0.482	0.594	0.569	0.285
Guizhou	0.474	0.656	0.621	0.144
Tibet	0.374	0.577	0.349	0.195

Sources: (1) SSB, China Population Statistics Year Book 1996, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1996, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1997, China Statistical Publishing House.

Table 8. Profile of Gender Development by Province in 1995

PROVINCE	Education index		Combined 1,2,3 level gross enrolment ratio		Enrolment ratio of high education	
	(Female)	(Male)	(Female)	(Male)	(Female)	(Male)
Shanghai	0.884	0.804	0.715	0.688	0.245	0.162
Beijing	0.880	0.815	0.711	0.690	0.275	0.174
Tianjin	0.859	0.785	0.656	0.644	0.144	0.099
Guangdong	0.846	0.736	0.615	0.581	0.045	0.022
Liaoning	0.840	0.779	0.620	0.611	0.078	0.052
Zhejiang	0.815	0.703	0.626	0.611	0.044	0.026
Jiangsu	0.828	0.716	0.630	0.579	0.062	0.028
Fujian	0.810	0.644	0.612	0.575	0.043	0.017
Shandong	0.815	0.693	0.630	0.597	0.038	0.021
Heilongjiang	0.821	0.758	0.591	0.581	0.047	0.027
Hebei	0.821	0.740	0.612	0.608	0.036	0.029
Jilin	0.836	0.779	0.620	0.599	0.068	0.040
Hainan	0.806	0.690	0.549	0.531	0.032	0.015
Hubei	0.816	0.688	0.620	0.578	0.071	0.029
Xinjiang	0.781	0.739	0.548	0.553	0.032	0.029
Shanxi	0.829	0.775	0.597	0.594	0.034	0.025
Hunan	0.816	0.708	0.604	0.585	0.041	0.020
Henan	0.802	0.705	0.590	0.567	0.023	0.014
Guangxi	0.815	0.700	0.560	0.537	0.025	0.013
Anhui	0.793	0.675	0.612	0.570	0.029	0.009
Inner Mongo	0.793	0.706	0.587	0.581	0.021	0.019
Chongqing						
Jiangxi	0.808	0.664	0.597	0.560	0.043	0.014
Sichuan	0.812	0.705	0.631	0.592	0.046	0.020
Shaanxi	0.791	0.686	0.597	0.570	0.069	0.028
Ningxia	0.742	0.604	0.560	0.537	0.030	0.022
Yunnan	0.714	0.561	0.513	0.498	0.018	0.012
Gansu	0.713	0.529	0.564	0.536	0.031	0.014
Qinghai	0.669	0.491	0.504	0.487	0.017	0.015
Guizhou	0.737	0.533	0.517	0.483	0.014	0.008
Tibet	0.492	0.271	0.405	0.332	0.028	0.017

Sources: (1) SSB, China Population Statistics Year Book 1996, China Statistical Publishing House.

(2) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998. (3) SSB, China Statistical Yearbook 1996, China Statistical Publishing House. (4) SSB, China Population Statistics Year Book 1997, China Statistical Publishing House.

Table 9. Time Allocation of Urban Population aged 15-64 in 1990 (minutes per day)

PROVINCE	Working time		Housework time		Leisure time		Sleep time	
	Female	Male	Female	Male	Female	Male	Female	Male
Shanghai								
Beijing	469	500	244	142	328	336	452	454
Tianjin								
Guangdong	485	503	251	125	333	374	465	454
Liaoning								
Zhejiang								
Jiangsu	460	494	235	132	343	383	467	459
Fujian								
Shandong								
Heilongjiang								
Hebei	483	505	271	130	281	342	458	456
Jilin	464	505	282	122	285	327	462	461
Hainan								
Hubei	454	475	262	133	253	310	477	465
Xinjiang								
Shanxi								
Hunan								
Henan								
Guangxi								
Anhui	434	484	299	140	251	318	466	462
Inner Mongo								
Chongqing								
Jiangxi	473	507	261	123	253	294	461	461
Sichuan								
Shaanxi								
Ningxia								
Yunnan								
Gansu	449	495	258	112	258	289	479	469
Qinghai	444	446	259	124	314	363	471	477
Guizhou	414	447	250	123	276	313	464	459
Tibet								
Average	411	480	287	132	257	312	479	476

Sources: (1) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998.

