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**The Hong Kong Polytechnic University**

**Department of Accounting and Finance**

**Measuring China's  
Regional Productivity  
Performance in Industry  
in 1985-2005**

Fu Lei

A thesis submitted in partial fulfillment of the requirements  
for Doctor of Philosophy

July, 2008

# CERTIFICATE OF ORIGINALITY

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## Abstract

For a large and dynamic transition economy like China, it is important to understand the role of individual regions in the national economy. Along with the reform-induced marketisation and integration with the international economy, there have been on-going changes in factor costs and hence comparative advantages of different regions, and interregional resource reallocations. A proper assessment of regional economies and their potentials relies essentially on an accurate measure of regional productivity. However, data problems, especially the lack of properly measured capital input (stock and services), have been major obstacles to such an assessment. At the current stage of economic development, industrial sectors are becoming more and more important to Chinese economy. In 2005, value-added of industry accounted for 42% of the country's GDP. It is thus necessary to carefully measure the performance of Chinese industry to understand the whole economy.

Therefore, this study re-estimates investment series, net capital stock, capital input, labour input, gross value of output and intermediate input. The whole framework is based on Jorgenson's translog function and the SNA standard to improve the quality of measurement. In the estimation of capital input, this study begins with a critical discussion of the problems in the official investment data. We first construct an alternative investment series for each major industry across regions, then calculate its net capital stocks, and finally estimate its capital services. The newly constructed capital input data are used in production

function analysis to assess the effect of the reform on regional productivity disparities. We also compare two series of net capital stock, one is based on newly estimated investment series, and the other is the adoption of official statistics. Results show that there is significant difference between the two. So, a new evaluation of investment series is necessary to avoid possible bias of TFP estimation.

In measuring labour input, we firstly decompose the number of employees according to different positions, and then use weekly working hours to get total working hours by sectors. Secondly, labour quality index from Wu & Yue's work (2007) is used to obtain labour input. Methodology is improved in quantity measurement and quality measurement of labour input compared with conventional headcount method.

In measuring output, the output deflator is re-constructed based on official statistics of gross value of output in current prices and comparable prices. Then, intermediate inputs are estimated with derived GVO and GVA in constant prices. In the estimation of TFP, Jorgenson's framework is followed, and it is the first time to apply Jorgenson's approach to study of Chinese regional economies.

The present study has yielded the following findings. First, economic growth of China's industry was mainly investment-driven and FDI plays an important role in pushing regional disparity. Second, shares of different sectors in most regions became more diversified after 1993. The diversification is due to marketisation policy that started in 1993 and in line with regional comparative

advantage. Third, most regions experienced positive TFP growth during 1985-2005 and achieved significant productivity improvement since 1993. Regions that have higher weight of heavy industries perform better in TFP. Fourth, there is significant convergence trend among the regions in terms of labour productivity within 1985-2005. Convergence during 1994-2005 is much stronger than the period of 1985-1993.

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## Abbreviations

CIESY	China Industrial Economy Statistical Yearbook
CLSY	China Labour Statistical Yearbook
CPI	Consumer Price Index
COE	Collective Owned Enterprise
CSIC	China Standard Industrial Classification
CSY	China Statistics Yearbook
DICS	Department of Investment and Construction Statistics
DITS	Department of Industry and Transportation Statistics
DPES	Department of Population and Employment Statistics
FA	Fixed Assets
FDI	Foreign Direct Investment
FFE	Foreign Funded Enterprise
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
GVO	Gross Value of Output
IC	Industrial Classification

## Abbreviations

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IO	Input-Output
KLEMS	Capital, Labour, Energy, Material, Services
MFP	Multi Factor Productivity
MPS	Material Product System
NBS	National Bureau of Statistics
NIA	National Income Account
OECD	Organization for Economic Co-operation and Development
OVFA	Original Value of Fixed Assets
PIM	Perpetual Inventory Method
PPI	Producer Price Index
SNA	System of National Accounts
SOE	State Owned Enterprise
SSB	State Statistics Bureau
SYIE	Statistical Yearbook on Industry and Economy
TFP	Total Factor Productivity
WTO	World Trade Organization

# Chapter 1 Introduction

With nearly thirty years of unprecedented rapid economic growth since the economic reform in 1978, China has achieved impressive growth and become the world's fourth largest economy<sup>1</sup>. Industrial sectors experienced remarkable expansion and development, which has made China the “world's factory”. There are many studies on the industrial economy of China. However, few studies are devoted to analysis of regional industry. China is very large and complex in geography. Different regions have different resource endowments. With “piece meal” strategy, the Chinese government launches various policies to each region and sector. These have caused significant difference in growth pattern of regions and sectors, and result in growth inequality across China. Measurement of the regional industrial growth on sectoral level can help us clearly understand China's industry. Nevertheless, this has never been properly done in the previous empirical studies.

With remarkable economic growth rate, China is widely criticized for pollutions and low return brought by its extensive growth modes. In economic theories, reliance on extensive growth can be undesirable in the long-run because it exhausts resources. This means that if only rely on investment of fixed assets, China's high growth rate will not be sustainable. On the other side, to maintain economic growth in the long run, it is good for an economy to grow intensively,

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<sup>1</sup> According to official statistics, China's GDP was ranked the fourth in the world in 2007 by market exchange rate.

for example by improvements in technology to increase the production possibilities frontier of the economy. By Solow's pioneering work in 1957, technology improvement or total factor productivity growth can be captured by the residual in his famous production function. So, an accurate measurement of total factor productivity is the key issue to answer the question that whether China's remarkable growth rate can be sustainable.

Many previous studies focus on TFP assessment at national level. For example, Wu (2007) assessed TFP performance of China's industrial sectors and got the result that the market oriented reform had significant influence on the TFP performance, especially after China's entering WTO. Zheng & Bigsten (2003) estimated China's total factor productivity growth and found that improvement in TFP accounted for major part of the growth during the period of 1978-1995. Their findings are in accordance with the results from the studies of the World Bank (1997) and Madisson (1998). Y. Wu (2004) employed an extended Solow approach to examine the role of productivity in China's economic growth. It is found that TFP has on average contributed to 13.5 percent of China's economic growth in the reform era. In the same book, Y. Wu gave his findings that there were different rates of convergence during the reform period of 1978-1997. Convergence was fast in early 1970s and early 1980s. For different regions, Y. Wu found that middle and west regions have converged faster than the coastal economies.

Measurement problems are the major obstacle to proper productivity analysis and caused significant debate about the real performance of the Chinese



economy, especially the industrial sectors. A few studies attempted to tackle these measurement problems including Wu (2000, 2002), Maddison (1998), Woo (1998), Ren (1997) on growth rate of output; Maddison (1998), Woo (1998) and Chan et al (1998) on price problems; Wu (2007), Wu and Shea (2001), Chan et al (1998) and Chow (1993) on capital measurement; Wu and Yue (2007) on labour measurement. However, there are still limitations in their work especially in methodology and research coverage.

Objectives of this study are two-folded. The first objective is to construct dataset of capital input, labour input and output following the international standard; The second purpose is to assess the industry-level regional productivity performance in China during the reform period. There are four major steps to implement the objectives. The first step is to solve remaining problems of current Chinese official statistics in various issues; in the second step, a quantity panel data set is built for 25 provincial-level regions cross classified by 24 sectors, consisting of gross value of output, gross value added, intermediate input, net capital stock and total hours worked; in the third step, the quantity of capital and labour input is adjusted considering quality improvement; in the fourth step, total factor productivity analysis is conducted by index number approach.

Results of this work are expected to test these hypotheses. First, along with China's market oriented reform, policy and market factors induced resource shift from industries where productivity were low or with lower growth rate to industries with higher productivity or faster growth of productivity. Opening to

FDI and deregulation of non-state owned sector could significantly improve resources reallocation by correcting distortions under central planning. Second, market-driven resource reallocation is expected to result in better productivity performance. Third, structural change of regional economies should also be expected due to the resource reallocation.

## **1.1 Importance of measurement in productivity analysis**

Productivity is a ratio of a volume measure of output to a volume measure of input use, as defined in the *OECD Manual of Measuring Productivity* (2001). There are several approaches to measure productivity. The choice of them normally depends on the availability of data and research purposes. Generally, productivity measures can be classified into single factor and total factor productivity measures. Single factor productivity measures can be either “capital productivity” or “labour productivity”, which means output per unit of capital goods or labour employed. Total factor productivity (TFP), sometimes called multifactor productivity (MFP), is a variable which accounts for effects in total output not caused by inputs. The original concept of TFP growth can be traced to Solow’s seminal work in 1957 and often named as Solow’s residual. It is described by Hulten (2000) that the residual captures changes in the amount of output that can be produced by a given quantity of inputs. Strictly speaking, TFP growth is the technological change with property to be disembodied, exogenous and Hicks-neutral. So, TFP and TFP growth are important concepts and frequently used by researchers to gain valuable insights into the process of economic growth.

There are several assumptions behind the framework of TFP measurement. These assumptions include in particular that, first, production processes can be represented by production functions at different levels of the economy. Production functions relate maximum producible output to sets of inputs. Second, the behavior of producers is efficiently, which means that costs are minimize and/or profits are maximized. Third, markets are competitive, and market participants are price-takers. However, due to imperfect economic environment in practice, estimated TFP growth may consist of various components: technical innovation, organizational efficiency change, input factor shares change, omitted variables and measurement errors. It is obvious that the more accurate the measurement of variables and embodied technological change of inputs is, the more precise the TFP estimated.

Generally speaking, there are two approaches to measuring TFP. One is non-parametric approach<sup>2</sup> and the other is parametric approach with explicit use of an aggregate production function for estimations. Economic models and measurement framework of both approaches have been well developed in the past fifty years. The major task of empirical studies is to find out and accurately measure of input and output variables, especially in the analysis of China's regional industry. Problems and obstacles will be discussed in the next section.

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<sup>2</sup> There are some other non-parametric techniques, such as DEA.

## **1.2 Problems of official statistics of Chinese industry**

Precise measurement of input and output is a must to accurately assess the productivity performance of China's industrial sectors. In this work, raw data is collected from official statistics. However, there are several gaps between the Chinese official statistics and the international standard. Ignorance of these problems will make the TFP estimation biased and unreliable. This part of work will try to tackle the obstacles in the measurement.

### **1.2.1 Problems in industrial classification and data coverage**

There are three major types of problems in industrial classification and data coverage of official statistics. First, China standard industrial classification (CSIC) is inconsistent during the period of 1985-2005. From *China Statistical Yearbook* of different years, there are three sets of classification, launched in 1985, 1994 and 2003 respectively. The 1994 CSIC is significantly different from 1985's. 2003 CSIC is close to 1994 CSIC. In 2003 CSIC, the sectors of "Logging and Transport of Timber and Bamboo" and "Weapon manufacturing" are excluded; sector of "Recycling and Disposal of Waste" is added. These changes are resulted from the fact that China's statistical framework is being shifted from MPS to SNA. However, there is no official adjustment that can help us to reconcile these classifications. Since almost all variables used in this study are on sectoral level, it is necessary to solve this problem.

Second, data coverage of official statistics is inconsistent over time and across different departments of NBS. Also from various issues of China Statistical Yearbook, it can be found that there has been a great change since 1998. Before 1998, “industrial enterprises with independent accounting systems” is used as coverage of statistics. However, the coverage has become “all state-owned industrial enterprises and non-state-owned industrial enterprises above designated size”. It is obvious that this change could make the coverage of Non-SOE smaller after 1998. But the problem is that there is no official information that can be used to reconcile the two periods.

Third, it is also worth noting that statistics from different departments of NBS have different coverage. All these three points that are mentioned above are important in the selection of various series, but often ignored by previous studies. In the measurement of industrial productivity of China, official data employed is normally from Department of Industry and Transportation Statistics (DITS), Department of National Account (DNA), Department of Investment and Construction Statistics (DICS) and Department of Population and Employment Statistics (DPES). Each department has its channel of data collection and aggregation. It can be found that the value of data published by different departments is seldom the same. The results would be less convincing if a researcher uses gross value of output from DITS, and at the same time uses GDP from DNA, number of employees from DPES and investment series from DICS in one production function exercise. The reason behind this problem is that NBS is not capable of conducting statistics on the whole economy. So, these departments intend to publish the data that they are confident in.

However, only using data from DIT is not enough for an accurate measurement of TFP, data from other three departments is necessary as complementary information.

### **1.2.2 Problems in measuring output and input**

As well as output, capital input and labour input are three major variables in production function analysis. However, official statistics is problematic in each variable. Direct use of official data will lead to serious bias in productivity estimations.

Problems are complex in capital measurement, since there is no standard investment series and net capital stock in line with international concepts. Much effort is made by previous studies to build net capital stock based on perpetual inventory method (PIM), like Ho & Jorgenson (2001), Wu (2002b), Huang et al (2002), Y. Wu (2004), Bai et al (2006), Zheng & Hu (2006) and Zhang et al (2007). Within these studies, Ho & Jorgenson (2001) further makes adjustment to quality improvement; Wu (2002b) tries to standardize the investment series, and makes adjustment to official depreciation rate deflator of fixed assets. Bai et al (2006) estimates rate of return of capital. In this study, there are following obstacles to remove in employing official statistics. First, there is no standard investment series that can be directly used in PIM exercise. Official statistics by DICS on investment is based on the workload made in the current year instead of the finished fixed assets that can be put into production. Moreover, data by DICS is inconsistent with that from DITS, which is the major source of other

variables. Second, depreciation rates adopted in China's industrial sectors are decided by government orders, and are criticized to be too low compared with the experience of western market economy. Third, there is no detailed official information of fixed assets deflator by asset type. The only official fixed assets deflator is the "price index of fixed assets investment", and was not available before 1992. Fourth, official statistics is lack of information on residential structure except three "industrial censuses" in 1985, 1995 and 2004. This problem could be serious to SOEs since most big SOEs provide schools, hospitals and houses to their employees. Contribution by the residential structure is part of welfare to employees and should be excluded from productive capital.

In estimation of labour input of China's industry, researchers often face scarcity of raw data. More characteristics of laborer are needed to make adjustment of quality improvement. In this study, there are three major problems to be solved. First is the inconsistency within different sources. There are two sets of industrial staff and workers statistics in China, respectively by DITS and DPES. As discussed in 1.131, these two departments have their own channels of data collection and aggregation method. DPES provides more detailed information on wage rate and welfare. However, it will lead to mistake to direct use "staff and workers" data by DPES, while collecting other variables from DITS. But, information is not enough to calculate labour input if only use DITS data. The second problem is that NBS does not provide regular information on weekly working hours. There is official standard of maximum working hours per week in China, which was reduced from 48 to 44 hours in 1994, and further to 40 hours

in 1995. However, reasonable weekly working hours should be differentiated by legal forms and sectors. The third problem is treatment to residential structure. In central planning era and early stage in reform period, SOEs often recruited more employees to provide social services, like teachers, doctors and nurses. The contribution of these non-industrial employees should be counted as welfare to productive employees instead of labour input to production. Nevertheless, there is no regular statistics on this part of non-industrial employees. In following chapters, problems mentioned above are to be discussed one by one.

For output, official statistics is criticized for its output deflator and the estimated growth rate (Maddison, 1998; Woo, 1998 and Wu, 2000). The criticism is based on following reasons. The first is induced by transfer of statistical framework from MPS to SNA. In previous adopted MPS, services are not included in the statistics. With implementation of SNA, more and more services are included in the official data gradually. Growth rate of output will be overestimated since data coverage is being enlarged. Fortunately, this problem occurred more in statistics on services than industrial sectors. Second, currently adopted comparable price index as output deflator can lead to overestimation of real growth rate of output. This issue is discussed in detail by Wu (2000) and chapter 2 and 6 of this thesis. Third, the use of single deflator approach by NBS may also lead to underestimation of inflation. It is argued in Jefferson et al (2000) that price liberalization in China resulted in a more rapid rise in prices of raw materials than in prices of output. If other things are equal, direct use of official output and output deflator will overestimate TFP.



### **1.3 Thesis structure**

This thesis consists of eight chapters. Chapter Two discusses problems in measuring China's industrial productivity through reviewing previous studies. Major contributions to the foundation of productivity measurement are studied. Empirical studies on China are reviewed at national and regional levels respectively. Problems covered by the discussion include the measurement of inputs and outputs, data coverage and industrial classification, and data quality of official statistics.

In Chapter Three, research methodology is discussed. It can be further divided into three parts. Part one is a detailed explanation of Jorgenson's translog framework. Part two discusses the perpetual inventory method that is used to measure net capital stock. The last part focuses on traslog approach in capital input measurement.

Chapter Four to Chapter Six discuss the work in constructing capital input, labour input and output respectively. Problems of official statistics and difficulties encountered on every variable are carefully treated. At the end of each chapter, constructed data set is presented and discussed.

Chapter Seven is devoted to results and discussions. China's industrial economy during post-reform period is studied in terms of structural changes,

labour productivity and capital intensity, and TFP performance of major manufacturing sectors.

Chapter Eight concludes the whole thesis. Implications of the reform to China's industrial economy are discussed based on the results of this study. Suggestions are also provided for further research in this area.

## **Chapter 2 Studies of Assessing Industrial Productivity Performance in China**

To solve the research problems raised in chapter one and accurately assess the regional productivity on sectoral level of China, two aspects of knowledge are necessary. First is the knowledge on China's industrial economy during reform era. The Chinese official statistics need to be adjusted for accurate measurement based on previous critics and comments; the results are to be explained based on earlier studies; data, method and results need to be compared with others. Second is background of each studied regions. As mentioned in chapter one, different resources endowment and policies caused different comparative advantages in each region. Good understanding of regional information can help us in explaining their productivity performance.

Since the remarkable economic growth in China during the reform period and its enormous scale, China has attracted a lot of attention of researchers. The empirical studies are vast in the past twenty years, especially on national level. However, there are few studies focus on regional level due to availability of data and complexity of regional situation. In these empirical studies, there are several important issues that meaningful to this work, such as real growth rate of Chinese industry; the problem of Chinese official statistics; gaps between the international standard and Chinese standard; limitations of neo-classic economic models to the Chinese case; regional and sectoral inequity. Within

above issues, some are compatible on both national and regional level, some need to be decomposed to regions such as problems of official statistics. So we distinguish the literatures on China's industrial economy by national level and regional level, and focus on national and sectoral discussions.

## **2.1 Literatures on national level**

Empirical studies on national level of Chinese industries cover each aspect of productivity assessment, including level and growth rate of output; measurement of inputs and alternative measurement methodologies.

### **2.1.1 Problems in measuring output**

There are several problems with output measurement of Chinese industry. First is caused by the framework change from original Marxist material product system (MPS) to currently adopted system of national account (SNA), since MPS is unable to reflect the activities of nonmaterial services industries<sup>3</sup>. To this study, this change does not affect industrial sectors as significantly as services. But it means that there is no official information on GDP for pre-1993 period. Though NBS made important adjustment to GDP in 1994-1995, for the period of 1978-1993, there is still no sectoral data available. As complementary

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<sup>3</sup> This change is described in detail by Xu (2004). The NBS began studying SNA in the early 1980s and established a system for GDP estimation at the national and provincial level in 1985. At first, Chinese GDP was only estimated from the production side. The NBS adopted expenditure approach as an experiment in 1989 and then formally in 1993. Before 1992, GDP estimates were obtained by summing the value added for all industries. From 1992, NBS switched to direct estimate from raw data sources. In 1993, national income estimation was officially cancelled.

information, NBS produced a set of IO tables for years 1981, 1983, 1987, 1990, and 1992. Sectoral information from these IO tables is too aggregate, but still important to researchers to estimate GVA for pre-1993 period, as conducted by Ho & Jorgenson (2001).

The second problem is about the output deflator. Official output deflator is widely criticized to understate inflation and overestimate output growth<sup>4</sup>, (Ren, 1995; Woo, 1998; Maddison, 1998; Wu, 2000; Young, 2003;). As alternative method, Maddison (1998) and Wu (2000, 2002a) reconstructed the GVA based on volume indices and input-output table value added weights. The estimated GVA intends to bypass the problematic official output deflator. Ho & Jorgenson (2001) employs sector-differentiated "ex-factory prices of industrial products" to make their estimation more accurate. This problem of official output deflator could be more complicated when intermediate inputs are involved in the production function analysis. NBS uses single deflator approach in calculation of GVA into constant price, which may bring further bias to TFP estimation. As argued by Jefferson et al (1999) that, price liberalization in China resulted in a more rapid rise in prices of raw materials than in prices of output and double-deflator was one alternative to avoid this problem.

### **2.1.2 Problems in measuring inputs**

In TFP assessment, accurate measurement of inputs is the key factor. Among the possible components of TFP, measurement error of inputs is one major part

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<sup>4</sup> Chapter 5 provides detailed discussion on the official output deflator.

in practice. For example, if capital input is underestimated, the residual, which is the estimated TFP, will be overestimated. However, it is difficult to get inputs accurately measured, mostly due to availability of data, problematic official statistics, and measurement method employed.

Most empirical studies tried to measure net capital stock without quality adjustment, like Huang et al (2002), Wu (2002b), Young (2003) and Holz (2006). Only a few studies, such as Ho & Jorgenson (2001) and Sun & Ren (2003) estimated capital input with translog function approach based on the framework built by Jorgenson & Griliches (1967). And both studies are on national level and 2-digit sectoral level.

Researchers made effort in various aspects to improve the measurement of capital. Huang et al (2002) tried to reclassify the traditional industrial classifications based on KLEMS standard, with depreciation rates from the experience of market economies. However, since there is no official data available for pre-1991 period, this study uses retail price index as fixed assets deflator, which may make the estimation unreliable. In Wu (2002b), the author criticizes the mistake of direct use of “investment in fixed assets” as the investment variable in estimating capital stock in PIM exercises. Investment series are derived by “original value of fixed assets” in official statistics in this study and non-productive fixed assets are deducted from capital stock. As alternative, Young (2003) employs gross fixed capital formation (GFCF) in national account to derive investment series. It needs to be pointed out that Young excludes unsold inventory from GFCF and calculates implicit GFCF

deflator by taking the difference between GDP deflator and the deflators for other components except capital formation. In Holz (2006), measures are made in two ways. The first follows the traditional method of accumulating investment over time. The effective investment is derived by the “transfer rate” from the investment statistical yearbooks. Unlike most other studies, this work employs one-hoss shay depreciation pattern. The second relies on the national income accounts (NIA), dividing the economy-wide depreciation values by depreciation rates yields the economy-wide midyear (original value of) fixed assets. With this approach, the author needs to assume that official depreciation value is appropriately measured which is widely criticized since linear depreciation method is employed by NBS. Moreover, the results are too sensitive to the depreciation rate adopted<sup>5</sup> which also made them unreliable.

Ho & Jorgenson (2001) is the first empirical study on China that consider both quantity and price of capital<sup>6</sup>. Ren & Sun (2003)’s work is quite similar in methodology. The later consider auto vehicle as one unique asset type as equipment and structure, and includes corporate tax in the calculation of rate of return of capital. However, both studies make use of official investment series in PIM exercises which is criticized by Wu (2002b), and without consideration of residential structure that will overestimate capital input.

Studies on labour input normally focus on data issues since there are fewer debates on methodology than capital input. As discussed in 2.132, the simplest

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<sup>5</sup> Chow (2006) found Holz (2006)’s result unreasonable as judged by the capital-output ratio and by the results obtained when his capital data are used to estimate a Cobb-Douglas production function.

<sup>6</sup> For detail discussion of this study, please refer to chapter 4.

measure of labour is direct use of number of persons employed, like Wu & Yue (2007). As improvement, total hours worked can be used, like Jefferson et al (2000). Similar with capital measurement, the consideration of quality adjustment of labour input will benefit the TFP assessment. The purpose is to convert hours worked into homogenous volume of labour input, as afford made by Li et al (1993), Ho & Jorgenson (2001), Young (2003) and Wu & Yue (2007).

One problem in measuring labour input of Chinese industry is the choice of quantity series (staff and workers) from official statistics. There are two main data sources on sectoral level. One is by the Department of Population and Employment Statistics (DPES). Data by DPES can be found in the Labour Statistics Yearbook (LSY), and the Population Chapter in CSY. This part of data is consistent with 1% Population Sample Survey (1987, 2005), and Population Census (1953, 1964, 1982, 1990 and 2000) (NBS website). Data by DPES is annual administrative and survey-based estimates (Young, 2003). Researchers often prefer data from DPES, such as Ho & Jorgenson (2001), Wu & Yue (2007) and Young (2003), since it can provide information on cross-classified characteristics of employment. Another source is by the Department of Industrial and Transportation Statistics (DITS). Sectoral level data by DITS can be collected from Statistical Yearbook on Industry and Economy (SYIE) and Industry Chapter of CSY. DITS data is consistent with Industrial Census (1951, 1985, 1995 and 2005). Nevertheless, DITS only provide data on “annual average employed persons”. Just Industrial Census provides detailed information on wages and welfare. However, it is often ignored by previous studies that only the “annual average employed persons” by DITS is consistent



with GVO, GVA, GVFA and depreciation since they are collected and aggregated by the same sources and with the same coverage. Reporting forms for DITS are filled in on firm level and aggregated by local statistics agencies. It is not proper with both DEPS and DITS data in one production function analysis, but researchers have to make use of DPES data to calculate human capital.

As another problem, treatment of non-industrial employees is seldom conducted in empirical studies except Jefferson et al (2000) and Wu & Yue (2007). In Jefferson et al (2000), three issues about quantity of laborer, respectively non-industrial employees, weekly working hours and furlough (*xiagang*), are carefully treated. Wu & Yue (2007) believes that 10 to 20 percent of total employment across industries, who are mostly categorized as persons engaged in “services and other activities”, should not be counted as part of industrial work force. The problem of non-industrial employees could be serious in SOEs, especially before the economic reform. However, since the quick rising of private and foreign firms, and listing of major SOEs in stock exchange, the share of non-industrial employees in the whole industry is declining. For studies of post-reform era, it is proper to discuss non-industrial employees by legal forms. On the other hand, the income share of non-industrial employees is as welfare to those productive employees in SOEs. It is not problematic to include this part in the total compensation to labour input, but will overestimate of quantity of laborer. Besides, there is no detailed official statistics on working hour estimates. Previous studies are difficult to transfer the number of employee into hours worked, like Ho & Jorgenson (2001) and Wu & Yue (2007). Effort is made by Wu & Yue (2007) to take into account working hours by industrial

sectors with information on maximum weekly working hours and statistics from the censuses.

### **2.1.3 Data quality**

Data quality is problematic of Chinese official statistics on national level in several aspects. One type of data quality problem was induced by system transfer from MPS to SNA and such problems had been discussed by Xu (2004).

First, the industry classification and expenditure categories are too aggregated. There are two industrial classification changes during 1985-2005, respectively in 1993 and 2003. Official data series need to be reclassified before any assessment. However, with too aggregated sectoral information, reclassification result is rough. To regroup sectors on 2-digit level, data on 3-digit level is often needed, but such information is only available in 1985, 1995 and 2004's industrial censuses.

Second, since 1998, the non-SOEs with annual sales of less than 5 million Yuan and individual business do not provide detailed sub industry information. Value added for this part of economy is collected in a sample survey by the Enterprise Investigation Organization of the NBS. This brings inconsistency in official data series and implies that some part of pre-1998 data is unreliable.

Third, there are some weak points in GDP estimation at constant prices due to the lack of price indices. The problem of constant price index<sup>7</sup> remains in both GDP estimation and GVO calculation (as single deflator approach is employed by NBS). There are three sets of comparable price indices during 1985-2005, with benchmark year of 1980, 1990 and 2000. Making use of available information, we are able to reconcile these three sets of price index. However, the weights of products in the basket continuously changing without published information. Moreover, the ten-year interval is long enough to introduce substitution biases, also known as Gerschenkron effect (Gerschenkron, 1951). Wu (2002a) comments that this effect can be more significant since 1980's benchmark when the economy became increasingly market-oriented.

Fourth, local leaders tend to interfere with some of the statistical data due to the lack of independence for the statistical system. This institutional problem has been discussed by several studies, such as Keidel (1992), Rawski (1993), Maddison (1998), Woo (1998), Wu (2000) and Young (2003). It is basically accepted that China's local government has political incentives to underestimate inflation and overestimate output growth. This means that TFP estimates based on official output data could have bias of overestimation.

The second type data quality problem is the change of official standard, including coverage change and industrial classification. NBS normally publish one data panel by industrial sectors as statistics represent industrial economy in

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<sup>7</sup> In China, there is no standard official constant price index. NBS uses "comparable price index" in the calculation of GVO and GVA in constant price. This problem will be discussed in chapter 6.

one year. However, we can find two kinds of coverage during 1985-2005, they are “industrial enterprises with independent accounting systems” for 1985-1997 and “all state-owned industrial enterprises and non-state-owned industrial enterprises above designated size” since 1998 (China Statistics Yearbook, various issues). This change made the time series less comparable for pre and post 1998 periods. In Holz & Lin (2001), the authors gave detailed discussion on the change and its implications. However, there is no available information to conduct any adjustment and we still need to wait for more official publications to solve this problem.

There are three sets of industrial classifications respectively launched in 1985, 1993 and 2003 during 1985-2005<sup>8</sup>. Wu & Xu (2005) commented on this problem that the changes were to shift the standard of classification from one facilitating the planning controls over individual industries to one reflecting the technological nature of individual sectors in line with the international standard industrial classification (ISIC). Researchers normally reconcile the classifications by aggregating some sectors. In Wu & Yue (2007), 40 sectors are aggregated into 25. The aggregation could be rough since it is on two-digit level as discussed above. However, it seems to be the only choice with available information.

Reasons behind of these changes can be in following aspects. First, market economy is taking place of original planning economy. Previous MPS was a proper approach of resources allocation and monitoring the whole economy.

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<sup>8</sup> For detailed discussion on these ICs, please refer to chapter 4.

However, the statistics framework needs to be adjusted to reflect the production activities when the market drives resources flow that was decided by government before. Second, with significant structural change especially in the legal forms, more and more previous SOEs are becoming share-holding companies. China requires clear statistics of these assets for better control. This is in line with the speech of previous General Secretary Jiang Zemin in the 15th Chinese Communist Party Congress in 1997 that “public ownership comprises not only state owned and collective owned, but also the state and collective shares in mixed ownership forms” (Xinhua Net). Third, as China becomes more integrated into the world market, especially after entering into WTO<sup>9</sup>. China is becoming more and more important due to enormous scale and sharply increasing share of international trade in recent years<sup>10</sup>. Official statistics is required to meet with the western standard for international comparison. Fourth, since the data quality of official statistics is widely criticized, NBS intends to publish data that they are confident in, and this may make data coverage smaller.

#### **2.1.4 Literatures on TFP measurement**

In recent years, China’s high growth performance at the macro level and low productive efficiency at the firm level have been a puzzle to the Chinese researchers. Given the rate of factor accumulation and allocation, the rate of growth depends on the rate of total factor productivity growth. If TFP only

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<sup>9</sup> For detailed discussion on the effects of China’s entry into WTO, please refer to Sachs & Woo (2003).

<sup>10</sup> By statistics from WTO, the trade volume of China ranked the 3<sup>rd</sup> in 2004-2006 in the world.

accounts for a small part of economic growth, the growth cannot be sustained. In the work by Zheng & Bigsten, the authors tried to decompose the economic growth into its components to explain this phenomenon. With empirical estimations of China's total factor productivity growth, they found that improvement in TFP accounted for major part of the growth during the period of 1978-1995, which is close to the studies of World Bank (1997) and Madisson (1998).

Since the 1990s, the Chinese economy has been growing along an "extensive" path since the middle of the 1990s according to declining output-capital stock ratio. The growth of Chinese economy depends on input more and more seriously. Blanchard and Giavazzi (2005) pointed out one of the reasons behind of this. China over-saves and has gone too far into manufacturing for export markets, which lead to capital misallocation. Then the marginal productivity of capital could even be negative. On the other hand, China still has a relatively low capital-labor ratio compared with Western economies. Labor is abundant, but average education is still low. Except capital misallocation, inefficiency is another reason for slow TFP growth. Zheng & Bigsten comment the inefficiency comes from SOEs, government intervention and local protectionism. They also found that China's reform measures have often resulted in one-time level effect on TFP. Here the authors may mean that the government policies can only create certain level of economic growth in one year. Since 1995, the Chinese government tried to enable GDP to grow by over 9% a year by policies and investment. But the effect of policies on GDP growth cannot take a long time. The government has to keep making new policies to sustain the 9% growth.

In Y. Wu (2004), an extended Solow approach is applied to examine the role of productivity in China's economic growth. The main purpose of this approach is to decompose output growth into factor contribution, technological progress and efficiency change. It is found that TFP has on average contributed to 13.5 percent of China's economic growth in the reform era. This contribution is mainly due to technological progress which tends to accelerate over time. The contribution of productivity to economic growth has been an important issue since one publication by Krugman (1994). He argued that rapid growth in the East Asian NICs has been driven mainly by massive injection of factor inputs rather than innovation and that growth in those countries would not be sustainable. Results various a lot among different studies. Borensztein & Ostry (1996) and Hu & Khan (1997) find significant contribution of TFP to economic growth in China during the reform period. Woo (1998) finds that China has largely followed an extensive growth model with little technological progress. Woo in this study further decomposes productivity growth into two components, that is, efficiency change and technological progress and tries to measure these two components by estimating production frontier. Woo comments that this decomposition emphasizes a distinction between a level and a growth effect of economic reform on the long-run growth. On one side, the level effect of economic reform causes upward shifts in actual production that is movement towards the frontier. On the other side, the growth effect implies that economic reform not only raises the level of production in the short run but also stimulates technological progress and hence leads to sustained growth in the economy. The high proportion of efficiency change in the TFP of China implies that

macroeconomic management through administrative interventions rather than economic policy instruments has been very costly to the Chinese economy.

## 2.2 Literatures on regional level

There are few regional productivity studies on China's industrial economy, mainly due to scarcity of data. Most of them employed incomplete regional level information from China Statistical Yearbooks. However, detailed sectoral information is only available in provincial statistics yearbooks, most of which are published since the middle of 1980's and not continuously available. Researchers have to be very careful to control the variables selected, legal forms, aggregate level of sector and studied period to avoid strong assumptions in estimation.

Problems in national level are often compatible with regional studies. However, more work need to be done for regional productivity analysis, such as regional output deflator, fixed assets deflator by asset types, depreciation, weekly working hours, wage rate and maybe the most important in practice, to fill in missing official raw data by available information. Important literatures on regional studies of China include Hsueh et al (1993), which provide estimation of provincial statistics of China for 1949-1989; TFP studies by Zheng & Hu (2006)<sup>11</sup>; capital measurement by Zhang et al (2007); study on the effects of geography and policy on provincial growth rates by Sylvie et al (2002); local protectionism and regional specialization study by Bai et al (2004).

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<sup>11</sup> Wu (2003) uses regional panel data to analyze national economy. So, it is discussed as national level study.



Zheng & Hu (2006)'s work is on aggregate level of sectors. Malmquist Index approach is employed to decompose productivity growth into two components, technological progress and efficiency change. They find considerable productivity growth for most of the data period, but it was accomplished mainly through technological progress rather than efficiency improvement. The data consist of a panel of 29 provinces over a period of 22 years from 1979 to 2001. However, there are some shortages in this study. Firstly, labour and capital input are not adjusted with quality improvement; labour is measured by number of persons employed instead of total hours worked. By this approach, inputs will be underestimated and TFP will be overestimated. Secondly, GDP deflator is used to deflate fixed assets investment series, which will be very problematic since GDP deflator is on producers' side and fixed assets investment deflator should be on purchasers' side. Fixed assets investment is mainly in equipment and structure, but GDP deflator reflects the price change of products of the whole economy. Thirdly, in estimation of initial capital stock, the authors assume the share of provincial capital stock in the national total in 1978 is the same as the share of the provincial GDP in the national total. Assumption made in this study is that the single productivity of capital in 1978 has no regional difference, which is too strong. Fourthly, regional variations are not taken into consideration in deflators and depreciation rates that will also leads to unreliable results.

China's regional inequality and reasons behind have attracted researchers' interest in recent years. Before the economic reform, the Chinese government

saw it as one of their mission to reduce the gap between the coastal and inland provinces. Central planning gave the Chinese government a handle to mobilize resources for achieving that goal as state appropriations as the dominant source of investment funds. For the post-reform period, regional policy had adopted an unbalanced one in order to improve productivity and benefit the people through economic growth. So, since the Sixth Five-year Plan (1981-1985), the state investment activities inclined to be favorable to the East. Sylvie et al (2002) tries to measure the regional disparity in China and explain it from geography and economic policy differences. The paper provides several interesting findings on provincial income inequality. First, there was unprecedented growth in provincial income inequality after 1992. Second, there was little change at the very top and very bottom of the inter-provincial income ranking scale. Third, the three major cities were always at the top of the income ranking scale. Fourth, Qinghai and Ningxia moved up most in the provincial income ranking during the planned period and moved down most in the reform period. Fifth, the provinces that improved their ranking most in the reform period were the coastal provinces. From their findings, policy bias is strongly suggested. In their econometric analysis of the factors contributing to regional income inequality, the authors set two key proxy variables for geography and preferential policies. They find that geography effects grow slowly over time, but policy effects are more immediate, and their effects remain constant over time.

