# The Chinese Economy: Mechanism of its Rapid Growth

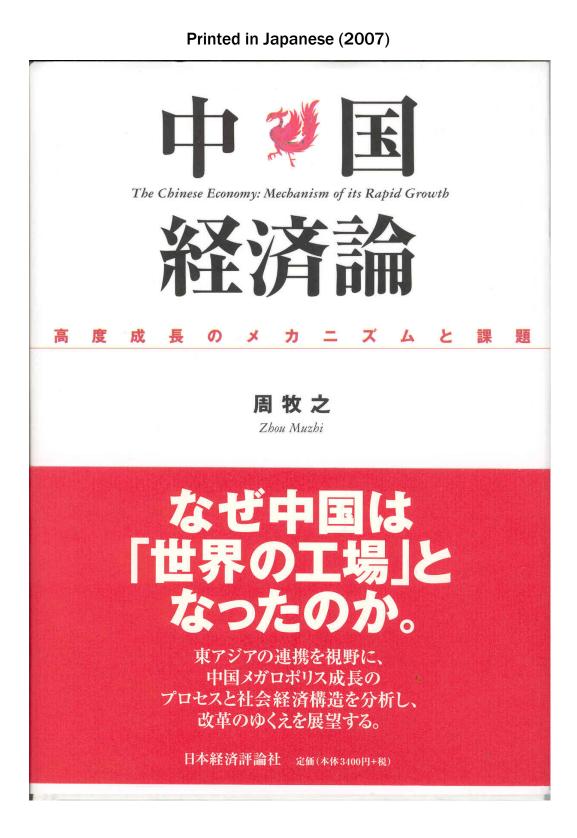
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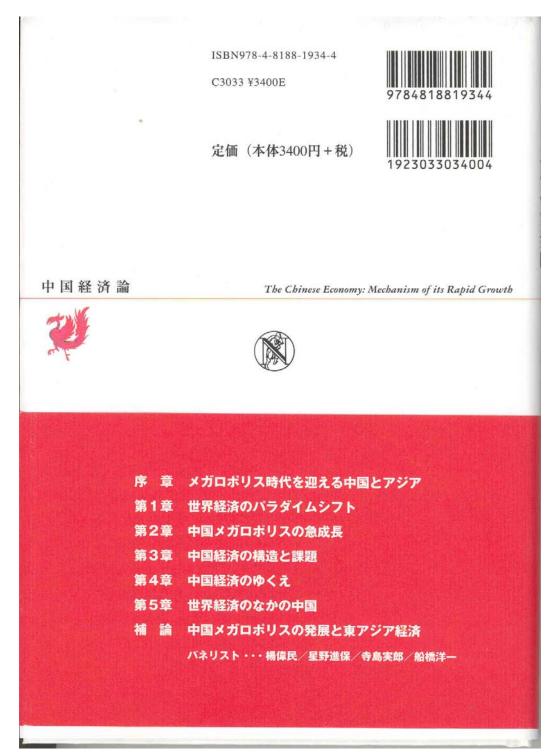
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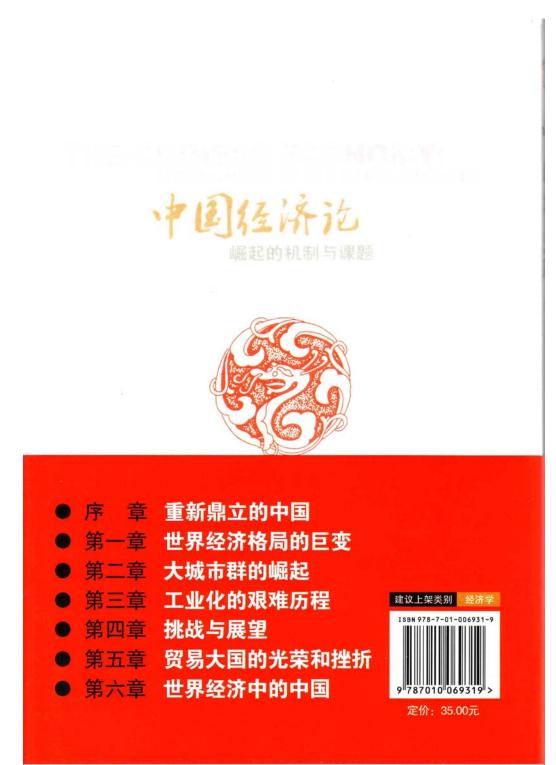


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## I. Prospectus

## Description

The economy of China has captured worldwide attention in recent years. Many in the United States and Europe are interested to know what has caused China to become "the world's factory," There is also great interest in where the country's rapidly growing economy is headed, and what effect the high level of growth will have on the economies of other countries, both within Asia and the world at large.