Table 10. Time Allocation of Rural Population Age 15-64 in 1990 (minutes per day)

PROVINCE	Working time		Housework time		Leisure time		Sleep time	
	Female	Male	Female	Male	Female	Male	Female	Male
Shanghai								
Beijing	376	479	310	140	252	294	488	480
Tianjin								
Guangdong	455	508	285	120	216	309	482	473
Liaoning								
Zhejiang								
Jiangsu	408	487	297	160	263	326	483	476
Fujian								
Shandong								
Heilongjiang								
Hebei	297	435	330	139	259	315	488	476
Jilin	335	460	346	126	256	332	492	487
Hainan								
Hubei	327	433	322	137	201	273	515	511
Xinjiang								
Shanxi								
Hunan								
Henan								
Guangxi								
Anhui	395	494	307	133	179	249	497	501
Inner Mongo								
Chongqing								
Jiangxi	364	499	320	91	203	267	496	500
Sichuan								
Shaanxi								
Ningxia								
Yunnan								
Gansu	219	361	365	167	207	244	516	517
Qinghai	295	383	332	171	236	296	507	512
Guizhou	322	426	284	116	201	249	499	502
Tibet								
Average	370	470	311	134	223	288	493	491

Sources: (1) Gender Statistics in China (1990-1995), Compiled by Research Institute of All China Women's Federation and Department of Social, Science & Technology Statistics, SSB, China Statistical Publishing House, 1998.

Table 11. Illiteracy Rate Of Population Age 15 and Over by Gender in 1997 (percent)

PROVINCE	City		Town		County (rural)	
	Male	Female	Male	Female	Male	Female
Shanghai	2.64	12.38	9.40	31.30	9.68	27.69
Beijing	2.77	10.22	3.19	10.85	6.44	20.10
Tianjin	3.81	13.40	1.44	10.61	7.20	19.09
Guangdong	1.42	8.59	1.65	8.81	4.42	20.14
Liaoning	3.31	10.28	2.37	11.22	5.60	14.27
Zhejiang	7.06	18.90	5.92	16.75	13.22	30.74
Jiangsu	5.18	17.87	5.39	19.05	12.57	32.01
Fujian	3.75	15.73	6.11	23.19	10.26	30.44
Shandong	7.93	23.28	1.26	8.48	15.37	35.65
Heilongjiang	3.08	8.70	4.93	13.16	7.70	16.74
Hebei	2.98	11.11	1.52	7.89	10.09	23.61
Jilin	2.42	8.43	2.16	8.48	7.02	14.16
Hainan	3.36	12.23	0.78	8.23	8.83	26.19
Hubei	2.64	10.08	7.69	18.78	11.04	28.27
Xinjiang	2.01	6.21	7.82	14.34	12.19	16.79
Shanxi	3.91	9.41	3.88	13.64	7.57	16.06
Hunan	3.03	12.00	1.93	8.56	6.88	19.38
Henan	3.93	12.59	2.18	12.56	9.70	23.82
Guangxi	4.29	14.43	1.38	12.45	8.32	25.49
Anhui	8.05	20.41	3.86	11.65	13.69	32.86
Inner Mongo	3.89	13.08	3.48	13.64	14.34	29.72
Chongqing	6.86	17.42	3.39	13.28	12.31	29.33
Jiangxi	3.01	13.43	3.04	15.72	6.89	21.40
Sichuan	6.74	19.23	4.34	12.75	13.66	30.59
Shaanxi	2.55	10.87	2.24	11.17	14.74	28.70
Ningxia	2.70	10.66	1.23	9.32	23.22	47.81
Yunnan	5.64	14.16	4.56	18.31	19.14	38.47
Gansu	4.53	15.49	4.64	17.19	21.47	44.82
Qinghai	6.33	20.24	6.23	20.61	42.08	71.75
Guizhou	6.59	18.35	4.30	11.52	16.62	46.66
Tibet	21.31	41.50	-	-	47.26	65.85
Average	3.90	12.89	3.79	13.22	13.04	29.86