Bai et al (2003) tries to explain the inequality by testing the hypothesis of regional specialization and protectionism of China's industry. This study uses dynamic panel estimation method to investigate the determinants of regional

specialization in China's Industries and local protectionism. The five hypothesis are industries with heavy employment of immobile resources are geographically concentrated; geographic concentration is more likely in industries that exhibit increasing returns to scale; the degree of regional specialization is higher for industries that enjoy significant external economies; geographic concentration is low for those industries that had high tax-plus-profit margins in the past; and regional specialization is low for industries with high shares of state ownership. Data employed in this study is a panel data set of 32 two-digit industries in 29 regions over the period of 13 years between 1985 and 1997. This study finds that specialization is lower for industries with higher profit-plus-tax margins in the past and for industries with larger shares of SOE, reflecting stronger incentives for local governments to protect these industries. Overall time trend of regional specialization of industrial production has reversed an early drop and registered a significant increase in later years. Above two studies by Sylvie et al (2002) and Bai et al (2003) are not closely related to the measurement issues of this study, but can help us in explaining regional differences in productivity and comparative advantage.

## **Chapter 3 Research Methodology: Measuring Sectoral Productivity**

Productivity is commonly defined as a ratio of a volume measure of output to a volume measure of input use. To trace the technology change is often the main objective of productivity measurement. Technology has been described as “the currently known ways of converting resources into outputs desired by the economy” (Griliches, 1987) and appears either in its disembodied form (such as new blueprints, scientific results, new organizational techniques) or embodied in new products (advances in the design and quality of new vintages of capital goods and intermediate inputs).

There are several approaches in measuring productivity. The choice between them depends on the purpose of productivity measurement and, in many instances, on the availability of data. Broadly, productivity measures can be classified as single factor productivity measures (relating a measure of output to a single measure of input) or multifactor productivity measures (relating a measure of output to a bundle of inputs). Another distinction, of particular relevance at the industry or firm level is between productivity measures that relate some measure of gross output to one or several inputs and those which use a value-added concept to capture movements of output. The economic theory of productivity measurement goes back to the work of Robert Solow (1957). They formulated productivity measures in a production function context

and linked them to the analysis of economic growth. The field has developed considerably since, in particular following major contributions by Dale Jorgenson, Zvi Griliches and Erwin Diewert. The production theoretical approach to productivity measurement offers a consistent and well-founded approach that integrates the theory of the firm, index number theory and national accounts. The purpose of this chapter is to discuss the methodology employed in this work to assess the productivity of Chinese industry, including production functions by regression approach and Jorgenson's translog framework especially methodology in the measurement of capital input.

### **3.1 Production Function**

The coefficients in the production functions are central to the decomposition of output growth into contributions from physical capital, labour, and productivity. The regression approach uses the econometrics method to directly estimate the coefficients by economic data. The regression approach to productivity measurement is only based on observations of volume outputs and inputs. As commented by the OECD Manual of "Measuring Productivity", the regression approach avoids postulating a relationship between production elasticities and income shares, which may or may not correspond to reality, and indeed puts researchers in a position of testing these relationships. Further possibilities arise with econometric techniques: allowance can be made for adjustment cost (the possibility that changes in factor inputs are increasingly costly the faster they are implemented) and variations in capacity utilization. Furthermore, it is possible to investigate forms of technical change other than the Hicks-neutral

formulation implied by the index number based approach; and there is no a prior requirement to assume constant returns to scale of production functions.

In 1957, Rober Solow publish a seminal paper on a production function describes how inputs such as bulldozers, semiconductors, engineers, and steel-workers combine to produce output. Inputs are grouped into two categories, capital,  $K$  and labour,  $L$ . If output is denoted as  $Y$ , the production function is assumed to have the Cobb-Douglas form and is given by

$$(1) \quad Y = F(K, L) = K^\alpha L^{1-\alpha},$$

Where  $\alpha$  is some number between 0 and 1 and it gives the output elasticity of capital.

$$(2) \quad \varepsilon_{YK} = \frac{K}{Y} \frac{dY}{dK} = \alpha$$

Notice that this production function exhibits constant return to scale: if all of the inputs are doubled, output will exactly double.

If we consider technology improvement and not assume a constant return to scale, the formula will be:

$$(3) \quad Y_t = AK_t^\alpha L_t^\beta,$$

Taking logs of both sides, we get,

$$(4) \quad \ln(Y_t) = \ln(A_t) + \alpha \ln(K_t) + \beta \ln(L_t)$$

Respectively,  $\alpha$  and  $\beta$  are output elasticity of capital and labour. This is the production function in levels and can be estimated directly by regressing  $\ln(Y_t)$  on  $\ln(K_t)$  and  $\ln(L_t)$ .

Alternatively, with total (logarithmic) differentiation and then a little mathematical rearrangement of Equation (1), we could get the famous Solow residual:

$$(5) \quad \frac{\dot{A}_t}{A_t} = \frac{\dot{Y}_t}{Y_t} - \frac{\partial Y}{\partial K} \frac{K_t}{Y_t} \frac{\dot{K}_t}{K_t} - \frac{\partial Y}{\partial L} \frac{L_t}{Y_t} \frac{\dot{L}_t}{L_t}.$$

$(\partial Y / \partial K)(K_t / Y_t)$  and  $(\partial Y / \partial L)(L_t / Y_t)$  are the output elasticities of capital and labour, i.e.  $\alpha$  and  $\beta$  as given in (1), respectively. By imposing perfect competition and constant returns to scale production technology, index number approach uses data on labour compensation from national accounts to get the factor share, which is equivalent to the output elasticity with respect to labour under the above assumptions.

## 3.2 Index Number Approach - Jorgenson's Translog

### Function

Following Solow's pioneering work, contributions had been further made by Dale Jorgenson, Zvi Griliches and Erwin Diewert in improving the measurement of productivity. The translog approach was built up by Jorgenson and Griliches in their theoretical work in 1967, and then frequently employed in empirical studies. Actually, the spirit of translog framework was based on the Divisia index derived by Francois Divisia in 1925, then further improved by Jorgenson & Griliches (1967) and Diewert (1976). So, in this part, Divisia index will be discussed first, followed by Jorgenson's framework.

### 3.2.1 Divisia index

The Divisia index is a weighted sum of growth rates, where the weights are the components' shares in total value. Suppose  $\{X_1(t), X_2(t), \dots, X_n(t)\}$  is the set of observations which are to be indexed and  $\{p_1(t), p_2(t), \dots, p_n(t)\}$  the associated price vector; let  $\alpha(t)$  denote the path of the  $X$ 's over the time interval  $[0, T]$ . The Divisia index, in its continuous form, is

$$(6) \quad D(\Gamma) = \exp \left\{ \int \left( \sum_{i=1}^n \frac{p_i(t) X_i(t)}{\sum_{j=1}^n p_j(t) X_j(t)} \frac{\dot{X}_i(t)}{X_i(t)} \right) dt \right\} = \exp \left\{ \int_{\Gamma} \varphi \cdot d\alpha(t) \right\}$$

Where

$$\varphi = \left( \frac{p_1(t)}{\sum_{j=1}^n p_j(t) X_j(t)}, \dots, \frac{p_n(t)}{\sum_{j=1}^n p_j(t) X_j(t)} \right)$$

Where dots over variables denote derivatives with respect to time,  $\varphi$  denotes the vector of prices normalized by the value shares, and  $\Gamma$  is the curve described by  $\alpha(t)$ ,  $0 \leq t \leq T$ . The Divisia index is thus a mapping from the set of paths  $\alpha(t)$  into the real line.

Since economic data does not come in the form of continuous records, the discrete form of the Divisia index is used in practice.

$$(7) \quad \log(D_t) - \log(D_{t-1}) = \sum_{i=1}^n \frac{1}{2} [V_{i,t} + V_{i,t-1}] [\log(X_{i,t}) - \log(X_{i,t-1})]$$

Where

$$V_{i,t} = \frac{p_{i,t} X_{i,t}}{\sum_{j=1}^n p_{j,t} X_{j,t}} \quad (i = 1, \dots, n)$$

This is the discrete time Törnqvist-translog index. Jorgenson's translog function is the discrete form of the Divisia index. It has two important properties. First, it



can always be computed given observations on prices and quantities. And secondly, it approaches the continuous form as  $\Delta t$  goes to zero.

### 3.2.2 Jorgenson's translog framework

In the work "Productivity and Economic Growth" of Jorgenson in 1989, he gave us a systematic framework to measure productivity by translog function.

$$(8) \quad Y_{jt} = A_{jt} f(K_{1jt}, \dots, K_{kjt}, L_{1jt}, \dots, L_{ljt}, Z_{1jt}, \dots, Z_{njt})$$

The index of productivity is represented by  $A_{jt}$ . It is assumed that the function is separable in such a way that the various types of capital, labour and intermediate inputs may be aggregated into indices  $K_{jt}$ ,  $L_{jt}$ , and  $Z_{jt}$  respectively, so we may write the production function as :

$$(9) \quad Y_{jt} = A_{jt} f(K_{jt}, L_{jt}, Z_{jt})$$

The index of capital input is aggregated from two types of assets, structures and equipment. The labour input is an aggregate of the number of workers cross classified by sex, age, and educational attainment. The material input index is aggregated over the 29 separate commodities. These intermediate goods are produced by the 29 sectors plus imports. The construction of these input aggregates is described in section III below.

We assume that (9) is described by a translog form so the index of productivity may be derived from :

$$(10) \quad d \ln Y_{jt} = \bar{v}_{K_{jt}} d \ln K_{jt} + \bar{v}_{L_{jt}} d \ln L_{jt} + \bar{v}_{Z_{jt}} d \ln Z_{jt} + d \ln A_{jt}$$

where  $d \ln Y_{jt} = \ln Y_{jt} - \ln Y_{jt-1}$ , and the  $\bar{v}$ 's are the two-period average share of the subscripted input in nominal gross output :

$$(11) \quad \bar{v}_{Kjt} = \frac{1}{2}(v_{Kjt} + v_{Kjt-1})$$

$$v_{Kjt} = \frac{P_{Kjt} K_{jt}}{P_{Yjt} Y_{jt}}$$

$$v_{Ljt} = \frac{P_{Ljt} L_{jt}}{P_{Yjt} Y_{jt}}$$

$$v_{Zjt} = \frac{P_{Zjt} Z_{jt}}{P_{Yjt} Y_{jt}}$$

The P's denote the prices,  $P_{Yjt}$  is the output price to the producer (factory gate price less taxes),  $P_{Kjt}$  is the rental price of capital, and  $P_{Ljt}$  is the price of labour input. The value of capital input is calculated such that the value of inputs equals the value of output:

$$(12) \quad P_{Yjt} Y_{jt} = P_{Kjt} K_{jt} + P_{Ljt} L_{jt} + P_{Zjt} Z_{jt}$$

We shall use the output price to calculate the productivity indices. Official GDP is evaluated at purchasers' price, or industry price,  $P_{Ijt}$ . The difference between the two valuations is the net taxes on production, NT :

$$(13) \quad P_{Ijt} Y_{jt} = P_{Yjt} Y_{jt} + NT_{jt}$$

The real value added of sector j,  $V_{jt}$ , is defined implicitly from (14) as output less an index of intermediate inputs :

$$(14) \quad d \ln Y_{jt} = \bar{v}_{Vjt} d \ln V_{jt} + \bar{v}_{Zjt} d \ln Z_{jt}$$

The following identity is implied:

$$(15) \quad \bar{v}_{Vjt} d \ln V_{jt} = \bar{v}_{Kjt} d \ln K_{jt} + \bar{v}_{Ljt} d \ln L_{jt} + d \ln A_{jt}$$

Where

$$v_{Vjt} = \frac{P_{Kjt} K_{jt} + P_{Ljt} L_{jt}}{P_{Yjt} Y_{jt}}$$

is the share of value added in gross output. The price of value added is then given by the sum of values divided by the quantity index:

$$(16) \quad P_{V_{jt}} V_{jt} = P_{K_{jt}} K_{jt} + P_{L_{jt}} L_{jt}$$

The above describes the accounting for each sector. We now turn to the aggregation over all the sectors to derive national output. To use an aggregate production function one must assume that there is perfect substitution among sectors, and total real value added (at factor cost) is calculated as the simple sum of sectoral value added:

$$(17) \quad V_t = \sum_j V_{jt}$$

This aggregate output is written as a Hicks neutral function of the inputs of capital and labour

$$(18) \quad V_t = A_t f(K_t, L_t)$$

$K_t$  is an index representing the aggregate of the various capital asset types, where each asset type  $k$  is the national sum of the asset in all sectors. We use the Divisia method to derive the input aggregate:

$$(19) \quad d \ln K_t = \sum_k \bar{v}_{Kkt} d \ln K_{kt}, \quad k=\text{Structures, Equipment}$$

$$K_{kt} = \sum_j K_{jkt}$$

Similarly,  $L_t$  represents the aggregate of various types of labour:

$$(20) \quad d \ln L_t = \sum_l \bar{v}_{Llt} d \ln L_{lt},$$

$l$ =cross classification of sex, age, education

$$L_{lt} = \sum_j L_{jlt}$$

From (15) we get the aggregate real value added, and we assume that (18) may be written in the translog form. Then, growth rate of TFP,  $A_t^a$ , may thus be derived from:

$$(21) \quad d \ln A_{jt} = \bar{v}_{Vjt} d \ln V_{jt} - \bar{v}_{Kjt} d \ln K_{jt} - \bar{v}_{Ljt} d \ln L_{jt}$$

Multiplying by the Domar weights and summing over all sectors:

$$(22) \quad \sum_t \frac{\bar{w}_{jt}}{\bar{v}_{Vjt}} d \ln A_{jt} = \sum_j \bar{w}_{jt} \ln V_{jt} - \sum_j \bar{w}_{jt} \frac{\bar{v}_{Kjt}}{\bar{v}_{Vjt}} d \ln K_{jt} - \sum_j \bar{w}_{jt} \frac{\bar{v}_{Ljt}}{\bar{v}_{Vjt}} d \ln L_{jt}$$

$$w_{jt} = \frac{P_{Vjt} V_{jt}}{\sum_i P_{Vit} V_{it}}$$

where

is the value share of sector j's value added in total GDP at factor cost.

The translog approach is actually one kind of index number approach and there are a few assumptions in this framework, such as perfect market competition and no price distortions. This framework has been well developed and often employed in empirical work, such as KLEMS project in Europe. However, researchers have to be careful in dealing with studies on China. It was argued by Wu & Xu (2005) that in the context of a centrally planned economy or transitional economy, assumptions of no distortion and perfect competition and that factors are paid their marginal revenue product are difficult to justify. They therefore argue that in estimating aggregate production function parameters, index number approach is unreliable in the context of a centrally planned. In this work, the studied period is 1985-2005. Market mechanism in China was being built up during this period, especially after 1993. Marketization was not complete yet, but can basically satisfy the requirement of market economy in recent years. With well established theoretical foundation, we still think the

translog framework is a better choice in measuring productivity of China's industrial economy.

### **3.3 Measurement of capital**

In measurement of productivity, the most complicated part is measuring capital input. So, it is necessary to explain methodology of capital measurement in detail. The first step in developing sectoral measures of capital input is to construct estimates of capital stock by industry for each year. Investment data is aggregated by PIM. The second step in developing sectoral measures of capital input is to construct estimates of prices of capital services from data on property compensation. For each asset the price of investment goods is a weighted sum of future rental prices, discounted by a factor that incorporates future rates of return. Weights are given by the relative efficiencies of capital goods of different ages. The same weights are used in constructing estimates of rental prices and capital stocks. In the following, methodology of constructing net capital stock and capital input is to be discussed in detail.

#### **3.3.1 Measuring net capital stock**

The Perpetual Inventory method generates an estimate of the capital stock by accumulating past purchases of assets over their estimated service lives. We normally refer to the capital goods acquired at different points of time as different vintages. Estimates of the relative efficiencies of capital goods of

different ages are derived from a comprehensive study of acquisition prices of assets of different vintages by Hulten and Wykoff (1981a, 1981b).

According to PIM, even when capital goods are homogeneous in nature, they must be distinguished by vintage, and it must further be recognized that the differing vintages of surviving capital have varying marginal products. This leads to an aggregate capital stock over vintages, measured in efficiency units, computed as in the perpetual inventory relation,

$$(23) \quad K_t = \Phi_0 I_t + \Phi I_{t-1} + \dots + \Phi_T I_{t-T}$$

where  $\Phi_0 = 1$ , the efficiency weights are in the range  $0 \leq \Phi \leq 1$ , and  $I_{t-T}$  is the oldest surviving vintage of capital, originally acquired as a new investment in time period  $t - T$ . It is evident from this equation that firstly, the estimates of the efficiency weights  $\Phi_{t-v}$  are needed to complete the measurement of  $K$  given data on the  $I$ . However, it is not evident how the  $\Phi$ 's are determined or how they can be estimated. One approach is to estimate the relative efficiency indirectly by assuming that  $\Phi$ 's follow some pattern that depends on an observable useful life  $T$ .

Several efficiency patterns have been discussed in the literatures on estimating  $\Phi$ . The one-hoss shay pattern commands the greatest appeal among these patterns. This is because casual experience with commonly used assets suggests that most assets have nearly the same level of efficiency regardless of their age, for example, a two-year-old bulb seems as same light as a two-year-old bulb. Thus, it is frequently assumed that  $\Phi$  takes the following form:

$$(24) \quad \Phi_0 = \Phi_1 = \dots = \Phi_{T-1} = 1, \quad \Phi_{t+\tau} = 0 \quad \tau = 0, 1, 2, \dots$$

In the one-hoss shay pattern, assets remain full efficiency until they totally retired. Thus, the efficiency sequence is completely characterized by the asset life  $T$ . As result, we only need to estimate  $T$  for capital input measurement.

Then, the second frequently used efficiency pattern is the straight-line decay.

Under this form,

$$(25) \quad \Phi_0 = 1, \Phi_1 = 1 - \frac{1}{T}, \Phi_2 = 1 - \frac{2}{T} \dots$$

$$\Phi_{T-1} = 1 - \frac{T-1}{T}, \quad \Phi_{T+\tau} = 0 \quad \tau = 0, 1, 2, \dots$$

we can see from the equation above, the straight-line form's most important characteristic is that efficiency decays in equal amount every year, that is,

$$(26) \quad \Phi_{\tau-1} - \Phi_{\tau} = \frac{1}{T} \quad \tau = 1, \dots, T-1$$

this pattern is very popularity and widely used because it is borrowed from depreciation accounting. At this moment, it is still the main official depreciation method in China.

The third widely used efficiency pattern is the geometric decay. Efficiency of capital decays at a constant rate  $\delta$ ,

$$(27) \quad (\Phi_{t-1} - \Phi_t) / \Phi_{t-1} = \delta, (t = 0, 1, 2, \dots)$$

$$\Phi_0 = 1, \Phi_1 = 1 - \delta, \Phi_2 = (1 - \delta)^2, \dots, \Phi_t = (1 - \delta)^t,$$

The geometric form is widely used in theoretical expositions of capital theory because of its simplicity and it is supported by empirical studies of used capital prices. But there are two problems with this pattern, one is the rapid loss of efficiency in the early years of asset life, moreover, assets are never retired under this pattern. So, the efficiency sequence is no longer a function of the

useful life  $T$ . However,  $\delta$  is frequently derived from published estimates of  $T$  using the double declining balance formula,  $\delta = 2/T$  obtained from tax accounting.

There are a lot of literatures on the retirement patterns of fixed assets and related review work can be referred to Fraumeni (1997). We will talk about the theoretical framework in the following. In this study, we are going to make use of geometric depreciation patter. So, the decreasing rate of the fixed assets' efficiency will be constant.

$$(28) \quad (\Phi_{t-1} - \Phi_t) / \Phi_{t-1} = \delta, (t = 0, 1, 2, \dots)$$

with  $\delta$  and  $T$ , we can set scrap rate as  $S$ , then we can have

$$(29) \quad S = (1 - \delta)^T$$

with this formula, we can estimate  $\delta$  from  $S$  and  $T$ .

and after adjustment, the PIM can be written as:

$$(30) \quad K_t = I_t + (1 - \delta)I_{t-1} + \dots + (1 - \delta)^{t-v} I_v + (1 - \delta)^{t-v+1} K_{v-1}$$

That is, the capital stock at time  $t$  is the efficiency-weighted sum of investment back to year  $v$ , plus the remaining efficiency of the capital stock of time  $v-1$ . By making the investment series sufficiently long, that is, making  $v$  sufficiently large, the size of  $K_{v-1}$  can then be ignored. Otherwise, a value for  $K_{v-1}$  must be estimated as benchmark.

$$(31) \quad K_t = I_t + (1 - \delta)K_{t-1}$$



### 3.3.2 Measuring Capital Input with Translog function

The flow of capital services is derived by aggregating two asset classes -- structures and equipment. Our method involves distinguishing between the stock of assets and the flow of services derived from them is described in detail in Jorgenson, Gollop and Fraumeni (1987). We shall merely summarize the methods here but will discuss our adaptations to the Chinese case.

The stock of capital of type  $k$  in sector  $j$  ( $S_{kjt}$ ) is accumulated from the flow of investment using the perpetual inventory method :

$$(32) \quad S_{kjt} = (1 - \delta_k)S_{kjt-1} + I_{kjt}, \quad k=\text{structure, equipment}$$

where  $I_{kjt}$  is the real investment in asset  $k$ , and  $\delta_k$  is the geometric depreciation rate. The real investment is given by the data on value of investment divided by the price of capital goods:

$$(33) \quad I_{kjt} = VI_{kjt} / PI_{kt}$$

The total stock of capital for sector  $j$  is the aggregate of the two types:

$$(34) \quad d \ln S_{jt} = \sum_k \bar{v}_{kjt}^S d \ln S_{kjt} \quad v_{kjt}^S = \frac{PI_{kt} S_{kjt}}{\sum_a PI_{at} S_{ajt}}$$

Each of the asset types generate a flow of services in period  $t$  proportional to the stock that was in place at the end of  $t-1$  ( $K_{kjt} \propto S_{kjt-1}$ ), at a rental cost  $P_{Kkjt}$ .

We express the rental cost of one unit of the capital stock  $S_{kjt-1}$  used in period  $t$  in sector  $j$  as:

$$(35) \quad P_{Kkjt} = [r_{jt} + (1 + \pi_{kt})\delta_k] PI_{kt-1}$$

where  $r_{jt}$  is the nominal rate of return in sector j, and  $1 + \pi_{kt} = PI_{kt} / PI_{kt-1}$  is the rate of asset inflation.

The total value of capital services is given by the capital row of the Use matrix, as expressed in (19) above. The rate of return is calculated such that the sum of the services over all asset types is equal to this sectoral value:

$$(36) \quad P_{Kjt} K_{jt} = \sum_k P_{Kkjt} K_{kjt} = \sum_k P_{Kkjt} S_{kjt-1}$$

With this we can now give the expression for the quantity of capital services in eqs. (6) and (7) as the aggregate of all assets :

$$(37) \quad d \ln K_{jt} = \sum_k \bar{v}_{kjt}^K d \ln K_{kjt} = \sum_k \bar{v}_{kjt}^K d \ln S_{kjt-1} ,$$

$$v_{kjt}^K = \frac{P_{Kkjt} K_{kjt}}{\sum_a P_{Kajt} K_{ajt}}$$

That is, the weight for each asset type is the rental cost which depends on the common rate of return and an asset specific rate of depreciation. This makes our capital input index different from those that use a simple linear sum of asset types. Above are just general function of capital measurement, detailed methodology employed in this study will be discussed in detail in chapter four.

# Chapter 4 Measuring Capital Input by Sector and Region

In the estimation of the production function and TFP, capital measurement is the most difficult part. In this chapter, we are going to discuss the problems of the official investment series as the reason for alternative measurement of net capital stock. We will derive our own series of investment to meet with the requirement of PIM and the production function, employing data published by the National Bureau of Statistics and its local offices. With this target, this chapter will firstly explain the features of the official fixed capital statistics, and then discusses the problems in it. Secondly procedures to construct net capital stock and capital input will be discussed. The last part will discuss the results of capital data work.

## 4.1 Features of the Official Fixed Capital Statistics

In this part, we will focus on the official definitions that related to our topic. The data sources, the raw data series and official classifications will be discussed.

### 4.1.1 The official investment series

Refer to the model of PIM, the first thing we need to do is to standardize the value of  $I$ , the investment series. In the official statistics, there are usually two

series published for us to derive the  $I$ . In the next, we will describe the two series official definitions.

One major industrial investment indicator adopted by the NBS is the investment in fixed assets. According to definition by the NBS in the official website, the amount of investment in fixed assets refers to the volume of activities in construction and purchases of fixed assets in monetary terms. It is a comprehensive indicator which shows the size, pace, proportional relations and use orientation of the investment in fixed assets. According to China's current management system, the investment in fixed assets in the whole country can be classified by various methods. The most common used is decomposed into the following four parts: investment in capital construction, investment in innovation, investment in real estates development and other investment in fixed assets. The investment in fixed assets can also be classified by type of construction into new construction in general, expansion and reconstruction. Another classification is by structure, and the investment series are decomposed into construction and installation, purchase of equipment and instruments and other expenses.

We can also find another related indicator named "newly increased fixed assets". It is defined as the newly increased value of fixed assets through investment, including the value of projects completed and put into production, the value of equipment, tools, and vessels considered as fixed assets, as well as the relevant expenses as investment in fixed assets. This is a comprehensive indicator of investment in fixed assets, reflecting the

achievements of investment in fixed assets in different periods, different sectors, and different regions.

### **4.1.2 The official capital stock series**

The final purpose of this part is to derive the net capital stock that put into production and capital input. So, official capital stock series could be helpful. However, this is no concept of capital stock in Chinese official statistics. The related indicator we can find is the gross value of fixed assets. It refers to the money value by firms to construct, purchase, install, rebuild, expand, and improve fixed assets. It normally includes purchase cost, package cost, transportation cost and installation cost etc.

### **4.1.3 Deflator and depreciation rate**

To derive net capital stock and capital input, accurate deflators and depreciation rate of fixed assets are necessary. For industrial sectors, there is one price indicator defined as “price index of investment in fixed assets”. This indicator is classified into structure, equipment and installation these three parts. For depreciation rate, we can find two sets of indices respectively for structure and equipment in the official statistics.

## **4.2 Problems of the Official Fixed Capital Statistics**

### **4.2.1 Chinese practice versus SNA – why official investment data are problematic**

As one of the most important factors of production, capital input is a big problem to an accurate assessment of the productivity performance of Chinese industry. The biggest difficulty is that Chinese official statistical authorities do not make standard capital stock estimation according to internationally accepted concepts, and available official data on fixed assets suffer from improper treatments to aggregation and depreciation, inconsistencies in industrial classification, and lack of information on prices (Wu, 2002). For regional level, there is even no detailed study on it. Reasons behind this are mainly in scant data and related information to carry out a study. Publication of regional data seems optional to the authorities, there is no systematic, continuous and standard data available for every province-level region in China statistics. Even we have previous experiences to solve the national level problems in deflator, depreciation and others; we still have more difficulties to adjust the deflator and depreciation rate to be suitable for every region. Except regional effect, ownership effect is also significant in China at this moment. The different performance and behavior of SOEs and non-SOEs are very critical issue in China at this moment. Only a few studies had taken ownership into their database, mainly because of scant data. After we cross classify region with ownership, there will be much more missed gaps to fill. On the other hand, the data coverage of SOEs took some times' change during the past. This also makes current official statistics not compatible for vertical comparisons.

In China, investment data are generally divided into three categories, they are “structure”, “equipment” and “others”. The Chinese classification of type of asset is compatible with the 1993 SNA requirement, which breakdown the fixed assets into three categories – machinery and equipment, buildings and structures and other assets. Of course, there are other kinds of breakdown method according to study objectives. A work done by Ho, Jorgenson and Stiroh (1999) provided a kind of assets breakdown, which distinguished 5 broad asset types: high-tech equipment, low-tech equipment, non-residential structures, residential structures and consumers’ durable. For this kind of division, they find that for the most recent period (1990-1996), capital quality change was almost completely due to substitution between the 5 distinguished assets and in particular towards high-tech capital. Except these, we can extend our asset types by transportation equipment, land, and inventories. However, we cannot arrive at this target at this moment with scarce data.

Dealing with the Chinese case, we firstly need to solve the problem of “others” investment. The definition of “others” investment is the expense that are necessary to do the work with the relation to the structure and installation projects and to the purchase of equipment. If let “others” be a single type of assets, it will be difficult for calculate its deflator and depreciation because it is composed by many kinds of expenses. To be simple and workable, we can reallocate the investment in others into structure and equipment according to their ratio. Then, the assets types we consider in this study are structure and equipment. But to be compatible with the international standard and satisfy the competitive market assumption of user cost theory, both of these two types of

assets should be productive. In China, nearly half of investment of SOEs is for residential housing, including workers' houses, schools, hospitals and other kinds of facilities for living. This is because that under central control period, enterprises assumed all kinds of responsibilities to their employees. The role of an enterprise is not simply a factory, but a society. However, such inputs like housing, education and medical treatment are not directly for production purpose. They should be treated as part of labor compensation instead of capital input. So, we will delete this part in SOEs. For the enterprises of other kinds of legal form, for example, FFEs, they have no the incentive to invest such non-profitable projects. For COEs, we can look them as not profit-seeking as SOEs, but most COEs' size are small and they can not get finance support from the central government. So, most of them do not have the liability and incentive to invest on residential structures. Compared with SOEs, we will not consider the problem of non-productive assets of non-SOEs.

### **4.3 Methodological problem in data collection and compilation**

For officially published data on gross value of fixed assets, the availability is not satisfactory. It seems that the situation of ATI is better than the SOEs since 1985. As planned, the matrix of the raw data should contain the information of 25 regions, 2 legal forms and time-serial for 20 years. So, there will be  $25 \times 2 \times 20 = 1000$  "units" to collect. A unit here means 40 industry branches' GFA of one region for one year. The data collection result is that 105 units do not exist or cannot be found, 82 of them are of SOEs. In these 105 missed units,



71 of them distribute in five regions, they are Tibet, Gansu, Qanghai, Inner Mongolia and Liaoning. Yearly distribution seems not fluctuate so much as regional distribution. But year 1998's missing units are comparably high and this can be explained by the coverage change of this year. Many regional statistics bureaus cannot adjust to the new standard on time in this year, so, some of them still followed the old standard and the others even do not publish the GFA data at all. Due to this problem, there may be a gap between year 1997 and 1999 and this need to be tested of significance at later stage.

On the other hand, for the units we can get, their quality is not satisfactory yet. Firstly, very few units can just reach the sum published by NBS if we add up the 40 industry branches in them. Actually, most regional statistics bureaus do not publish 40 industry branches' data. Some branches' information is frequently undisclosed, like "weapons manufacturing", "other manufacturing", and "other mining". Reasons behind this may be variable, and we can only assume that such information is confidential to be disclosed or the value is too small compared with the total. Apparently, the second reason does not make sense due to very large residual of the calculated sum and the published total. However, it has seemed to be a norm that the regional statistics bureaus will not publish the information of one industry branch if they are not sure about it. As a result, we frequently need to estimate the distribution of these residuals. The second deficiency of data quality is that there are a few mistakes in regional statistics such as wrong decimal digits or even unaccountably mistakes. Though such mistakes are not many in quantity and not serious to our result directly,

when it happens with the above residual problem at the same time, it may increase the difficulty of our estimation substantially.

### **4.3.1 Institutional problem (data fabrication)**

It seems that the statistics policy of NBS is not followed by the province level statistics bureaus very well. There are many inconsistencies of the format and contents between regional and national statistics. It is especially serious with data coverage. In 1998, the data coverage of SOEs changed to be “state-owned or controlling share hold enterprises” at national level, most regional statistics still followed the 1997 standard. A few regional statistics bureaus even have not transferred to new coverage till 2000. So, we need to reconcile all of them before any calculations. But the quality of the national data for 1998 to 2000 is very questionable with inconsistent regional information. As the fourth problem of data quality, when we use ATI data to minus SOEs’ to get the value of non-state-owned enterprises, negative results happen sometimes. Definitely, the coverage of ATI must be larger or equal to that of SOEs. This could be due to conversion of ATI and SOEs data, or publishing mistake to at least one of them.

### **4.3.2 Coverage problem**

There are three sets of industrial classifications (CSIC) in China. One is developed during the central planning period (known as the 1972 industrial classification system). In this system, there are 15 industry branches. Wu

(2002a) commented about this CSIC System that under central planning, industries with a close vertical linkage were grouped together and controlled by a specialized ministry to facilitate the implementation of production plans (because such a linkage was a key in co-coordinating input and output in quantity in the absence of market). For example, the Ministry of Metallurgical Industry administratively controlled metallic mining, basic metals, and fabricated metals production. In 1984 China made its first effort to establish a modern industrial classification system to replace the 1972 CSIC System. The current or the 1994 CSIC System is a further improvement of the 1984 one and is largely compatible with the international standard. In both of these two systems, there are 40 industry branches. However, at this moment, there is no official information to help us link these three systems. The inconsistency in the CSIC Systems has caused great difficulties in the analysis of long-run productivity performance at industry branch level. As a result, we will meet 1984 and 1993 CSIC Systems in this study. To make our database workable and for long-term productivity performance analysis, it is necessary for us to overcome this inconsistency. The most frequently used method to solve this problem is by regrouping one or more industries into a larger one, for example, Huang, Ren and Liu (2002). They regrouped the manufacturing part into 15 branches, from 30. So, they can link the different CSIC Systems directly without any other information. In some other studies, such as Wu (2002b), unpublished information is used to regroup 1984 and 1972 industry branches into the new industry branches in the 1994 CSIC System. However, this can only be done at national level. There is not any information can help us regroup them at regional level. Moreover, to be consistent and systematic, we need more than one year's

information on regrouping method for every region. This already makes it nearly impossible for us to do so even this method is very rough to use one year's ratio to apply to other years. Under current situation, we can only adopt the first method. Our principle in this adjustment is to combine as few industry branches as possible. So, we employ the 25 IC (detail refer to appendix one) in this study. Using this classification, the number of industry branches is 25 instead of the official 40. Lastly, since the 25th sector in 25 IC is lumbering industry, we will not consider it, which means we finally get 24 sectors in this paper.

Except above issues, we also have one problem of data coverage in China. From the publications by NBS, we can see that the coverage of industrial data changed for one time during 1985 and 2003. The coverage used before 1998 for ATI is "industrial enterprises with independent accounting systems", for SOEs, the coverage is "state-owned enterprises with independent accounting systems". Beginning in 1998, the coverage for ATI is "all state-owned industrial enterprises and non-state-owned industrial enterprises above designated size". The designated size here means that annual sales income of this enterprise should be over 5 million. For SOEs, the coverage used is "state-owned or controlling share hold industrial enterprises". There are two kinds of controlling share hold. One is the country hold not less than 50% of the company; second is that the country is the largest share holder. Under both circumstances, the country can control this company. Such enterprises are also treated as SOEs. From the change of coverage in 1998, we can see the structure and policy changes to the Chinese enterprises. The central government tried to only maintain those important, large and medium sized SOEs and transfer the others

to non-state-owned. For some of the maintained SOEs, part of their ownership is sold to the public by share-holding system reform, including being listed. Of course, this change cannot be achieved in one year. So, there must be a gap between 1997 and 1998 especially for SOEs. For ATI, the coverage seems changed not so significant, only add one requirement about annual sales volume. For SOEs, the state-controlled enterprises are added in from 1998, this may enlarge the coverage of this part. But we can say that the ratio of such state-controlled enterprises is very small, it will not make the gap between 1997 and 1998 very significant. Also from the data of 1997 and 1998, the annual growth is relatively smooth. On the other hand, to fill this gap, we need the progress at national level to provide us more information about state-controlled enterprises before 1998. So, in this study, we will just follow the coverage by NBS.

#### **4.4 Procedures of Data Construction**

The net capital stock data is constructed by following steps; first, the gross stock data is reclassified into 25 sectors. The data is cross-classified by region and ownership type. Second, gaps are filled and controlled by data published by DITS. Thirdly, calculate the gross flow of fixed assets which is the difference of connected two years' gross value of fixed assets. Fourthly, the gross flow of fixed assets is deflated by regional deflator. Fifthly, last years' net capital stock is depreciated by our sectoral depreciation rate and plus current year's deflated flow of fixed assets, employing the PIM.

#### **4.4.1 Construction of price index**

For price index, we also try to differentiate regions for structure. Structure cannot be traded cross regions. So, it is affected by local price level much more significant than equipment. We can find two systematic related regional price indices from CSY, one is the provincial consumer price index of every year, and the second is the provincial investment price index of structure for year 1990-2005. The second one is exactly what we need. However, we have to estimate the index for year 1985-1989 with the help with regional CPI and Wu's national price index of structure. We regress the national CPI on Wu's index to find the relation between these two indices. Then, we apply this relation to every region's CPI to get the regional price index of structure. For price index of equipment of Wu (2002b), it is classified by 39 industry branches. We use geometric means to transfer it into 25 industry branches.

#### **4.4.2 Geometric depreciation rate**

In this study, the national level depreciation rate is based on Wu's work in 2002a. Wu's depreciation rate index is for 38 industry branches, and cross-classified by asset type. For different regions, the data from the CSY (1999) is employed for additional information. This series provide us the information of industrial depreciation of different regions. However, it is only for year 1991-1998, and not cross-classified by industry branch and asset type. Combing these two series, we can get a rough regional depreciation rate series. First, we reclassify Wu's depreciation rate into 25 industry branches. We use geometric mean for industry branch composition. Next, we calculate the weight of every

region, denoted by  $j$ , to the country, which is the geometric mean of all the regions. Then we time this weight with the national depreciation of different

asset types,  $k$ , and industry branches,  $j$ , we get  $\delta_{ijk,t} = \delta_{ik,t} \frac{\delta_j}{\delta}$ .