Authored by Prof. Muzhi Zhou, **THE CHINESE ECONOMY: Mechanism of its Rapid Growth** is currently published in both Japanese (April 2007) and Chinese (March 2008), and has been distributed throughout Asia. Owning the worldwide publishing rights for the manuscript, Prof. Zhou is seeking a United States publisher to bring this book to the American market. The manuscript is currently undergoing translation into English by a group of Chinese and English scholars at the University of Illinois, Chicago. Once the translation is completed, an editor at MIT, working with Prof. Zhou, will make additional changes before sending the manuscript to a publisher. The anticipated date of availability for the manuscript is Sept. 1, 2008. Prof. Zhou currently holds a two-year appointment as visiting professor at MIT and a visiting scholar at Harvard University. This book is the basis for a planned research effort at MIT called **The Megalopolis Program**, which is part of the *Field Intelligence Laboratory*. THE CHINESE ECONOMY: Mechanism of Its Rapid Growth examines how the information revolution has prompted the lengthening of supply chains to global levels. This development, in turn, has allowed for the formation of gigantic industrial concentrations in three major Chinese urban centers; namely the Pearl River Delta (Hong Kong, Macau, and Canton Province), the Yangtze River Delta, (Shanghai, Zhejiang Province, and Jiangsu Province), and the Capital Area (Beijing, Tianjin, and Hebei Province). In 2005, the domestic share of these regions accounted for 42.4% in GDP and 77% in export value.

These clusters of industry and the ensuing movement of population toward them occurred at the same time that China was initiating an urbanization reform movement. All together, the formation of worldwide supply chains and the large amount of human movement within China have laid the basis for a new type of urban economy called the megalopolis.

Twenty to thirty years of economic growth will cause the Hong Kong, Shanghai, and Beijing regions to become population centers that could reach as many as 200 - 300 million people each, The current precedent for high population metropolitan areas is Tokyo with 34 million inhabitants located in 23 districts. Given much greater land resources, metropolitan areas in the US seldom surpass 10 million people.

With massive population shifts occurring as nearly 20 million workers per year move from rural areas to megalopolises, the densities of the three major Chinese cities are rising rapidly. The population shift, unprecedented in world

history, is the result of Chinese workers seeking higher paying manufacturing and construction jobs. At current growth rates, population densities double or triple of Tokyo currently exist in isolated locations and will likely be widespread in the Chinese Megalopolises of the future. This means up to 38,000 people might live per square kilometer of land.

Issues such as controlling land use, the application of information technology to operate the megalopolis, developing transport and other infrastructure, preserving water resources and energy, environment conservation, and the function of agriculture outside of major population centers will play an important future role in the lives of Chinese people and the world economy. For this reason, megalopolis policies are an extremely important topic that presents a unique opportunity for multidisciplinary research in addition to opportunities for businesses involved in information technology. Prof. Zhou's book defines the Asian megalopolis and its economic implications, and is a leading edge analysis that is of value to business managers and corporate leaders along with both Asian and American scholars.

In addition to specifying the global supply chain and the megalopolis as mechanisms that brought about China's rapid economic development, this book also examines major issues that China faces today. Chinese society and economy have undergone massive changes because of the concentration of industry and the large shifts of population; this book examines these changes.

## Outstanding Features

Prof. Zhou is from a prominent literary family in China and brings a unique perspective to his writing and research through having successful academic, governmental, and engineering careers in both Japan and China. His language skills in Chinese, Japanese, and English provide a solid basis for primary research. Through the Japan-China Organization for Business, Academia & Government Partnership, Prof. Zhou has taken a leadership role in organizing conferences at the minister level to discuss economic and political issues of importance to the countries that comprise East Asia. Through many years of research, diplomatic, and business work, Prof. Zhou has accumulated a storehouse of knowledge and insight that is unique. All of this is contained in his book.