Sources: (1) SSB, China Population Statistics Year Book 1998, China Statistical Publishing House.

BIBLIOGRAPHY

- Alesino, Albert and Dani Rodrik. "Distributive Politics and Economic Growth," *Quarterly Journal of Economics* 1994.
- An, Tifu and Liang Peng. 1996. "Dangqian zhong guo caizheng: xingshi, wenti, he duiche" (The Contemporary Chinese Public Finance: The Situation, Problems, and Solutions). *Caizheng yanjiu* (Studies in Public Finance), No. 7, pp. 15-19.
- Annual of Prices and Family Incomes and Expenditures in Chinese Cities*, Beijing: China Statistical Publishers, 1998: 9.
- Arkush, R. David. *Xi Xiaotong and Sociology in Revolutionary China*. Massachusetts: Council on Asian Studies, Harvard University (Publishers) Cambridge and London: Harvard University Press (Distributors): 1981.
- Arshadi, M. "Capital Structure, Agency Problems, and Deposit Insurance in Banking Firms," *Financial Review*, 1989: 24, 31-52.
- Ash, Robert F. and Richard Louis Edmonds. 1998, "China's Land Resources, Environment and Agricultural Production," *China Quarterly*. December 1998.
- Beijing University Chinese Economics Research Center, Urban Labor Market Research Group, "Shanghai: Stratification and Integration of Urban and Rural Workers," *Gaige*, 1998: 103.
- Bo Yibo. "Look Back on Several Important Decision Makings and Events," China: The Press of the Party University of the Central Committee of Communist Party of China, 1993.
- Bruno, Michael, Martin Ravallion and Lyn Squire. "Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues," In Tanzi, Vito and Ke-young Chu, eds., *Income Distribution and High-Quality Growth*. Cambridge: MIT Press, 1998.
- Buck, John L. *Land Utilization in China*. Nanking: University of Nanking, 1937 (first published) and New York: Paragon Book Reprint Corp., 1964 (reprinted).
- Buiter, Willem, Ricardo Lago and Nicholas Stern. "Promoting an Effective Market Economy in a Changing World," In Istvan P. Szekely and Richard Sabot, eds., *Development Strategy and Management of the Market Economy, Vol. II*. Oxford: Clarendon Press, 1997.
- Chang Xiuzhe and Gao Minghua. "On the Marketing of the National Economic Marketization of China," *Investigations Studies and Suggestions. The Macroeconomic Institute under State Development Planning Commission*. No. 17, 1998.
- Chen Jinhua (Chief-editor). *The National Report on National Economy and Social Development of China 1996*. The Planning Press of China, 1996.
- Chen Jinhua (Chief-editor). *The National Report on National Economy and Social Development of China 1997*. China Planning Publishing House, 1997.
- Chen Ruisheng (Chief-editor). *Encyclopedia of China's Reform (1978-1991)*, Dalian: Dalian Publishing House, 1992.
- China Daily, 26 Nov. 1997
- China Development Report 1996*, China Statistical Publishing House.
- China Fiscal Yearbook [Zhongguo Caizheng Nianjian]*. Beijing: Caizheng Zazhi she, 1997.
- China's Institute of Statistician Affairs (eds.). *The Report of State Affairs of China: 1978-1995*. Beijing: China Planning Press, 1996.
- China Labour Statistical Yearbook 1997. Beijing: Zhongguo Tongji, 1997.
- China Research Group, Chinese Academy of Science. *Exploiting Resources and Saving Resources - The Potential and Strategies for Natural and Human Resources in China*. Science Publishing House, 1992.
- China Statistics Survey*, 1998.
- China Study Research Group, Chinese Academy of Science. *Employment and Development: the Unemployment Issues and Employment strategy in China*. Liaoning People's Press, 1998.
- China Whitepaper on Foreign Trade and Economic Cooperation (1998)*, Beijing: Economic Science Press, 1998.
- Central Intelligence Agency. *The World Factbook*. 1992.