### 4.4.3 Method in filling data gaps

#### 4.4.3.1 Systematic changes to raw data

Among the 105 unavailable units, more than half of them have very similar characteristics. Data is available for neighboring years. In this study, not more than 5 continuous years' unavailable data is acceptable. For very few special cases, for example, the SOEs data of Inner Mongolia is not available from 1987 to 1994, which is continuous for 8 years; we will use another kind of method. Total values of the units are available. For this task, we actually need to get the weight for each of the 39 industry branches of one unit, and use these weights to split the total. This condition can be well satisfied with data from every year's "China Statistics Yearbook" except 1998 SOEs. Regional data is available in "China Statistics Yearbook", for both SOEs and ATI, however, only total value of one region. The year 1998 seems a big problem to us especial statistical coverage changed for SOEs in this year.

Either ATI or SOEs data is available in one year for one region. As the number of unavailable SOEs units is much larger than ATI, we often meet the situation that there is only ATI data is available for one year. If above three conditions are satisfied, we can make our estimation by

$$(38) \quad FA_{i,t}^S = \frac{1}{2} \cdot \left( \frac{FA_{i,t-1}^A}{FA_{i,t-1}^S} + \frac{FA_{i,t+1}^A}{FA_{i,t+1}^S} \right) \cdot FA_{i,t}^A \cdot \frac{FA_t^S}{FA_t^A}$$

$$i = 1, 2, 3, \dots, 39, \quad t = 2, 3, 4, \dots, 15$$

Where  $FA_{i,t}^S$  stands for the gross value of fixed assets of the  $i$ th industry branch in the  $t$ th year of SOEs.

$FA_t^S$  stands for the total gross value of fixed assets the 39 industry branches in the  $t$ th year of SOEs.

$FA_{i,t}^A$  stands for the gross value of fixed assets of the  $i$ th industry branch in the  $t$ th year of ATI.

$FA_t^A$  stands for the total gross value of fixed assets the 39 industry branches in the  $t$ th year of ATI.

Equation (34) is for the situation that SOEs data is not available for the  $t$ th year. We have the data of ATI of this year and  $(t-1)$ th  $(t+1)$ th years' data, both of ATI and SOEs. If the unavailable units continue for more than one year, say,  $n$  years ( $n \leq 14$ )<sup>12</sup>, and year  $t$  is the  $x$ th year in the  $n$  years, we only need to adjust equation (34) into,

$$(39) \quad FA_{i,t}^S = \left( \frac{FA_{i,t-x}^A}{FA_{i,t-x}^S} \cdot \frac{n+1-x}{n+1} + \frac{FA_{i,t+n+1-x}^A}{FA_{i,t+n+1-x}^S} \cdot \frac{x}{n+1} \right) \cdot FA_{i,t}^A \cdot \frac{FA_t^S}{FA_t^A}$$

$$i = 1, 2, 3, \dots, 39, \quad t = 2, 3, 4, \dots, 15, \quad x = 1, 2, 3, \dots, n$$

where  $(t-x)$ th and  $(t+n+1-x)$ th year are the closest years, when data become available, on both sides of the  $n$  years' unknown serial.

With this method, we can catch the effects of two kinds of changes from related information in our calculations. The first effect is caused by the growth of the

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<sup>12</sup> As discussed above, we think  $n \leq 5$  is acceptable in this study normally.



whole industry and it is reflected by  $FA_{i,t}^A \cdot \frac{FA_t^S}{FA_t^A}$ . The second effect is caused by the weight change of SOEs in the whole industry and it is reflected by the part of  $\frac{FA_{i,t-x}^A}{FA_{i,t-x}^S} \cdot \frac{n+1-x}{n+1} + \frac{FA_{i,t+n+1-x}^A}{FA_{i,t+n+1-x}^S} \cdot \frac{x}{n+1}$  in the equation (39). However, with this method, we have one assumption on both changes that the trend of the changes is regular and follows certain patterns as neighboring years. Such patterns seems very possible in short term, as set by us as 5 years; for long term, it will be very risky since government policy, economic situation and industry structural changes.

Equation (38) may take some other changes with the data availability condition, for example, when the first years' data of our serial is not available. We only can make use of the information of one side.

$$(40) \quad FA_{i,t}^S = \left( \frac{FA_{i,t+1}^A}{FA_{i,t+1}^S} \cdot 2 - \frac{FA_{i,t+2}^A}{FA_{i,t+2}^S} \right) \cdot FA_{i,t}^A \cdot \frac{FA_t^S}{FA_t^A}$$

$$i = 1, 2, 3, \dots, 39, \quad t = 1$$

This situation may differ from equation (34) very much since we have to totally accept the growth trend between the  $(t+1)$ th and  $(t+2)$ th year and with no limit to this trend at the same time. If the growth rate of one or more industry branches is substantially large between these two years, say, more than 100%, then we will reach a negative value of the  $t$ th year. Fortunately, the first year, 1985's data availability is good because of the 1985 industrial census. However, we still need to set one value to limit the trend for substantial growth of some industry branches. The value we think most reasonable is  $\frac{FA_{i,t+1}^S}{FA_{i,t+1}^A} \cdot FA_{i,t}^A$ , which

means we give up the effect of substantial growth trend between  $(t+1)$ th and

$(t+2)$ th year of individual industry branches and keep the others to follow the trend. One direct result of this arrangement is that we cannot meet the total. Two actions can be taken to deal with this problem. The first is to just accept the difference if it is very small. Reason behind this action is that this small difference is assumed to be caused by all the other industry branches by weight and the effect on each branch is very slight. On the other hand, this will make sure that the growth trend of the  $(t+1)$ th and  $(t+2)$ th year is followed at least by other industry branches. The second action we can take is to split the difference into other industry branches by weight. Normally, we choose this approach because the difference is comparably large. An inevitable effect of this choice is the overall change of growth rate of every industry branch between the  $t$ th and  $(t+1)$ th year.

Above discussions are based on the situation that can satisfy the three conditions and we can catch both of the two changes' effects. However, sometimes, we can only catch one. For example, we do not have information on either ATI or SOEs in one year or one of them is not available for more than five years. Under such situations, our estimation is not very confident. To be systematic and as safe as possible, the simplest approach is employed. For example, when ATI and SOEs are not available in one year, we prefer to use arithmetic average to fill the gap.

#### 4.4.3.2 Changes to special cases

It is our objective that all the changes to the raw data are systematic; we try to avoid complex methods to make the database easy to understand and neat. However, the distribution of missed units and their quality deficiencies are not systematic. The conditions for us to do systematic estimation discussed above are not sufficient all the time.

One kind of uncertainty we meet is more than five years' continuous unavailable units; fortunately, we only have two such cases, which are Inner Mongolia and Liaoning. The SOEs data for Inner Mongolia is not available from 1987 to 1997, for Liaoning is not available from 1986 to 1996. We still can get some help information from existing years. The ratio of SOEs/ATI for Inner Mongolia in 1987 and 1997 are respectively 0.94 and 0.95. SOEs/ATI ratio for Liaoning in 1988 and 1998 are 0.88 and 0.78. As we can see, the structural changes of these two regions are not significant for the eleven years, which means that the comparably stable status of these two regions makes our estimation easier. Using 1993 as a break point, the years before 1993 use the make use of the SOEs/ATI ratio of 1987 or 1988, for the years from 1993, 1997 or 1998 information is borrowed for these two regions. The relationship can be like this,

$$FA_{i,t}^S = \frac{FA_{i,\tau}^A}{FA_{i,\tau}^S} \cdot FA_{i,t}^A \cdot \frac{FA_t^S}{FA_t^A}$$

$$i = 1,2,3,\dots,40, \quad t = 1,2,3,\dots,16 \quad \tau = 2,3,14,15$$

If  $t < 9$ , then  $\tau = 2$  for Inner Mongolia and 3 for Liaoning.

If  $t \geq 9$ , then  $\tau = 14$  for Inner Mongolia and 15 for Liaoning.

Actually, we can directly use the relation of  $FA_{it}^S = FA_{it}^A \frac{FA_t^S}{FA_t^A}$  to fill up the units missed. This is the simplest way and will not result in new problems like negative value of non-SOEs. However, this method will totally break the relationship among different industry branches. Moreover, it does not make full use of available information. So, we do not employ this method in this study.

Another attempt is to remove the residual between the published total and the calculated sum of one unit. This problem raised mostly due to non-disclosure of some industry branches. We actually need to spread the residual to the missed sectors by estimation. The residual can be expressed as  $FA_t - \sum_{i=1}^{40} FA_{i,t}$ , where

$FA_t$  is the published total. We use this residual as the total of missed sectors if there is no mistake. If only one sector is missed, the GFA value of this sector should just be the residual. As a common example, say, there are several sectors missed of SOEs, but we have full information of neighboring years and ATI of the same year. Then we have,

$$(41) \quad FA_{j,t}^S = \frac{1}{2} \cdot \left( \frac{FA_{j,t-1}^S}{FA_{j,t-1}^A} + \frac{FA_{j,t+1}^S}{FA_{j,t+1}^A} \right) \cdot FA_{j,t}^A \cdot \frac{FA_t^S - \sum_{i=1}^{40} FA_{i,t}^S}{FA_t^A - \sum_{i=1}^{40} FA_{i,t}^A}$$

$$j = 1, 2, 3, \dots, 40$$

where j stands for the missed sector in one unit

The above equation is for the estimation of missed sectors in one unit. As discussed, such problems are many in quantity, and may be integrated with other kind of problems together, which is much more troublesome. At here, we cannot explain every change in detail because of quantity. However, we can

say that all changes are based on above estimation methods. We have to use the formulas flexibly. Here we can raise one example, assume we do not have SOEs unit in the  $t$ th year, and in the  $(t+1)$ th year we missed two sector data, at the same time, we have all other information. The approach we fix this complex problem is firstly, we fill up the sector data of the  $(t+1)$ th year making use of information of the  $(t+2)$ th year and  $(t-1)$ th year, then, we use a fixed  $(t+1)$ th year and  $(t-1)$ th year's information to estimate the missed SOEs unit of the  $t$ th year.

## 4.5 Estimation of capital input

For the estimation of capital input, we will follow Jorgenson's user cost approach for rental price and translog function for capital input as explained in detail in Chapter 3.

### 4.5.1 Translog capital input function

In Jorgenson (1973), the rental price of one asset was expressed as,

$$(42) \quad P_t^K = P_{t-1}r_t + \delta P_t - (P_t - P_{t-1})$$

where  $P_t^K$  is the rental price,  $P_t$  is the price of this asset at time  $t$ ,  $r_t$  is rate of return at time  $t$ ,  $\delta$  is the geometric depreciation rate.

For the aggregation of capital services over different asset types, it is assumed that aggregate services  $K_t$  are a translog function of the services of individual assets  $K_k^t$ .

$$(43) \quad \ln K_t - \ln K_{t-1} = \sum_k v_k (\ln K_k^t - \ln K_k^{t-1})$$

$k = (\text{equipment, structure})$

where  $v_k = \frac{1}{2}(v_k^t + v_k^{t-1})$ , and  $v_k^t = \frac{P_k^t K_k^t}{\sum_k P_k^t K_k^t}$ . With this translog, the weight for each

asset type  $V_k$  depends on the common rate of return and an asset specific rate of depreciation. This characteristic differ Jorgenson's model from those with simple linear aggregation.

The flow of capital service of each of the components of capital input  $\{K_{ki}(T)\}$  is proportional to capital stock, say  $\{A_{ki}(T-1)\}$ :

$$(44) \quad K_{ki}(T) = Q_{Kk}^i A_{ki}(T-1),$$

The constants of proportionality  $\{Q_{Kk}^i\}$  transform capital stock into a flow of capital services. The translog quantity indices of sectoral capital input  $\{K_i\}$  can be expressed in terms of their components  $\{K_{ki}\}$  or in terms of the components of sectoral capital stock  $\{A_{ki}\}$ :

$$(45) \quad \ln K_i(T) - \ln K_i(T-1) = \sum \bar{v}_{Kk}^i [\ln A_{ki}(T-1) - \ln A_{ki}(T-2)]$$

We can define sectoral capital stock, say  $\{A_i(T-1)\}$ , as the unweighted sum of its components:

$$(46) \quad A_i(T-1) = \sum A_{ki}(T-1)$$

Similarly, we can define sectoral indices of the quality of capital stock, say  $\{Q_K^i(T)\}$ , that transform sectoral measures of capital stock into the translog indices of capital input:

$$(47) \quad K_k(T) = Q_K^i(T) \cdot A_k(T-1),$$

The sectoral indices of the quality of capital stock can be expressed in the form

$$(48) \quad \ln Q_K^i(T) - \ln Q_K^i(T-1) = \sum \bar{v}_{Kk}^i [\ln A_{ki}(T-1) - \ln A_{ki}(T-2)] - [\ln A_{ki}(T-1) - \ln A_{ki}(T-2)]$$

These indices reflect changes in the composition of capital stock within each sector. Sectoral capital quality remains unchanged if all components of capital stock within a sector are growing at the same rate. Sectoral quality rises if components with higher flows of capital input per unit of capital stock growing more rapidly. Quality falls if components with lower flows per unit are growing more rapidly.

#### **4.5.2 Sectoral capital property compensation for 1985-2005**

IO tables are employed in the estimation process. Now, we have three comprehensive IO tables of 1987, 1992 and 1997; two less comprehensive IO tables of 1990 and 1995. For regional estimation, we have two incomplete IO tables of 1987 and 1997. IO tables of 1987, 1992 and 1997 are in detailed industrial classification, which can be reconciled with 25 IC properly. For the year of 1990 and 1995, we need assume that the growth pattern of capital input is stable. In the IO tables, there are value-added and labor compensation; we subtract the labor compensation from sectoral value-added to obtain the capital property compensation. Then, we link the five points using arithmetic means. The time series we get is from 1985 to 2003.

#### **4.5.3 Sectoral depreciation rate and price**

For the calculation of rate of return, in the formula  $P_t^K = P_{t-1}r_t + \delta P_t - (P_t - P_{t-1})$ , we need sectoral depreciation rate  $\delta$  and price P, we are following the relationship that

$$\delta = \frac{\sum \delta_k A_k}{A} \text{ and}$$

$$P = \frac{\sum P_k A_k}{A}$$

#### 4.5.4 Sectoral rate of return

With capital compensation and net capital stock  $A$ , we can get the sectoral

$$\text{rental price } P_K^t, P_K^t = \frac{VK_i^t}{A_i^{t-1}},$$

where  $VK_i^t$  is the capital compensation. Then we put the sectoral rental price into the formula of rental price, we get the sectoral rate of return by equation

$$(49) \quad r_t = \frac{P_t^K - \delta P_t + (P_t - P_{t-1})}{P_{t-1}}$$

#### 4.5.5 Rental price of structure and equipment

With rate of return, depreciation rate, price of respective structure and equipment, we can get rental prices by asset type with equation (42). The assumption here is that the rate of return of each asset type is the same.

#### 4.5.6 Sectoral capital input: rate of growth

Finally, we can calculate the rate of growth of sectoral capital input  $(\frac{K_t}{K_{t-1}} - 1)$

with Jorgenson's translog function

$$(50) \quad \ln K_t - \ln K_{t-1} = \sum_k v_k (\ln K_k^t - \ln K_k^{t-1})$$



For the detailed calculation of  $v_k$  and rate of growth of sectoral capital input, we take  $K_k^t = A_k^{t-1}$ , and  $\sum_k P_k^t K_k^t = VK_t$  for the calculation of  $V_k$ .

#### 4.5.7 Problems Encountered

In the estimation of capital input, we encountered with several problems. First of all, we have no information on the ownership and little information on region. We can only make use of two years' regional IO table to get the relationship of the rental prices between nation and every region. Then, we connect these two years with simple arithmetic mean. So, we can get a ratio serial of regional rental prices to national rental prices for year 1986-2003. At the same time, we use the national IO table of year 87, 92, 95, 97 to get a non-linear line of the national-level capital input from year 1986 to 2003. Then we use the ratios got from the regional IO table to calculate regional capital input, then capital services finally.

We still have problems related with industrial reclassification. One way that we can get more accurate capital services is to find a broader classification that can fit the 25 IC and the IO table way (24 industry branches). Another way is to keep 25 IC as standard, then, use the weight of net capital stock as the weight of capital input to split a big industry. For example, in 25 IC, "Food" and "Tobacco" are two individual industries, in the IO table, they are put together. We have the net capital stock data of both "Food" and "Tobacco" in hand, then, we can use their ratio to split the "Food and Tobacco" capital input in the IO

table. However, we need to assume that rental prices of these two industries are the same.

For the industries with negative value added in some year, we just accept these negative values in calculating the rental prices and imply that renting these capitals for business will result loss in that year.

For detailed calculation of regional capital services, we follow two relations. First, we use IO table to get the capital input from IO table by subtracting labor compensation from added value. Second, we make use of one-year saving rate, asset inflation rate and price of capital goods of last year,

$P_K^t = P^{t-1}r^t + \delta P^t - (P^t - P^{t-1})$  to get the rental prices of capital. Then, we can

calculate the capital service with the relation that  $\sum_k P_{Kkj} S_{kjt-1} = VK_{jt}$

## 4.6 Comparison of net capital stocks calculated with estimated investment and official investment

As discussed in Chapter 4.2, official statistics of investment have problems in concept and coverage. So, it is necessary to build up net capital stock of industry with investment derived from gross value of fixed assets. To show the significance of this treatment, in this part, we are going to compare the two net capital stock series constructed respectively by estimated investment series and official investment series. Then we will discuss possible reasons behind the differences.

There is little information on the investment that is cross-classified by sectors and regions, so, we can only conduct the comparison on national level. Moreover, official investment series is prepared and published by the Department of Investment & Construction Statistics (DICS). Data coverage of this department is different from DITS. According to CSY 2008, statistics on investment is project-based and only the projects with the scale on or above 0.5 million will be covered. So, we cannot compare the two stocks of net capital on absolute level, instead, comparison on indices and growth rate is an appropriate option. The series we used is “total investment in fixed assets in the whole country” by sectors. Then, two sets of net capital stock are calculated by PIM approach, respectively with the two investment series, and using the same deflator of investment in fixed assets and depreciation rate.

As shown in chart 4-1 and 4-2, net capital stock constructed with estimated investment ( $K$ ) grows much faster than the stock calculated with official investment ( $K'$ ) during early 1990s. In 1995, difference between  $K$  and  $K'$  is the largest within the 20 years. Since 1996, growth rate of  $K$  became slower. In 2004, accumulated growth of  $K$  and  $K'$  was very close. It is clear that difference between the two series is significant. Directly adopting official investment data may under-estimate capital input, thus over-estimate TFP for the period of 1985-1995; and over-estimate capital input, thus under-estimate TFP growth for 1996-2005.

There are several reasons behind the difference of calculation results. The first reason is in data coverage. Before 2004, data coverage of official investment

series is economy-wide (over 0.05 million yuan before 1997, and over 0.5 million yuan since 1997). Published data is classified by legal forms (only SOE and COE before 1994) or by capital construction, innovation and real estate development. So, investment of private and other types of legal forms was not well record before 1994. During the same period, statistics on the gross value of fixed assets covered enterprises on or above township level, for all kinds of legal forms. So, with higher growth rate of private investment and FDI, the estimated  $I$  is expected to grow faster than the official  $I$ . Because it normally takes one or two years for the investment become fixed assets, growth rate of estimated  $I$  continued to be higher until 1996. The second reason is in concept. As discussed in Chapter 4.2, some investment made by SOEs need years to become fixed assets or just wasted. Because China's official concept of investment is different from the SNA standard, it may over-estimate the real investment without proper treatment of waste. On the other hand, in our approach of deriving investment series, scrapings are not considered because of data limitation. So, investment could be under-estimated. Shown in the following charts, when coverage of both investment series was close since late 1990s, growth rate of official  $I$  became more quickly.

From above discussion, we can conclude that even net capital stocks calculated with estimated investment and official statistics are very close in 2005, the results are significantly different during 1985-2005. If directly adopt official investment series in PIM approach, without proper treatment of time lag, waste and coverage, TFP growth can be over-estimated before 1996, and under-

estimated since 1996. So, it is a better approach for us to derive investment series from another published series on gross value of fixed assets.

CHART 4-1: INDICES OF NET CAPITAL STOCK

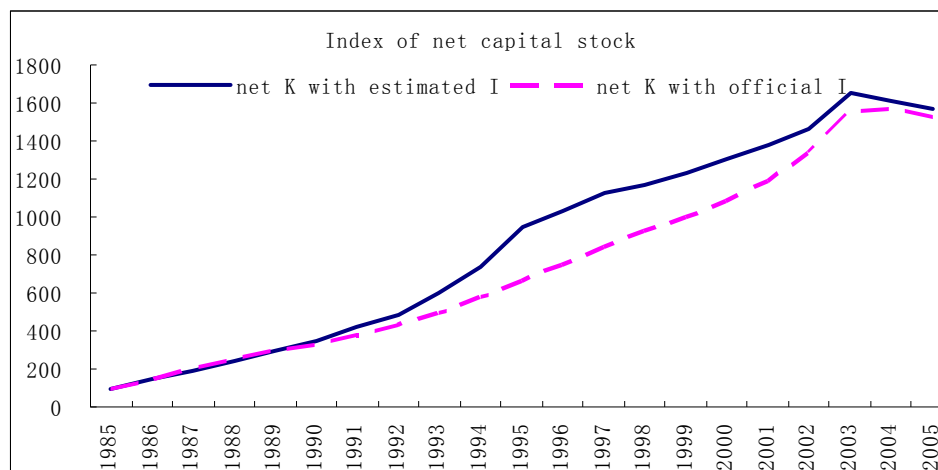
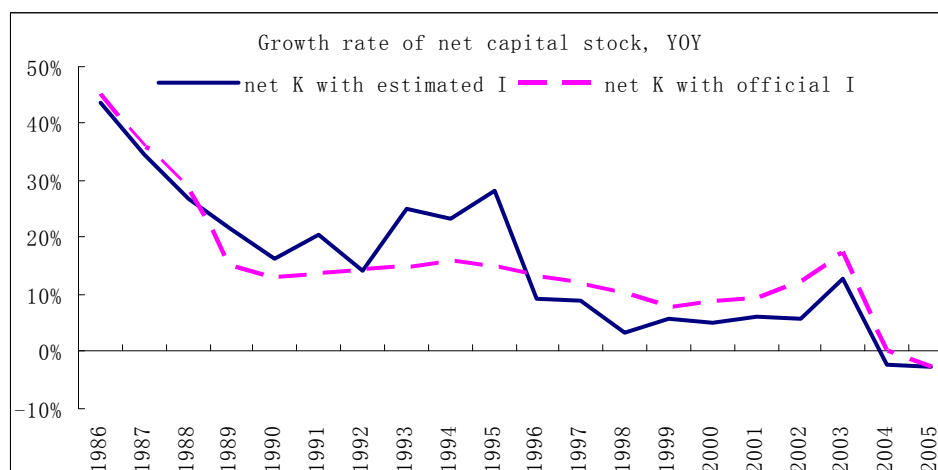


CHART 4-2: GROWTH RATE OF NET CAPITAL STOCK



## 4.7 Results

The results of capital data work are to be presented in two parts. Table 4-1 is the net capital stock constructed. Table 4-2 is the growth rate of sectoral capital input. Net capital stock is the year end value and the unit is 100 million RMB Yuan.

TABLE 4-1: NET CAPITAL STOCK BY REGION AND SECTOR

		Net capital stock of Beijing																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.3	3.5	3.5	3.5	3.6	3.9	3.9	4.2	4.1	4.0	4.5	4.6	4.5	4.8	4.6	4.5	3.1	3.4	3.2	2.3	2.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.0	0.1	0.1	0.2	0.3	0.3	0.6	0.7	0.8	0.8	0.8	0.8	0.9	0.7	0.7	0.6	0.5	0.4	1.4	1.5	1.7
4	NMM	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.8	0.8	0.7	0.5	0.4	0.4	0.2	0.5	0.5	0.3
5	FDB	6.4	8.0	9.2	11.0	12.9	14.0	16.8	16.3	22.3	24.3	35.3	36.8	39.1	44.7	46.2	50.2	39.0	41.7	40.6	65.3	52.3
6	TBC	0.2	0.2	0.2	0.2	0.5	0.9	0.9	1.0	1.0	0.8	1.3	1.7	1.6	1.6	1.3	1.3	1.2	1.2	1.5	1.5	1.4
7	TEX	6.7	7.4	8.8	9.4	10.3	10.8	12.4	12.7	14.4	18.5	19.8	21.5	17.6	16.0	12.8	9.9	9.3	9.1	9.2	6.9	6.1
8	WEA	1.9	2.3	2.6	2.9	3.2	3.5	4.3	4.5	6.0	6.9	7.6	8.4	8.2	8.1	7.3	6.5	6.8	6.4	5.1	6.2	6.5
9	LEA	0.8	0.9	0.9	0.9	1.1	1.0	1.1	1.1	1.9	2.1	2.3	2.4	2.5	2.3	1.8	1.4	1.1	0.8	0.2	0.0	0.1
10	WDF	1.7	2.1	2.2	2.2	2.4	2.4	2.6	2.5	3.4	2.5	3.6	2.7	2.9	3.8	3.7	4.0	5.1	5.4	5.3	7.0	6.4
11	PAP	5.7	7.1	8.5	8.7	8.7	9.2	9.7	9.8	19.8	13.0	17.1	19.1	19.1	22.2	21.5	21.8	24.6	27.4	28.8	38.9	38.1
12	PET	1.6	2.2	3.9	5.8	6.9	7.2	34.7	32.7	27.8	37.4	46.3	47.5	56.1	60.3	58.5	61.1	73.7	74.3	67.9	61.4	55.0
13	CHE	23.7	26.2	29.7	31.3	34.6	35.5	11.0	18.9	22.0	27.2	32.8	33.3	51.0	58.4	59.0	54.5	45.2	50.8	93.6	96.7	44.3
14	RBP	3.7	4.3	4.7	5.1	5.2	5.3	5.5	4.8	4.9	6.3	8.3	12.7	15.1	14.9	13.3	11.9	12.6	12.4	9.0	10.0	10.0
15	BUI	9.9	10.5	11.2	11.7	12.1	12.1	12.8	12.3	15.4	22.7	20.3	30.2	34.1	36.8	35.7	34.9	27.1	31.4	34.8	47.6	39.7
16	MSP	15.5	17.0	22.2	23.8	25.1	26.1	27.1	29.0	46.5	58.7	112.5	104.8	98.0	77.7	51.6	90.6	83.7	74.5	70.7	68.7	69.2
17	MPD	2.5	3.3	3.8	4.0	4.1	4.5	5.6	5.5	5.5	6.1	7.8	9.0	11.4	11.3	9.4	8.9	9.0	10.9	8.1	14.1	16.5
18	MCH	16.8	17.2	19.2	20.2	20.6	21.3	22.7	21.5	40.4	25.6	32.6	37.3	37.0	39.5	39.8	32.8	24.9	23.8	34.6	48.2	52.2
19	TRS	7.0	7.8	8.8	9.6	10.9	11.8	13.9	16.3	22.6	24.5	29.3	32.9	26.9	31.0	28.9	29.5	31.5	33.0	33.0	57.1	65.0
20	ELE	3.3	4.1	5.1	6.3	6.7	6.9	7.2	7.6	8.4	11.1	11.9	15.9	16.8	19.7	20.1	16.5	18.3	15.8	13.5	17.7	15.9
21	ICT	5.7	7.5	8.0	8.2	10.1	12.0	12.9	12.5	15.8	19.7	31.8	36.3	34.4	43.7	48.2	60.1	58.2	56.9	60.9	82.1	170.8
22	INS	2.0	2.2	2.6	2.6	2.6	2.4	2.6	2.6	3.6	4.4	5.4	5.9	6.4	6.4	3.6	3.9	5.0	5.4	6.2	7.1	10.2
	<i>Utilities</i>	13.9	15.2	15.5	19.3	22.3	28.6	33.4	45.0	146.0	70.2	88.3	109.6	128.0	154.2	166.4	171.3	187.9	201.9	239.4	572.8	643.6
	<i>Mining</i>	3.5	3.8	3.8	4.0	4.2	4.4	4.8	5.2	5.2	5.1	5.8	6.2	6.1	6.2	5.8	5.5	4.0	4.0	5.1	4.3	4.0
	<i>Manufacturing</i>	115.2	130.0	151.6	163.9	177.8	187.1	203.7	211.5	281.5	311.7	425.9	458.3	478.2	498.4	462.7	499.8	476.2	481.3	449.4	572.1	659.8
	<i>All</i>	132.7	149.0	170.9	187.2	204.4	220.2	241.9	261.6	432.7	387.1	520.0	574.1	612.4	658.8	634.9	676.7	668.1	687.3	693.9	1149.2	1307.4

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Tianjin																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	PTM	7.5	8.7	10.2	11.4	16.5	14.6	18.6	27.5	39.9	65.8	73.2	40.3	42.4	37.1	66.2	138.7	149.6	158.2	172.1	211.5	227.1
3	MTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	NMM	1.5	1.5	1.6	2.2	2.3	2.3	2.4	2.6	2.3	2.5	3.8	3.8	4.4	4.1	3.9	3.9	3.8	3.9	3.5	3.1	3.1
5	FDB	4.2	5.2	5.7	6.7	7.0	8.1	9.1	11.8	12.3	20.6	28.1	31.6	34.6	43.8	37.2	37.2	40.9	42.3	33.6	40.7	43.1
6	TBC	0.1	0.5	0.5	0.6	0.5	0.6	0.7	0.7	0.7	0.7	1.0	0.9	1.1	2.2	2.0	2.1	1.9	2.1	2.1	2.2	1.9
7	TEX	11.1	12.0	12.7	13.0	14.8	15.3	15.5	16.0	18.5	23.0	27.2	29.3	31.6	30.6	27.7	29.2	30.2	27.8	26.4	23.9	21.3
8	WEA	1.1	1.3	1.7	1.8	2.0	2.2	3.1	3.3	4.6	6.1	5.6	6.1	7.1	8.1	7.3	7.6	6.3	6.8	6.1	6.1	8.4
9	LEA	0.7	0.9	0.9	1.0	1.0	1.3	1.2	1.7	2.1	2.9	3.3	3.1	3.6	2.5	3.2	3.1	2.8	2.7	3.0	2.8	2.5
10	WDF	1.0	1.0	1.1	1.1	1.0	1.2	1.5	1.3	2.3	3.0	4.2	4.3	5.6	6.0	6.5	7.4	6.1	5.9	6.8	5.4	4.7
11	PAP	2.5	2.8	3.0	3.1	4.0	4.0	4.4	4.0	6.2	6.9	15.7	15.5	16.9	19.0	18.0	14.5	17.4	10.2	16.0	15.0	20.1
12	PET	1.9	2.4	3.2	4.8	6.9	6.7	6.3	6.2	17.2	22.8	24.3	27.4	29.2	29.7	30.9	37.2	4.7	29.4	22.2	26.0	78.2
13	CHE	21.8	22.3	25.4	26.6	27.6	29.5	31.5	33.0	30.6	31.2	38.1	42.3	66.0	74.5	79.6	76.3	128.8	103.1	96.4	58.8	64.3
14	RBP	2.5	2.8	3.7	4.6	4.8	4.8	4.8	4.9	6.5	9.1	10.8	10.6	16.8	18.6	19.5	22.2	22.1	22.9	21.4	28.6	24.7
15	BUI	4.0	4.6	4.7	5.4	5.8	5.4	6.3	6.0	6.4	8.0	14.4	15.8	18.3	16.2	18.7	19.1	19.2	18.1	16.4	22.4	21.9
16	MSP	8.3	9.0	9.8	9.9	11.0	11.1	11.4	12.0	14.8	21.2	74.6	75.4	75.8	78.9	81.3	53.6	55.4	53.6	61.5	81.5	96.2
17	MPD	3.9	4.3	4.5	5.0	5.4	5.5	6.2	6.5	8.9	10.9	14.5	16.8	16.4	16.8	17.0	14.7	14.9	14.5	12.0	12.4	14.3
18	MCH	12.4	13.5	14.1	15.5	15.9	16.7	17.0	18.0	19.7	21.8	28.9	33.0	28.2	32.0	32.3	34.7	30.8	32.2	29.9	38.0	38.5
19	TRS	4.2	4.3	5.6	6.0	6.0	5.9	5.9	6.9	13.2	14.6	19.3	26.5	39.3	42.0	39.5	38.7	36.1	25.9	41.1	58.5	68.2
20	ELE	2.7	3.1	4.1	6.0	9.3	5.7	6.0	7.0	8.6	11.7	13.9	17.1	21.9	24.1	23.5	25.0	26.4	33.5	33.9	38.7	41.0
21	ICT	3.2	4.1	5.1	5.5	5.4	5.6	6.1	7.7	13.3	19.9	29.4	39.2	46.8	62.5	67.1	82.9	114.1	111.4	105.5	114.4	119.0
22	INS	1.0	0.7	0.7	0.4	0.6	0.7	1.5	1.1	3.2	3.5	4.2	4.4	5.7	5.5	5.1	5.5	5.2	5.2	6.6	3.8	4.3
	<i>Utilities</i>	10.6	11.8	12.9	16.7	19.5	20.0	26.2	37.0	38.4	44.8	66.2	57.9	65.7	105.3	116.8	141.9	139.7	174.4	150.6	188.6	196.2
	<i>Mining</i>	9.1	10.2	11.8	13.6	18.8	17.0	21.0	30.2	42.3	68.3	77.0	44.2	46.9	41.2	70.2	142.7	153.4	162.1	175.6	214.7	230.2
	<i>Manufacturing</i>	86.6	94.7	106.6	117.0	129.0	130.2	138.7	148.1	189.2	237.8	357.6	399.2	465.0	513.0	516.3	511.2	563.3	547.7	540.7	579.2	672.7
	<i>All</i>	106.3	116.7	131.2	147.3	167.4	167.2	185.9	215.3	269.9	350.9	500.9	501.2	577.6	659.5	703.2	795.8	856.4	884.2	867.0	982.4	1099.1

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Hebei																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	25.9	28.9	31.3	32.0	35.9	38.5	38.6	40.0	40.3	41.2	53.9	56.6	55.1	50.4	49.8	49.5	51.4	53.0	74.6	84.3	83.4
2	PTM	7.2	9.6	11.9	16.1	26.1	32.8	38.5	43.2	45.7	49.6	56.7	56.5	58.4	51.2	86.0	56.8	51.1	51.5	79.4	90.1	99.4
3	MTM	4.2	4.6	4.8	5.9	6.3	6.4	6.6	7.8	9.2	9.9	11.7	10.8	11.5	8.9	9.1	8.9	9.6	10.0	11.2	20.7	32.3
4	NMM	2.4	2.3	2.1	2.6	2.8	3.4	3.6	4.5	5.1	5.7	6.0	6.4	8.0	7.2	8.4	8.5	8.1	7.5	7.5	6.3	6.5
5	FDB	7.4	11.5	15.9	14.5	16.9	18.4	20.1	23.4	29.7	36.3	43.4	48.2	56.8	51.0	53.9	54.2	60.9	57.5	64.0	73.3	75.3
6	TBC	0.4	0.7	1.0	1.2	1.3	2.7	2.9	3.0	3.6	5.2	5.9	6.4	6.6	6.5	6.4	6.5	6.0	6.5	7.1	7.2	6.7
7	TEX	13.2	16.3	19.2	23.6	28.2	34.1	39.6	41.1	44.3	50.6	52.2	51.3	52.6	45.9	39.4	39.9	41.7	41.1	42.2	39.9	48.9
8	WEA	1.4	1.4	1.4	2.2	2.5	2.7	3.3	3.7	4.9	6.0	6.2	7.1	8.1	5.5	6.1	5.9	8.1	8.1	7.5	8.7	5.5
9	LEA	0.9	1.2	1.4	1.7	1.6	1.7	1.9	1.9	2.7	3.1	4.1	5.1	5.5	4.9	3.7	4.4	4.5	5.7	3.5	6.2	5.7
10	WDF	1.1	1.0	1.0	1.4	1.5	1.5	1.8	2.2	2.7	3.1	4.2	4.9	6.3	4.8	6.0	6.1	6.0	6.2	5.6	7.4	6.8
11	PAP	3.9	4.8	5.7	7.3	8.5	13.1	11.9	13.0	14.9	15.8	19.4	22.6	25.2	24.3	24.5	26.7	26.8	26.2	26.4	25.7	46.1
12	PET	2.9	3.4	3.8	4.9	5.9	7.1	9.8	10.7	11.4	13.1	14.0	15.1	17.3	16.6	20.9	33.3	37.6	37.0	23.9	39.8	46.4
13	CHE	16.9	19.1	20.9	24.4	27.7	30.4	41.4	46.1	53.3	60.7	71.0	85.6	88.7	89.5	93.8	94.4	98.9	99.9	111.8	112.2	110.0
14	RBP	2.6	3.4	4.3	5.1	5.5	6.5	7.4	8.4	10.1	11.7	14.0	15.0	17.3	15.7	16.5	16.4	18.8	21.9	23.3	24.4	21.8
15	BUI	15.7	18.0	20.2	23.2	25.4	26.6	28.8	32.1	40.7	50.6	61.3	66.1	71.5	67.5	70.2	71.5	74.4	76.7	89.5	99.8	100.4
16	MSP	14.1	16.7	19.3	22.9	28.1	32.9	42.7	43.9	53.7	80.8	97.3	116.7	120.1	120.9	130.8	141.9	163.6	174.7	229.3	291.3	393.0
17	MPD	2.7	3.4	4.1	4.4	5.1	5.7	6.0	7.8	11.5	14.4	13.6	15.1	16.3	13.3	12.8	14.7	13.9	14.5	15.1	18.2	25.6
18	MCH	20.1	22.1	23.6	24.6	24.9	25.8	28.4	30.0	33.8	37.6	44.8	47.5	53.6	46.5	45.3	43.3	38.3	37.7	37.8	40.4	47.1
19	TRS	6.3	7.1	7.8	8.4	8.7	9.4	10.8	11.8	14.1	16.8	21.1	24.6	27.3	26.9	24.9	20.1	19.9	21.3	21.2	26.2	34.4
20	ELE	1.9	2.5	3.0	3.8	4.8	4.6	5.7	6.6	9.8	12.8	13.3	13.5	16.8	15.5	16.5	18.4	17.1	18.3	17.3	20.9	24.3
21	ICT	1.1	1.5	1.8	2.7	3.7	3.8	5.6	5.7	5.7	9.7	8.0	19.4	9.0	7.0	6.7	5.6	18.8	18.3	17.1	17.5	16.0
22	INS	0.7	0.8	0.9	1.2	1.1	1.1	1.0	1.0	1.7	2.0	2.9	3.1	2.8	1.7	1.6	1.5	2.0	2.1	1.3	1.8	2.2
	<i>Utilities</i>	32.2	35.3	37.6	42.5	47.1	60.5	72.1	102.3	110.9	132.5	167.6	180.8	203.4	233.1	262.1	296.6	350.7	375.4	398.7	470.5	509.8
	<i>Mining</i>	39.8	45.4	50.2	56.6	71.1	81.1	87.4	95.6	100.3	106.4	128.3	130.3	133.0	117.8	153.2	123.7	120.2	122.0	172.8	201.4	221.6
	<i>Manufacturing</i>	113.5	135.1	155.3	177.6	201.5	228.0	269.0	292.3	348.5	430.4	496.6	567.3	601.8	564.1	580.1	605.0	657.6	673.5	743.9	860.8	1016.1
	<i>All</i>	185.6	215.8	243.1	276.7	319.7	369.7	428.5	490.1	559.7	669.2	792.5	878.5	938.2	914.9	995.5	1025.2	1128.4	1170.9	1315.4	1532.7	1747.6



Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Shanxi																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	48.4	55.2	65.1	72.6	79.0	106.8	111.3	120.2	124.5	132.3	151.9	162.3	170.2	170.0	166.1	149.7	181.6	268.3	210.4	259.5	338.8
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.4	0.5	0.6	0.9	1.1	1.1	1.4	1.3	5.7	10.1	1.8	1.6	1.4	1.9	1.9	1.8	1.9	3.0	4.3	6.9	9.4
4	NMM	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.1	1.3	2.0	2.1	1.8	1.1	0.8	0.7	1.1	0.5	0.4	1.1	0.9
5	FDB	4.2	5.6	6.4	7.5	7.5	7.9	8.4	8.5	10.3	11.0	13.7	15.6	16.1	13.9	14.5	14.9	15.8	16.7	16.1	20.5	22.5
6	TBC	0.1	0.2	0.2	0.3	0.3	0.4	0.6	0.7	0.7	0.9	1.1	1.3	1.4	1.6	1.7	1.4	1.2	1.4	2.2	2.1	1.0
7	TEX	4.7	5.5	5.9	6.6	7.3	7.5	8.1	8.2	8.4	9.3	12.5	12.9	11.4	10.0	8.0	8.4	7.4	6.3	5.5	6.0	4.8
8	WEA	0.5	0.6	0.6	0.8	0.9	1.0	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.5	0.5	0.5	0.6	1.1	0.9	1.0	0.7
9	LEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	WDF	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9	1.1	1.2	1.0	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6
11	PAP	2.1	3.5	2.4	2.7	2.9	3.1	3.2	3.0	3.4	3.6	4.4	4.7	6.4	4.5	4.8	3.5	3.4	2.3	2.3	2.3	2.4
12	PET	1.3	1.9	2.2	2.9	4.0	5.0	6.6	7.5	7.0	7.8	11.0	12.2	13.9	19.6	21.5	20.5	30.9	48.8	61.0	104.6	128.8
13	CHE	17.4	18.7	19.9	21.0	22.1	22.8	24.6	24.1	22.3	24.0	35.0	40.3	48.8	49.2	46.7	48.3	46.2	45.7	57.0	66.7	76.4
14	RBP	1.5	1.8	1.9	2.0	2.1	2.3	2.6	3.0	2.7	3.0	3.3	4.6	5.2	1.5	1.5	1.7	1.8	3.1	2.5	2.5	2.3
15	BUI	6.3	7.1	8.4	8.7	9.2	10.0	11.4	11.9	13.1	15.2	19.1	21.7	21.4	22.4	24.7	29.7	30.6	38.1	30.5	40.8	36.7
16	MSP	19.0	22.7	23.6	26.0	30.5	32.2	33.0	34.8	33.6	36.7	72.9	93.8	96.0	105.9	97.9	109.2	121.6	108.5	152.7	175.4	224.0
17	MPD	2.0	2.2	2.6	2.7	2.9	3.1	3.4	3.3	4.0	4.9	4.9	5.4	5.2	3.6	4.8	4.1	3.7	1.7	1.5	1.4	1.8
18	MCH	20.8	22.6	23.7	24.7	24.6	24.3	24.2	21.0	22.6	24.0	38.6	38.5	36.1	38.7	34.3	32.2	16.6	14.4	38.9	40.5	37.5
19	TRS	3.1	3.0	3.4	3.7	3.7	3.8	4.2	8.0	6.3	6.9	8.4	10.2	9.2	7.4	6.6	8.1	8.2	9.0	9.6	8.1	7.0
20	ELE	2.1	2.3	2.6	2.8	3.1	3.3	4.0	4.0	4.5	5.1	5.8	6.1	6.0	4.7	4.4	4.9	5.1	2.6	3.5	6.2	3.6
21	ICT	1.8	1.5	1.4	1.4	1.4	1.3	1.6	1.8	1.4	1.6	2.0	3.2	3.2	3.1	1.3	1.2	1.3	2.9	3.0	4.8	3.9
22	INS	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.7	0.8	0.8	1.0	1.0	0.9	0.7	0.8	0.8	0.3	0.3	0.4	2.1
	<i>Utilities</i>	31.9	33.3	30.7	44.9	47.9	52.4	59.6	86.4	96.9	100.3	110.8	112.8	123.9	132.4	155.3	191.5	233.7	229.7	283.9	327.3	372.6
	<i>Mining</i>	49.6	56.7	66.7	74.6	81.2	109.0	113.8	122.8	131.3	143.7	155.7	166.0	173.4	173.1	168.7	152.2	184.7	271.8	215.1	267.5	349.2
	<i>Manufacturing</i>	88.1	100.1	106.4	114.9	123.7	129.1	138.5	142.2	142.8	156.7	235.6	273.7	283.2	287.8	274.2	289.9	295.6	303.1	387.7	483.9	556.2
	<i>All</i>	169.6	190.2	203.9	234.4	252.8	290.5	311.9	351.3	371.0	400.7	502.0	552.5	580.6	593.3	598.2	633.5	714.0	804.6	886.7	1078.6	1278.0

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Inner Mongolia																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	17.1	19.5	21.7	21.8	25.8	26.6	30.0	32.7	32.7	32.6	38.1	37.3	37.1	37.9	66.1	60.1	65.5	71.2	64.1	75.2	88.9
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	1.3	1.4	1.9	2.3	3.1	3.0	3.2	3.5	4.2	4.8	6.1	6.7	6.7	4.5	4.7	4.9	4.9	4.5	5.4	9.2	12.9
4	NMM	1.7	1.7	1.9	2.0	2.5	2.8	3.0	3.3	3.7	4.0	2.7	2.5	2.2	1.3	1.6	1.5	1.8	2.0	3.3	4.2	4.1
5	FDB	7.4	8.3	9.2	10.5	11.8	12.9	14.0	15.3	17.4	20.7	23.1	25.1	25.1	19.3	18.5	17.3	20.6	24.2	32.6	40.8	55.6
6	TBC	0.1	0.1	0.3	0.5	0.5	0.5	0.6	0.7	0.7	0.8	1.6	1.4	1.3	1.3	1.4	1.7	1.4	1.5	1.7	1.9	2.0
7	TEX	3.3	4.2	4.8	5.2	6.3	6.8	7.2	7.4	7.6	10.6	13.3	14.6	13.4	10.8	10.2	9.5	11.9	13.6	15.2	14.2	15.1
8	WEA	0.3	0.4	0.5	0.5	0.6	0.6	0.8	0.9	1.3	1.3	1.5	1.4	1.7	1.3	1.6	1.4	1.3	1.2	1.2	1.9	0.6
9	LEA	0.8	0.9	0.9	1.2	1.2	1.2	1.3	1.2	1.3	1.5	1.5	1.5	1.3	0.9	1.2	1.3	1.1	1.2	1.4	1.0	0.8
10	WDF	0.9	0.7	0.8	1.0	1.2	1.3	1.4	1.4	2.1	2.8	2.2	2.9	2.5	1.8	1.7	1.7	2.1	2.1	2.1	3.8	2.7
11	PAP	1.7	1.7	1.8	2.3	2.4	2.4	2.8	3.2	4.5	4.3	4.3	4.9	3.6	1.8	1.7	2.9	2.9	3.1	3.3	2.9	7.8
12	PET	0.3	0.3	0.4	0.4	0.4	0.6	1.0	1.2	4.1	4.2	4.7	4.6	4.8	4.6	4.9	3.9	4.2	4.4	5.6	10.1	12.9
13	CHE	3.9	4.2	4.7	5.8	5.3	7.2	7.6	8.5	8.4	9.3	13.6	16.9	16.3	25.7	25.3	26.4	25.1	25.9	26.7	29.4	38.1
14	RBP	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.2	1.2	1.4	1.3	1.2	1.2	1.1	1.3	1.2	1.1	0.9	0.9	0.7
15	BUI	4.9	5.6	5.9	6.5	6.7	7.5	8.4	8.6	10.0	11.9	14.3	14.6	14.3	8.5	10.3	10.8	13.5	17.7	48.9	23.4	30.9
16	MSP	19.4	20.9	21.6	23.4	25.4	25.3	25.5	26.5	30.7	54.3	53.7	60.8	65.9	74.0	73.6	69.0	68.2	86.4	88.9	99.9	124.4
17	MPD	1.1	1.1	1.1	1.3	1.4	1.4	1.5	1.4	2.1	2.0	2.4	2.2	2.3	1.5	1.0	1.3	1.0	0.5	0.6	1.0	0.8
18	MCH	7.8	8.3	8.5	8.8	9.2	8.8	9.0	8.9	9.8	9.2	19.0	19.6	14.1	11.1	11.5	10.2	7.7	8.2	20.3	20.8	23.5
19	TRS	0.8	0.9	0.7	0.7	0.7	0.7	1.3	1.3	1.3	2.0	2.3	2.5	4.9	4.5	4.0	3.7	3.8	3.9	3.3	3.9	6.4
20	ELE	0.6	0.7	0.8	1.3	1.3	1.5	1.4	1.6	2.6	2.5	2.9	2.7	2.5	1.7	2.1	1.6	1.3	0.9	1.3	0.9	1.2
21	ICT	0.3	0.4	0.5	0.5	0.7	0.8	0.9	1.0	1.3	1.4	1.6	1.5	1.2	1.5	1.3	0.7	0.6	0.7	1.1	1.2	2.8
22	INS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Utilities</i>	24.5	25.2	26.8	28.6	34.1	36.5	39.2	46.5	56.0	69.6	73.0	78.8	83.0	121.8	165.1	164.7	171.0	179.8	237.7	298.4	597.8
	<i>Mining</i>	20.1	22.6	25.5	26.0	31.3	32.3	36.2	39.4	40.5	41.4	46.9	46.5	46.0	43.7	72.4	66.4	72.2	77.8	72.8	88.6	105.8
	<i>Manufacturing</i>	54.1	59.2	63.0	70.5	75.8	80.3	85.5	90.1	106.5	140.0	163.4	178.3	176.3	171.2	171.4	164.7	167.9	196.6	254.9	257.8	326.5
	<i>All</i>	98.8	107.0	115.3	125.1	141.3	149.2	160.9	176.1	203.1	250.9	283.3	303.6	305.4	336.8	408.8	395.8	411.2	454.2	565.4	644.8	1030.1

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Liaoning																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	25.8	28.3	32.1	33.0	35.6	40.6	43.8	44.9	44.1	43.6	57.5	51.3	55.4	36.3	51.6	45.7	44.2	57.0	51.4	50.9	57.9
2	PTM	14.0	17.8	26.4	36.5	46.0	54.8	61.4	63.4	75.0	73.4	85.4	88.7	97.2	90.3	173.0	126.6	146.6	153.4	147.0	172.4	182.4
3	MTM	3.0	3.4	3.8	5.1	4.8	5.2	5.6	6.0	6.4	6.7	9.0	12.7	12.0	9.9	5.4	5.0	6.1	7.1	13.4	20.6	31.3
4	NMM	3.5	3.6	4.0	4.4	4.6	5.0	5.3	6.1	6.3	6.7	9.9	6.8	6.2	6.1	7.3	5.3	5.8	5.4	4.4	2.6	1.7
5	FDB	11.2	13.1	15.6	18.2	20.6	21.8	25.7	28.2	33.1	39.5	51.6	56.0	53.5	47.9	46.9	48.6	44.2	49.3	52.2	70.3	82.0
6	TBC	0.4	0.5	0.6	0.8	0.9	0.9	1.1	1.1	1.8	2.1	2.3	2.8	2.5	3.1	3.2	2.8	3.1	3.1	3.4	3.7	3.6
7	TEX	17.3	20.4	22.5	26.0	27.5	28.5	30.0	30.9	32.8	40.8	45.9	41.1	39.8	31.4	31.6	24.4	23.2	18.8	20.4	24.7	19.5
8	WEA	2.1	2.6	3.1	3.4	3.7	4.0	4.6	5.3	6.4	8.1	10.3	10.2	10.3	7.6	6.8	7.9	5.8	6.8	6.7	8.9	8.5
9	LEA	1.1	1.3	1.5	1.5	1.7	1.8	1.8	1.9	2.2	3.0	3.4	3.6	3.2	3.1	2.4	2.7	1.9	2.2	2.7	2.3	2.2
10	WDF	1.4	1.6	1.5	1.6	1.9	1.8	2.2	2.2	2.7	4.7	6.1	6.5	7.5	6.9	7.5	9.0	9.2	12.0	14.6	16.2	15.3
11	PAP	6.8	8.3	9.6	10.1	10.4	10.7	11.7	12.1	13.5	17.3	20.8	21.2	20.1	21.7	17.0	16.7	19.7	19.6	17.9	20.1	31.7
12	PET	13.0	14.7	17.0	20.1	24.8	28.5	33.8	36.2	36.0	56.6	87.9	121.3	104.7	123.1	126.4	103.5	129.3	127.6	121.2	99.2	104.8
13	CHE	47.0	49.6	54.0	57.5	59.6	64.4	79.3	84.6	93.5	105.3	126.0	123.0	166.6	152.3	147.4	137.1	145.4	128.9	118.0	144.5	145.7
14	RBP	6.5	7.7	9.0	7.4	10.3	10.8	12.5	13.8	16.0	17.8	23.8	24.8	23.9	19.6	19.9	21.7	22.0	27.0	39.7	50.7	47.7
15	BUI	20.4	24.2	28.0	29.0	30.3	32.4	34.0	39.1	47.5	56.5	68.6	68.4	70.7	61.9	52.6	52.1	51.5	52.1	51.5	71.0	74.1
16	MSP	69.2	77.7	83.8	100.2	107.9	120.2	129.0	179.8	213.1	216.5	238.5	292.4	286.7	282.7	281.9	297.7	301.6	320.8	308.3	353.4	398.1
17	MPD	5.5	6.5	7.6	8.1	8.6	8.8	9.8	10.4	13.3	16.2	19.1	19.9	19.6	16.8	14.5	13.9	30.0	13.7	13.6	11.1	12.8
18	MCH	41.0	46.4	51.5	54.9	56.0	56.1	62.4	66.4	75.1	89.0	115.6	119.5	121.6	99.7	81.7	75.9	81.9	81.9	89.0	79.4	104.9
19	TRS	14.3	17.4	19.0	20.6	21.2	22.4	24.5	26.1	30.0	37.6	48.5	56.3	59.6	55.6	55.3	58.3	58.3	67.9	69.6	97.7	101.6
20	ELE	7.6	10.8	13.4	15.9	17.6	19.2	20.5	21.6	30.4	35.5	47.9	46.5	44.5	39.9	37.3	33.2	35.2	31.2	34.1	37.5	45.9
21	ICT	4.8	6.6	7.3	7.7	8.3	8.7	9.6	10.9	19.2	37.6	34.6	34.3	35.3	32.9	33.6	34.6	31.3	34.4	28.9	36.1	37.5
22	INS	2.0	2.1	2.3	2.4	2.4	2.3	2.5	2.7	5.5	5.7	6.4	6.3	5.3	4.5	4.0	3.8	3.4	4.1	4.9	8.1	5.9
	<i>Utilities</i>	39.4	45.7	52.1	61.7	68.8	71.6	85.8	91.5	125.9	157.1	174.6	201.5	220.0	229.6	255.6	331.7	426.3	460.7	470.5	480.0	490.5
	<i>Mining</i>	46.2	53.0	66.2	79.0	91.0	105.6	116.1	120.4	131.8	130.4	161.8	159.5	170.8	142.7	237.3	182.5	202.7	223.0	216.2	246.5	273.3
	<i>Manufacturing</i>	271.7	311.6	347.2	385.4	413.7	443.5	495.2	573.4	671.9	789.7	957.3	1053.9	1075.4	1010.6	970.1	943.8	997.0	1001.3	997.0	1134.8	1241.6
	<i>All</i>	357.3	410.2	465.6	526.0	573.4	620.7	697.1	785.4	929.6	1077.2	1293.7	1414.9	1466.2	1382.9	1463.0	1458.0	1626.0	1685.1	1683.7	1861.3	2005.4

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Jilin																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	9.3	11.6	11.5	11.5	12.2	14.1	14.8	15.0	13.4	14.5	17.4	18.7	19.3	17.8	14.9	13.8	10.3	9.5	5.7	7.9	6.8
2	PTM	5.1	6.3	9.0	11.2	13.4	15.9	19.3	22.7	27.9	29.3	31.0	33.6	35.6	46.8	48.9	51.8	108.8	113.1	129.4	139.1	152.0
3	MTM	3.7	2.0	2.5	2.6	1.5	1.9	2.1	2.2	1.9	2.3	3.9	4.0	3.9	3.8	7.1	6.2	5.8	5.1	4.0	4.8	5.2
4	NMM	0.5	0.2	0.2	0.6	0.7	0.6	0.6	0.8	1.4	1.9	1.7	1.6	1.3	0.7	0.5	0.7	0.6	0.6	0.6	0.4	0.4
5	FDB	8.1	9.7	12.0	13.4	16.3	17.7	19.5	20.7	24.3	29.3	37.7	38.6	38.0	31.4	28.2	30.1	30.1	37.4	39.8	51.0	67.1
6	TBC	0.4	0.5	0.6	0.7	1.0	1.5	1.6	1.8	1.9	1.8	2.2	2.7	3.3	3.2	4.3	4.4	4.4	4.1	5.0	4.6	4.4
7	TEX	5.0	5.2	5.8	6.3	6.7	6.8	7.9	8.4	8.8	11.1	12.6	13.0	12.8	11.0	9.2	9.7	9.4	8.4	7.3	4.8	2.1
8	WEA	0.6	0.8	1.0	1.0	1.1	1.2	1.3	1.4	1.6	2.0	2.1	2.1	2.0	0.9	0.9	0.8	0.9	1.0	1.1	1.4	2.6
9	LEA	0.5	0.5	0.7	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	1.2	1.3	0.7	1.0	0.5	0.4	0.2	0.1	0.1	0.1
10	WDF	2.9	3.1	3.3	3.7	4.2	4.5	4.7	4.9	4.8	5.3	6.9	7.5	7.8	7.3	5.5	6.5	9.3	7.8	12.8	17.5	12.1
11	PAP	4.7	5.2	6.0	7.5	8.0	9.2	9.7	9.4	10.1	11.1	13.3	13.8	13.7	10.6	10.1	8.3	7.4	10.9	9.3	5.9	12.3
12	PET	1.8	1.9	2.1	2.2	3.5	5.7	6.0	6.7	5.0	5.2	6.0	5.9	5.5	5.1	7.3	6.0	8.5	8.2	4.6	5.3	3.9
13	CHE	27.5	29.0	31.5	33.4	35.0	39.0	42.4	44.0	51.3	60.8	72.7	88.4	104.3	103.8	120.6	112.1	106.7	99.1	110.8	113.5	131.0
14	RBP	2.3	2.5	2.8	3.3	3.7	3.7	4.0	4.2	4.5	5.4	5.8	6.9	8.1	5.1	2.9	3.1	2.8	4.3	3.3	4.5	2.7
15	BUI	8.6	9.6	10.7	12.0	13.0	13.4	14.2	14.7	19.0	20.5	26.3	26.4	25.4	22.1	19.5	14.5	16.3	17.1	18.4	23.0	30.8
16	MSP	4.5	6.9	7.7	9.5	11.5	12.6	13.9	14.6	30.5	23.6	27.0	27.6	27.1	25.6	24.3	22.5	20.4	24.2	18.1	30.2	34.9
17	MPD	2.1	2.2	2.4	2.8	2.6	2.7	3.2	3.3	3.6	3.9	4.0	4.9	5.9	3.7	3.2	5.1	4.3	2.0	1.4	1.3	1.2
18	MCH	12.4	12.7	13.5	13.7	14.0	13.3	14.2	14.2	14.5	15.3	18.2	19.4	19.9	16.0	11.5	12.3	12.2	15.7	4.7	8.0	6.6
19	TRS	7.2	9.8	13.1	14.1	15.4	15.5	17.5	23.1	31.0	37.8	40.9	60.4	81.1	82.8	83.3	82.5	81.4	87.9	94.4	93.1	146.2
20	ELE	1.3	2.0	2.9	3.3	3.4	4.0	4.3	4.5	4.6	5.1	6.7	6.4	5.8	5.7	5.2	4.7	4.0	2.9	2.7	2.3	2.0
21	ICT	1.4	1.7	2.0	2.3	2.4	2.4	3.0	2.8	2.7	3.3	4.5	4.5	4.4	5.0	5.0	7.4	4.3	12.9	9.8	14.3	5.5
22	INS	0.8	0.9	1.1	1.2	1.2	1.2	1.4	1.4	1.9	2.2	3.1	3.4	3.6	2.7	2.5	2.2	1.7	1.7	2.2	3.2	4.3
	<i>Utilities</i>	27.1	29.3	36.5	38.2	41.6	45.5	53.4	59.9	73.5	93.6	106.5	111.6	113.3	120.8	117.2	123.8	142.7	164.2	166.5	231.6	229.9
	<i>Mining</i>	18.6	20.1	23.2	25.9	27.8	32.6	36.9	40.7	44.6	48.1	54.0	57.8	60.1	69.0	71.4	72.6	125.4	128.4	139.8	152.3	164.3
	<i>Manufacturing</i>	92.1	104.1	119.3	131.1	143.7	155.2	169.5	180.9	220.9	244.6	291.0	333.2	370.1	342.6	344.4	332.6	324.3	345.7	346.0	384.3	469.6
	<i>All</i>	137.8	153.5	179.0	195.2	213.2	233.3	259.8	281.4	339.0	386.3	451.5	502.6	543.5	532.4	533.0	529.0	592.4	638.3	652.3	768.1	863.8

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Heilongjiang																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	27.8	30.9	34.6	37.5	44.1	47.3	48.4	52.2	52.8	52.9	74.1	73.7	70.9	69.4	48.1	51.2	51.7	53.2	53.2	56.3	69.7
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	3.5	3.5	3.5	3.7	3.8	3.8	4.2	4.6	3.0	3.8	4.8	3.8	4.2	4.2	3.2	3.3	2.9	2.6	2.3	3.9	3.7
4	NMM	1.0	1.0	1.0	1.2	1.3	1.5	1.5	1.9	1.8	2.0	2.2	2.3	2.6	1.8	1.2	1.0	0.5	0.5	1.6	1.5	1.4
5	FDB	19.0	21.9	23.4	25.3	28.9	30.8	34.1	34.9	35.3	40.3	52.0	60.4	61.2	58.6	43.3	49.1	47.9	29.3	58.2	56.8	70.3
6	TBC	0.8	0.9	1.2	1.4	1.7	2.1	2.3	2.4	3.2	4.2	5.3	5.3	5.7	5.6	4.5	5.5	5.4	4.1	2.7	4.4	5.4
7	TEX	9.6	10.5	12.1	13.9	15.1	17.5	17.9	19.1	18.8	23.1	24.1	26.3	25.4	21.2	13.9	12.3	6.4	5.3	5.1	8.0	4.8
8	WEA	0.7	0.8	1.0	1.0	1.2	1.0	1.1	1.2	1.4	1.3	0.9	0.9	1.1	1.1	0.8	0.8	0.7	0.3	0.6	0.6	0.7
9	LEA	0.8	0.8	1.0	1.0	1.3	1.1	1.1	1.1	1.4	1.5	1.2	1.6	1.9	1.2	0.8	0.7	0.6	0.3	0.7	0.4	0.2
10	WDF	6.6	7.1	8.6	8.8	9.4	10.1	10.4	11.1	10.9	11.5	13.2	13.1	17.1	11.0	9.7	14.1	14.0	7.3	11.0	11.7	4.6
11	PAP	7.8	7.9	8.7	8.7	8.9	9.8	9.9	10.2	11.0	10.0	10.7	13.2	15.7	13.4	12.6	18.4	23.4	19.3	15.8	16.5	23.6
12	PET	7.4	7.8	8.8	26.9	28.7	37.6	37.0	38.6	39.8	53.8	53.7	60.4	68.9	69.4	68.3	101.7	102.0	108.3	91.3	87.9	99.2
13	CHE	8.0	8.4	9.6	11.1	12.2	13.4	18.0	20.8	25.7	28.6	29.9	32.2	36.2	36.0	28.5	34.6	30.8	32.1	46.8	58.6	45.7
14	RBP	3.0	4.0	4.7	5.3	6.0	6.5	6.9	7.7	8.1	9.0	9.8	11.6	11.7	9.3	6.2	6.3	10.6	3.3	9.9	8.7	2.8
15	BUI	13.4	13.6	14.5	15.1	15.5	16.2	15.9	16.8	17.1	18.1	23.8	24.6	26.0	20.4	14.6	17.6	18.1	9.8	18.5	19.3	19.7
16	MSP	6.8	7.5	7.9	8.1	8.9	10.0	10.5	11.5	12.7	13.6	17.0	18.1	17.5	17.0	8.5	4.9	7.4	8.3	13.0	14.2	16.5
17	MPD	2.7	3.1	3.4	3.6	3.7	3.9	4.2	4.2	4.8	5.9	7.7	7.6	11.8	4.0	2.8	3.5	3.1	2.2	4.7	8.6	5.4
18	MCH	25.6	27.4	28.7	29.9	30.5	30.8	31.0	31.0	34.0	33.1	44.7	49.1	46.5	43.8	33.2	41.3	23.9	16.0	31.0	27.4	20.6
19	TRS	6.5	7.2	8.2	8.5	8.3	8.3	8.7	8.8	11.8	14.8	20.5	22.7	22.1	23.1	17.7	21.4	21.7	27.7	29.0	25.7	28.2
20	ELE	4.0	4.7	5.6	6.1	6.1	6.7	7.1	7.3	5.4	10.4	11.4	11.4	11.1	10.2	7.6	10.1	10.2	6.8	7.7	10.7	9.2
21	ICT	0.9	1.0	1.2	1.4	1.4	1.5	1.6	1.6	1.6	1.9	4.1	6.7	9.3	6.6	5.7	7.8	5.9	5.6	8.2	9.9	9.7
22	INS	1.0	1.1	1.2	1.2	1.2	1.3	1.3	1.2	1.8	2.3	2.1	2.1	2.4	1.5	1.3	2.2	1.6	0.7	0.5	2.7	2.5
	<i>Utilities</i>	26.5	27.6	31.9	41.8	44.8	48.1	52.9	51.4	69.1	76.0	100.6	98.1	133.3	172.6	142.0	174.6	203.3	238.3	310.1	333.6	300.9
	<i>Mining</i>	32.2	35.4	39.1	42.4	49.1	52.6	54.1	58.6	57.5	58.7	81.1	79.9	77.6	75.4	52.5	55.5	55.2	56.2	57.1	61.6	74.8
	<i>Manufacturing</i>	124.6	135.9	149.6	177.3	189.1	208.5	218.8	229.5	244.7	283.5	332.2	367.4	391.5	353.2	280.0	352.4	333.5	286.7	354.8	372.1	368.9
	<i>All</i>	183.3	198.9	220.7	261.5	283.0	309.2	325.9	339.6	371.3	418.2	513.8	545.3	602.4	601.2	474.5	582.5	592.0	581.3	722.0	767.3	744.6

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Shanghai																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	NMM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	FDB	5.2	6.5	8.4	9.5	11.7	14.2	16.3	16.2	18.4	24.5	32.8	36.3	47.7	54.9	56.0	49.7	47.0	47.6	48.9	55.5	54.3
6	TBC	0.3	0.3	0.5	0.7	1.2	1.6	2.2	2.4	2.6	4.4	6.4	6.5	6.1	12.7	16.5	18.7	17.0	17.5	16.3	16.7	17.9
7	TEX	20.4	24.8	35.2	37.3	39.2	41.7	43.6	43.6	43.2	52.6	56.2	57.7	55.9	55.6	46.1	35.4	34.9	33.0	34.8	39.0	33.4
8	WEA	2.0	2.7	3.4	4.0	5.1	5.6	6.8	8.1	9.9	14.1	17.1	19.9	23.2	24.3	20.7	18.7	21.2	19.6	20.6	26.5	25.9
9	LEA	1.0	1.2	1.4	1.5	1.8	2.2	2.5	2.7	3.9	4.9	5.5	5.2	6.1	5.7	5.9	4.7	3.1	4.6	5.6	7.5	7.5
10	WDF	1.4	1.6	1.7	1.9	2.2	2.4	2.3	2.4	3.9	3.4	4.6	6.5	10.9	14.7	14.4	14.4	14.7	13.2	13.6	21.5	21.6
11	PAP	3.9	4.9	6.2	7.5	8.3	8.5	8.7	9.2	10.6	12.8	16.0	16.9	25.8	35.1	36.4	33.2	35.2	35.2	41.9	65.2	55.5
12	PET	4.7	4.8	8.7	9.0	10.2	13.5	16.9	17.4	12.6	14.8	15.8	20.4	31.4	36.5	38.2	31.2	101.5	116.9	114.9	120.9	113.1
13	CHE	36.2	45.1	44.7	46.6	48.2	50.8	66.1	70.7	90.1	104.6	118.0	129.0	125.0	139.8	140.8	170.9	109.2	111.4	113.8	134.5	192.2
14	RBP	5.2	6.6	7.9	8.9	9.7	10.8	12.1	12.7	13.1	17.4	26.2	31.3	42.7	46.1	47.1	44.7	46.0	48.7	57.4	79.7	79.6
15	BUI	6.2	7.2	9.4	13.0	13.2	14.3	15.2	15.6	19.0	24.2	29.4	32.4	39.1	43.4	42.6	33.8	34.9	35.5	41.8	65.8	66.0
16	MSP	38.8	95.8	101.2	107.3	111.4	108.9	140.1	172.6	174.9	278.7	271.7	257.6	223.5	284.1	355.6	385.5	369.7	268.2	260.3	296.6	389.9
17	MPD	6.3	7.4	8.9	10.3	11.1	12.4	13.0	12.7	14.5	18.5	23.8	27.2	44.7	44.7	41.9	33.9	33.4	35.6	32.3	45.5	45.6
18	MCH	29.7	32.9	37.5	40.3	43.4	45.8	48.9	51.2	46.9	57.9	74.1	87.9	86.4	95.0	82.4	75.5	78.9	87.3	106.0	136.2	144.7
19	TRS	9.1	11.4	12.1	12.8	15.3	19.1	20.7	23.3	33.1	46.5	63.2	69.3	81.7	94.3	94.5	114.0	123.4	123.7	132.6	154.2	178.5
20	ELE	6.5	8.4	10.4	12.4	14.0	15.3	16.9	17.9	21.3	31.2	42.3	51.2	64.6	71.1	59.2	63.7	59.5	49.1	56.9	74.1	76.6
21	ICT	7.5	8.2	10.4	11.5	12.1	15.7	17.4	18.5	23.2	29.6	41.0	49.5	59.9	72.6	93.3	115.0	134.2	194.1	257.1	402.1	458.7
22	INS	2.4	2.7	3.2	3.5	3.6	3.7	4.3	4.4	9.1	9.7	10.9	11.8	12.2	14.0	7.9	5.7	5.7	5.6	13.4	12.6	10.9
	<i>Utilities</i>	12.8	13.2	15.1	18.4	23.4	30.3	41.6	48.1	73.2	108.6	139.1	143.3	160.1	201.9	196.6	239.5	320.1	323.5	357.6	484.1	527.8
	<i>Mining</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Manufacturing</i>	186.6	272.3	311.2	338.0	361.7	386.7	454.1	501.5	550.3	749.7	855.0	916.6	986.8	1144.7	1199.5	1248.8	1269.5	1246.9	1368.0	1753.9	1972.1
	<i>All</i>	199.4	285.5	326.4	356.4	385.1	416.9	495.7	549.6	623.5	858.4	994.1	1059.9	1147.0	1346.6	1396.1	1488.3	1589.5	1570.4	1725.5	2238.0	2499.8

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Jiangsu																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	9.6	10.6	12.3	14.8	15.8	16.4	15.6	15.1	15.6	15.9	20.6	21.0	19.7	18.6	21.1	21.8	18.3	20.8	20.5	25.3	36.9
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.9	0.9	1.0	1.3	1.3	1.2	1.3	1.2	1.0	1.2	1.8	1.8	1.4	1.2	1.1	1.1	1.8	6.0	5.0	4.4	4.3
4	NMM	4.1	4.3	4.6	5.6	5.7	5.7	6.1	6.0	6.6	8.3	11.3	11.1	10.8	9.4	8.9	9.5	9.0	8.1	6.9	8.0	7.5
5	FDB	14.8	18.5	23.6	26.5	29.7	31.2	34.0	36.7	41.2	52.0	69.6	76.0	85.0	81.1	79.7	74.0	71.7	72.8	75.7	88.0	88.8
6	TBC	0.4	0.4	0.5	0.7	1.0	1.2	1.9	2.4	2.7	3.7	4.7	6.9	7.2	7.9	8.1	8.0	9.4	13.4	13.2	15.0	16.4
7	TEX	38.7	47.9	60.3	71.7	83.7	91.2	100.2	109.2	134.5	166.9	195.9	205.0	208.6	197.0	192.0	190.1	195.3	206.6	244.4	340.7	342.0
8	WEA	3.1	3.6	4.3	5.8	6.7	7.8	9.2	11.7	16.7	22.3	28.8	33.0	34.6	34.0	37.0	31.0	36.6	38.0	38.6	77.9	72.5
9	LEA	1.4	1.7	2.3	3.0	3.5	4.0	4.5	5.2	7.5	9.0	10.8	11.6	11.0	9.3	9.1	8.8	8.9	10.0	12.7	10.4	7.4
10	WDF	1.4	1.7	2.1	2.6	2.8	3.0	3.1	4.2	5.1	6.4	9.2	11.2	11.8	11.1	11.7	12.1	14.0	17.6	19.2	29.9	21.3
11	PAP	4.8	5.9	7.5	8.6	9.5	10.2	11.2	12.2	14.3	17.4	23.6	26.9	37.4	37.8	54.5	91.0	108.5	113.4	117.6	148.6	286.6
12	PET	2.6	3.7	5.2	10.3	6.6	7.3	14.8	15.9	16.0	21.4	23.3	25.8	28.7	31.8	30.0	40.9	40.9	26.7	26.1	26.6	39.6
13	CHE	29.7	38.5	51.2	53.4	82.7	109.9	123.7	131.9	145.3	173.6	215.7	225.0	232.9	257.3	265.6	251.2	255.4	296.2	310.5	375.3	489.4
14	RBP	8.0	10.3	13.5	14.6	17.7	18.2	19.1	22.1	28.0	32.0	37.5	42.1	48.2	51.9	54.2	52.6	57.9	64.4	71.7	127.4	89.9
15	BUI	19.6	23.7	29.7	32.9	35.0	34.8	38.7	40.1	47.2	59.1	81.1	98.1	100.7	91.4	91.2	89.1	90.9	88.4	86.0	143.6	151.2
16	MSP	8.8	12.4	17.3	19.5	23.3	25.2	27.3	32.2	41.3	50.3	71.4	73.8	79.4	76.2	85.7	97.2	106.0	144.5	175.2	320.0	342.5
17	MPD	6.1	7.7	9.9	11.7	13.3	13.8	15.7	17.6	22.7	30.3	37.4	42.1	42.4	41.5	44.1	37.5	41.1	50.7	64.1	69.9	76.6
18	MCH	32.6	37.7	45.2	50.8	55.0	57.3	62.2	70.7	81.8	99.2	124.1	135.7	141.4	132.6	129.3	128.1	129.0	132.9	152.1	218.2	231.3
19	TRS	9.5	10.5	12.0	13.2	13.8	15.0	17.2	22.6	33.1	41.8	58.7	59.0	64.7	72.6	69.0	79.6	79.4	87.1	111.5	140.2	152.9
20	ELE	7.1	9.5	12.8	14.4	16.7	17.6	21.0	24.7	34.3	45.1	57.4	62.5	68.9	70.0	75.6	73.9	81.6	92.5	99.5	152.1	173.9
21	ICT	11.0	13.6	17.4	19.8	21.1	22.2	28.6	29.3	33.0	42.1	55.2	63.7	76.9	82.9	92.6	102.7	135.2	157.6	282.9	495.3	602.7
22	INS	3.1	3.6	4.3	4.5	4.6	4.7	5.8	6.3	8.2	9.3	12.0	13.0	12.4	11.4	12.2	10.5	11.7	12.4	15.9	24.8	31.4
	<i>Utilities</i>	24.5	29.0	35.6	41.8	46.4	51.9	67.3	74.8	117.1	124.8	177.8	196.4	224.0	243.3	309.4	396.8	402.8	436.7	508.8	642.3	814.5
	<i>Mining</i>	14.6	15.8	17.9	21.7	22.8	23.4	23.0	22.4	23.2	25.4	33.6	33.9	31.9	29.2	31.2	32.4	29.1	34.9	32.4	37.8	48.7
	<i>Manufacturing</i>	202.6	250.9	319.1	363.9	426.8	474.5	538.1	595.0	712.8	881.8	1116.3	1211.2	1292.3	1297.8	1341.5	1378.2	1473.4	1625.1	1917.1	2804.0	3216.6
	<i>All</i>	241.7	295.7	372.6	427.3	496.0	549.8	628.4	692.2	853.0	1032.0	1327.7	1441.4	1548.1	1570.2	1682.1	1807.4	1905.3	2096.8	2458.3	3484.0	4079.8