Recognizing this potential, Prof. John R. Williams and Prof. Jung-Hoon Chun, both of MIT, invited Prof. Zhou to be a visiting professor. While in Cambridge, Prof. Zhou has also build relationships with Harvard University's Fairbank Center for East Asian Studies and The Edwin O. Reischauer Institute of Japanese Studies.

In total, these experiences combined with detailed scholarship have produced a book that would be a unique introduction into the American market, providing value to business, academia, and government. As a final note on features, 2008 marks the 30<sup>th</sup> anniversary of the political and economic changes that re-structured the Chinese economy and opened it to the world. Publication of

this book in both Asia and the United States reinforces the significance of political and economic change on society.

## Competition

THE CHINESE ECONOMY: Mechanism of its Rapid Growth contrasts with Barry Naughton's comprehensive work (*Chinese Economy*, MIT Press, 2007) in two major ways. First, it examines China's economic decline and subsequent prosperity in the context of the world economy's paradigm shift over the last 500 years. Second, it also discusses policy and the direction of reforms that deal with societal and economic problems modern-day China faces.

#### Apparatus

This book is written in a style that is direct and easily understood. It is based on Prof. Zhou's research and intensive field-studies in the three Chinese megalopolises during the past fifteen years. It is also based on his personal interviews conducted with many Chinese government officials and business leaders, and on discussions that he had with Sino-Japanese researchers, economists, government leaders, corporate leaders, scholars, and journalists at annual policy forums which he initiated. The book includes, as an addendum, transcripts of some discussions that deal with the formation of a new Asian order, a feature that has proven highly popular among readers.

The structure of the book contains three important features. The first

depicts China's role in the world economy since the expedition of Zheng nearly 600 years ago. For this Prof. Zhou has carefully analyzed the great changes of the relationship between the world economy structure and the Chinese economy since the seafaring age, the era of the Industrial Revolution, the age of huge production and consumption, and the time of the Information Revolution.

The second feature is an examination of the Chinese socio-economic structure, analyzing how the process of convoluted history produced the socioeconomic structure of contemporary China. The value of this analysis is a deep insight into the basic underlying problems that still exist in China today.

The third feature is a candid discussion of the direction and pragmatic steps needed for China to reform its socio-economic structure.

## Audience

Although this book was written as an academic work and has been wellreceived by scholars in the field, it also has received high praise from Chinese and Japanese industry and government leaders. Renowned newspapers such as the Nikkei Shimbun have written favorable reviews. Many Japanese universities are currently using THE CHINESE ECONOMY as a textbook. Finally, people in business find the book useful in understanding the emerging economic features of China. First published in Japan during April 2007, an edition has been released (2008) by China's most prominent publisher, The People's Press.

### Market Considerations

The book already has significant sales in Asia during the past year. Since Nihon Keizai Hyoron Publishing Company (Tokyo) began selling the book in April 2007, there have been 6,000 copies sold. Just now appearing, The Peoples Press (Beijing) has done a first printing of 10,000 copies and projects total sales of 100,000 copies.

Since this book is positioned to appeal to both people in business and academics, a target for United States sales of 20,000 copies is reasonable. Notably, it is rare that a scholar like Prof. Zhou introduces a book into the United States market that has already appeared in several different Asian languages. In addition, Prof. Zhou has built a network of people in the United States to aid in the translation, and editing of the book. This will help a great deal in achieving commercial success in the American market.

#### Status of the Book

About 300 pages in length, the book contains 7 photographs and over 70 tables, graphs, and diagrams. The translators and editor anticipate completion of the book before Sept. 1, 2008. At that time, the manuscript should be ready for publication with very little additional work by a publisher.

## Reviewers

Ezra F. Vogel Henry Ford II Research Professor of the Social Sciences, Emeritus Harvard University

Ronald Suleski Assistant Director Fairbank Center for East Asian Research Harvard University

Edmund W. Schuster Field Intelligence Lab (Megalopolis Program) and the Data Center Program Laboratory for Manufacturing and Productivity Massachusetts Institute of Technology

Book Review from *China Daily* <u>http://www.chinadaily.com.cn/hqcj/2008-04/08/content\_6599484.htm</u>

Book Review from *People Daily* <u>http://www.booker.com.cn/GB/69396/7049241.html</u>

APPENDIX A contains two reviews in Japanese from the *Economist* and *Nikkei* Shimbun

## Background of the Author



Muzhi Zhou graduated from Hunan University with a S.B. in Electrical Engineering, joined the Chinese Ministry of Industry and Machinery, and began to work on the largest national project to that date in China: the construction of the Shanghai-Baoshan Iron and Steel

Works. Later, he obtained a Ph.D. in Economics at Tokyo Keizai University where, as Senior Researcher, he was involved in evaluating economic plans of interest to both Japan and China.