- Cong, Ming. 1996. "Guanyu woguo zhongchangqi zhengxing caizheng de jige wenti" (Issues Concerning How to Strengthen China's Public Finance in Medium- and Long-Term). *Caimao jingji* (Financial Economics), No. 6, pp. 15-21.
- D'Arista, Jane W. *The Evolution of U.S. Finance Vol. I, Federal Reserve Monetary Policy: 1915-1935*. Armonk: M.E. Sharpe, 1994.
- D.K. Lieu. *The 1912 Census of China*, Madrid: XX Session l'Institut, Madrid, 1931.
- Dai Zhou (Chief-editor). *Theory of Deng Xiaoping and Contemporary China, Volume 3*. Beijing: Red Flag (Hongqi) Publishing House, 1998.
- Deng Shaohui. "The Qing Dynasty's Policy on Encouraging Students Studying Abroad," *The Questions of History Teaching*, No. 5. 1993.
- Department of Comprehensive Planning Under the Ministry of Finance. *State Statistical Data on Revenue and Expenditure*. May 1982.
- Ding, Si. 1996. "Zhengxing caizheng shuoxianyao tongyi caizheng" (To Boost Public Finance, Public Finance Has To Be Unified First). *Yunnan caizheng yu kuaiji* (Yunnan Public Finance and Accounting), No. 11, pp. 9-14.
- Ding Yuanzhu. "Field Report on the Unemployment of Harbin City," *Information and Studies*, No. 3. Macroeconomic Institute under State Development Planning Commission, 1998.
- Dreze, J. and Amartya Sen. *Hunger and Public Action*. Oxford: Clarendon Press, 1989.
- Du Xuncheng. *Chinese Capitalism and the Old Chinese Governments (1840-1939)*. Shanghai: The Publishing House of Social Science Academy of Shanghai, 1991.
- Prasenjit Duara. "Culture, Power and State." *Strategy and Management*, No. 4. Beijing, 1994.
- Dull, Jack. "The Evolution of Government in China," in Paul S. Ropp, ed., *Heritage of China*. Berkeley: University of California Press, 1990.
- Fairbank, Reischauer and Albert M. Craig, *East Asia, The Modern Transformation*. Boston: Houghton Mifflin, 1965.
- Fei Hsiao Tung. *Toward a People's Anthropology*. New World Press, 1981.
- Fei Xiaotong. *Fifty Years of A China Village: The Works of Fei Xiaotong*. Jiangsu: Jiangsu People's Press, 1987.
- Fei Xiaotong. *Peasant Life in China*. Jiangsu: Jiangsu People's Press, 1986.
- Fei Xiaotong. *Re-Building Rural Society*. Observation Publishing House, 1948.
- Fei Xiaotong. *The Selected Works of Fei Xiaotong*. Tianjin: Tianjin People's Press, 1988.