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Zhejiang																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1.0	1.1	1.1	1.7	1.8	1.9	2.1	2.2	2.0	2.1	2.2	2.5	2.6	2.5	1.8	2.3	2.2	2.1	2.0	2.0	4.2
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	1.0	1.1	1.3	1.4	1.8	2.0	2.0	2.0	2.2	2.0	3.2	3.1	2.9	3.3	3.2	2.7	2.6	1.4	1.9	1.5	2.0
4	NMM	1.7	1.9	1.9	2.4	2.5	2.7	2.9	2.9	3.3	3.8	5.4	5.6	5.3	3.4	3.1	2.4	2.0	3.0	4.8	7.3	6.3
5	FDB	12.6	16.2	19.8	23.4	25.1	26.3	29.0	30.0	32.4	36.4	51.2	56.4	62.8	67.6	66.6	61.6	65.7	70.1	76.2	72.6	84.2
6	TBC	0.3	0.4	0.7	0.7	0.9	1.3	1.6	2.4	2.2	3.4	4.7	5.3	5.9	6.2	6.9	8.6	9.6	11.8	12.7	13.5	13.1
7	TEX	18.0	24.6	31.7	39.1	44.2	48.1	55.1	62.4	85.1	102.5	126.3	138.1	146.2	173.5	166.7	157.9	180.3	222.2	286.5	358.1	388.1
8	WEA	1.4	2.0	2.5	3.1	3.6	4.3	5.6	7.9	12.2	16.5	20.3	23.3	24.4	26.7	31.5	36.9	48.4	59.1	69.5	59.3	82.6
9	LEA	1.0	1.3	1.5	1.9	2.2	2.6	3.3	4.2	5.9	8.7	10.4	12.1	13.5	13.7	12.4	13.1	17.6	21.5	25.1	34.0	36.8
10	WDF	1.4	1.8	1.8	2.3	2.4	2.6	3.0	3.3	4.1	4.9	6.5	6.9	7.7	7.1	8.1	9.5	12.0	14.7	20.0	35.1	37.4
11	PAP	3.7	4.8	5.6	6.7	7.7	8.2	9.4	10.5	12.9	15.8	20.9	23.0	37.6	42.0	41.7	44.4	54.8	66.0	76.2	96.5	192.8
12	PET	6.4	6.0	5.8	6.1	6.4	6.8	7.3	8.5	11.4	12.4	14.6	14.3	19.9	21.2	26.0	27.1	26.8	30.8	38.5	39.8	41.0
13	CHE	11.7	13.3	16.4	18.9	20.7	23.1	30.0	35.4	40.8	49.6	70.4	74.9	82.8	96.3	97.6	98.3	109.6	121.9	150.2	219.8	280.6
14	RBP	5.1	6.6	7.7	9.3	10.1	10.9	13.0	15.2	18.4	21.5	27.5	29.8	32.4	30.3	34.6	35.7	39.6	46.5	64.3	106.6	113.8
15	BUI	11.1	14.5	17.6	21.1	22.1	22.6	24.0	25.1	29.7	38.8	54.9	62.7	64.0	55.8	52.2	53.8	56.4	64.8	81.8	124.3	139.3
16	MSP	3.4	4.3	5.0	6.5	7.1	7.6	8.4	9.2	12.8	19.2	25.2	25.3	27.4	28.7	36.5	31.2	36.1	38.6	45.5	68.6	85.3
17	MPD	3.0	4.0	5.0	6.2	6.9	7.5	8.2	9.5	11.5	14.1	17.8	18.6	19.0	21.7	21.8	24.2	24.5	29.8	31.4	43.3	55.2
18	MCH	14.4	18.4	20.1	23.2	25.2	26.4	29.3	32.8	38.6	44.8	55.0	56.5	57.2	63.4	64.2	72.8	83.9	98.8	121.9	308.6	174.5
19	TRS	3.4	2.6	3.5	4.4	4.6	5.0	6.0	7.1	11.6	14.1	21.2	23.2	25.2	28.4	28.1	34.6	42.3	47.8	61.4	90.0	105.1
20	ELE	4.1	5.5	7.2	9.0	9.9	10.9	11.7	13.5	18.7	23.4	32.3	37.5	43.7	50.6	53.2	57.6	71.3	81.9	97.1	61.7	139.7
21	ICT	2.2	3.3	4.0	4.8	5.2	5.5	6.8	7.6	8.6	11.0	12.8	16.7	19.4	22.2	21.0	29.0	31.8	39.7	54.9	30.5	154.5
22	INS	1.4	1.5	1.7	1.9	2.3	2.4	2.7	2.7	3.9	4.6	6.0	7.6	5.9	6.0	5.6	6.4	7.9	8.6	14.7	25.8	25.7
	<i>Utilities</i>	24.8	28.0	30.8	33.5	37.4	42.7	47.1	51.0	86.6	108.0	144.2	164.2	190.8	221.3	254.1	314.9	348.7	388.6	436.8	731.3	798.4
	<i>Mining</i>	3.7	4.1	4.4	5.5	6.1	6.6	7.1	7.1	7.4	7.9	10.8	11.2	10.9	9.2	8.1	7.4	6.8	6.5	8.6	10.8	12.5
	<i>Manufacturing</i>	104.5	130.9	157.7	188.8	206.7	222.2	254.5	287.5	360.9	441.7	577.9	632.2	695.1	761.7	774.9	802.7	918.5	1074.5	1328.0	1788.1	2149.7
	<i>All</i>	133.1	162.9	192.9	227.8	250.3	271.6	308.6	345.6	455.0	557.6	733.0	807.6	896.8	992.3	1037.1	1125.0	1274.0	1469.6	1773.4	2530.2	2960.6



Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Anhui																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	17.0	20.3	23.0	23.6	29.7	30.7	31.0	35.0	36.4	39.4	51.1	53.0	66.4	64.9	62.5	67.8	68.8	76.7	81.2	99.1	92.1
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.6	0.5	0.3	0.6	0.7	0.8	0.9	1.1	1.1	8.3	9.4	12.5	11.3	12.6	13.1	12.9	12.4	11.5	11.8	11.9	11.4
4	NMM	0.9	1.1	1.2	1.3	1.3	1.5	1.7	1.5	1.9	2.7	3.6	3.8	3.8	1.2	1.2	1.8	1.7	1.0	1.0	2.0	2.8
5	FDB	7.4	12.7	18.3	15.0	17.2	18.4	20.1	21.4	24.4	29.0	37.3	43.8	44.7	36.3	36.5	36.0	38.0	47.3	41.2	45.3	52.7
6	TBC	0.9	1.2	1.4	2.3	2.6	3.0	3.6	4.0	4.3	5.9	8.2	10.5	12.5	13.5	14.8	13.7	11.8	10.6	11.8	14.1	15.8
7	TEX	7.7	9.9	11.8	14.1	16.3	18.6	20.8	22.2	23.4	29.7	33.8	34.6	35.0	30.4	28.7	24.8	26.2	27.6	26.5	26.6	27.6
8	WEA	0.5	0.6	0.7	1.2	1.2	1.2	1.3	1.8	2.3	3.1	3.4	3.4	2.5	1.9	1.3	1.5	2.0	1.8	1.6	1.9	2.8
9	LEA	0.5	0.4	0.3	0.8	1.2	1.2	1.3	1.3	2.1	2.7	3.0	3.7	3.6	2.1	2.5	1.6	1.5	1.2	1.6	1.3	1.5
10	WDF	0.9	0.8	0.7	1.2	1.3	1.8	1.8	1.9	2.3	3.0	4.0	4.8	5.8	3.0	3.3	4.0	3.6	3.8	5.3	3.5	4.7
11	PAP	2.5	3.0	3.5	4.5	4.9	5.2	5.9	6.8	7.6	9.4	12.4	12.3	12.2	10.2	9.6	7.9	8.1	8.2	10.2	11.4	21.4
12	PET	4.6	4.7	4.7	5.4	5.6	5.7	6.9	7.0	6.4	9.1	12.4	15.2	16.7	15.9	14.4	19.4	19.1	18.6	18.4	16.7	16.0
13	CHE	10.2	11.2	11.7	14.0	15.5	16.5	21.2	22.8	26.4	30.7	38.1	43.1	42.7	37.0	44.3	46.8	37.0	35.0	37.6	43.5	46.6
14	RBP	1.9	2.6	3.2	3.7	4.0	4.4	4.8	5.6	6.9	8.8	11.4	13.5	15.1	15.3	18.8	18.4	21.6	21.8	23.5	27.6	29.1
15	BUI	8.1	11.9	15.7	17.3	17.6	17.8	17.9	19.1	20.2	28.7	35.8	41.7	46.1	39.5	36.1	34.5	35.6	40.8	44.1	56.1	62.1
16	MSP	15.9	16.0	15.1	21.4	21.7	23.2	26.4	27.1	31.1	41.5	51.2	52.9	52.1	59.1	69.0	58.6	61.9	59.1	86.5	113.9	122.1
17	MPD	1.5	1.8	2.1	2.3	2.4	2.5	2.8	3.1	3.5	4.8	6.4	6.8	6.8	2.9	3.3	3.7	2.0	2.5	2.4	4.3	7.2
18	MCH	7.9	9.0	9.5	10.2	11.1	11.9	13.3	14.9	16.7	20.9	26.3	29.4	29.8	25.0	21.0	21.3	16.8	16.8	19.7	26.3	26.0
19	TRS	2.9	3.4	3.7	3.9	4.1	4.1	4.6	4.9	6.9	9.0	10.8	13.1	15.0	12.2	13.3	13.5	20.7	23.6	24.3	31.9	46.5
20	ELE	1.3	1.8	2.3	3.4	4.1	3.9	4.8	5.7	7.2	10.3	13.2	17.8	21.3	18.8	23.4	16.3	18.2	18.7	21.5	22.0	28.0
21	ICT	1.0	1.3	1.5	1.5	1.9	2.2	2.5	2.5	3.1	3.7	5.0	4.2	4.4	4.8	4.6	3.8	4.3	5.7	4.7	7.1	8.3
22	INS	0.4	0.6	0.7	0.7	0.7	0.7	0.8	0.9	1.0	1.3	2.0	2.1	1.9	1.4	1.1	1.1	1.0	1.3	1.7	2.4	2.8
	<i>Utilities</i>	19.1	21.4	22.9	23.3	25.9	35.9	36.3	37.6	52.0	53.9	78.4	66.0	68.4	99.2	121.0	154.3	147.5	160.8	183.8	189.7	190.8
	<i>Mining</i>	18.5	21.8	24.6	25.5	31.7	32.9	33.6	37.6	39.4	50.5	64.1	69.3	81.5	78.7	76.8	82.5	82.9	89.1	94.0	113.0	106.3
	<i>Manufacturing</i>	76.3	92.8	106.8	122.8	133.4	142.3	160.7	173.0	195.9	251.6	314.4	352.9	368.2	329.3	346.1	326.8	329.5	344.5	382.7	455.7	521.1
	<i>All</i>	113.9	136.1	154.3	171.6	191.1	211.1	230.6	248.2	287.4	355.9	456.8	488.1	518.2	507.2	543.9	563.5	559.9	594.5	660.5	758.4	818.1

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Fujian																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1.9	1.9	2.2	2.6	2.9	3.0	2.9	2.7	2.9	3.1	3.4	4.1	3.8	3.2	3.0	2.7	2.6	3.5	2.8	3.2	5.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.8	1.0	1.0	1.2	1.2	0.8	1.0	1.2	0.8	1.6	2.2	3.1	4.3
4	NMM	0.7	0.7	0.7	0.8	1.0	1.2	1.2	1.3	1.4	1.7	2.5	2.5	2.5	1.3	1.3	1.2	1.3	1.2	1.5	1.8	2.0
5	FDB	9.7	10.6	12.1	14.2	15.4	16.4	17.8	19.2	23.0	29.7	38.0	41.1	46.0	41.3	42.9	41.4	41.7	44.2	50.6	63.7	65.8
6	TBC	0.5	0.6	0.7	1.3	1.4	1.7	2.2	2.5	3.0	4.3	5.3	5.0	6.4	6.2	6.5	6.7	7.1	8.8	12.9	14.4	12.9
7	TEX	3.2	4.0	5.2	6.1	7.5	7.7	9.2	10.3	10.5	12.3	19.1	23.2	23.5	22.1	26.2	30.3	33.0	38.7	54.2	68.3	79.3
8	WEA	0.5	0.7	0.9	1.2	1.9	2.4	4.1	5.1	5.6	7.8	10.4	11.3	14.0	11.3	9.4	10.9	10.4	16.2	22.1	22.1	28.0
9	LEA	0.3	0.4	0.6	0.7	1.1	2.1	2.4	3.3	5.6	6.6	10.4	11.2	10.4	12.7	11.5	12.6	14.7	17.7	24.8	31.7	26.6
10	WDF	1.5	2.3	2.7	3.1	3.4	3.6	4.6	4.9	5.8	7.2	8.4	8.9	11.4	6.0	7.4	8.0	8.5	9.5	10.6	15.4	12.6
11	PAP	4.5	5.0	5.7	6.2	7.2	7.7	8.6	10.1	10.8	13.0	21.4	17.0	24.7	23.7	20.9	34.3	39.9	38.7	42.1	44.9	88.7
12	PET	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	8.5	9.1	9.6	11.6	12.2	11.3	12.5	9.6	10.2	9.1	9.0
13	CHE	8.0	10.1	11.9	13.3	18.4	19.3	20.5	22.0	24.0	24.1	37.9	38.6	41.9	46.1	55.3	56.2	61.4	63.0	74.4	77.6	85.0
14	RBP	2.2	2.8	3.8	4.4	5.0	5.6	7.2	8.9	11.3	13.0	16.7	18.0	22.2	19.6	20.1	22.8	26.5	28.4	32.9	43.6	35.0
15	BUI	4.3	4.9	5.9	7.8	9.1	11.7	13.0	13.5	18.9	27.1	35.1	40.3	39.8	45.6	44.4	46.6	45.4	42.7	47.8	75.8	82.1
16	MSP	2.4	3.1	3.9	4.3	5.0	5.4	6.1	6.7	8.8	10.2	11.6	16.5	19.2	24.1	26.9	21.7	22.0	22.0	28.6	52.0	57.6
17	MPD	0.8	0.9	1.0	1.1	1.3	2.1	2.4	2.8	3.5	4.9	8.7	12.3	13.7	11.9	8.5	13.4	13.5	15.5	12.8	7.3	10.0
18	MCH	4.9	5.3	5.7	6.1	6.4	6.9	7.2	8.3	7.8	11.0	13.4	15.7	14.3	11.7	12.0	16.5	15.5	15.3	20.2	26.4	27.8
19	TRS	1.2	1.3	1.5	1.7	1.8	1.9	2.2	3.0	4.3	4.8	7.2	11.4	13.8	12.7	15.5	12.8	16.9	17.4	21.6	29.2	32.0
20	ELE	1.4	1.8	2.1	3.1	3.5	3.4	4.2	5.0	6.6	8.4	9.7	11.8	13.5	13.7	13.9	16.1	15.8	19.0	20.7	24.4	24.7
21	ICT	1.7	2.3	2.8	3.2	3.2	4.3	5.1	5.9	6.4	10.0	12.8	15.2	24.0	26.7	27.6	36.0	44.8	53.1	62.7	65.4	76.2
22	INS	0.3	0.4	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.9	2.3	1.7	2.1	1.1	1.0	1.8	1.8	2.1	8.1	8.4	10.7
	<i>Utilities</i>	15.8	17.2	19.8	21.3	23.0	28.0	30.7	34.5	49.3	77.8	102.5	120.9	142.4	152.9	183.0	215.3	275.7	303.0	330.4	352.1	378.9
	<i>Mining</i>	3.1	3.1	3.4	3.9	4.5	4.9	4.8	4.7	5.1	5.8	7.0	7.7	7.4	5.3	5.3	5.1	4.7	6.3	6.5	8.1	11.3
	<i>Manufacturing</i>	47.5	56.5	66.8	78.1	91.9	102.8	117.2	132.2	157.0	195.7	277.0	308.1	350.6	348.2	362.2	399.4	431.4	461.9	557.1	679.8	763.8
	<i>All</i>	66.4	76.7	90.1	103.3	119.4	135.7	152.7	171.3	211.4	279.3	386.5	436.7	500.4	506.4	550.5	619.8	711.8	771.2	893.9	1040.0	1154.0

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Jiangxi																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	6.2	7.2	7.7	7.7	8.2	9.3	9.3	9.9	8.8	10.0	11.9	12.4	12.7	11.0	9.5	8.2	8.9	7.6	6.6	9.2	13.6
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	8.1	8.7	10.0	11.0	11.3	11.5	11.7	16.3	17.1	15.5	21.3	21.5	22.6	23.6	16.4	10.1	9.4	7.6	8.1	12.4	9.8
4	NMM	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.2	1.5	1.6	1.7	2.4	2.1	1.8	1.7	1.8	1.9	1.7	0.4	0.8
5	FDB	6.5	7.1	8.7	9.8	10.8	10.4	12.1	12.1	13.4	15.0	19.8	20.9	22.3	20.3	18.6	17.1	14.3	13.5	13.3	17.5	19.5
6	TBC	0.2	0.3	0.3	0.3	0.3	1.2	1.2	1.3	1.6	1.9	2.1	2.1	2.2	2.8	3.3	3.8	4.2	4.3	4.5	4.3	8.7
7	TEX	4.3	5.0	5.7	6.5	7.5	8.0	8.9	9.3	10.1	13.4	16.5	17.1	16.6	14.7	12.9	11.4	10.6	8.9	8.3	7.1	9.0
8	WEA	0.4	0.6	0.7	0.8	0.8	0.9	1.1	1.4	1.1	1.0	1.2	1.2	1.5	1.2	1.0	0.8	0.8	1.1	0.7	2.8	4.8
9	LEA	0.3	0.3	0.4	0.5	0.4	0.4	0.5	0.6	1.4	1.5	1.8	1.8	1.7	1.5	1.2	1.0	0.9	1.1	0.9	1.0	1.5
10	WDF	1.5	1.6	1.8	2.0	2.2	2.3	2.6	2.6	2.8	4.7	5.3	4.9	5.7	4.4	3.5	2.6	3.4	3.0	2.9	4.3	6.1
11	PAP	2.4	2.7	3.3	3.5	3.9	4.1	4.9	5.2	5.5	7.5	10.4	12.0	11.7	10.0	8.8	7.7	7.4	6.8	7.7	8.2	20.2
12	PET	1.9	2.1	2.0	2.5	2.5	2.5	3.1	3.2	3.6	4.2	4.5	5.8	7.5	10.6	13.3	16.2	15.1	14.4	14.0	15.8	15.2
13	CHE	6.9	8.0	9.8	10.1	11.1	12.2	13.7	14.8	21.5	24.5	28.7	30.2	39.6	35.6	32.3	29.4	27.1	30.1	31.4	40.6	41.6
14	RBP	1.1	1.4	1.6	1.9	2.2	2.2	2.4	2.7	3.0	3.5	4.8	5.3	3.6	3.0	2.4	1.8	1.5	1.7	2.3	5.0	6.7
15	BUI	6.1	7.6	8.8	9.6	10.5	12.1	13.0	13.9	16.5	20.4	27.3	29.4	29.4	27.9	26.8	26.8	22.6	21.7	27.5	34.0	39.5
16	MSP	6.0	12.2	13.2	14.5	14.6	14.5	14.6	15.2	16.3	23.7	27.2	32.2	32.9	43.0	52.2	61.6	65.9	68.2	71.8	73.7	91.8
17	MPD	0.8	0.8	1.0	1.1	1.2	1.2	1.3	1.6	2.2	2.6	3.5	3.3	3.0	2.5	2.1	1.8	1.7	2.3	1.9	2.8	4.7
18	MCH	8.2	8.7	9.1	9.4	9.4	9.5	10.2	10.5	9.3	12.6	16.1	17.7	18.2	15.4	12.9	11.2	9.7	8.2	6.4	8.8	7.2
19	TRS	5.0	5.5	5.8	5.7	5.9	5.9	6.5	6.7	8.1	9.0	12.8	16.5	20.9	21.0	21.5	22.6	24.0	23.7	24.3	24.0	29.2
20	ELE	1.3	1.5	2.0	2.3	2.6	2.9	3.4	3.7	4.2	6.2	7.3	8.4	8.3	8.0	7.8	7.8	6.4	5.2	7.6	6.9	7.6
21	ICT	2.0	2.3	2.5	2.6	2.8	2.9	3.2	3.3	3.5	4.2	5.4	5.6	5.4	4.7	4.1	3.6	3.8	4.9	5.1	4.0	9.8
22	INS	1.0	1.1	1.2	1.0	1.0	1.0	0.9	1.0	1.7	1.5	2.0	2.1	2.2	1.8	1.4	1.1	2.1	3.3	2.3	2.9	2.8
	<i>Utilities</i>	18.1	19.0	20.5	21.4	23.3	24.6	24.7	26.7	29.2	49.5	59.3	64.5	72.9	80.4	88.4	96.5	114.3	120.0	149.0	160.5	171.3
	<i>Mining</i>	15.0	16.7	18.5	19.5	20.4	21.8	22.1	27.2	27.0	27.0	34.9	35.6	37.7	36.7	27.7	19.9	20.1	17.0	16.5	22.0	24.2
	<i>Manufacturing</i>	56.0	68.9	78.1	84.3	89.6	94.1	103.5	109.0	125.5	157.4	196.8	216.8	232.7	228.3	226.1	228.3	221.6	222.2	232.8	263.7	326.0
	<i>All</i>	89.1	104.5	117.1	125.3	133.3	140.5	150.2	162.8	181.7	233.8	291.0	316.9	343.4	345.4	342.2	344.7	356.0	359.2	398.3	446.2	521.6

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Shandong																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	24.1	29.5	31.2	35.3	41.3	45.7	47.9	51.7	51.5	59.3	74.5	81.3	91.3	91.1	95.1	97.8	109.7	118.9	144.3	186.1	205.2
2	PTM	25.5	40.4	54.8	68.9	83.4	99.5	116.4	126.2	141.2	135.8	163.7	162.7	162.5	164.0	138.2	256.7	274.2	289.3	272.3	351.1	281.9
3	MTM	3.5	3.8	3.9	4.6	5.3	9.8	11.0	11.5	13.9	16.4	18.6	21.4	21.0	18.1	19.2	19.3	20.4	20.9	27.9	32.6	37.9
4	NMM	3.8	4.6	4.7	6.0	7.0	8.6	9.0	10.2	10.6	11.4	12.6	11.4	10.5	7.7	7.5	8.4	10.5	10.8	10.4	8.4	10.6
5	FDB	17.2	22.3	28.9	36.6	42.2	48.7	57.7	65.0	75.1	92.5	122.2	135.5	145.0	142.3	142.9	143.9	145.8	176.0	194.9	273.8	318.0
6	TBC	1.4	1.9	2.3	2.4	2.7	3.2	3.9	5.6	7.2	7.8	10.2	12.9	25.1	16.1	17.9	17.4	17.0	16.7	18.4	17.0	15.0
7	TEX	23.8	29.3	35.0	44.7	57.3	68.4	75.1	78.7	92.2	104.7	123.7	127.9	131.6	131.9	127.8	126.1	135.2	144.9	188.1	191.2	262.1
8	WEA	1.9	2.7	3.2	3.9	4.4	5.2	5.9	6.5	8.3	9.5	12.6	15.5	15.7	13.4	14.2	14.5	15.3	16.6	28.1	31.7	39.1
9	LEA	1.6	2.2	2.7	3.2	3.6	4.1	5.1	5.6	6.3	8.6	10.6	11.5	12.1	12.1	12.0	10.2	12.0	10.6	10.5	14.2	8.1
10	WDF	2.2	2.5	3.2	4.0	4.5	4.9	5.9	6.0	7.4	8.0	9.9	11.1	11.5	8.6	6.8	8.8	11.1	13.9	20.2	28.0	15.9
11	PAP	6.4	8.5	10.5	12.5	14.0	15.9	18.3	20.4	25.6	36.5	44.2	50.5	55.2	53.8	65.9	66.8	71.0	85.0	122.7	151.7	307.2
12	PET	7.1	7.0	8.2	27.4	41.5	43.8	46.1	48.1	50.2	64.7	69.8	76.1	77.8	94.8	98.2	105.5	31.9	39.9	44.7	73.2	87.5
13	CHE	17.9	20.1	23.9	28.2	36.2	44.7	54.4	68.9	84.0	101.0	117.7	136.0	131.9	134.3	146.0	142.6	187.6	185.9	196.7	281.6	361.6
14	RBP	8.5	10.2	11.9	14.0	16.0	20.0	22.2	25.4	27.9	34.5	41.2	47.1	46.5	46.5	50.1	44.3	55.2	55.2	56.5	67.1	31.7
15	BUI	16.3	19.9	23.9	27.5	30.2	32.4	35.4	40.7	57.9	75.9	98.4	106.3	117.5	108.3	94.4	96.1	95.1	112.0	140.0	185.1	232.9
16	MSP	10.6	12.2	14.4	16.0	18.4	22.8	26.0	27.1	37.8	44.4	54.9	57.8	66.0	67.0	71.8	80.9	84.1	80.1	112.3	245.9	378.3
17	MPD	4.9	6.3	7.9	8.8	9.4	10.5	11.1	13.5	16.8	19.1	24.4	23.1	22.5	22.2	19.7	20.9	20.9	20.5	18.6	34.5	46.7
18	MCH	24.9	28.9	32.5	36.9	40.1	42.9	45.3	50.2	53.0	66.1	85.2	92.5	94.3	88.7	86.9	85.5	79.1	81.5	97.0	132.8	184.5
19	TRS	7.1	8.2	9.5	10.1	11.1	11.6	13.9	15.8	21.9	25.3	38.4	45.0	45.0	43.6	41.2	37.4	38.6	47.5	50.8	60.1	92.2
20	ELE	3.3	4.9	6.3	7.9	9.2	10.5	11.9	13.5	18.3	22.9	29.3	33.1	37.7	41.3	47.1	50.1	51.6	55.6	62.7	74.9	95.4
21	ICT	1.9	2.4	3.2	3.4	4.1	4.8	5.3	6.1	7.0	11.1	16.2	18.4	21.8	19.9	20.5	20.2	28.4	34.3	49.4	60.9	77.3
22	INS	1.0	1.1	1.3	1.5	1.5	1.7	1.8	1.7	4.7	5.5	6.9	6.3	6.9	5.4	4.3	4.2	4.4	5.7	3.8	8.3	10.0
	<i>Utilities</i>	32.6	35.6	44.8	52.4	62.7	74.9	73.7	93.0	119.3	132.8	180.1	174.7	199.6	238.6	268.0	342.1	370.9	431.0	565.8	618.7	654.8
	<i>Mining</i>	57.0	78.3	94.6	114.9	137.0	163.7	184.3	199.6	217.2	222.8	269.5	276.9	285.3	280.8	260.1	382.1	414.9	439.8	455.0	578.2	535.6
	<i>Manufacturing</i>	158.1	190.8	228.7	289.1	346.5	396.1	445.2	498.7	601.7	738.3	915.8	1006.8	1064.1	1050.2	1067.9	1075.6	1084.1	1181.6	1415.5	1931.9	2563.4
	<i>All</i>	247.6	304.7	368.1	456.4	546.2	634.7	703.2	791.2	938.2	1093.8	1365.4	1458.4	1549.0	1569.6	1596.0	1799.9	1870.0	2052.5	2436.3	3128.8	3753.8

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Henan																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	26.2	27.5	29.3	28.9	32.8	33.3	35.1	36.2	38.5	41.2	60.7	63.9	63.5	68.6	66.9	74.5	83.7	106.3	107.7	108.7	147.1
2	PTM	20.4	26.6	32.2	41.3	58.8	57.5	64.3	66.0	76.9	74.3	84.9	85.7	88.4	82.9	78.3	67.0	76.7	68.7	102.8	109.9	19.0
3	MTM	1.3	1.8	2.2	2.9	3.4	3.7	4.7	5.8	6.6	7.6	9.5	10.1	9.8	8.4	9.3	12.7	14.0	12.8	13.3	16.6	18.7
4	NMM	0.7	0.7	0.7	0.8	1.0	0.8	1.2	1.5	1.3	1.5	1.5	2.0	2.4	1.3	1.4	1.3	1.5	3.4	1.5	3.0	6.5
5	FDB	8.7	10.7	14.1	14.7	16.3	18.0	22.1	25.2	31.1	39.9	54.3	61.8	66.7	69.0	70.7	70.1	69.6	65.8	70.6	78.9	107.8
6	TBC	1.7	2.3	2.5	2.5	3.0	3.8	5.5	7.3	9.2	10.2	14.1	15.4	17.2	17.1	20.5	20.5	20.5	19.8	21.6	20.6	19.3
7	TEX	11.8	14.1	16.5	18.4	21.2	23.5	28.2	30.6	35.9	47.6	46.8	49.9	50.0	44.1	40.1	37.3	36.4	33.3	32.2	40.7	46.9
8	WEA	0.9	1.1	1.1	1.4	1.5	1.7	2.0	2.8	2.2	2.7	3.1	3.8	3.2	2.8	2.5	2.6	2.3	1.8	1.7	2.0	2.6
9	LEA	1.0	1.3	1.3	1.7	1.8	2.0	2.2	2.9	3.4	4.9	5.6	6.3	6.6	5.9	5.6	5.4	5.7	4.9	4.5	4.9	4.1
10	WDF	0.9	0.9	1.0	1.1	1.2	1.4	1.5	1.4	2.4	2.8	3.9	4.6	4.3	4.8	4.4	4.5	4.5	3.7	4.7	7.6	6.3
11	PAP	3.8	4.6	5.1	6.4	6.9	8.0	9.3	11.2	12.8	14.5	19.6	21.1	21.5	26.2	26.1	26.9	25.6	26.5	24.3	29.9	70.1
12	PET	2.1	2.5	3.1	3.4	4.4	5.4	7.3	11.5	10.3	14.5	14.5	14.9	17.0	17.1	17.2	35.0	29.7	28.0	27.3	31.1	31.7
13	CHE	17.7	18.7	21.3	25.4	29.9	31.7	44.5	47.7	45.7	54.9	71.8	74.9	97.5	96.6	100.3	96.7	95.9	94.9	96.1	100.1	114.7
14	RBP	2.3	2.9	3.6	4.1	4.4	4.6	6.0	7.4	7.5	9.4	11.7	13.0	12.9	12.5	13.0	13.9	13.3	12.8	13.0	13.7	10.6
15	BUI	11.1	13.9	19.6	20.5	21.4	22.9	27.6	28.9	37.3	50.0	63.9	75.7	70.9	74.3	77.1	74.0	72.6	71.1	74.5	87.6	102.0
16	MSP	14.3	17.6	18.2	19.6	20.1	21.9	23.8	23.6	31.7	43.0	56.9	64.1	67.4	72.3	79.9	73.7	84.3	95.3	104.4	142.4	178.4
17	MPD	2.0	2.3	2.7	2.9	3.2	3.1	3.6	4.2	4.4	5.6	7.5	7.8	7.4	5.9	5.3	5.4	5.3	4.3	3.2	7.4	9.1
18	MCH	27.0	26.9	31.6	32.2	32.5	33.2	38.1	39.2	41.8	50.8	62.5	75.0	68.5	63.4	60.7	54.5	50.4	47.6	54.2	54.2	66.5
19	TRS	3.3	3.6	3.6	4.0	4.1	4.3	5.3	6.6	9.1	10.9	17.6	19.9	18.5	21.7	21.9	21.0	20.7	20.7	17.0	21.1	19.0
20	ELE	3.4	4.0	5.0	5.2	5.4	5.9	8.0	9.4	9.2	13.5	18.3	19.6	20.5	19.9	20.7	19.7	21.0	20.0	18.6	21.0	26.1
21	ICT	1.5	1.6	1.7	1.8	1.8	2.0	4.6	7.5	7.9	7.9	8.5	13.8	15.2	13.1	14.6	13.1	12.8	19.0	20.0	26.2	26.2
22	INS	1.4	1.1	1.2	1.3	1.6	1.6	1.5	2.1	2.4	2.6	3.2	3.2	3.0	2.5	2.4	2.1	2.5	2.4	1.2	5.6	5.8
	<i>Utilities</i>	34.1	42.0	42.8	48.0	52.5	58.3	64.8	64.5	81.4	108.0	144.3	169.8	185.2	236.3	245.4	271.3	318.9	373.1	414.1	574.6	587.5
	<i>Mining</i>	48.5	56.6	64.3	73.9	96.1	95.4	105.3	109.4	123.3	124.7	156.7	161.7	164.1	161.1	156.0	155.5	175.8	191.2	225.4	238.2	191.4
	<i>Manufacturing</i>	114.9	130.1	153.2	166.6	180.7	195.0	241.1	269.5	304.2	385.7	484.0	544.7	568.5	569.2	582.9	576.3	573.1	571.9	588.9	694.9	847.0
	<i>All</i>	197.6	228.7	260.3	288.6	329.2	348.6	411.2	443.4	508.9	618.4	785.0	876.2	917.8	966.6	984.3	1003.2	1067.8	1136.2	1228.4	1507.7	1625.9