Currently, the author is a Visiting Professor at the MIT Laboratory for Manufacturing and Productivity, while he maintains his appointment as a Professor of Economics at Tokyo Keizai University. He also is a Visiting Research Fellow in the Japanese Ministry of Finance's Policy Research Institute, and has served as a board member and advisor to many think tanks. Recently, he has been appointed as a visiting professor at Harvard University. In addition he continues working on policy formulation and political exchange between Japan and China, and he conducts a number of international conferences every year. The megalopolis developmental policy, which the author prescribes as a means for socioeconomic reform, is currently being implemented as the eleventh fiveyear Chinese national policy. The author also participated in the Chinese People's Political Consultative Conference (CPPCC) in March 2007 as a special committee member, and made many motions for reform there. It is no overstatement that the author's unique history and extensive personal connections in the highest economic and political spheres of Asia give him the necessary background and expertise to analyze economic development in China and Eastern Asia.

## II. Table of Contents (TOC)

#### Chapter 1 - The Tremendous Changes of Global Economic Structure

To comprehend the mechanism of Chinese economic growth requires a deep understanding of two important perspectives. First, rapid industrialization of a developing country like China would not be possible without changes in worldwide economic structure that have created new overseas markets and the potential to build an export economy. Understanding these changes is a central theme of the book and important knowledge for those in business and academics. The second perspective is the focus, drive, and execution in transforming China from an agrarian society to a manufacturing-oriented economy capable of competing in nearly every market worldwide. Of particular note, the information revolution plays a strong role in changing the way developing societies like China achieve economic growth and a higher standard of living for its people.

#### Chapter 2: The Rapid Growth of Metropolis

Three metropolises have emerged as the engine of Chinese growth. These regions include the Yangtze River delta, the Pearl River delta, and the Beijing-Tianjin-Hebei region. The first two have done a very good job at focusing on basic public services such as deep-water ports, airports, highways, formation of capital markets along with technical knowledge and a global perspective. The anchors of these metropolitan regions, Hong Kong and Shanghai, have been international centers of commerce for hundreds of years and have societies that are cosmopolitan in composition and attitude. This chapter includes several case studies of how these large metropolitan areas developed through time to become the engine of Chinese economic growth...

#### Chapter 3: The Difficult Process of Industrialization

The emergence of metropolises in the modern history of China is a new phenomenon. For most of the past 50 years, China has had an anti-urbanization policy designed to restrict the increase in urban population for major cities. During the past 10 years, this policy has been relaxed causing a large-scale impact to the socio-economic structure of China as migration from rural areas to cities increased. This widened regional differences created the conditions for rapid industrialization and advances in manufacturing capability while also creating the potential for social unrest as differences in income between rural and urban areas became greater. This chapter analyzes the phases of China's industrialization along with how these events shaped the socio- economic infrastructure of China. The conclusion of the chapter summarizes the important issues that China's economy faces currently and into the future.

## Chapter 4: Challenge and Forecast

With the rapid economic growth of the past ten years, many underlying problems will begin to emerge. For example, the government tightly controls the

salaries and social welfare of ordinary labors, especially peasants who work in cities. This has become a major issue relating to the future economic development of China. In addition, a lack of an economic re-distribution system exists. This is dividing China by social/educational class and region into those that benefit from economic growth and a much larger group that experience no economic benefits what-so-ever from rapid economic growth. These imbalances are causing social unrest. This chapter discusses the mechanisms to deal with this issue in the context of how to sustain the growth of the three major metropolitan areas...

#### Chapter 5: Glory and Frustrations of the Great Commercial Country

This chapter summarize with focus on the economic history of China during the period of colonization by the Europeans, industrialization, and the information revolution. The last part of the chapter focuses on the "Reform & Opening" policy that signaled the emergence of China as a participant in the world economy.

#### Chapter 6: China in the Global Economy

Facing new challenges, the final chapter of this book examines the importance of the knowledge economy for China and the influence of the three large Chinese metropolitan areas in the next stage of economic growth. This includes an appraisal of the prospects for unification of the East Asian economy into a coordinated unit of independent nations.