- First Five-Year Plan for Development of the National Economy of the People's Republic of China in 1953-1957*. Beijing: Foreign Language Press, 1956.
- Flannery, M. J. "Capital Regulation and Insured Banks' Choice of Individual Loan Default Risks," *Journal of Monetary Economics* 1989: 24, 235.
- Guangming Daily, 8 Dec. 1998.
- Guangming Daily, 11 Dec. 1998.
- Gui Shizun, *Population Sociology*. Shandong: Shangdong People's Press, 1986.
- Guo Gang and Ge Yinsu. *Survey of Social Security in China*. The Publishing Housing of China International Trust and Investment Corporation, 1995.
- Hartz, Louis. *Economic Policy and Democratic Thought: Pennsylvania, 1776-1860*, Massachusetts: Harvard University Press, 1948.
- He Liping. "The Struggling Experiences of Chinese Women for Employment in Modern History," *Modern History Studies*, No. 2, 1998.
- Herschler, Stephen B. 1995. "The 1994 Tax Reforms: The Center Strikes Back." *China Economic Review*, Vol. 6, No. 2: 239-245.
- Ho Ping-ti. *The Ladder of Success in Imperial China*. New York: John Wiley, 1964.
- Holmström, Bengt and Jean Tirole. "Private and Public Supply of Liquidity," *Journal of Political Economy*, 1998: 106/1.
- Hu Angang. "Disaster and Development: the Impact of Natural Disaster and Disaster Alleviation Strategy in China", *Research Paper of the Chinese Situation Study, 10th Issue*. Chinese Study Center of CAS, August 1998.
- Hu Angang. *Employment and Development*. Liaoning People's Publishing House, 1998.
- Hu Angang. *Selected Works of Hu Angang*. Harbin: Heilongjiang Educational Press, 1995.
- Hu Angang. *The Next Step for China*. Chengdu. Sichuan: Sichuan People's Publishing House, 1995.
- Hu Angang, Wang Yi and Niu Wenyuan. *Ecological Deficit: The Greatest Crisis for Future Subsistence, Abstract from National Conditions and Decision Making*. Beijing: Beijing Publishing Company, 1990.
- Huang Dingkang and Shu Keqin. *The Wage Adjustment and Reform: 1949-1991*. Sichuan: Sichuan People's Press, 1991.
- "Human Development and Poverty Alleviation." *China Human Development Report*. 1997.
- Jing Jinquan and Jiang Shan. "Orbit of the Reform of Personnel Management System in China," *Outlook Weekly*, 9 Nov. 1998.