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Hubei																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2.5	2.7	2.7	2.8	2.9	3.0	3.0	2.9	2.9	2.7	3.6	4.2	4.2	2.9	2.9	1.7	2.2	1.8	2.0	1.8	2.7
2	PTM	5.2	5.3	5.7	6.3	6.8	7.2	11.7	12.5	16.3	17.5	18.6	19.1	19.1	19.5	16.8	20.4	32.0	30.0	33.1	22.8	30.2
3	MTM	0.3	0.6	0.9	0.9	0.9	0.9	1.0	0.9	1.5	2.0	2.5	2.7	3.0	2.9	4.7	4.7	4.6	4.6	5.3	8.7	4.6
4	NMM	2.5	2.8	2.9	3.8	4.3	4.4	5.4	5.9	7.3	8.0	9.3	9.6	10.3	9.2	8.9	20.6	17.5	16.8	14.1	10.3	10.9
5	FDB	9.1	11.5	14.6	16.4	19.8	20.5	21.2	22.5	23.5	27.2	36.5	44.0	48.4	48.6	51.9	48.0	47.6	46.6	46.2	42.5	47.7
6	TBC	1.4	1.8	2.4	3.0	3.4	4.0	6.1	6.7	8.2	9.7	12.6	13.2	14.9	18.5	17.7	18.5	18.6	18.0	13.8	15.6	19.8
7	TEX	22.3	23.8	30.3	34.7	39.7	40.7	43.1	43.9	42.4	48.1	55.6	56.3	60.0	51.8	46.0	40.7	37.0	32.8	31.9	28.1	33.9
8	WEA	1.5	2.5	2.9	3.6	3.8	4.1	4.7	5.0	5.8	7.4	8.5	10.4	12.5	11.8	11.0	10.3	11.3	11.1	10.4	4.3	6.6
9	LEA	0.8	0.9	1.1	1.2	1.2	1.3	1.3	1.4	3.5	3.0	2.6	2.4	2.3	1.4	1.1	0.9	1.3	0.8	0.2	0.0	0.1
10	WDF	1.7	2.1	2.3	2.3	2.4	2.6	2.9	2.9	3.0	3.8	4.8	5.3	5.9	4.7	5.6	5.1	5.4	6.1	6.7	4.5	5.7
11	PAP	4.6	5.4	6.5	7.3	7.6	8.2	8.6	9.0	11.4	12.2	15.7	15.2	15.3	14.9	15.2	12.1	13.7	13.8	14.5	20.2	30.0
12	PET	4.4	4.6	5.0	5.2	6.2	6.3	6.7	7.8	6.4	9.6	12.8	13.3	15.0	20.3	20.9	21.0	21.7	20.7	18.6	27.2	20.5
13	CHE	16.5	19.9	20.6	23.3	25.7	27.1	29.5	31.7	31.6	40.3	51.5	57.5	62.2	66.5	63.6	60.6	62.2	61.6	58.3	57.8	97.9
14	RBP	4.2	4.9	5.9	6.5	6.8	7.3	7.5	7.6	9.1	9.7	12.9	15.0	15.9	14.2	13.7	13.5	13.6	12.6	13.6	6.6	8.5
15	BUI	13.8	16.1	18.1	19.6	21.2	20.4	21.1	21.3	22.6	27.4	39.5	46.9	48.7	41.5	39.3	38.8	38.4	37.0	35.2	44.5	56.5
16	MSP	50.0	54.1	55.5	50.9	52.0	53.5	54.7	61.8	95.3	91.6	125.4	125.8	131.4	145.9	153.0	121.1	148.1	142.1	165.8	180.9	177.4
17	MPD	3.0	3.5	4.7	5.1	5.5	6.2	6.1	6.8	8.1	10.5	11.6	13.0	15.4	12.9	11.1	9.1	10.8	9.4	4.6	7.4	10.0
18	MCH	22.0	23.0	24.8	25.6	25.0	25.5	27.3	27.2	24.9	28.5	38.8	42.3	42.7	40.6	37.8	33.6	30.9	28.4	26.3	25.1	24.3
19	TRS	23.1	25.1	27.2	30.0	30.5	29.5	33.2	37.6	45.8	58.0	67.1	83.2	86.6	108.4	93.8	95.0	94.6	98.6	104.5	119.7	145.8
20	ELE	3.4	3.8	4.4	5.5	6.3	6.5	7.3	7.8	10.5	10.0	14.6	16.6	17.9	18.6	13.7	13.2	14.8	11.4	7.8	15.3	21.8
21	ICT	2.9	3.2	3.4	3.8	3.9	4.1	4.0	5.5	4.3	6.7	6.9	6.7	11.1	14.1	13.3	14.0	8.1	7.0	2.3	10.4	34.6
22	INS	1.6	1.9	1.8	1.9	2.5	2.6	2.6	2.6	2.7	3.0	3.4	4.4	3.3	3.5	3.4	3.1	3.3	2.3	-0.2	0.6	4.4
	<i>Utilities</i>	47.0	53.5	61.3	66.1	68.6	73.6	76.4	78.4	103.9	117.5	136.1	146.6	169.5	196.8	229.9	250.2	263.7	280.4	746.8	722.4	776.5
	<i>Mining</i>	10.6	11.4	12.3	13.8	15.0	15.5	21.1	22.1	28.0	30.3	34.0	35.6	36.6	34.6	33.2	47.5	56.3	53.2	54.4	43.6	48.4
	<i>Manufacturing</i>	186.2	207.8	231.5	245.9	263.6	270.3	287.7	309.2	359.0	406.6	520.8	571.5	609.4	638.1	612.2	558.5	581.3	560.4	560.5	610.8	745.4
	<i>All</i>	243.7	272.8	305.1	325.7	347.2	359.4	385.2	409.7	490.9	554.4	690.9	753.7	815.6	869.5	875.3	856.2	901.3	894.0	1361.7	1376.8	1570.3

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Hunan																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	9.5	9.5	10.8	11.0	11.8	12.4	12.2	12.1	10.9	11.4	16.1	17.2	16.9	14.9	14.2	10.4	10.1	10.8	13.3	12.5	13.5
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	3.9	4.7	5.3	5.6	5.7	5.7	5.8	6.1	6.2	9.5	8.8	9.1	9.0	7.3	6.5	6.8	5.6	8.5	4.7	6.0	7.4
4	NMM	1.5	1.7	1.8	2.3	2.5	2.8	2.9	2.9	2.9	3.7	4.8	4.9	4.8	3.3	3.8	2.9	2.6	2.2	2.8	2.7	3.6
5	FDB	8.5	9.7	11.4	13.5	13.9	14.2	15.3	15.4	16.3	20.6	26.0	25.8	26.5	27.4	26.3	26.6	26.3	28.7	27.0	31.0	35.5
6	TBC	1.2	1.8	2.1	2.5	3.0	3.9	5.8	6.6	7.4	14.5	21.0	23.2	24.8	26.9	27.4	26.9	25.7	24.5	25.5	23.2	27.0
7	TEX	9.5	12.2	13.5	14.4	16.1	16.4	17.7	18.2	18.4	21.0	25.7	21.9	20.0	15.8	16.3	13.7	10.4	10.9	8.8	10.8	12.6
8	WEA	0.7	1.0	1.2	1.2	1.3	1.4	1.5	1.5	1.3	1.7	1.9	2.0	2.0	0.3	0.4	0.7	0.9	1.2	1.0	1.2	1.3
9	LEA	0.8	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.9	2.3	3.0	2.9	3.1	1.8	1.7	1.7	1.6	1.2	1.3	1.5	0.8
10	WDF	1.2	1.3	1.5	2.7	2.6	2.7	2.6	2.6	3.0	3.9	4.6	6.1	6.5	4.5	5.5	5.5	5.5	6.2	5.4	6.6	2.9
11	PAP	5.7	6.2	8.2	8.8	9.2	9.9	10.5	10.8	11.5	13.4	17.2	18.2	18.7	13.3	13.9	16.4	16.5	19.8	21.9	42.7	50.1
12	PET	1.9	1.9	2.2	2.3	4.3	4.9	13.3	13.3	6.3	17.7	25.5	27.5	32.7	34.4	33.5	23.0	24.7	25.8	26.2	22.5	19.7
13	CHE	19.3	20.5	22.9	25.4	26.9	27.5	25.1	27.1	35.1	37.3	45.8	46.3	49.2	46.1	48.1	67.4	64.2	62.5	65.1	62.9	66.8
14	RBP	2.5	2.9	3.5	3.2	4.0	4.3	4.4	4.6	4.8	5.6	7.7	7.3	7.3	5.5	5.1	4.9	5.1	4.6	6.0	8.5	3.9
15	BUI	12.1	13.7	16.1	19.2	21.3	22.2	22.9	23.8	28.5	35.1	46.5	47.9	25.7	34.7	40.7	38.5	37.4	32.1	30.3	34.1	35.8
16	MSP	11.2	12.3	15.4	17.0	17.6	17.9	20.6	22.3	26.7	35.6	45.3	46.5	53.6	54.7	61.8	65.5	66.8	58.5	77.2	100.8	108.5
17	MPD	1.7	1.9	2.3	2.4	2.6	2.6	2.8	2.9	4.4	4.9	4.7	5.1	5.6	2.6	2.9	2.8	3.8	5.6	5.5	7.8	6.4
18	MCH	16.4	19.2	20.1	20.3	21.1	22.0	23.7	24.3	24.9	28.7	39.5	40.0	59.2	31.0	27.9	26.2	21.8	21.1	28.6	30.0	37.4
19	TRS	6.3	6.8	7.3	7.6	8.4	8.9	10.0	10.8	13.3	15.9	22.0	24.3	23.2	21.9	23.2	23.6	25.7	24.5	26.6	22.7	23.8
20	ELE	3.0	4.0	5.0	5.7	6.3	6.6	7.5	7.8	9.1	14.1	17.0	15.8	15.6	13.6	14.1	13.9	14.0	13.2	15.4	13.4	16.7
21	ICT	2.7	3.1	3.8	4.1	3.5	3.5	3.8	4.0	3.7	4.1	5.6	6.2	12.8	11.6	10.7	16.2	20.6	20.7	23.8	28.2	29.1
22	INS	1.1	0.6	1.1	1.1	1.1	1.1	1.1	1.2	0.8	1.1	1.8	2.4	2.0	1.7	2.3	2.1	2.4	1.7	0.7	1.4	1.7
	<i>Utilities</i>	24.7	27.5	29.4	36.6	41.8	47.3	47.2	65.3	80.1	87.8	104.0	113.3	149.6	148.2	172.4	184.4	214.5	236.2	293.2	305.0	303.7
	<i>Mining</i>	14.9	15.9	18.0	18.9	19.9	20.9	20.9	21.1	20.0	24.7	29.7	31.3	30.7	25.5	24.5	20.0	18.2	21.5	20.8	21.2	24.5
	<i>Manufacturing</i>	106.0	120.0	138.7	152.5	164.6	171.3	190.3	198.7	217.6	277.4	360.8	369.4	388.4	347.9	361.5	375.4	373.4	363.0	396.3	449.2	480.1
	<i>All</i>	145.6	163.4	186.1	208.0	226.3	239.5	258.4	285.1	317.7	389.8	494.4	514.0	568.7	521.6	558.5	579.8	606.2	620.7	710.4	775.3	808.3

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Guangdong																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.0	3.0	3.0	3.6	3.9	4.2	5.0	4.0	3.9	5.0	5.1	5.2	4.6	4.2	2.3	1.8	1.0	0.5	0.0	-0.4	-1.3
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	6.2	6.3	6.5	7.5	7.7	7.9	9.7	8.2	8.2	8.2	8.8	8.6	8.5	9.9	10.2	9.2	7.9	7.2	6.7	7.0	7.9
4	NMM	2.7	3.0	2.9	6.5	6.2	6.5	7.1	6.7	8.0	9.4	9.7	9.9	9.5	9.1	7.0	7.2	6.0	5.4	5.0	5.2	5.3
5	FDB	23.9	30.3	35.1	41.4	46.8	56.6	76.4	77.3	95.5	109.1	132.9	160.3	160.9	175.6	163.8	151.2	135.5	128.4	128.4	141.9	155.0
6	TBC	0.8	1.4	2.0	2.9	3.4	4.6	6.9	6.6	7.4	9.0	11.1	15.7	15.4	15.5	17.3	16.4	14.9	14.7	14.8	16.7	19.6
7	TEX	12.1	17.9	26.0	31.0	42.4	51.3	74.4	70.7	76.8	97.1	110.3	110.3	112.2	121.6	112.0	111.7	114.0	122.4	135.7	163.1	181.6
8	WEA	3.0	4.3	5.8	9.1	10.5	13.1	21.5	23.3	34.6	42.9	45.8	50.4	52.4	71.8	61.1	63.7	60.1	59.5	61.8	69.7	83.1
9	LEA	1.1	1.6	2.5	3.6	5.2	8.0	11.3	12.4	17.8	21.0	27.5	26.4	27.0	31.1	35.0	35.0	36.7	39.8	44.4	52.5	52.1
10	WDF	2.4	3.0	3.7	4.7	5.7	6.3	12.6	12.1	15.3	17.9	19.9	21.5	25.4	28.9	25.2	28.8	32.2	36.8	42.7	52.6	51.8
11	PAP	6.4	7.8	9.7	11.4	13.2	15.9	22.7	24.3	33.5	43.4	55.4	59.2	61.4	87.8	83.8	101.5	112.2	127.2	146.5	179.2	246.1
12	PET	8.1	8.6	9.7	10.7	12.8	14.3	20.5	22.0	20.5	28.8	27.4	35.5	38.4	41.2	103.4	103.7	84.3	72.9	64.0	63.6	73.0
13	CHE	12.9	15.5	21.6	30.7	36.2	41.1	58.1	65.6	82.9	101.3	119.8	139.2	144.5	156.0	151.2	148.5	139.7	138.8	144.2	164.1	198.6
14	RBP	7.1	10.6	13.1	17.2	22.4	26.4	38.4	38.0	46.8	59.2	70.6	75.5	79.6	101.4	101.9	106.6	113.9	125.7	142.8	173.3	169.5
15	BUI	15.2	18.3	25.0	32.1	37.5	45.6	66.4	67.1	92.3	129.2	170.8	176.0	172.7	216.4	186.0	164.5	142.1	130.9	127.3	139.4	177.0
16	MSP	7.7	8.7	10.6	12.8	17.3	18.6	24.8	22.8	34.2	35.5	45.6	52.2	57.3	87.6	64.2	75.3	74.5	78.5	85.3	101.8	157.3
17	MPD	4.4	6.1	8.0	10.6	12.6	14.1	20.9	19.6	29.6	40.0	52.1	55.8	66.6	81.4	75.6	78.4	75.6	76.7	81.7	94.7	119.7
18	MCH	12.5	15.1	17.2	20.0	22.4	26.7	36.3	33.4	28.9	36.1	47.9	51.4	52.9	63.5	49.9	46.5	59.7	75.5	92.4	119.3	139.7
19	TRS	6.9	7.1	8.1	8.8	9.7	11.1	15.5	18.7	29.5	35.4	47.5	60.7	67.6	65.6	62.6	62.7	64.8	71.6	79.8	97.5	116.1
20	ELE	5.6	8.9	12.2	19.2	23.5	27.0	42.3	46.0	58.6	73.9	85.9	100.3	120.0	141.6	126.7	138.0	153.6	175.8	204.1	252.8	320.2
21	ICT	6.4	9.4	12.8	15.9	19.2	18.5	46.9	47.3	57.0	80.9	103.6	111.0	126.9	173.5	185.9	230.1	307.0	390.5	484.9	624.6	703.7
22	INS	0.7	0.7	0.8	1.0	1.0	1.1	1.8	1.6	9.2	12.4	12.5	16.8	20.2	28.8	23.5	25.0	31.6	39.1	47.7	60.8	74.2
	<i>Utilities</i>	31.6	40.1	56.1	48.2	67.1	89.7	124.0	130.9	194.1	436.9	504.7	554.6	682.5	703.6	719.2	754.9	817.6	915.0	1044.9	1272.0	1338.9
	<i>Mining</i>	11.9	12.3	12.4	17.5	17.8	18.7	21.8	18.9	20.1	22.6	23.6	23.8	22.6	23.3	19.5	18.2	15.0	13.1	11.7	11.8	11.9
	<i>Manufacturing</i>	137.2	175.4	223.8	283.1	341.7	400.3	597.7	608.5	770.4	973.0	1186.7	1318.3	1401.4	1689.2	1629.1	1687.6	1752.4	1904.9	2128.5	2567.6	3038.2
	<i>All</i>	180.6	227.8	292.2	348.7	426.5	508.7	743.5	758.4	984.6	1432.5	1715.0	1896.7	2106.6	2416.1	2367.8	2460.6	2584.9	2833.0	3185.1	3851.4	4389.0



Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Guangxi																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2.8	1.3	1.8	2.1	2.3	2.6	2.9	3.0	2.7	2.9	4.1	4.3	4.2	3.8	3.6	3.7	2.6	2.3	2.0	1.4	2.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	4.1	4.2	4.8	4.9	5.6	6.4	6.8	6.9	7.3	7.8	9.5	9.4	8.8	7.5	10.3	11.7	11.2	8.7	8.3	7.3	8.9
4	NMM	0.6	0.5	0.6	0.6	0.7	0.7	0.9	1.2	1.8	2.0	2.7	2.4	2.8	2.3	1.5	2.1	1.0	2.1	1.8	1.6	1.5
5	FDB	10.4	11.1	13.0	14.2	18.4	20.1	23.6	26.2	31.6	38.0	52.9	60.3	63.9	64.6	65.2	66.1	62.9	53.2	52.1	59.3	66.8
6	TBC	0.4	0.5	0.9	1.2	1.5	1.7	2.1	2.5	3.2	3.8	4.6	4.7	4.7	4.5	4.5	5.6	4.8	4.6	5.6	8.9	9.7
7	TEX	4.1	4.5	5.4	6.4	7.5	8.5	9.3	9.5	9.4	10.4	13.0	14.0	12.7	8.1	8.1	6.0	6.3	4.7	3.4	3.2	3.3
8	WEA	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.9	1.0	1.7	1.8	1.2	1.2	0.9	0.5	0.4	0.3	0.3	0.3	0.4
9	LEA	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.6	0.8	0.9	1.3	1.5	1.4	1.1	0.8	0.9	0.6	0.7	0.5	0.8	0.4
10	WDF	0.7	0.7	0.9	1.0	1.1	1.1	1.6	1.9	2.1	2.5	3.2	3.5	4.9	3.9	3.9	4.4	4.6	5.0	5.2	7.5	3.4
11	PAP	2.2	2.7	2.8	3.6	4.0	4.5	5.4	5.9	7.0	7.9	10.0	14.9	15.2	12.8	12.4	18.8	20.0	19.1	19.3	20.6	39.7
12	PET	0.0	0.1	0.1	0.2	0.2	0.4	0.5	0.6	1.2	1.5	1.8	1.6	1.8	1.8	1.8	1.7	1.5	1.5	1.6	3.1	3.9
13	CHE	8.8	8.7	9.3	10.4	11.3	11.9	14.0	14.3	16.4	18.0	26.1	27.5	28.2	27.4	28.0	30.3	30.7	30.6	30.0	32.8	36.5
14	RBP	1.3	1.5	1.8	2.0	3.0	3.1	3.4	3.5	4.2	4.7	5.5	5.8	6.6	4.3	4.2	3.8	3.0	3.2	3.0	2.2	1.3
15	BUI	5.6	6.4	7.4	9.2	12.0	12.8	14.9	16.3	22.1	28.5	41.8	50.3	46.3	37.7	33.5	32.1	30.0	24.1	25.6	33.5	31.0
16	MSP	4.0	4.2	4.8	5.4	6.4	7.8	8.2	8.4	11.3	13.6	38.2	39.8	39.0	39.6	37.0	37.2	41.8	36.8	46.4	63.0	76.4
17	MPD	0.9	1.0	1.1	1.3	1.1	1.2	1.5	1.5	1.7	3.3	3.1	3.1	3.0	1.8	1.6	1.6	1.2	1.1	0.8	0.5	0.4
18	MCH	6.3	6.7	6.9	7.2	7.8	7.9	9.0	9.9	11.2	14.9	19.6	23.9	22.5	19.2	17.7	16.9	17.2	16.8	8.7	8.5	7.0
19	TRS	2.5	2.6	3.1	3.1	3.3	3.3	4.6	5.2	6.5	7.8	12.9	13.3	14.3	12.8	13.9	12.4	12.5	11.4	20.7	23.3	30.7
20	ELE	1.4	1.5	1.9	2.2	2.4	2.5	3.5	3.4	4.1	4.8	6.8	7.0	7.6	6.5	5.9	5.6	5.0	4.0	4.4	4.2	4.0
21	ICT	0.9	1.0	1.1	1.3	1.4	1.5	2.1	2.0	2.1	2.4	3.0	3.3	3.1	2.7	3.3	3.0	2.1	1.6	1.6	3.2	3.6
22	INS	0.3	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.8	1.1	1.1	1.3	1.3	1.1	1.4	0.9	0.8	0.9	1.0	1.1	0.8
	<i>Utilities</i>	19.0	19.8	19.5	19.8	22.4	24.7	26.6	27.0	35.4	39.0	64.4	71.9	83.1	91.7	98.6	132.4	133.8	156.2	177.5	214.0	226.8
	<i>Mining</i>	7.6	6.1	7.2	7.6	8.6	9.8	10.7	11.1	11.8	12.7	16.2	16.0	15.7	13.6	15.4	17.5	14.8	13.1	12.0	10.3	12.4
	<i>Manufacturing</i>	50.2	54.3	62.0	70.3	83.0	89.9	105.5	113.1	136.4	165.1	246.5	277.6	277.8	251.2	244.0	248.0	245.6	219.6	230.1	276.1	319.1
	<i>All</i>	76.8	80.1	88.8	97.6	113.9	124.4	142.7	151.1	183.7	216.8	327.1	365.5	376.5	356.5	357.9	397.8	394.2	389.0	419.6	500.3	558.2

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Sichuan																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	15.7	17.6	19.9	21.1	23.7	26.9	28.3	28.9	29.0	26.0	38.8	39.3	39.0	44.6	44.3	40.9	20.9	21.1	22.3	27.0	30.8
2	PTM	8.0	9.3	10.2	12.1	14.8	16.2	20.5	23.7	34.2	33.7	42.2	41.7	43.8	44.7	112.9	84.8	72.7	65.8	84.2	181.7	195.3
3	MTM	5.5	5.7	5.9	6.0	6.2	6.4	6.9	7.2	3.2	3.4	4.2	4.9	4.9	5.2	2.7	6.0	3.5	3.8	4.5	13.6	6.7
4	NMM	4.2	4.4	4.6	4.6	4.9	5.9	6.8	6.5	8.9	11.0	13.1	13.0	13.4	12.4	12.6	7.8	5.3	5.1	6.1	5.1	5.1
5	FDB	17.3	21.3	25.8	29.6	31.2	33.1	35.7	37.8	42.2	50.4	67.1	67.0	72.5	84.2	89.2	84.8	77.4	84.2	92.8	93.7	125.5
6	TBC	0.9	1.2	1.5	1.9	2.4	3.0	3.4	4.6	5.0	7.8	11.4	13.5	14.1	22.1	21.7	22.7	16.5	17.7	16.5	21.7	22.3
7	TEX	13.2	16.6	20.3	23.8	25.8	29.4	32.6	34.0	40.5	48.6	56.3	52.4	45.5	49.1	39.8	38.2	17.4	15.7	17.3	17.7	15.8
8	WEA	1.4	1.8	2.3	2.4	2.5	2.3	2.7	2.7	2.7	3.4	3.5	3.3	3.2	3.1	3.1	2.6	2.7	2.7	2.5	2.8	3.2
9	LEA	1.4	1.6	1.9	2.0	2.1	2.3	2.5	2.5	3.9	4.4	5.3	5.6	5.0	4.7	3.1	1.7	1.1	1.2	1.9	3.0	2.5
10	WDF	1.5	1.9	2.2	2.5	2.6	2.6	3.0	3.1	3.6	4.3	5.8	5.8	8.1	8.0	7.4	5.6	4.2	4.8	4.7	6.7	5.6
11	PAP	7.4	8.7	10.1	11.0	11.9	12.7	13.3	14.4	19.9	21.1	28.9	28.9	31.2	32.7	28.9	27.1	19.5	20.9	25.3	30.9	34.9
12	PET	0.5	0.7	0.8	0.8	1.0	1.1	1.4	2.2	0.6	0.7	1.6	1.3	1.6	3.2	3.1	3.5	1.9	2.5	8.3	8.4	11.2
13	CHE	32.7	35.1	38.0	41.1	44.9	48.3	52.4	56.7	65.6	74.7	94.8	101.6	111.2	160.9	158.0	158.7	103.8	102.9	103.3	142.6	153.5
14	RBP	3.5	4.4	5.4	5.8	6.2	6.1	6.7	7.1	8.1	9.0	13.4	11.8	13.6	17.7	14.9	11.7	5.4	6.7	9.3	26.6	22.3
15	BUI	15.5	19.4	23.9	25.5	25.7	26.2	27.3	28.8	36.3	47.3	63.2	66.7	77.4	85.0	99.4	104.3	61.6	74.8	87.8	93.2	99.4
16	MSP	42.9	47.0	48.4	50.5	54.8	56.4	67.2	79.3	106.0	85.1	133.5	137.5	163.5	178.8	193.9	188.0	126.5	123.6	153.8	128.4	189.6
17	MPD	3.3	4.1	5.0	6.0	6.2	6.4	6.8	8.3	8.7	12.8	11.7	12.7	12.1	11.2	9.5	8.6	6.3	8.1	7.8	8.4	8.6
18	MCH	40.0	43.7	47.8	47.6	48.0	49.0	51.6	53.8	51.5	57.9	98.7	94.9	63.7	71.8	70.4	65.4	34.7	35.7	62.8	69.1	63.4
19	TRS	12.8	13.8	15.1	15.8	17.4	18.4	19.5	22.6	29.9	34.7	50.5	57.9	63.7	98.2	107.3	124.5	80.0	73.8	95.9	106.4	128.8
20	ELE	5.6	6.5	7.6	9.3	9.8	10.5	11.2	12.9	14.7	17.6	21.0	21.0	22.4	32.0	30.4	29.8	18.4	16.9	18.7	21.2	25.7
21	ICT	6.8	8.4	8.9	9.2	10.2	10.4	12.3	13.1	16.5	24.9	28.3	31.1	34.0	41.4	44.2	44.2	34.0	36.9	30.4	38.4	37.6
22	INS	3.3	3.7	4.1	4.1	4.2	4.7	4.8	5.1	6.0	6.1	7.0	6.4	6.3	11.7	11.3	11.1	7.0	6.3	6.5	4.1	4.5
	<i>Utilities</i>	36.8	40.0	44.1	39.7	52.8	60.9	65.4	87.5	106.7	155.5	169.6	184.8	272.3	331.6	483.1	500.7	433.2	505.7	555.6	628.2	668.7
	<i>Mining</i>	33.3	37.0	40.6	43.7	49.8	55.3	62.5	66.3	75.4	74.1	98.3	98.8	101.1	106.8	172.5	139.4	102.5	95.9	117.1	227.4	238.0
	<i>Manufacturing</i>	210.0	239.7	269.1	288.9	306.8	323.1	354.4	388.9	461.6	510.9	702.1	719.3	749.3	915.8	935.6	932.5	618.3	635.6	745.6	823.4	954.4
	<i>All</i>	280.2	316.7	353.9	372.3	409.4	439.3	482.4	542.6	643.6	740.4	969.9	1003.0	1122.7	1354.2	1591.2	1572.6	1154.0	1237.2	1418.3	1679.0	1861.1

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Guizhou																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	8.5	9.0	8.9	9.5	9.5	9.8	10.3	10.5	9.5	10.3	13.1	13.0	12.5	11.3	13.4	16.2	16.1	20.9	21.1	25.5	36.3
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.9	0.9	1.1	1.0	0.5	0.7	0.4	0.5	0.5	0.5	5.1	4.8
4	NMM	0.8	0.9	1.1	1.0	1.1	1.8	1.7	1.7	1.7	1.9	2.9	3.2	3.2	3.0	7.3	18.3	19.3	18.5	17.3	17.6	-8.5
5	FDB	3.0	4.0	5.3	6.0	6.6	7.1	7.9	8.3	11.0	11.9	12.7	11.2	15.0	14.1	14.5	12.6	12.6	13.0	13.0	14.3	16.0
6	TBC	1.2	1.4	1.9	2.1	2.7	3.3	4.0	5.5	6.6	8.4	9.0	11.1	14.5	16.8	18.4	18.3	18.5	16.6	15.2	16.5	14.8
7	TEX	1.6	1.8	1.9	2.2	2.5	2.5	3.0	2.9	2.9	3.7	3.8	4.3	3.6	3.8	3.5	2.8	2.5	1.5	0.9	0.8	0.4
8	WEA	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
9	LEA	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
10	WDF	0.3	0.4	0.4	0.4	0.4	0.5	0.7	0.5	0.5	0.6	0.9	0.8	0.8	0.9	0.8	0.8	0.5	0.6	0.6	0.7	0.9
11	PAP	1.1	1.2	1.5	1.5	1.6	1.7	1.9	2.1	2.6	2.9	3.1	3.5	3.5	3.1	3.7	3.1	3.1	2.6	2.8	2.5	1.3
12	PET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	CHE	6.4	6.8	6.8	7.3	7.2	7.5	8.5	9.0	9.2	11.7	14.2	14.8	17.0	15.9	17.6	18.9	19.3	19.3	23.9	24.8	54.2
14	RBP	0.7	0.8	1.0	0.9	1.3	1.8	2.1	2.3	3.3	3.3	3.3	4.8	4.6	5.7	5.9	5.3	7.5	6.1	6.3	7.6	8.7
15	BUI	4.3	5.0	5.9	6.2	6.3	6.5	7.1	7.1	7.6	8.7	11.5	12.7	13.0	11.1	11.8	12.8	12.4	12.7	14.8	16.2	15.4
16	MSP	16.9	16.4	15.9	16.3	18.4	19.3	21.4	21.7	23.2	20.0	32.2	34.0	36.5	38.0	36.1	34.5	34.9	47.1	48.8	52.5	58.0
17	MPD	1.3	1.4	2.1	2.0	2.0	2.0	2.0	1.9	2.2	2.5	2.6	2.6	2.8	2.4	2.1	2.1	1.9	3.1	3.1	3.0	2.9
18	MCH	8.3	6.7	8.5	8.2	7.3	8.1	8.2	6.2	6.2	6.5	6.1	7.2	6.9	5.8	5.8	5.1	4.8	4.3	4.3	4.8	4.1
19	TRS	7.1	7.1	7.4	7.5	7.4	7.7	7.9	9.5	11.2	12.1	15.1	16.6	16.1	15.8	14.5	15.4	15.1	15.9	13.7	13.5	15.1
20	ELE	1.1	1.6	2.4	2.3	2.9	2.2	2.9	3.3	2.5	2.6	3.2	3.9	4.0	3.4	3.1	2.7	2.8	2.5	3.6	2.4	3.1
21	ICT	3.3	4.8	2.6	2.4	2.3	2.3	2.3	2.2	2.0	1.9	3.2	3.6	3.7	3.9	3.5	3.5	3.2	4.1	3.0	3.9	6.3
22	INS	0.8	1.1	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.7	0.5	0.6	0.8	0.7	0.7	0.5	0.7	0.8	0.7	0.7	0.7
	<i>Utilities</i>	14.8	15.8	15.9	19.1	20.5	20.4	18.7	21.6	34.7	47.4	56.8	60.2	60.0	69.9	73.8	99.6	117.6	116.0	137.1	214.9	246.4
	<i>Mining</i>	9.6	10.4	10.3	10.9	10.9	11.9	12.4	12.7	11.6	13.1	17.0	17.2	16.7	14.8	21.3	35.0	35.9	39.9	39.0	48.2	32.5
	<i>Manufacturing</i>	57.9	60.9	65.0	66.9	70.5	73.9	81.6	84.4	92.6	98.4	122.1	132.6	143.6	142.0	142.7	139.0	140.5	150.9	155.2	164.7	202.1
	<i>All</i>	82.2	87.1	91.2	96.8	101.9	106.3	112.7	118.7	138.9	158.9	195.9	210.0	220.4	226.7	237.7	273.6	294.0	306.7	331.2	427.8	481.1

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Yunnan																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.5	4.3	4.7	5.1	5.5	6.0	6.6	6.4	5.6	5.5	7.2	7.7	8.0	7.3	6.7	8.3	7.9	6.6	4.8	6.6	8.5
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	6.5	6.5	6.6	6.6	6.7	7.6	7.6	7.7	7.5	7.5	8.7	10.7	10.3	9.4	9.6	8.1	7.3	5.4	2.8	16.3	19.6
4	NMM	1.5	1.5	1.9	2.0	2.1	2.2	2.5	4.0	3.9	3.2	3.2	3.3	4.6	4.4	3.9	3.2	4.0	3.6	3.5	3.2	2.9
5	FDB	8.4	9.5	11.7	12.5	12.7	13.3	15.1	15.3	15.9	18.4	23.6	25.4	29.1	29.1	28.4	28.9	28.6	26.6	28.1	25.7	25.3
6	TBC	2.0	3.8	4.8	5.6	7.5	8.9	10.2	14.1	17.0	24.8	38.8	51.2	60.7	78.1	84.3	81.7	86.5	78.9	77.3	76.6	75.8
7	TEX	2.2	2.4	3.0	3.2	3.4	4.2	4.3	4.4	4.2	4.9	6.3	5.0	5.5	3.5	3.1	2.5	2.6	2.0	2.3	2.4	2.4
8	WEA	0.4	0.5	0.6	0.7	0.7	0.7	0.8	0.8	0.9	1.0	0.9	0.8	0.8	0.7	0.7	0.9	0.8	0.8	0.7	0.6	0.5
9	LEA	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.9	0.8	0.8	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2
10	WDF	0.8	0.9	1.4	1.7	1.8	2.0	2.2	2.1	2.1	2.2	3.8	4.6	5.6	5.6	5.9	5.6	5.5	4.4	3.3	4.3	4.0
11	PAP	1.9	2.2	2.6	2.6	3.0	3.2	3.6	4.7	6.0	7.3	11.8	13.7	14.5	13.9	12.6	16.8	18.2	18.2	17.3	19.2	18.7
12	PET	0.0	0.0	0.0	1.4	1.7	1.6	1.6	1.9	1.6	1.6	1.5	1.4	1.3	1.2	1.2	1.4	1.3	1.3	1.8	3.8	7.1
13	CHE	13.2	13.8	13.7	14.9	15.4	17.0	18.0	17.1	18.6	23.6	33.2	35.8	38.5	39.4	40.8	48.4	38.2	52.8	52.0	42.0	49.2
14	RBP	1.2	1.5	1.7	2.0	2.0	2.1	2.4	2.4	2.6	2.9	3.6	3.6	5.1	4.3	3.8	3.9	2.7	3.5	3.4	2.8	2.5
15	BUI	5.0	5.5	6.9	7.3	7.8	8.8	9.1	9.2	10.7	13.1	18.0	21.9	23.4	25.7	23.6	21.1	21.6	21.9	22.8	25.8	27.3
16	MSP	11.2	12.6	14.2	15.6	16.0	16.2	18.0	18.0	20.8	23.9	35.4	35.7	36.2	32.8	39.9	42.0	50.4	48.5	64.1	57.6	81.5
17	MPD	1.1	1.3	1.4	1.5	1.5	1.4	1.4	1.4	1.7	1.9	2.0	2.1	2.2	1.2	0.8	0.8	1.2	0.9	0.6	0.5	0.4
18	MCH	8.5	8.5	8.9	8.9	9.1	9.2	9.7	9.3	7.4	8.5	11.7	11.6	12.2	11.9	9.7	8.7	5.9	7.1	5.6	3.8	3.9
19	TRS	1.3	1.6	1.6	1.6	1.6	1.6	1.8	2.6	4.0	4.0	4.7	4.6	6.1	5.0	4.8	4.0	4.2	3.9	4.2	6.1	6.3
20	ELE	0.9	1.1	1.3	1.5	1.8	1.7	1.9	2.0	2.2	2.5	3.8	3.9	3.3	3.6	3.2	3.0	2.7	2.8	2.8	3.2	2.7
21	ICT	0.7	0.7	0.6	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.0	1.2	0.9	0.9	0.8	1.0	0.9	0.4	1.4	1.7
22	INS	0.8	0.9	0.8	0.9	0.9	0.9	0.9	1.0	0.9	0.9	1.5	1.4	1.3	1.0	0.8	0.8	1.3	1.1	1.5	0.8	0.7
	<i>Utilities</i>	18.8	19.4	20.1	23.5	27.5	32.7	36.4	42.2	60.4	66.2	78.9	81.2	91.1	101.8	114.1	126.7	139.4	148.3	191.0	213.9	223.5
	<i>Mining</i>	11.5	12.3	13.2	13.7	14.3	15.8	16.7	18.1	17.0	16.2	19.1	21.7	22.9	21.2	20.2	19.6	19.2	15.7	11.0	26.1	31.0
	<i>Manufacturing</i>	59.9	67.1	75.5	83.0	87.8	94.2	102.3	107.7	118.3	143.3	202.5	224.6	247.7	258.5	264.8	271.7	272.9	275.7	288.4	277.0	310.3
	<i>All</i>	90.2	98.9	108.8	120.1	129.6	142.6	155.4	168.0	195.7	225.7	300.4	327.5	361.7	381.5	399.1	418.0	431.4	439.8	490.4	517.0	564.9