## Forum: The Growing up of China and the Huge Change of Asian Structure

The "China-Japan Policy Exchange Forum: Metropolises of China and the East Asian Economic Circle" was held in Tokyo on May 11, 2006. In this forum senior officials and policy researchers for both China and Japan discussed several issues that will influence the development of Asia in the 21<sup>st</sup> century. The highlights of this forum are reported as a prologue.

## III. Detailed Background and C.V.

Muzhi Zhou Professor, Tokyo Keizai University, Japan Visiting Professor, Massachusetts Institute of Technology Visiting Scholar, Harvard University

I was born in Hunan Province, China, where I received a Bachelor in Electrical Engineering in 1985 from Hunan University. In 1995 I completed a Doctorate of Economics from Tokyo Keizai University in Japan.

My professional career began in China in 1985 at the Ministry of Industry and Machinery where I was in charge of such national projects as the Second Phase of the Shanghai Baoshan Iron and Steel Works construction.

In Japan, from 1991 through 1994, I was associated with the Research Institute for Urban and Environmental Development as Research Fellow. The following year I moved to the International Development Center of Japan (IDCJ) where, as Senior Researcher from 1995 through 2002, I was responsible for Japan's policy planning in regard to developing countries. While in that position, I formulated a variety of urbanization policies for the government of China.

As Associate Professor of Economics at Tokyo Keizai University from 2002 through 2006, I focused on helping the government of China formulate urbanization policies, on promoting policy discussions between Japan and China, and on improving political dialogue between the two countries.

After being appointed Professor of Economics at Tokyo Keizai University in 2007, I began a sabbatical leave in the United States as Visiting Professor at the

Laboratory for Manufacturing and Productivity, Massachusetts Institute of Technology. While here, I will continue to pursue my interest concerning changes in the global supply chain and in its implications for Asian countries.

In 2007, I was also appointed Special Member of the National Congress of China in the Chinese People's Political Consultative Conference. In this capacity, I advise on matters of economic policy.

In the two decades since I began my professional career, I have done extensive research and have written numerous articles that stemmed from my interest in the information revolution and its effects on industry. My initial book, *Mechatronics Revolution and New International Specialization: Asian Industrialization in the Modern World Economy* (Minerva Publishing Company, Kyoto, 1997) addressed the advances in information technology and the impact on industrialization in Asia. This effort was winner of the Telecommunications Advancement Foundation Award.

My early research on urbanization and ensuing policy-making in this area for the National Development and Reform Commission of China led to my being invited to edit *Urbanization: Theme of China's Modernization* (Hunan People's Publishing House, Changsha, 2001). This book, the first of its kind to be published in China, takes an approach that is in marked contrast to the government's anti-urbanization policies of the past. Instead, it faces the concerns of urbanization head on, proposing comprehensive policies dealing with such concerns as increasingly high-density land use, special zoning needed for development, local governments' financial contributions, Chinese societies' high level of mobility, and the need for improved services and infrastructure.

In my subsequent book, *Megalopolis in China*, (World Affairs Press, Beijing, 2004), I argued for a shift in China's urbanization policy from the small city on which it was based in the 1990s; I proposed instead a focus on the megalopolis, a cluster of major metropolitan areas which function together in many respects and which may be treated as a unit. In focusing on the megalopolis, I also analyzed the growth mechanism of the Chinese economy, and pointed out the need to develop urbanization policies dealing with land use reform, highly dense and cardependent populations, and the increasing transfer from an economy based on manufacturing and industry to one based on knowledge. My conclusions convinced top-level researchers and policy-makers in both Japan and China of the need for a new direction in urbanization planning in China. The advice offered by this select group to the National Development and Reform Commission resulted in China's acceptance of the megalopolis concept, and in a significant change of focus in China's 11th Five Year Plan.'

I viewed China's economy from a different perspective as editor of *The Transformation of Economic Development Model in China* (World Affairs Press, Beijing, 2005). This book is a compilation of studies by a select group of researchers and policy makers that I had organized to analyze the distribution of wealth in China. We made significant proposals about how to redistribute income between the central government and the various levels of local government as a means to promote competitiveness of the local economy as a driving force for the national economy. The Chinese Congress was particularly receptive to my proposal to strengthen the compulsory education system in rural areas which, I argued, is very important for redistributing wealth among the different levels of society. A more balanced distribution of wealth would allow a better- educated labor force the ability to increase their personal income, and it would provide them with improved social services such as health care.