- Johnson, Chalmers. 1982. *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975* (Stanford: Stanford University Press).
- Kalecki, Michael with Ignacy Sachs. "Forms of Foreign Aid: An Economic Analysis." In Jerzy Osiatynski, ed., *Collected Works of Michal Kalecki Vol. V, Developing Economies*. Oxford: Clarendon Press, 1993.
- Katzenstein, Peter, ed. 1978. *Between Power and Plenty* (Madison: The University of Wisconsin Press).
- Li, Chengrui, and Liu Cheng. 1997. "Dangqian quanshehui ziji yunxing mianning de kunjing yu chulu" (Problems in the Circulation of Total Social Funds and Possible Solutions). *Jingji yanjiu cankao* (Reference Materials in Economic Research), No. 1007, pp. 2-19.
- Lie Kan, Lie Shay. *The Modern History of China*. Zhonghua Publication, 1994.
- Lin, Justin Yifu, Cai Fang, and Li Zhou. 1997. "Social Consequences of Economic Reform in China: An Analysis of Regional Disparity in the Transition Period." Beijing: UNDP.
- Liu Shiding and Ding Yuanzhu. *Social Problems Towards the 21st Century*. Sichuan: Sichuan People's Press, 1997 (in Chinese).
- Liu Suinian and Wu Qungan. *History of Socialism Economy in China*. Heilongjiang: Heilongjiang People's Press, 1985.
- Lu Feng. "Unit: a Special Social Organization," *The Social Science of China*, No. 1. 1989.
- Luo Gan. "The Expansion for the Reform Proposal of State Council's Institutions." *People's Daily* 7 March 1998.
- Macfarquhar, R. and J.K. Fairbank. *Cambridge History of China: The People's Republic*. Shanghai: Shanghai People's Publishing House, 1992.
- McKinnon, Ronald I. *The Order of Economic Liberalization, 2nd Ed.* Baltimore: Johns Hopkins University Press, 1991, 1993.
- Meade, James. *Liberty, Equality and Efficiency*. New York: New York University Press, 1993.
- Meisner, Mao's China. New York: The Free Press, 1977.
- Ministry of Finance. 1997. *Zhongguo caizheng nianjian 1997* [China Public Finance Yearbook] (Beijing: China Public Finance Press).
- Mo Rong, Jiuye. *Zhongguo de Shiji Nanti*. Beijing: Jingji Kexue, 1998.
- Moise, Edwin. "Downward Social Mobility in Pre-revolutionary China," *Modern China*. January 1977.
- Mote, Fritz. "Political Structure," in Gilbert Rozman, ed., *The Modernization of China*. New York: The Free Press, 1981.
- Nickum, James E. "Is China Living on the Water Margin?" *China Quarterly*. 156, December 1998.
- "Ordinance of Registration and Regulation of Civil Organizations." *People's Daily*, 4 November 1998.
- "Organizational Law for Villagers Committees of People's Republic of China." *People's Daily*, 5 November 1998.
- Pennacchi, G. "A Reexamination of Over or Under Pricing of Deposit Insurance." *Journal of Money, Credit and Banking*, 1987.
- Pennacchi, G. "Alternative Forms of Deposit Insurance: Pricing and Bank Incentive Issues," *Journal of Banking and Finance*, 1987.
- People's Daily*, 9 February, 1998.
- Polanyi, Karl. *The Great Transformation: the Political and Economic Origins of Our Time*. Boston: Beacon Press, 1944, 1957.
- Political College of People's Liberation Army of China. *The History of People's Republic of China*. Huanghe Press, 1993.
- Population Department under State Statistical Bureau. *The Analysis of China's Floating Population*. 1997.
- Qiu Yan. *The Decision-Making Procedure of Great Events of People's Republic of China*. The Publishing House of Economic Daily, 1998.
- Rawski, T. *Economic Growth in Prewar China*. Berkeley and Los Angeles, 1989.
- Ren Chenhai, Wang Wenxing, Feng Zongwei and Chen Fu: "The Distribution and Control of Acid Rain in China", *Frontiers of Science and Technology in China*, Shanghai: Shanghai Education Press, 1998.
- Riskin, Carl. *China's Political Economy*. 1987.
- Rodrik, Dani. "Globalization, Social Conflict and Economic Growth," *Revised Working Paper*. Massachusetts: John F. Kennedy School of Government, Harvard University, 11 December 1997.
- Rodrik, Dani. "Making Openness Work: The New Global Economy and the Developing Countries," *Working Paper*. Massachusetts: John F. Kennedy School of Government, Harvard University, August 1998.
- Rong Jingben and He Zengke. *The Pressurized System to Democratic System of Cooperation—Study on Political Reform at Township and County Level*. Beijing: Central Compilation and Translation Press, 1998.
- Rowe, William. *Hankou: Commerce and Society in a Chinese City, 1796-1889*. Stanford: Stanford University Press, 1984.
- Roy, William G. *Socializing Capital: The Rise of the Large Industrial Corporation in America*. Princeton: Princeton University Press, 1997.
- Sen, Amartya. "What's the Point of a Development Strategy?" in *Development Strategy and Management of Market Economy Vol. I*. Oxford: Clarendon Press, 1997.