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Shaanxi																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	11.2	11.4	11.8	12.9	13.2	13.0	14.1	14.4	13.4	13.1	17.1	20.6	20.0	19.3	15.5	13.8	35.5	39.9	42.6	68.2	57.6
2	PTM	0.6	0.9	1.2	1.8	2.7	3.4	4.0	4.7	5.7	6.5	7.8	8.7	9.6	13.9	94.9	90.3	115.4	141.9	182.3	240.7	307.2
3	MTM	3.5	4.1	4.6	5.3	5.9	6.6	7.2	7.2	5.6	7.5	8.6	9.2	9.0	8.6	10.7	10.8	9.6	9.6	11.2	11.8	11.3
4	NMM	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.8	1.0	1.0	1.0	0.7	0.7	0.3	0.4	0.5	0.4	0.2	0.1	0.6	0.7
5	FDB	4.2	4.8	5.5	6.7	7.1	8.3	9.6	10.1	11.5	12.7	16.7	17.0	18.6	20.0	19.5	20.3	22.9	20.3	20.4	27.3	30.7
6	TBC	0.6	0.8	0.9	1.0	1.4	1.8	2.6	2.8	3.5	4.1	5.8	5.7	6.4	8.1	8.3	7.6	8.2	9.1	8.7	7.9	7.3
7	TEX	8.9	10.2	11.5	12.6	13.9	15.3	16.6	17.6	20.1	23.1	26.0	27.9	26.9	23.8	21.4	20.6	17.4	16.8	12.3	15.5	11.7
8	WEA	0.7	0.8	0.8	0.9	1.0	0.9	1.1	1.0	1.0	1.1	1.4	1.6	1.4	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6
9	LEA	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	1.1	1.2	1.5	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.3
10	WDF	0.9	0.9	1.0	1.3	1.3	1.2	1.3	1.3	1.2	1.4	2.2	2.5	2.3	1.5	1.6	1.3	1.2	1.0	1.3	0.5	0.2
11	PAP	2.4	3.0	3.7	3.9	4.2	4.5	5.2	6.0	6.6	7.2	9.8	10.8	11.1	10.4	10.8	10.6	10.6	11.6	12.5	11.9	6.9
12	PET	0.5	0.6	0.6	0.8	1.7	1.8	1.9	2.5	3.8	4.3	4.0	5.3	6.2	6.3	10.8	10.2	10.3	11.3	19.1	22.7	25.7
13	CHE	9.6	9.8	11.2	11.5	11.8	14.1	14.2	15.2	16.3	18.0	25.0	26.8	26.0	33.9	33.4	34.2	36.4	37.0	42.3	36.8	45.2
14	RBP	1.2	1.4	1.7	1.3	1.7	1.7	1.8	1.9	2.1	2.3	3.9	4.0	2.8	1.9	1.8	1.7	1.6	1.3	1.0	2.6	1.3
15	BUI	6.3	7.2	8.3	10.0	10.4	11.5	11.9	10.8	12.1	15.7	20.3	19.4	18.3	14.9	15.9	15.8	16.1	18.4	22.0	25.1	25.6
16	MSP	5.0	6.3	7.2	9.0	9.2	9.3	9.7	9.8	13.0	13.2	19.6	20.3	20.6	18.6	18.2	15.0	14.6	15.5	25.9	25.0	28.1
17	MPD	2.4	2.4	2.4	2.8	2.9	2.9	3.1	3.1	3.2	3.4	5.0	5.6	4.7	3.2	3.4	3.4	2.7	2.7	1.9	3.4	3.0
18	MCH	20.4	21.3	22.4	24.6	24.3	23.7	24.6	24.7	21.4	24.4	39.6	41.1	39.4	40.2	35.3	39.6	38.2	40.9	31.1	18.9	30.2
19	TRS	15.9	17.2	18.6	17.1	17.1	17.2	17.8	18.8	19.9	22.4	27.9	31.8	31.0	30.7	27.7	29.0	36.7	30.0	36.6	34.9	45.9
20	ELE	3.4	4.0	4.6	4.8	5.0	5.3	5.8	7.0	8.0	10.0	12.1	14.9	15.0	13.6	11.8	10.8	12.8	12.9	14.9	14.5	19.9
21	ICT	8.8	8.9	9.0	9.1	9.1	10.1	16.2	16.0	16.8	18.8	23.2	22.1	25.3	28.1	24.4	23.4	30.0	28.0	23.0	23.0	28.7
22	INS	2.5	2.8	3.1	3.5	3.7	3.7	4.6	4.7	5.6	6.5	7.8	7.8	7.6	6.0	6.0	5.3	4.6	5.3	3.2	5.8	4.4
	<i>Utilities</i>	18.4	20.9	22.0	23.0	23.4	25.6	26.3	47.2	44.6	61.4	74.0	74.8	85.5	102.9	122.4	135.7	156.7	166.0	170.5	230.9	243.5
	<i>Mining</i>	16.0	17.1	18.2	20.8	22.6	23.9	26.3	27.0	25.7	28.0	34.5	39.3	39.3	42.1	121.5	115.4	160.9	191.5	236.2	321.3	376.9
	<i>Manufacturing</i>	94.1	102.8	113.0	121.4	126.6	133.9	148.5	154.0	166.8	189.7	251.6	266.1	264.8	263.0	252.0	250.2	265.6	263.5	277.4	276.8	315.9
	<i>All</i>	128.5	140.8	153.2	165.2	172.7	183.3	201.1	228.2	237.1	279.2	360.1	380.2	389.6	408.1	495.9	501.3	583.1	621.0	684.1	829.0	936.3

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-1, CONT'D

		Net capital stock of Xinjiang																				
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.5	3.7	4.2	4.7	5.0	5.5	5.9	6.4	6.4	6.8	9.6	10.2	10.6	10.7	10.6	9.6	7.6	8.3	8.9	8.6	8.0
2	PTM	12.0	15.4	20.7	25.2	34.5	44.7	50.6	57.8	110.8	118.0	137.8	166.6	170.3	187.1	201.9	191.1	135.7	160.9	182.8	252.9	297.7
3	MTM	1.2	0.4	0.6	0.5	1.0	1.2	1.7	1.9	1.7	2.5	0.7	0.7	0.5	0.4	1.4	1.9	1.5	1.9	1.6	2.4	5.8
4	NMM	0.5	0.5	0.6	0.6	0.7	0.9	1.4	1.6	1.5	1.5	1.5	1.5	1.8	1.2	1.1	0.9	0.3	0.3	0.3	0.4	0.5
5	FDB	4.4	4.7	5.9	6.7	8.6	10.3	12.4	12.9	14.4	16.9	20.9	24.5	27.3	23.9	21.3	18.6	17.4	27.2	25.4	26.2	24.7
6	TBC	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.7	0.7	1.0	1.2	1.3	1.2	1.2	1.1	1.2	1.9
7	TEX	4.1	4.9	6.6	7.3	8.7	11.0	14.5	15.2	15.7	18.3	22.8	28.0	29.9	16.8	17.0	21.0	26.6	24.0	20.6	12.7	11.7
8	WEA	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.8	0.9	0.9	0.9	0.8	0.6	0.4	0.4	0.4	0.4
9	LEA	0.7	0.9	1.1	1.3	1.4	1.5	1.6	1.6	1.5	1.5	1.5	1.7	1.6	1.1	1.0	0.9	0.5	0.2	0.3	0.5	0.5
10	WDF	0.3	0.4	0.4	0.4	0.5	0.5	0.7	0.7	0.6	0.8	1.1	1.8	2.1	2.0	1.7	1.8	0.9	0.6	0.6	1.4	1.4
11	PAP	1.0	1.1	1.5	1.5	1.6	2.1	2.7	3.6	3.6	3.6	4.3	4.9	5.2	4.7	4.8	4.5	3.5	4.5	4.2	4.3	8.6
12	PET	6.0	6.0	6.1	6.1	6.0	6.1	6.3	6.0	7.2	14.6	21.6	22.9	26.2	28.8	31.8	31.3	65.4	63.6	54.5	60.9	58.1
13	CHE	2.6	2.2	2.5	3.2	3.4	3.9	4.0	4.3	5.3	6.7	8.4	10.3	11.0	10.3	9.8	9.3	8.8	7.2	11.0	10.3	10.5
14	RBP	0.6	0.7	0.9	1.3	1.4	1.4	1.5	1.7	2.4	2.6	2.8	3.4	4.8	1.4	0.8	0.7	10.8	11.0	10.3	12.2	11.5
15	BUI	4.0	4.9	5.5	6.3	6.5	6.5	6.7	8.1	8.4	11.5	14.0	16.0	17.2	10.0	7.7	5.2	8.4	17.7	22.8	21.0	21.4
16	MSP	2.7	2.9	4.0	4.6	4.7	6.2	6.2	6.5	7.2	9.6	14.1	12.9	12.9	8.7	4.7	4.0	26.1	16.8	15.1	16.4	21.5
17	MPD	0.4	0.5	0.6	0.5	0.5	0.6	0.7	0.7	1.4	1.5	1.6	2.3	2.5	2.4	2.3	2.2	1.9	0.8	0.5	1.0	1.4
18	MCH	3.6	3.7	4.2	4.0	3.9	3.9	4.1	4.2	3.0	3.3	4.4	6.2	6.1	5.5	4.9	3.9	3.2	3.7	2.1	1.6	1.5
19	TRS	1.4	1.3	1.5	1.6	1.5	1.7	1.7	1.8	1.9	2.3	2.6	3.3	3.2	3.0	2.9	2.7	2.3	2.4	1.6	1.1	0.9
20	ELE	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.8	1.3	1.3	1.8	2.1	2.4	1.8	1.2	0.7	1.9	3.2	3.5	3.3	3.1
21	ICT	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	6.0	5.1
22	INS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.1
	<i>Utilities</i>	7.9	8.6	10.5	11.5	14.4	14.9	18.1	27.6	26.8	30.0	37.1	43.2	45.5	47.1	48.0	44.6	73.1	85.1	109.5	117.7	127.3
	<i>Mining</i>	17.2	19.9	26.0	31.0	41.2	52.2	59.6	67.6	120.5	128.7	149.6	179.0	183.3	199.3	214.9	203.5	145.1	171.4	193.6	264.3	312.0
	<i>Manufacturing</i>	32.5	35.2	42.2	46.3	50.4	57.4	65.0	69.0	75.3	96.1	123.5	142.0	154.1	122.6	114.3	109.1	179.5	184.8	174.2	180.8	184.2
	<i>All</i>	57.6	63.7	78.7	88.8	105.9	124.5	142.6	164.3	222.7	254.8	310.2	364.2	382.9	369.0	377.2	357.2	397.8	441.3	477.2	562.9	623.5

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2: CAPITAL INPUT BY REGION AND SECTOR

		Capital input of Beijing																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.5	3.7	3.4	3.5	3.7	4.1	3.9	4.5	4.0	3.9	5.0	4.7	4.4	5.0	4.5	4.4	2.2	3.7	3.0	1.8
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.1	0.2	0.2	0.5	0.4	0.3	1.2	0.7	0.9	0.8	0.8	0.8	0.9	0.6	0.6	0.5	0.4	0.3	0.9	1.5
4	NMM	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.4	0.7	1.2	0.7	0.6	0.4	0.4	0.4	0.1	0.9	0.6
5	FDB	8.0	9.9	10.5	13.3	14.9	15.2	20.1	15.8	30.7	26.4	50.4	38.3	41.4	50.2	47.5	54.2	31.4	44.1	39.7	95.8
6	TBC	0.2	0.2	0.2	0.2	1.3	1.6	0.9	1.0	1.0	0.7	2.0	2.2	1.6	1.5	1.1	1.2	1.1	1.3	1.7	1.6
7	TEX	7.4	8.1	10.5	10.0	11.2	11.4	14.2	13.0	16.4	23.8	21.1	23.2	14.6	14.7	10.6	7.9	8.8	9.0	9.1	5.7
8	WEA	2.3	2.7	2.9	3.2	3.5	3.9	5.2	4.7	8.1	7.8	8.5	9.1	8.0	8.0	6.8	6.0	6.9	6.1	4.4	6.9
9	LEA	0.9	1.0	1.0	0.9	1.2	1.0	1.1	1.2	3.3	2.3	2.6	2.5	2.7	2.1	1.5	1.1	0.9	0.6	0.3	0.2
10	WDF	2.1	2.5	2.4	2.2	2.5	2.4	2.8	2.5	4.5	1.9	5.1	2.0	3.1	4.7	3.6	4.3	6.2	5.7	5.2	8.8
11	PAP	7.1	8.7	10.3	8.9	8.6	9.8	10.2	10.0	40.1	8.6	22.3	21.1	19.1	25.6	20.9	22.1	27.5	30.3	30.2	50.7
12	PET	2.2	2.8	7.0	8.6	8.3	7.4	11.5	30.8	23.6	50.2	57.5	48.7	66.0	64.6	56.8	63.6	88.3	74.9	50.8	56.0
13	CHE	26.2	29.0	33.6	32.9	38.2	36.4	3.4	32.1	25.5	33.5	39.2	33.6	76.7	66.4	59.4	50.6	37.7	56.7	167.1	99.8
14	RBP	4.3	5.0	5.1	5.6	5.3	5.3	5.7	4.2	5.0	8.0	10.8	18.7	17.8	14.8	11.9	10.8	13.1	12.2	6.9	10.7
15	BUI	10.5	11.1	12.0	12.1	12.6	12.0	13.6	11.7	19.5	33.3	18.2	44.0	38.2	39.7	34.8	34.1	21.7	35.7	37.9	62.2
16	MSP	17.0	18.6	29.0	25.4	26.3	27.1	28.2	31.0	75.0	74.2	215.3	97.8	91.7	62.2	34.9	153.6	77.7	66.9	67.3	66.9
17	MPD	3.3	4.4	4.4	4.2	4.2	4.8	7.0	5.4	5.4	6.9	9.9	10.5	14.2	11.3	7.9	8.5	9.1	13.1	6.2	22.9
18	MCH	17.2	17.4	21.5	21.1	20.8	22.1	24.2	20.3	78.3	16.3	41.4	42.6	36.8	42.1	40.1	27.5	19.3	22.9	47.6	64.2
19	TRS	7.8	8.7	9.8	10.5	12.3	12.8	16.4	19.1	31.7	26.5	35.0	36.8	22.2	35.5	27.1	30.1	33.5	34.5	32.9	93.0
20	ELE	4.1	5.1	6.5	7.7	7.0	7.1	7.5	8.0	9.3	14.7	12.7	21.0	17.6	22.8	20.6	13.8	20.1	13.9	12.0	21.6
21	ICT	7.5	9.7	8.6	8.4	12.5	14.4	13.7	12.2	20.0	24.4	50.7	41.1	32.9	54.9	53.0	73.3	56.7	55.7	64.7	106.0
22	INS	2.2	2.4	2.9	2.7	2.5	2.3	2.7	2.5	5.1	5.3	6.7	6.5	6.8	6.4	2.1	4.3	6.2	5.8	6.9	7.9
	<i>Utilities</i>	15.2	16.6	15.8	24.2	25.8	36.9	39.1	60.5	47.2	33.9	111.0	135.3	148.5	184.6	179.0	176.0	204.9	215.8	280.5	1308.9
	<i>Mining</i>	3.8	4.2	3.9	4.3	4.4	4.7	5.4	5.6	5.3	5.1	6.5	6.7	6.1	6.3	5.5	5.3	3.0	4.1	4.8	3.9
	<i>Manufacturing</i>	130.0	147.3	178.2	177.9	193.4	197.1	188.3	225.4	402.3	364.6	609.2	499.9	511.7	527.7	440.6	567.1	466.2	489.4	590.9	780.9
	<i>All</i>	149.0	168.0	197.9	206.4	223.6	238.6	232.8	291.5	454.8	403.6	726.7	641.9	666.3	718.6	625.1	748.4	674.1	709.3	876.2	2093.7

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Tianjin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	PTM	8.7	10.0	11.9	12.9	24.0	12.9	23.6	40.8	57.8	108.4	81.5	22.3	44.6	32.5	117.9	288.4	161.1	167.2	186.8	258.3
3	MTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	NMM	1.5	1.5	1.8	2.9	2.4	2.3	2.5	2.9	2.1	2.7	5.7	3.9	5.0	3.8	3.7	3.9	3.7	4.1	3.2	2.8
5	FDB	5.2	6.4	6.2	8.0	7.2	9.2	10.2	15.4	12.8	34.7	38.5	35.6	37.8	55.6	31.6	37.1	45.0	43.6	27.1	48.5
6	TBC	0.5	0.5	0.6	0.6	0.5	0.7	0.9	0.6	0.8	0.7	1.4	0.9	1.2	4.2	1.9	2.2	1.6	2.4	2.0	2.3
7	TEX	12.0	12.8	13.4	13.3	16.6	15.7	15.6	16.5	21.7	28.7	32.3	31.6	34.1	29.6	25.2	30.8	31.2	25.6	25.1	21.7
8	WEA	1.3	1.4	2.2	2.0	2.2	2.5	4.3	3.5	6.5	8.0	5.2	6.6	8.4	9.2	6.6	7.9	5.3	7.4	5.5	6.1
9	LEA	0.9	1.1	0.8	1.1	1.1	1.6	1.1	2.3	2.7	4.1	3.8	2.9	4.2	1.7	4.1	3.1	2.4	2.7	3.2	2.7
10	WDF	1.0	1.0	1.3	1.1	1.0	1.5	1.8	1.2	4.2	3.9	6.0	4.3	7.4	6.5	7.0	8.4	5.0	5.8	7.6	4.4
11	PAP	2.8	3.0	3.1	3.3	5.2	4.0	4.9	3.7	9.6	7.7	36.3	15.2	18.4	21.3	17.1	11.7	20.9	5.9	25.0	14.0
12	PET	2.4	3.1	4.2	7.2	10.2	6.5	5.9	6.1	48.4	30.3	25.8	30.9	31.3	30.1	32.3	45.1	0.6	195.2	16.7	30.3
13	CHE	22.3	22.8	29.0	27.8	28.7	31.4	33.8	34.5	28.5	31.7	46.5	47.0	103.1	84.1	85.0	73.2	217.5	82.5	90.2	36.3
14	RBP	2.8	3.2	4.9	5.6	5.0	4.7	4.9	5.0	8.6	12.7	12.9	10.3	26.7	20.4	20.5	25.3	22.0	23.6	20.0	37.7
15	BUI	4.6	5.1	4.8	6.3	6.1	5.0	7.5	5.7	6.7	10.1	26.1	17.2	21.3	14.4	21.5	19.5	19.3	17.1	14.9	30.0
16	MSP	9.0	9.8	10.7	9.9	12.2	11.0	11.7	12.6	18.5	30.5	268.7	76.2	76.1	82.2	83.7	34.9	57.3	51.8	70.5	107.6
17	MPD	4.3	4.6	4.8	5.5	5.7	5.6	7.0	6.8	12.2	13.5	19.3	19.6	16.0	17.1	17.1	12.6	15.2	14.1	9.9	12.9
18	MCH	13.5	14.8	14.7	17.0	16.2	17.4	17.3	19.1	21.9	24.2	38.6	37.8	23.9	36.5	32.6	37.4	27.1	33.6	27.8	48.0
19	TRS	4.3	4.3	7.3	6.4	5.9	5.8	5.9	8.2	26.1	16.1	25.6	36.5	58.3	44.9	37.0	37.9	33.6	18.4	65.4	82.9
20	ELE	3.1	3.6	5.4	8.8	14.5	3.4	6.3	8.2	10.7	15.9	16.5	21.0	28.0	26.6	22.8	26.6	27.8	42.4	34.2	44.0
21	ICT	4.1	5.3	6.4	5.8	5.3	5.8	6.7	9.8	23.0	29.9	43.4	52.1	56.0	83.3	72.0	102.3	156.0	108.9	100.3	123.6
22	INS	0.7	0.5	0.7	0.3	0.7	0.9	3.5	0.7	10.0	3.8	5.0	4.6	7.5	5.3	4.6	6.0	5.0	5.1	8.4	2.2
	<i>Utilities</i>	11.8	13.1	14.1	21.6	22.9	20.6	34.3	52.6	39.9	52.3	97.9	50.5	74.7	168.5	129.5	172.2	137.5	217.1	130.5	234.2
	<i>Mining</i>	10.2	11.5	13.7	15.8	26.4	15.3	26.1	43.7	59.9	111.1	87.2	26.2	49.7	36.3	121.6	292.3	164.8	171.2	190.0	261.1
	<i>Manufacturing</i>	94.7	103.5	120.6	129.8	144.1	132.7	149.3	159.9	272.9	306.3	651.9	450.5	559.7	573.0	522.6	522.1	692.9	686.4	554.0	655.3
	<i>All</i>	116.7	128.1	148.4	167.1	193.4	168.6	209.7	256.2	372.6	469.7	837.0	527.2	684.0	777.8	773.8	986.6	995.2	1074.7	874.6	1150.7



## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Hebei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	28.9	32.2	33.9	32.8	40.2	41.3	38.6	41.4	40.7	42.1	70.3	59.5	53.7	46.2	49.2	49.2	53.2	54.5	103.1	94.5
2	PTM	9.6	12.8	14.8	21.7	42.6	41.3	45.2	48.5	48.3	53.8	64.8	56.3	60.5	45.0	143.6	37.9	46.2	51.6	118.3	101.0
3	MTM	4.6	5.0	5.1	7.2	6.7	6.5	6.9	9.3	10.7	10.7	13.9	10.0	12.1	7.0	9.3	8.8	10.3	10.4	12.4	36.2
4	NMM	2.3	2.2	2.0	3.2	2.9	4.1	3.9	5.6	5.9	6.3	6.4	6.8	10.0	6.5	9.7	8.6	7.7	7.0	7.5	5.3
5	FDB	11.5	17.9	22.0	13.2	19.5	19.8	21.9	27.4	37.7	44.5	51.9	53.6	66.8	45.9	57.0	54.5	68.2	54.4	70.7	82.8
6	TBC	0.7	1.1	1.4	1.6	1.4	5.9	3.0	3.1	4.3	7.4	6.6	7.1	6.8	6.4	6.4	6.7	5.6	7.0	7.7	7.3
7	TEX	16.3	20.1	22.7	29.0	33.4	41.2	46.0	42.8	47.9	58.0	53.8	50.5	53.8	40.2	33.9	40.4	43.5	40.5	43.3	38.0
8	WEA	1.4	1.5	1.4	3.3	2.8	3.0	3.9	4.1	6.6	7.2	6.4	8.0	9.4	4.0	6.7	5.7	10.7	8.1	7.1	9.7
9	LEA	1.2	1.5	1.8	2.1	1.5	1.7	2.1	1.9	4.0	3.5	5.4	6.3	6.0	4.4	2.8	5.3	4.6	7.1	2.2	10.6
10	WDF	1.0	1.0	0.9	2.0	1.7	1.6	2.1	2.6	3.5	3.6	5.8	5.6	8.1	3.7	7.4	6.2	5.9	6.3	5.1	9.5
11	PAP	4.8	5.9	6.6	9.5	9.8	20.5	10.7	14.3	17.1	16.8	23.8	26.3	28.2	23.3	24.7	29.1	27.0	25.7	26.6	25.0
12	PET	3.4	3.9	4.3	6.4	7.2	8.3	13.6	11.7	12.3	15.1	14.8	16.4	19.9	16.0	26.4	53.5	42.5	36.4	15.4	65.7
13	CHE	19.1	21.5	22.9	28.4	31.4	33.4	56.4	51.4	61.6	69.0	83.0	103.2	92.0	90.3	98.3	95.0	103.7	101.0	124.9	112.6
14	RBP	3.4	4.5	5.3	6.1	5.9	7.8	8.3	9.5	12.1	13.5	16.7	15.9	19.9	14.2	17.3	16.4	21.5	25.3	24.7	25.4
15	BUI	18.0	20.6	22.5	26.7	27.6	27.5	31.0	35.8	51.7	63.1	74.2	71.3	77.4	63.7	73.0	72.7	77.4	78.9	103.6	110.5
16	MSP	16.7	19.9	22.1	27.1	34.3	38.3	56.0	45.0	65.9	122.5	117.7	140.5	123.5	121.8	141.5	154.2	188.8	186.5	300.1	368.5
17	MPD	3.4	4.3	4.9	4.7	5.9	6.2	6.4	10.1	17.1	18.0	12.9	16.8	17.6	10.8	12.4	16.8	13.2	15.1	15.7	21.9
18	MCH	22.1	24.2	25.2	25.5	25.0	26.6	31.2	31.7	38.5	41.8	53.5	50.5	60.5	40.1	44.1	41.4	33.8	37.1	37.8	43.1
19	TRS	7.1	8.0	8.6	9.1	8.9	10.0	12.4	12.9	17.0	20.2	26.6	28.7	30.2	26.4	23.0	16.2	19.7	22.7	21.1	32.0
20	ELE	2.5	3.2	3.7	4.7	6.1	4.3	7.3	7.6	14.5	16.7	13.9	13.8	20.8	14.4	17.5	20.5	15.9	19.6	16.4	24.7
21	ICT	1.5	2.0	2.3	4.0	5.1	3.9	8.3	5.7	5.7	16.6	6.6	46.6	4.3	5.5	6.5	4.7	58.7	17.8	16.2	17.9
22	INS	0.8	0.9	1.0	1.5	1.1	1.2	0.8	1.0	2.9	2.3	4.1	3.3	2.5	1.0	1.5	1.5	2.7	2.1	0.8	2.4
	<i>Utilities</i>	35.3	38.6	40.0	48.1	52.2	78.2	85.9	145.9	120.2	158.2	211.9	195.1	228.5	266.6	294.4	334.7	413.2	401.1	422.6	551.3
	<i>Mining</i>	45.4	52.2	55.7	64.9	92.5	93.2	94.5	104.8	105.6	112.9	155.4	132.6	136.2	104.7	211.7	104.5	117.4	123.6	241.3	236.9
	<i>Manufacturing</i>	135.1	161.9	179.6	204.9	228.7	261.1	321.6	318.7	420.3	539.9	577.7	664.4	647.6	532.3	600.3	640.8	743.4	691.5	839.5	1007.6
	<i>All</i>	215.8	252.8	275.3	317.8	373.4	432.5	501.9	569.4	646.1	811.1	945.0	992.0	1012.3	903.6	1106.4	1080.0	1273.9	1216.2	1503.4	1795.9

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Shanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	55.2	63.0	76.8	80.9	86.0	144.9	116.0	129.8	128.9	140.5	174.5	173.4	178.6	169.7	162.2	135.0	219.8	392.7	166.3	316.4
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.5	0.8	0.7	1.5	1.2	1.2	1.8	1.2	24.6	18.0	0.3	1.5	1.1	2.7	1.8	1.7	2.1	4.6	6.0	11.1
4	NMM	1.0	1.2	1.1	1.1	1.2	1.0	1.1	1.4	1.0	1.5	3.0	2.2	1.6	0.7	0.6	0.6	1.8	0.2	0.4	2.5
5	FDB	5.6	7.4	7.3	8.7	7.5	8.2	9.0	8.5	12.5	11.9	17.0	17.9	16.5	12.0	15.2	15.3	16.8	17.5	15.6	25.4
6	TBC	0.2	0.2	0.3	0.3	0.2	0.7	0.8	0.9	0.7	1.1	1.4	1.6	1.5	1.8	1.7	1.2	1.0	1.6	3.4	2.0
7	TEX	5.5	6.3	6.4	7.4	7.9	7.7	8.7	8.3	8.6	10.2	17.0	13.4	9.9	8.8	6.4	8.8	6.5	5.3	4.9	6.5
8	WEA	0.6	0.7	0.6	1.0	1.1	1.0	0.8	0.8	1.0	1.0	1.0	0.8	1.0	0.3	0.5	0.5	0.7	2.0	0.7	1.2
9	LEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	WDF	0.6	0.6	0.6	0.9	0.7	0.7	0.7	0.8	0.9	0.9	1.4	1.3	0.8	0.1	0.3	0.3	0.3	0.3	0.4	1.0
11	PAP	3.5	5.9	1.6	3.1	3.1	3.2	3.3	2.9	3.9	3.8	5.4	5.1	8.8	3.1	5.2	2.6	3.2	1.5	2.3	2.4
12	PET	1.9	2.7	2.4	3.8	5.6	6.3	8.8	8.4	6.5	8.7	15.5	13.6	16.0	27.6	23.6	19.5	47.2	77.1	76.4	179.0
13	CHE	18.7	20.1	21.3	22.2	23.1	23.5	26.6	23.5	20.7	25.8	51.2	46.3	59.1	49.7	44.4	49.9	44.3	45.1	70.9	77.9
14	RBP	1.8	2.1	2.1	2.1	2.3	2.4	2.9	3.4	2.4	3.5	3.6	6.3	5.9	0.5	1.5	1.9	2.0	5.0	2.0	2.4
15	BUI	7.1	8.0	9.9	8.9	9.7	10.7	13.0	12.4	14.4	17.7	24.0	24.6	21.1	23.4	27.2	35.9	31.5	47.3	24.6	53.8
16	MSP	22.7	27.0	24.6	28.5	35.6	33.9	33.8	36.7	32.3	40.2	148.0	121.5	98.2	117.0	90.2	122.3	135.6	96.8	214.6	201.0
17	MPD	2.2	2.5	3.0	2.8	3.0	3.4	3.8	3.2	5.0	5.9	4.9	6.1	4.9	2.5	6.6	3.5	3.3	0.7	1.4	1.2
18	MCH	22.6	24.5	24.8	25.6	24.4	23.8	24.1	17.9	24.6	25.5	63.2	38.3	33.8	41.6	30.2	30.1	8.3	12.3	104.3	42.0
19	TRS	3.0	2.8	4.0	3.9	3.7	4.0	4.7	15.4	5.0	7.6	10.3	12.5	8.2	5.9	5.9	10.1	8.3	9.9	10.3	6.9
20	ELE	2.3	2.5	3.0	2.9	3.5	3.5	4.9	4.0	5.0	5.7	6.7	6.3	5.9	3.7	4.0	5.6	5.3	1.4	4.5	10.4
21	ICT	1.5	1.2	1.4	1.5	1.4	1.2	2.0	2.0	1.1	1.8	2.5	5.0	3.3	3.0	0.5	1.0	1.4	6.1	3.0	7.5
22	INS	0.5	0.4	0.6	0.5	0.5	0.5	1.6	0.8	0.6	1.0	0.7	1.3	1.0	0.7	0.6	0.9	0.8	0.1	0.2	0.7
	<i>Utilities</i>	33.3	34.7	28.4	65.8	51.0	57.3	67.8	125.8	108.8	103.9	122.3	114.9	136.1	141.5	182.0	235.7	284.5	225.9	348.9	375.5
	<i>Mining</i>	56.7	64.9	78.5	83.5	88.5	147.1	118.8	132.5	154.6	160.0	177.8	177.1	181.3	173.2	164.6	137.3	223.7	397.6	172.7	330.0
	<i>Manufacturing</i>	100.2	115.0	113.7	124.2	133.5	134.6	149.6	149.9	145.2	172.3	373.8	322.0	295.9	301.7	264.0	309.4	316.3	330.1	539.5	621.3
	<i>All</i>	190.2	214.7	220.6	273.5	273.0	339.1	336.2	408.3	408.5	436.2	673.9	614.0	613.3	616.4	610.6	682.4	824.4	953.6	1061.0	1326.8

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Inner Mongolia																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	19.5	22.2	24.1	21.8	30.6	27.3	34.0	35.6	32.6	32.6	44.5	36.4	36.9	38.7	118.2	54.4	71.7	77.5	57.7	88.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	1.4	1.6	2.5	2.8	4.0	2.9	3.3	3.9	5.1	5.4	7.8	7.4	6.6	3.0	4.9	5.1	4.9	4.2	6.5	15.2
4	NMM	1.7	1.7	2.2	2.0	3.2	3.1	3.3	3.5	4.1	4.3	1.8	2.3	2.0	0.7	2.0	1.3	2.2	2.4	5.2	5.5
5	FDB	8.3	9.2	10.2	11.9	13.2	14.0	15.1	16.8	19.7	24.7	25.9	27.4	24.9	14.3	17.6	16.1	24.9	28.7	44.0	50.7
6	TBC	0.1	0.2	0.8	1.0	0.5	0.4	0.8	0.7	0.8	0.8	3.4	1.1	1.3	1.3	1.5	2.1	1.1	1.8	1.9	2.2
7	TEX	4.2	5.2	5.4	5.6	7.5	7.3	7.7	7.6	7.9	15.1	16.9	16.2	12.1	8.7	9.7	8.8	14.9	15.5	17.0	13.3
8	WEA	0.4	0.5	0.6	0.6	0.6	0.7	1.0	1.0	2.0	1.3	1.7	1.3	2.0	1.0	2.0	1.3	1.2	1.2	1.1	2.8
9	LEA	0.9	1.0	1.0	1.5	1.2	1.2	1.3	1.2	1.4	1.7	1.6	1.5	1.1	0.6	1.6	1.4	1.0	1.2	1.6	0.7
10	WDF	0.7	0.6	0.9	1.2	1.5	1.4	1.4	1.5	3.3	3.6	1.7	3.9	2.1	1.3	1.6	1.7	2.7	2.1	2.1	6.9
11	PAP	1.7	1.7	2.0	2.8	2.5	2.5	3.3	3.8	6.4	4.0	4.4	5.5	2.6	0.8	1.6	5.1	2.9	3.4	3.5	2.5
12	PET	0.3	0.3	0.4	0.4	0.5	0.7	1.7	1.5	14.3	4.2	5.1	4.5	5.0	4.5	5.3	3.1	4.6	4.5	7.2	18.5
13	CHE	4.2	4.5	5.4	7.1	4.7	9.9	8.0	9.5	8.3	10.3	20.0	21.1	15.7	40.7	24.9	27.6	23.8	26.7	27.4	32.4
14	RBP	0.6	0.8	0.6	0.7	0.7	1.0	1.0	0.9	1.7	1.1	1.7	1.1	1.1	1.1	1.1	1.4	1.1	1.0	0.7	0.9
15	BUI	5.6	6.5	6.1	7.2	6.9	8.2	9.4	8.9	11.5	14.2	17.2	14.8	14.0	4.8	12.9	11.3	17.0	23.4	135.2	11.2
16	MSP	20.9	22.4	22.4	25.3	27.3	25.0	25.7	27.4	35.6	98.6	52.9	69.2	71.7	83.5	73.0	64.3	67.4	111.1	91.4	112.5
17	MPD	1.1	1.1	1.1	1.4	1.6	1.4	1.5	1.4	3.3	1.9	2.8	2.1	2.4	0.9	0.6	1.8	0.7	0.2	0.7	1.9
18	MCH	8.3	8.8	8.6	9.1	9.6	8.3	9.1	8.8	11.1	8.5	40.7	20.0	9.9	8.4	11.9	8.9	6.0	8.7	52.0	21.4
19	TRS	0.9	0.9	0.5	0.8	0.7	0.7	2.4	1.3	1.2	3.1	2.6	2.7	9.7	4.1	3.5	3.5	3.9	4.0	2.8	4.7
20	ELE	0.7	0.8	0.9	2.0	1.4	1.6	1.4	1.7	4.5	2.4	3.3	2.5	2.2	1.1	2.7	1.2	1.1	0.5	1.9	0.6
21	ICT	0.4	0.5	0.5	0.6	0.9	1.0	1.0	1.1	1.7	1.6	1.7	1.4	1.0	1.7	1.1	0.3	0.5	0.9	1.5	1.3
22	INS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Utilities</i>	25.2	25.8	28.5	30.6	40.8	39.1	42.1	55.4	67.7	86.7	76.4	85.2	87.6	180.1	224.8	164.3	177.7	189.1	313.9	373.8
	<i>Mining</i>	22.6	25.4	28.8	26.6	37.8	33.4	40.6	42.9	41.8	42.3	54.2	46.1	45.5	42.4	125.0	60.9	78.8	84.0	69.4	108.8
	<i>Manufacturing</i>	59.2	65.0	67.4	79.1	81.4	85.3	91.7	95.1	134.6	197.3	203.6	196.2	178.9	179.0	172.5	159.8	174.8	234.8	392.3	284.5
	<i>All</i>	107.0	116.2	124.6	136.4	160.0	157.8	174.4	193.4	244.1	326.2	334.2	327.6	312.1	401.5	522.3	385.0	431.3	507.9	775.6	767.1

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Liaoning																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	28.3	31.0	36.4	34.0	38.4	46.3	47.3	46.0	43.4	43.2	74.4	46.1	59.5	24.6	70.9	40.8	42.8	71.3	46.7	50.3
2	PTM	17.8	22.7	39.2	50.5	58.1	65.3	68.8	65.6	89.1	72.0	98.9	92.2	106.0	84.3	89.6	94.9	166.9	159.4	141.1	197.2
3	MTM	3.4	3.8	4.3	6.8	4.5	5.6	6.0	6.5	6.7	6.9	12.0	17.6	11.4	8.4	2.9	3.1	6.3	6.5	64.1	10.3
4	NMM	3.6	3.7	4.4	4.9	4.7	5.4	5.7	6.9	6.5	7.1	14.3	4.8	5.7	6.0	8.6	3.9	6.4	5.1	3.7	1.7
5	FDB	13.1	15.3	18.7	21.2	23.1	22.9	30.3	31.0	38.8	46.9	66.2	60.5	51.4	43.4	46.1	50.0	40.7	53.9	54.7	89.2
6	TBC	0.5	0.6	0.7	1.0	1.1	1.0	1.2	1.2	2.8	2.4	2.5	3.3	2.3	3.6	3.4	2.5	3.3	3.1	3.8	3.9
7	TEX	20.4	24.1	24.7	30.0	29.0	29.4	31.6	31.9	34.8	50.2	51.2	37.1	38.7	25.4	31.8	19.4	22.2	15.9	21.6	28.1
8	WEA	2.6	3.1	3.8	3.7	4.0	4.3	5.2	6.2	7.5	10.0	13.1	10.1	10.6	6.1	6.3	8.8	4.6	7.6	6.6	10.7
9	LEA	1.3	1.6	1.7	1.5	1.9	1.9	1.9	2.1	2.5	4.0	4.0	3.8	2.8	3.1	1.9	3.0	1.4	2.4	3.3	2.0
10	WDF	1.6	1.7	1.4	1.6	2.2	1.8	2.7	2.3	3.2	8.1	7.9	6.9	8.6	6.4	8.1	10.8	9.3	15.4	17.5	17.8
11	PAP	8.3	10.0	11.2	10.5	10.8	11.0	12.8	12.6	15.0	21.8	25.0	21.5	19.1	23.5	13.5	16.5	22.8	19.5	16.6	22.0
12	PET	14.7	16.6	19.6	23.8	30.6	32.8	40.2	38.9	35.7	88.3	136.4	166.9	90.6	144.4	129.8	85.0	160.5	125.9	115.4	82.3
13	CHE	49.6	52.5	58.7	61.2	61.7	69.6	97.7	90.1	102.9	117.9	149.5	120.2	223.6	139.6	142.7	127.7	153.9	114.8	108.6	173.8
14	RBP	7.7	9.0	10.5	6.2	14.2	11.5	14.3	15.2	18.4	19.5	31.7	25.6	23.2	16.2	20.2	23.3	22.2	32.3	56.1	63.3
15	BUI	24.2	28.7	32.4	29.9	31.5	34.4	35.6	45.1	57.4	66.8	82.9	68.3	72.9	54.7	45.3	51.6	51.0	52.5	51.0	92.3
16	MSP	77.7	87.2	90.4	119.6	115.5	133.6	138.4	252.5	252.7	219.9	262.4	357.1	281.3	278.9	281.2	313.6	305.3	340.1	297.0	399.8
17	MPD	6.5	7.8	8.8	8.6	9.2	8.9	10.9	10.9	17.0	19.7	22.4	20.7	19.4	14.5	12.6	13.4	63.0	6.5	13.5	9.3
18	MCH	46.4	52.2	57.2	58.4	56.7	55.9	69.6	70.7	85.2	105.3	149.3	123.5	123.9	82.4	67.5	70.9	87.8	81.7	95.6	72.0
19	TRS	17.4	21.1	20.7	22.4	21.7	23.6	26.8	27.8	34.5	47.1	62.2	65.3	63.1	51.9	55.0	61.3	58.3	78.5	71.3	132.9
20	ELE	10.8	15.3	16.7	19.0	19.4	20.8	22.0	22.7	42.3	41.2	63.5	45.3	42.8	36.2	35.1	30.0	36.9	28.1	36.7	40.4
21	ICT	6.6	9.1	8.0	8.1	9.0	9.0	10.7	12.4	33.4	71.5	32.0	34.1	36.5	30.8	34.3	35.6	28.6	37.5	24.9	43.4
22	INS	2.1	2.3	2.4	2.5	2.4	2.3	2.7	2.8	11.6	5.8	7.2	6.2	4.4	3.9	3.5	3.6	3.1	4.9	5.6	12.4
	<i>Utilities</i>	45.7	52.9	59.5	73.0	76.7	74.5	103.1	97.6	171.5	194.7	193.8	231.7	239.1	239.2	283.3	424.3	541.7	496.0	479.7	488.8
	<i>Mining</i>	53.0	61.2	84.2	96.1	105.8	122.7	127.8	125.0	145.7	129.3	199.5	160.6	182.6	123.3	172.0	142.6	222.4	242.2	255.6	259.5
	<i>Manufacturing</i>	311.6	358.1	387.4	429.1	443.9	474.6	554.6	676.2	795.8	946.4	1169.5	1176.4	1115.1	964.9	938.3	927.1	1075.2	1020.8	999.9	1295.7
	<i>All</i>	410.3	472.2	531.2	598.3	626.4	671.8	785.5	898.8	1113.0	1270.3	1562.8	1568.6	1536.8	1327.4	1393.6	1494.1	1839.4	1759.1	1735.2	2044.0