In addition to researching and producing publications over the past twenty years, I have studied in detail the relations between Japan and China. Although the economies of the two nations have become closer over time, and more dependent on each other, the relationship between them remains delicate. In an effort to foster improvement in this area, I began in 2005 to organize three annual conferences to promote policy discussion and to improve political dialogue. The conferences have proven to be very successful, and already their influence on policy and politics is being felt. They have been attended by Japan Prime Minister Shinzo Abe, by ministers of both China and Japan, by other leaders of government, business, academia, and the media. The conferences take place alternately in China and Japan, and the next, the Beijing-Tokyo Forum will be held August 27 - 29, 2007, in Beijing. This will be followed in October, 2007, in Nanjing by the China-Japan Policy Exchange Forum, and in November, 2007, in Beijing by the China-Japan High Level Economic Forum.

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International Development Center of Japan (IDCJ)
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#### **PROFESSIONAL SERVICE:**

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 Kyoto, Japan: Minerva Publishing Co. Winner in 1998 of the
 Telecommunications Advancement Foundation Award - Encouragement Prize of the TELECOM Social Science Prize

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The 13th Telecommunications Advancement Foundation Award - Encouragement Prize of the TELECOM Social Science Prize, 1998.

# APPENDIX A – Published Reviews

From the The Economist (7-31-07)

## BookReview

今をときめく上 今をときめく上 り名しんでいた。78年まで経済規 苦しんでいた。78年まで経済規 しんでいた。78年まで経済規 た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を た。いち早く改革・開放政策を	国で ル 港 経 海 道 イ の あ タ (	中国経済 高度成長のメカニズムと課題 周牧之著(東京経済大学教授) 別や之著(東京経済大学教授) 文化大革命の後遺症で疲弊し たれが予想できた にれが予想できた にたいが予想できた
<b>功した。90年代に入ると、浦東功した。90年代に入ると、浦東</b> (本)の国有企業に埋もれていた当時の中 が極端に不足していた当時の中 が極端に不足していた当時の中 がを引き出すことにも成 術と人材を引き出すことにも成	<ul> <li>し、株式</li> <li>し、株式</li> <li>し、株式</li> <li>し、株式</li> <li>し、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、</li></ul>	ーズムと課題」 「「大学教授」 「「大学教授」 「「大学教授」 「「大学教授」 「「「大学教授」」 「「「」」 「「」」 「」」 「「」」 「」」 「」」 「
大規模な乱開発、 たの実情と政策を熟知した著者 はその回答とこれからの方向性 を、明確に示している。	に かし、 がロボリスは課題 で がの対外開放は、多国籍企業のグ の対外開放は、多国籍企業のグ の対外開放は、多国籍企業のグ さるする形でダ たまいし、中国の たまいし、中国のメ ガロボリスは課題 に直面している。	生産、最適調達をめざす企業の 生産、最適調達をめざす企業の

From the Nikkei Shimbun (6-10-07)

	中国経済論
は二〇〇五年、中国の国人総会 (GDP)の四二大メガロボリス (GDP)の四二大メガロボリス (GDP)の四二大メガロボリス ただ中国は建国以来、戦日の国人総会 をさまよっている。その若来、いま中国の国人総会 たでは「農田型の法人のうちてになり、豊かさを求 たたの若都した農村部に移っている。 をごまよっている。その結果、いま他国 をさまよっている。その結果、いま他国 をさまよっている。その結果、いま他国 をさまたが採用のたたの、豊村住民が都市 に流入するのを阻止し続けている。 をたまする。〇六年からの出稼ぎ労働者がたアンチ都市地 に流入するのである。その結果、いま他の 日本社会を取り組むべきのがし、豊村住民が都市 になどが採用の低点重要課題だ。 をつための行財政改革」と呼ばれる総中国 では「一人」 たたの第十一次である。 では「「たっこの三大メガロボリス をでしたり、豊からの出稼ぎ労働者が にはするで、この三大メガロボリス をでしたり、豊からの出稼ぎ労働者を たたのにはすでに、豊村住民が都市 になどが採用の一本 たたのである。 では、現政権の たたのための たたの たたの たたの たたの たたの たたの たたの たたの	周牧之著