- She Zi Xia. "The Education Needs and the Missionary Schools in the Transition Period of Ding Dynasty's Last Days." *Journal of Huadong Normal University*, No. 3, 1997.
- Smil, Vaclav. *China's Environmental Crisis*, Armonk: M.E. Sharpe, 1993.
- Stanley, Robert. *Dimensions of Law in the Service of Order: the Origins of the Federal Income Tax 1861-1913*. Oxford: Oxford University Press, 1993.
- State Commission of Economic System Reform. *System Reform and Social Security*. Reform Press, 1995.
- State Council. *Master Plan for National Environmental Construction*. Beijing: Xinhua News Agency, 6 Jan. 1999.
- State Information Center. "Laws, Regulations and Policies of China Since 1949," *The Internet of China Economic Information*, 1998.
- State Planning Commission. *The Documents on Economic Planning and Economic Work*. The Planning Press of China, 1992.
- State Planning Commission. *National Report on Social Development of People's Republic of China*. Beijing, 1995.
- State Statistical Bureau. *Brief Statistical Data on the National Economy (1949-1988)*. July 1989.
- State Statistical Bureau (ed.). *China Development Report 1996*. Beijing: China Statistical Publishing House, 1996.
- State Statistical Bureau. *State Statistical Data on National Economy*. July 1990.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1991*, Beijing: China Statistical Publishing House, 1991.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1992*, Beijing: China Statistical Publishing House, 1992.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1993*, Beijing: China Statistical Publishing House, 1993.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1996*, Beijing: China Statistical Publishing House, 1996.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1997*, Beijing: China Statistical Publishing House, 1997.
- State Statistical Bureau (ed.). *Statistical Yearbook of China 1998*, Beijing: China Statistical Publishing House, 1998.
- State Statistical Bureau and Ministry of Civil Affairs (eds.). *China Disaster Report: 1949 to 1995*. China Statistical Publishing House, 1995.
- Statistical Data on Chinese Labor and Wages*. Beijing: China Statistical Press, July 1987.
- Stiglitz, Joseph E. *The Economic Role of the State*. China Press of Goods and Materials, 1998.
- Stiglitz, Joseph E. "The Role of Government in the Contemporary World." In Tanzi, Vito and Ke-young Chu, eds., *Income Distribution and High-Quality Growth*. Cambridge: MIT Press, 1998a
- Stiglitz, Joseph E. *Whither Socialism?* Cambridge: MIT Press, 1994, 1996.
- "Temporary Ordinance of Registration and Regulation of Non-Profit-Seeking Private Institutions, 25 Oct. 1998," *People's Daily*, 9 Nov. 1998.
- To Evaluate the Cultural Fault in Modern History based on the Old Examination System, Re-Evaluation to the Modern History of China*. Beijing: Reform Publishing House, 1998.
- Tu Wei-ming, "The Confucian Tradition in Chinese History," in Paul S. Ropp, ed., *Heritage of China*, Berkeley: University of California Press, 1990.
- UNDP. *1994 Human Development Report*. New York: Oxford University Press, 1994.
- UNDP. *1996 Human Development Report*. New York: Oxford University Press, 1996.
- UNDP. "Human Development and Poverty Alleviation," *1997 China Human Development Report*, 1997.
- UNDP. *China Environment and Sustainable Development Resource Book II: A Compendium of Donor Activities*. Beijing, August 1996.
- Unger, Roberto Mangabeira. *Plasticity Into Power: Comparative-Historical Studies on the Institutional Conditions of Economic and Military Success*. Cambridge: Cambridge University Press, 1987.
- Vermeer, Eduard B. "Industrial Pollution in China and Remedial Policies," *China Quarterly*, 156, December 1998: 955.
- Wang Mingjian. "The Mystery That Decided the Destiny of 30 Million Chinese Youth." *Guangming Daily Press*, 1998.
- Wang Yanzhong. "Studies on 'Enterprise Creates Society' in State Owned Enterprises in Border Areas." *On Border Area Development*, Beijing: Beijing University Press, 1993.
- Wang Ying, Zhe Xiaoye, Sun Bingyao. *Social Intermediate Section—Reform and Social Organizations of China*, Beijing: China Development Publishing House, 1993.
- White, Gordon, ed. 1988 *Developmental States in East Asia* (London: Macmillan).
- Williamson, John. "Public Policy Towards International Capital Flows." In Istvan P. Szekely and Richard Sabot, eds., *Development Strategy and Management of the Market Economy, Vol. II*. Oxford: Clarendon Press, 1997.
- World Bank. *China 2020*, Washington, DC: The World Bank, 1997.

- World Bank. *China's Management of Enterprise Assets: The State as Shareholder*. Washington DC: The World Bank, 1997.
- World Bank. *Clear Water and Blue Skies. China's Environment in the New Century*. Chinese edition, China Financial and Economic Press, 1997.
- World Bank. *Old Age Security: Pension Reform in China*. Washington DC: The World Bank, 1997.
- World Bank. *World Development Report 1997: World Government in Transition*. Chinese edition, Chinese Publishing Company of Finance and Economics, 1997.
- World Bank. "Income Distribution in China," *Report No: 16685-CHA*. Country Operations Division, China and Mongolia Department, East Asia and Pacific Region, 30 June 1997.
- World Bank. *World Development Indicators*. Washington DC: The World Bank, 1998.
- World Bank. *World Development Report 1997—State in the Changing World*. Beijing: Finance and Economy Publishing House of China, 1997.
- Wu Han and Fei Xiaotong. *The Power of Imperial and the Power of Gentry*. Observation Publishing House, 1948.
- Wu Peilun (ed.). *China's Reform of Government Institutions*. Beijing: Economy Daily Press, 1990.
- Wu Zhongze(Chief-ed.). *The Work of Social Associations Management*. Beijing: China Society Press, 1996.
- Xu Yi and He Shengmin. 1995. "Dui dangqian caizheng jingji xingshi de jidian kaifa he jianyi" (Comments on the Current Situation of Public Finance). *Jingji gaige yu fazhan* (Economic Reform and Development). No. 8.
- Xie Qingkui, Yan Jirong, Zhao Chenggen. *Analysis on Government System of China*. Beijing: China Broadcast and Television Press, 1995.
- Xu Pinghua. "On the Relationship between Economy and Population in the Feudal Society of China," *Study of Chinese History*, No.3., 1997.
- Xu Songtao. *China: Reform of the Wage System*. China Financial and Economic Press, 1989.
- Xu Yong. *Villager Self-governance of Chinese Rural Area*. Wuhan, Central-China: Normal University Press, 1997.
- Yang Yimao. "The New Education During Modernization Movement," *Social Science*, No.1. Beijing, 1996.
- Yang YiYong. "Unemployment in China," *Economic Highlights*, 1998.
- Yu Heping. *Business Associations and China Modernization in the Early Time*, Shanghai: Shanghai People's Publishing House, 1993.
- Yu Tianyi. 1995. "Guoyou zhichan liushi wenti fenxi" (An Analysis of the Causes of State Property Loss). *Jingji yu shehui* (Economy and Society), No. 5: 45-48.
- Zhang Zhongli. *China Gentry, the Studies of the Role of Gentry in China Society of the 19th Century*. Shanghai: The Press of Shanghai Academy of Social Science, 1991.
- Zheng Hangsheng, Li Qiang, Li Lulu. *Study on the Theory of Social Indicator*. Beijing: People's University Press, 1989.
- Zhou Erliu and Zhang Yulin, *Balance Between Rural and Urban Areas*. Jiangsu: Jiangsu People's Press, 1991.
- Zhu Ying. "On the Civil Society of Qing Dynasty's Last Phase," *History Studies* No. 4., 1996.Z
- Zong Yumei and Lin Chengdong. "The Policy on Protecting National Productions of Nanjing National Government in Its Early Days," *History Monthly*, No. 1., 1997.
- Zuo Ran, "Aims at Reforming the Whole Public Administration," *Outlook Weekly*, No. 27, 6 July 1998.
- Zysman, John. 1983. *Government, Markets, and the Growth* (Ithaca: Cornell University Press).

1999

undp



China Financial & Economic Publishing House