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Jilin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	11.6	14.4	11.4	11.4	13.1	16.3	15.6	15.2	12.0	15.7	20.8	19.9	19.9	16.4	12.7	12.8	8.0	8.9	4.0	9.7
2	PTM	6.3	7.8	13.0	13.9	16.0	18.9	23.5	26.6	34.6	30.8	32.7	36.4	37.5	60.6	51.1	53.3	218.8	117.3	147.1	148.9
3	MTM	2.0	1.1	3.0	2.8	0.9	2.5	2.2	2.3	1.6	2.8	6.5	4.1	3.8	3.7	13.7	5.6	5.4	4.7	3.3	5.4
4	NMM	0.2	0.1	0.2	1.6	0.8	0.6	0.6	1.0	2.3	2.8	1.5	1.4	1.1	0.4	0.3	1.1	0.4	0.7	0.7	0.3
5	FDB	9.7	11.4	15.0	15.0	19.6	19.2	21.4	21.9	28.6	35.2	48.2	39.5	37.5	26.5	25.6	31.8	30.0	44.4	41.7	62.0
6	TBC	0.5	0.6	0.7	0.8	1.6	2.2	1.7	2.1	1.9	1.8	2.5	3.4	3.9	3.0	5.8	4.5	4.3	3.9	6.1	4.4
7	TEX	5.2	5.5	6.4	6.9	7.0	6.9	9.2	9.0	9.2	13.8	14.4	13.3	12.6	9.6	7.9	10.0	9.1	7.7	6.5	3.6
8	WEA	0.8	1.1	1.2	1.0	1.3	1.2	1.5	1.4	1.8	2.5	2.2	2.0	1.9	0.5	0.8	0.7	0.9	1.1	1.2	1.5
9	LEA	0.5	0.6	0.8	0.7	0.7	0.9	0.9	0.8	1.1	1.0	1.1	1.4	1.5	0.3	1.4	0.2	0.3	0.1	0.0	0.1
10	WDF	3.1	3.2	3.6	4.0	4.8	4.9	4.9	5.0	4.7	5.9	8.9	8.0	8.2	6.8	4.2	7.6	12.5	6.8	19.5	22.9
11	PAP	5.2	5.7	6.9	9.3	8.5	10.6	10.2	9.2	10.8	12.3	15.9	14.2	13.6	8.3	9.8	7.0	6.6	15.2	8.2	4.2
12	PET	1.9	2.0	2.3	2.4	5.5	9.1	6.3	7.6	3.7	5.3	6.9	5.8	5.2	4.7	10.4	4.9	11.9	7.9	2.7	5.9
13	CHE	29.0	30.5	34.3	35.3	36.8	43.3	46.2	45.6	59.5	71.7	86.5	107.2	122.7	103.3	139.2	104.4	101.7	92.3	123.1	116.1
14	RBP	2.5	2.7	3.2	3.7	4.1	3.8	4.3	4.4	4.9	6.3	6.2	8.3	9.4	3.3	1.8	3.3	2.6	5.8	2.7	5.6
15	BUI	9.6	10.6	11.9	13.6	13.9	13.8	15.0	15.3	24.5	22.1	33.6	26.6	24.5	19.3	17.4	11.2	17.9	17.7	19.4	27.5
16	MSP	6.9	10.5	8.6	11.7	13.8	13.7	15.3	15.4	64.1	18.2	31.0	28.2	26.7	24.1	23.1	20.9	18.6	28.3	14.0	47.1
17	MPD	2.2	2.4	2.5	3.4	2.4	2.8	3.8	3.4	3.8	4.2	4.1	6.1	7.1	2.3	2.7	7.9	3.7	1.0	1.1	1.2
18	MCH	12.7	13.0	14.4	13.9	14.2	12.6	15.1	14.2	14.8	16.3	21.7	20.6	20.4	13.0	8.4	13.1	12.0	19.5	1.5	12.3
19	TRS	9.8	13.4	17.6	15.1	16.7	15.5	19.8	30.7	42.0	46.1	44.3	89.1	108.7	84.6	83.9	81.7	80.6	94.5	100.8	92.1
20	ELE	2.0	2.9	4.2	3.9	3.4	4.8	4.6	4.6	4.7	5.7	8.6	6.2	5.3	5.6	4.7	4.3	3.5	2.3	2.5	2.1
21	ICT	1.7	2.0	2.5	2.6	2.5	2.3	3.9	2.6	2.6	4.1	6.0	4.6	4.2	5.7	4.9	10.6	2.8	32.6	7.7	19.9
22	INS	0.9	1.0	1.2	1.3	1.2	1.2	1.6	1.3	2.6	2.5	4.5	3.8	3.9	2.0	2.4	2.0	1.3	1.6	2.8	4.4
	<i>Utilities</i>	29.3	31.6	45.5	40.1	45.3	49.8	62.8	67.2	89.9	118.8	121.0	116.8	115.0	128.4	113.9	130.1	162.4	186.5	168.4	312.4
	<i>Mining</i>	20.1	23.4	27.6	29.7	30.8	38.3	41.9	45.1	50.5	52.0	61.6	61.8	62.4	81.2	77.9	72.8	232.6	131.6	155.1	164.3
	<i>Manufacturing</i>	104.1	119.1	137.6	144.4	158.2	168.8	185.6	194.5	285.2	275.1	346.7	388.4	417.3	323.1	354.5	326.1	320.3	382.6	361.7	433.0
	<i>All</i>	153.5	174.1	210.7	214.2	234.3	256.9	290.3	306.8	425.6	445.9	529.4	567.0	594.6	532.7	546.3	529.0	715.3	700.7	685.3	909.7

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Heilongjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	30.9	34.3	38.8	40.5	52.0	50.8	49.5	56.4	53.3	53.1	103.8	73.3	68.2	67.9	33.4	54.4	52.3	54.6	53.2	59.1
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	3.5	3.5	3.5	4.0	3.8	3.7	4.7	4.9	1.9	4.9	6.0	3.1	4.5	4.2	2.5	3.4	2.6	2.3	2.1	6.2
4	NMM	1.0	1.0	1.1	1.3	1.4	1.8	1.6	2.2	1.7	2.2	2.3	2.5	2.8	1.3	0.7	0.8	0.3	0.4	4.8	1.4
5	FDB	21.9	25.2	25.0	27.3	32.8	32.6	37.7	35.6	35.6	46.1	67.4	70.2	62.1	56.1	32.1	55.4	46.8	18.5	108.3	55.6
6	TBC	0.9	1.1	1.4	1.7	1.9	2.6	2.6	2.5	4.3	5.4	6.7	5.3	6.2	5.4	3.7	6.8	5.2	3.2	1.9	6.7
7	TEX	10.5	11.4	13.9	16.0	16.2	20.3	18.3	20.4	18.6	28.5	25.2	28.8	24.5	17.8	9.1	10.9	3.3	4.2	4.9	12.4
8	WEA	0.8	1.0	1.1	1.0	1.6	0.8	1.1	1.5	1.7	1.2	0.6	1.0	1.2	1.1	0.7	0.7	0.6	0.2	0.9	0.6
9	LEA	0.8	0.9	1.1	1.0	1.7	1.0	1.1	1.2	1.6	1.7	1.0	2.0	2.3	0.7	0.5	0.6	0.6	0.1	1.9	0.2
10	WDF	7.1	7.5	10.4	9.0	10.1	10.8	10.7	11.8	10.7	12.3	15.2	12.9	22.7	6.9	8.5	20.6	13.9	3.9	16.0	12.4
11	PAP	7.9	7.9	9.7	8.5	9.0	10.8	10.0	10.5	11.9	9.1	11.5	16.3	18.8	11.5	11.8	27.0	29.6	16.0	13.1	17.1
12	PET	7.8	8.2	10.0	82.4	30.7	49.2	36.3	40.4	41.0	73.0	53.5	68.1	79.1	69.8	67.2	152.9	102.3	115.1	77.0	84.7
13	CHE	8.4	8.9	11.0	12.8	13.3	14.7	24.2	24.1	31.7	31.8	31.2	34.8	40.6	35.7	22.6	42.0	27.4	33.5	67.7	73.0
14	RBP	4.0	5.4	5.6	5.9	6.8	7.0	7.2	8.7	8.6	10.0	10.5	13.8	11.7	7.5	4.2	6.4	17.1	1.2	25.8	7.8
15	BUI	13.6	13.8	15.3	15.6	15.9	16.7	15.5	17.8	17.3	19.2	31.4	25.4	27.4	15.9	10.4	21.3	18.5	5.4	33.6	20.1
16	MSP	7.5	8.1	8.3	8.4	9.7	11.3	10.9	12.6	14.0	14.6	21.3	19.4	16.9	16.6	4.1	2.7	11.6	9.5	20.4	15.4
17	MPD	3.1	3.5	3.7	3.8	3.8	4.1	4.6	4.2	5.5	7.3	10.1	7.5	18.5	1.3	1.9	4.5	2.7	1.5	10.2	15.3
18	MCH	27.4	29.4	29.9	30.9	30.9	31.0	31.0	31.0	37.7	32.2	60.9	54.1	43.9	41.1	24.9	51.9	13.6	10.4	60.4	24.4
19	TRS	7.2	7.9	9.2	8.9	7.9	8.4	9.1	8.9	16.0	18.6	28.7	25.0	21.4	24.2	13.4	26.1	21.9	35.5	30.3	22.9
20	ELE	4.8	5.6	6.7	6.7	6.1	7.3	7.5	7.5	4.0	19.9	12.6	11.3	10.8	9.3	5.8	13.4	10.3	4.6	8.7	14.3
21	ICT	1.0	1.1	1.4	1.8	1.4	1.5	1.7	1.5	1.7	2.1	9.2	10.9	12.8	4.7	5.0	10.5	4.5	5.4	11.7	10.9
22	INS	1.1	1.2	1.2	1.2	1.2	1.3	1.4	1.0	2.7	3.0	1.8	2.1	2.7	0.9	1.2	3.8	1.1	0.3	0.4	12.6
	<i>Utilities</i>	27.6	28.9	36.9	54.9	48.0	51.7	58.3	49.9	93.1	83.5	133.1	95.7	180.8	223.2	116.9	214.1	236.0	278.4	401.0	358.1
	<i>Mining</i>	35.4	38.9	43.4	45.8	57.1	56.3	55.7	63.6	56.9	60.2	112.1	78.9	75.5	73.4	36.6	58.6	55.1	57.3	60.1	66.7
	<i>Manufacturing</i>	135.9	148.2	164.9	243.1	201.3	231.3	230.8	241.1	264.6	336.1	398.9	409.0	423.4	326.5	226.9	457.6	331.1	268.6	493.2	406.3
	<i>All</i>	198.9	216.0	245.2	343.8	306.4	339.3	344.8	354.5	414.6	479.8	644.1	583.6	679.7	623.1	380.4	730.2	622.2	604.3	954.3	831.1

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Shanghai																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	NMM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	FDB	6.5	8.0	10.9	10.7	14.2	17.2	18.7	16.0	21.0	32.5	44.0	40.1	62.3	63.0	57.0	44.2	44.6	48.3	50.0	62.2
6	TBC	0.3	0.4	0.8	1.0	2.0	2.2	3.0	2.7	2.8	7.1	9.5	6.5	5.7	25.6	21.6	21.4	15.6	18.2	15.3	17.2
7	TEX	24.8	30.1	50.0	39.4	41.0	44.3	45.6	43.5	42.8	64.1	60.1	59.3	54.2	55.3	38.4	27.3	34.4	31.4	36.3	42.8
8	WEA	2.7	3.5	4.2	4.9	6.3	6.1	8.4	9.5	12.2	19.8	20.8	23.0	27.2	25.3	17.9	17.1	23.6	18.4	21.4	32.4
9	LEA	1.2	1.3	1.6	1.7	2.2	2.7	2.7	2.9	5.7	6.1	6.3	4.9	7.3	5.4	6.1	3.8	2.0	6.8	6.6	9.8
10	WDF	1.6	1.9	1.9	2.1	2.6	2.7	2.2	2.6	6.2	2.9	6.3	9.2	18.4	19.9	14.0	14.5	15.0	11.9	14.0	32.8
11	PAP	4.9	6.3	7.9	9.0	9.1	8.8	8.8	9.7	12.2	15.5	19.9	17.9	39.1	47.6	37.9	30.3	37.2	35.3	49.6	99.7
12	PET	4.8	5.0	15.6	9.4	11.6	18.0	21.3	17.8	9.1	17.5	16.7	26.6	48.5	42.4	40.1	25.4	330.4	134.6	112.9	127.1
13	CHE	45.1	56.3	44.4	48.6	49.8	53.5	86.1	75.6	114.3	121.2	133.1	140.9	121.2	156.3	141.7	207.3	70.0	113.6	116.1	157.8
14	RBP	6.6	8.4	9.5	9.9	10.6	11.9	13.6	13.4	13.5	22.9	39.2	37.2	57.7	49.6	48.1	42.6	47.2	51.4	66.9	108.5
15	BUI	7.2	8.3	12.4	17.9	13.4	15.3	16.3	15.9	23.3	30.6	35.8	35.6	47.1	48.1	41.9	26.9	36.0	36.2	48.6	99.9
16	MSP	95.8	236.5	106.8	113.2	114.9	105.9	181.9	213.1	177.0	446.6	264.6	243.9	193.3	363.1	446.5	418.4	354.5	194.8	252.8	335.3
17	MPD	7.4	8.6	10.8	11.9	11.8	13.9	13.5	12.4	16.6	23.7	30.7	31.1	74.1	44.7	39.2	27.4	33.0	37.9	29.4	63.4
18	MCH	33.0	36.4	42.8	43.2	46.6	48.1	52.3	53.6	42.6	72.0	95.3	104.5	84.8	104.6	71.2	69.1	82.5	96.3	127.8	172.2
19	TRS	11.4	14.1	12.8	13.5	18.3	23.9	22.2	26.4	47.5	65.4	86.0	76.0	96.2	108.9	94.7	137.8	133.5	124.0	142.1	178.3
20	ELE	8.4	10.8	12.9	14.9	15.6	16.8	18.7	19.1	25.3	45.4	57.2	62.1	81.2	78.2	49.6	68.4	55.8	41.1	64.9	93.7
21	ICT	8.2	8.9	13.3	12.6	12.8	20.4	19.3	19.5	29.2	37.6	56.5	59.5	72.4	88.2	119.3	141.1	155.9	276.9	336.9	617.2
22	INS	2.7	2.9	3.9	3.7	3.8	3.8	4.9	4.6	19.2	10.4	12.2	12.7	12.7	16.1	4.4	4.0	5.7	5.4	30.7	12.0
	<i>Utilities</i>	13.2	13.6	17.4	22.4	29.9	39.2	57.4	55.6	110.9	161.0	178.2	147.7	178.6	254.1	191.4	290.8	425.5	326.8	394.0	648.0
	<i>Mining</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Manufacturing</i>	272.3	447.7	362.4	367.5	386.6	415.6	539.4	558.0	620.6	1041	994.0	991.0	1103.4	1342.3	1289.7	1327.0	1477.0	1282.4	1522.5	2262.1
	<i>All</i>	285.5	461.3	379.8	390.0	416.5	454.8	596.8	613.6	731.6	1202	1172.2	1138.7	1282.1	1596.3	1481.1	1617.8	1902.4	1609.2	1916.5	2910.2

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Jiangsu																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	10.6	11.8	14.3	17.7	17.0	17.0	14.8	14.6	16.0	16.3	26.3	21.4	18.5	17.5	23.9	22.3	15.5	23.3	20.2	30.3
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.9	1.0	1.1	1.8	1.3	1.2	1.4	1.1	0.8	1.4	2.7	1.7	1.1	1.0	1.0	1.1	2.9	19.0	4.2	3.9
4	NMM	4.3	4.4	4.9	6.8	5.8	5.7	6.4	6.0	7.3	10.4	15.1	11.0	10.5	8.2	8.5	10.2	8.5	7.4	5.9	9.1
5	FDB	18.5	23.0	30.3	29.6	33.0	32.6	37.0	39.6	46.2	65.4	92.0	82.7	94.8	77.6	78.3	69.0	69.7	73.7	78.3	99.1
6	TBC	0.4	0.5	0.6	1.1	1.4	1.4	3.0	3.1	2.9	5.0	5.8	9.9	7.6	8.6	8.4	7.9	11.1	19.1	13.1	17.1
7	TEX	47.9	59.1	76.1	85.3	97.2	99.2	110.1	119.4	166.4	206.4	228.6	214.1	212.3	186.5	187.3	188.3	200.1	217.4	284.0	456.5
8	WEA	3.6	4.2	5.2	7.8	7.7	8.9	10.7	15.0	23.8	29.1	37.6	37.4	36.6	33.5	39.7	26.6	42.3	39.3	39.1	137.9
9	LEA	1.7	2.2	3.0	4.0	4.1	4.4	5.1	5.9	10.9	10.8	13.0	12.4	10.5	7.8	8.9	8.6	9.1	11.3	16.1	8.7
10	WDF	1.7	2.0	2.5	3.1	3.0	3.2	3.2	5.7	6.3	8.0	13.0	13.6	12.4	10.5	12.3	12.5	16.0	21.9	20.7	44.8
11	PAP	5.9	7.3	9.4	9.9	10.4	11.0	12.3	13.5	16.7	21.1	31.9	30.4	51.7	38.1	78.2	151.4	129.3	118.9	122.2	185.7
12	PET	3.7	5.2	7.3	20.6	4.2	8.0	30.8	17.0	16.1	28.7	25.3	28.7	31.8	35.3	28.2	55.9	40.8	17.6	25.5	27.1
13	CHE	38.5	50.0	68.2	55.6	128.4	145.9	139.2	140.8	159.7	206.4	266.3	234.6	241.0	283.8	273.8	237.9	259.7	342.5	325.1	448.9
14	RBP	10.3	13.2	17.7	15.7	21.5	18.7	20.0	25.6	35.1	36.2	43.9	46.8	55.0	55.6	56.5	51.1	63.4	71.1	79.1	216.4
15	BUI	23.7	28.5	37.3	36.5	37.0	34.4	42.9	41.3	55.7	73.7	110.9	118.2	103.4	83.3	91.1	87.1	92.8	86.2	83.9	223.7
16	MSP	12.4	17.4	24.2	21.9	27.7	27.1	29.7	38.1	53.1	61.2	101.2	76.2	85.5	73.1	96.3	110.2	115.5	195.7	211.1	571.7
17	MPD	7.7	9.7	12.8	13.7	15.1	14.2	17.8	19.8	29.3	40.4	46.2	47.3	42.8	40.6	46.9	31.8	45.1	62.5	80.5	76.0
18	MCH	37.7	43.5	54.2	56.9	59.3	59.5	67.4	80.5	95.8	120.3	155.0	148.3	147.4	124.4	126.1	126.9	129.9	136.6	172.3	301.5
19	TRS	10.5	11.6	13.8	14.5	14.3	16.3	19.7	30.0	49.2	52.7	82.5	59.3	71.0	81.3	65.7	91.8	79.2	95.3	141.3	173.8
20	ELE	9.5	12.7	17.4	16.2	19.3	18.5	25.2	29.3	47.5	59.1	72.6	68.1	75.9	71.2	81.6	72.3	89.7	104.0	106.4	222.1
21	ICT	13.6	16.8	22.1	22.5	22.5	23.3	37.0	29.9	37.1	53.2	72.0	73.1	92.4	89.6	103.2	113.2	175.0	182.2	488.6	840.3
22	INS	3.6	4.1	5.2	4.7	4.8	4.8	7.2	6.8	10.6	10.5	15.4	14.1	11.8	10.6	13.1	9.0	12.9	13.1	19.9	37.0
	<i>Utilities</i>	29.0	34.4	43.6	49.2	51.6	58.2	87.4	83.1	182.6	133.0	252.6	216.6	254.5	263.9	391.7	505.1	408.7	472.0	588.4	800.2
	<i>Mining</i>	15.8	17.2	20.3	26.3	24.1	23.9	22.7	21.7	24.1	28.1	44.2	34.1	30.1	26.8	33.4	33.6	26.9	49.8	30.4	43.3
	<i>Manufacturing</i>	250.9	311.0	407.3	419.6	510.8	531.3	618.4	661.3	862.5	1088.3	1413.1	1315.2	1383.8	1311.2	1395.5	1451.6	1581.6	1808.3	2307.2	4088.2
	<i>All</i>	295.8	362.7	471.2	495.0	586.4	613.3	728.5	766.1	1069.3	1249.3	1709.9	1565.9	1668.4	1601.9	1820.6	1990.3	2017.2	2330.0	2926.0	4931.7



## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Zhejiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1.1	1.1	1.2	2.6	1.9	2.0	2.5	2.2	1.8	2.2	2.3	2.9	2.8	2.4	1.3	3.0	2.2	2.0	1.9	2.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	1.1	1.2	1.6	1.4	2.4	2.2	2.1	1.9	2.4	1.9	5.1	3.0	2.7	3.6	3.1	2.3	2.4	0.8	2.4	1.3
4	NMM	1.9	2.1	2.0	3.0	2.6	2.9	3.0	2.9	3.7	4.5	7.5	5.8	5.1	2.2	2.9	1.8	1.8	4.2	7.4	10.8
5	FDB	16.2	20.7	24.3	27.6	26.8	27.4	31.9	30.9	35.1	40.7	70.8	62.0	69.5	72.5	65.7	57.3	69.8	74.4	82.2	69.6
6	TBC	0.4	0.5	1.3	0.8	1.0	1.9	2.0	3.7	2.1	5.0	6.4	6.0	6.5	6.4	7.7	10.8	10.7	14.6	13.8	14.4
7	TEX	24.6	33.5	40.9	48.2	49.7	52.3	63.3	71.0	116.0	122.9	154.4	150.4	154.7	204.7	160.5	149.9	204.6	271.1	364.6	442.2
8	WEA	2.0	2.8	3.3	3.8	4.0	5.2	7.3	11.1	18.7	21.8	25.4	26.3	26.0	28.7	36.5	42.9	62.6	71.3	81.1	51.7
9	LEA	1.3	1.7	1.8	2.4	2.6	3.1	4.2	5.4	8.3	12.8	12.4	13.9	15.4	14.0	11.4	13.9	23.5	26.2	29.2	45.5
10	WDF	1.8	2.3	1.9	3.0	2.5	2.8	3.5	3.6	5.1	5.8	8.6	7.3	8.5	6.6	9.3	11.1	14.9	18.0	26.6	60.0
11	PAP	4.8	6.1	6.5	8.1	8.9	8.7	10.9	11.8	15.7	19.3	27.5	25.1	60.7	47.0	41.4	47.2	67.6	79.4	87.8	121.4
12	PET	6.0	5.6	5.6	6.5	6.8	7.1	7.9	10.0	15.3	13.5	17.0	14.1	27.7	22.5	31.9	28.3	26.5	35.4	47.9	41.1
13	CHE	13.3	15.1	20.4	21.8	22.7	25.8	38.8	41.8	46.8	60.0	99.0	79.7	91.5	111.9	98.8	99.0	122.2	135.5	184.4	319.0
14	RBP	6.6	8.5	8.9	11.3	11.1	11.7	15.5	17.8	22.0	24.8	35.0	32.0	35.2	28.4	39.2	36.7	43.6	54.0	87.5	172.3
15	BUI	14.5	19.1	21.3	25.3	23.0	22.8	25.5	26.2	35.0	50.3	77.4	71.3	65.3	48.9	48.9	55.5	58.9	73.9	101.4	183.1
16	MSP	4.3	5.4	5.9	8.4	7.8	8.1	9.4	10.1	17.8	28.7	33.0	25.4	29.8	30.1	46.5	26.6	41.7	41.3	53.3	101.7
17	MPD	4.0	5.3	6.4	7.7	7.5	8.2	8.9	10.9	14.1	17.2	22.5	19.4	19.4	24.9	21.9	26.9	24.8	36.1	33.2	59.1
18	MCH	18.4	23.3	22.0	26.8	27.2	27.5	32.6	36.9	45.7	51.9	67.5	58.0	57.9	70.3	64.9	82.4	96.5	115.8	149.1	752.7
19	TRS	2.6	2.0	4.8	5.5	4.8	5.5	7.2	8.5	18.9	17.1	31.7	25.5	27.4	32.0	27.9	42.5	51.8	53.9	78.5	130.3
20	ELE	5.5	7.5	9.4	11.3	10.8	12.1	12.4	15.8	25.8	29.1	43.8	43.6	50.9	58.6	55.8	62.1	87.6	93.4	114.1	41.0
21	ICT	3.3	4.9	5.0	5.8	5.7	5.8	8.5	8.4	9.8	13.9	14.9	21.6	22.5	25.5	20.0	39.4	34.7	49.0	74.6	16.9
22	INS	1.5	1.7	1.9	2.2	2.7	2.4	3.0	2.7	5.5	5.4	7.8	9.6	4.5	6.2	5.2	7.3	9.6	9.4	24.5	44.0
	<i>Utilities</i>	28.0	31.6	33.8	36.5	41.8	48.9	51.9	55.3	145.5	134.1	192.4	186.6	220.9	256.2	291.1	388.2	385.1	431.7	488.7	1202.4
	<i>Mining</i>	4.1	4.4	4.8	7.0	6.9	7.1	7.6	7.1	7.9	8.5	14.9	11.7	10.6	8.3	7.3	7.1	6.3	7.0	11.6	14.0
	<i>Manufacturing</i>	130.9	165.8	191.4	226.4	225.5	238.3	292.8	326.7	457.7	540.1	755.0	691.4	773.3	839.3	793.6	839.8	1051.6	1252.6	1633.8	2666.2
	<i>All</i>	162.9	201.7	230.0	269.9	274.2	294.4	352.2	389.1	611.1	682.7	962.3	889.7	1005	1103.8	1092.0	1235.1	1443.0	1691.3	2134.1	3882.6

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Anhui																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	20.3	24.2	26.1	24.2	37.5	31.7	31.4	39.4	38.0	42.7	66.2	54.8	83.2	63.5	60.2	73.5	69.8	85.2	85.7	119.6
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.5	0.4	0.2	0.9	0.9	0.8	1.0	1.4	1.0	64.0	10.6	16.8	10.2	13.9	13.7	12.6	12.0	10.6	12.0	12.1
4	NMM	1.1	1.3	1.4	1.4	1.3	1.6	2.0	1.3	2.5	3.8	4.6	4.1	3.8	0.4	1.3	2.6	1.5	0.6	1.0	3.5
5	FDB	12.7	21.8	26.4	12.2	19.6	19.6	21.9	22.8	28.0	34.5	47.9	51.3	45.7	29.6	36.7	35.6	39.9	58.2	36.3	49.2
6	TBC	1.2	1.5	1.7	3.9	2.8	3.5	4.2	4.5	4.7	7.9	11.2	13.5	14.8	14.5	16.4	12.6	10.3	9.6	13.1	16.7
7	TEX	9.9	12.6	14.1	16.8	18.9	21.2	23.3	23.8	24.7	37.8	38.6	35.5	35.3	26.4	27.1	21.4	27.7	28.9	25.6	26.6
8	WEA	0.6	0.8	0.8	1.9	1.2	1.2	1.4	2.4	3.0	4.2	3.7	3.3	1.9	1.5	0.9	1.6	2.6	1.6	1.4	2.1
9	LEA	0.4	0.3	0.2	2.2	1.6	1.3	1.3	1.3	3.6	3.4	3.3	4.5	3.6	1.2	3.0	1.0	1.4	0.9	2.2	1.0
10	WDF	0.8	0.7	0.5	2.4	1.4	2.4	1.9	2.0	2.7	3.9	5.3	5.8	7.1	1.5	3.6	4.7	3.3	3.9	7.2	2.4
11	PAP	3.0	3.7	4.0	5.7	5.4	5.6	6.8	7.8	8.5	11.6	16.6	12.1	12.2	8.4	9.1	6.5	8.3	8.4	12.5	12.7
12	PET	4.7	4.9	4.6	6.2	5.9	5.7	8.5	7.0	5.9	13.1	16.9	18.8	18.4	15.0	13.0	26.6	18.7	18.2	18.2	15.2
13	CHE	11.2	12.3	12.2	16.8	17.1	17.7	27.3	24.5	30.7	35.6	47.2	48.7	42.3	32.0	53.1	49.4	29.3	33.2	40.2	50.1
14	RBP	2.6	3.4	3.9	4.3	4.4	4.8	5.2	6.6	8.3	11.1	14.8	15.9	16.9	15.5	23.1	18.1	25.3	22.0	25.2	32.2
15	BUI	11.9	17.4	20.8	19.1	17.8	17.8	17.9	20.4	21.4	40.9	44.5	48.6	51.1	33.8	33.0	33.0	36.8	46.6	47.5	70.1
16	MSP	16.0	16.1	14.2	30.4	21.8	24.7	30.1	27.8	35.8	55.7	63.4	54.8	51.3	67.2	80.8	49.5	65.6	56.3	126.2	149.0
17	MPD	1.8	2.2	2.4	2.4	2.6	2.6	3.0	3.5	3.9	6.8	8.5	7.2	6.9	1.2	3.8	4.2	1.0	3.3	2.4	7.4
18	MCH	9.0	10.1	10.1	10.9	12.1	12.7	14.9	16.7	18.9	26.2	33.2	33.0	30.1	20.8	17.6	21.5	13.2	16.9	23.1	34.4
19	TRS	3.4	3.9	4.0	4.1	4.2	4.1	5.0	5.2	10.1	11.7	12.9	16.0	17.1	9.9	14.4	13.7	32.1	27.0	25.0	41.5
20	ELE	1.8	2.5	2.9	5.0	4.9	3.7	5.8	7.0	9.1	14.8	16.7	24.2	25.4	16.6	29.1	11.4	20.3	19.3	24.5	22.4
21	ICT	1.3	1.6	1.8	1.5	2.5	2.6	2.8	2.4	3.9	4.5	6.6	3.6	4.5	5.4	4.4	3.1	4.8	7.5	3.8	10.3
22	INS	0.6	0.7	0.8	0.6	0.7	0.7	0.9	1.0	1.2	1.7	2.9	2.3	1.6	1.1	0.8	1.2	0.8	1.6	2.4	3.3
	<i>Utilities</i>	21.4	24.0	24.5	23.8	28.8	50.0	36.7	39.0	72.0	55.8	113.9	55.6	70.9	143.5	147.4	196.0	141.1	175.0	209.2	195.4
	<i>Mining</i>	21.8	25.9	27.8	26.5	39.6	34.1	34.4	42.1	41.5	110.5	81.4	75.7	97.3	77.7	75.2	88.7	83.3	96.4	98.8	135.2
	<i>Manufacturing</i>	92.8	116.5	125.7	146.4	144.9	151.7	182.4	186.9	224.1	325.3	394.3	399.0	386.0	301.7	369.9	315.1	341.6	363.3	436.9	546.6
	<i>All</i>	136.1	166.4	178.0	196.7	213.4	235.9	253.5	268.0	337.6	491.5	589.6	530.3	554.2	522.9	592.5	599.9	566.1	634.7	744.9	877.2

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Fujian																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1.9	2.0	2.5	3.0	3.2	3.0	2.8	2.5	3.1	3.3	3.8	4.8	3.5	2.6	2.8	2.4	2.5	4.7	2.3	3.7
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.5	0.5	0.6	0.6	0.6	0.9	0.7	0.8	0.9	1.2	1.1	1.3	1.2	0.6	1.2	1.5	0.5	3.1	3.0	4.3
4	NMM	0.7	0.6	0.7	0.8	1.3	1.5	1.2	1.3	1.6	2.1	3.6	2.5	2.5	0.7	1.3	1.1	1.5	1.1	1.9	2.2
5	FDB	10.6	11.5	13.9	16.6	16.7	17.3	19.2	20.6	27.7	38.4	48.8	44.4	51.5	37.1	44.6	39.9	42.1	46.8	57.5	79.1
6	TBC	0.6	0.8	0.9	2.3	1.5	2.0	2.9	2.9	3.5	6.1	6.6	4.6	8.3	6.0	6.9	6.9	7.5	10.9	18.8	16.2
7	TEX	4.0	5.1	6.7	7.2	9.2	7.8	11.1	11.5	10.8	14.4	29.9	28.2	23.8	20.8	31.1	35.0	36.1	45.2	75.6	85.6
8	WEA	0.7	0.9	1.3	1.5	2.9	3.2	6.8	6.4	6.1	10.7	13.9	12.3	17.5	9.3	7.9	12.5	10.0	24.4	29.3	22.2
9	LEA	0.4	0.5	0.7	0.9	1.6	4.0	2.7	4.5	9.7	7.7	16.5	12.1	9.7	15.5	10.5	13.7	17.1	21.3	34.4	40.2
10	WDF	2.3	3.6	3.0	3.5	3.8	3.9	5.8	5.2	6.9	8.9	10.0	9.3	14.8	3.1	9.1	8.7	9.0	10.5	11.8	22.1
11	PAP	5.0	5.5	6.5	6.7	8.4	8.3	9.6	12.1	11.6	15.7	35.2	13.4	36.1	22.7	18.4	56.3	46.6	37.6	45.7	47.8
12	PET	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.2	0.5	17.1	9.8	10.2	14.1	12.9	10.5	13.8	7.3	10.9	8.2
13	CHE	10.1	12.6	14.0	15.0	25.5	20.2	21.8	23.6	26.1	24.2	59.7	39.2	45.4	50.9	66.5	57.1	67.1	64.7	87.6	80.9
14	RBP	2.8	3.6	5.0	5.1	5.6	6.3	9.2	11.0	14.2	14.9	21.4	19.4	27.4	17.2	20.7	25.9	30.7	30.3	37.9	57.2
15	BUI	4.9	5.4	7.1	10.5	10.4	15.0	14.5	14.1	26.5	39.0	45.5	46.2	39.4	52.2	43.1	49.0	44.3	40.1	53.3	118.0
16	MSP	3.1	3.9	4.8	4.8	5.7	5.9	6.9	7.4	11.6	11.8	13.1	23.7	22.4	30.5	29.9	17.5	22.3	22.0	37.3	94.0
17	MPD	0.9	1.1	1.2	1.1	1.5	3.4	2.8	3.3	4.4	6.8	15.7	17.5	15.3	10.3	5.9	21.4	13.5	18.0	10.5	4.2
18	MCH	5.3	5.7	6.2	6.4	6.6	7.5	7.5	9.5	7.4	15.6	16.3	18.3	12.9	9.5	12.2	23.1	14.5	15.1	26.6	34.4
19	TRS	1.3	1.4	1.8	1.8	1.9	2.0	2.6	4.2	6.1	5.5	10.6	18.2	16.6	11.7	19.0	10.5	22.3	17.9	26.8	39.6
20	ELE	1.8	2.4	2.5	4.5	3.9	3.3	5.1	6.1	8.6	10.8	11.1	14.3	15.5	13.9	14.2	18.6	15.4	22.9	22.4	28.7
21	ICT	2.3	3.2	3.5	3.7	3.1	6.0	6.0	6.8	7.1	15.4	16.5	17.9	37.9	29.8	28.4	46.8	55.5	62.8	73.6	68.2
22	INS	0.4	0.6	0.3	0.4	0.6	0.5	0.5	0.5	1.0	1.3	5.4	1.3	2.5	0.6	0.9	3.2	1.8	2.6	30.3	8.6
	<i>Utilities</i>	17.2	18.6	22.9	22.9	24.9	34.2	33.5	38.8	70.7	122.5	135.2	142.5	167.8	164.0	219.1	253.2	352.3	332.6	359.8	374.6
	<i>Mining</i>	3.1	3.1	3.9	4.4	5.1	5.4	4.8	4.6	5.5	6.6	8.5	8.5	7.2	3.9	5.3	5.0	4.5	8.9	7.1	10.1
	<i>Manufacturing</i>	56.5	67.7	79.5	92.1	109.1	116.6	135.1	150.0	190.4	247.7	393.4	350.3	407.1	355.0	382.1	456.6	469.6	500.2	690.4	855.1
	<i>All</i>	76.7	89.4	106.2	119.4	139.1	156.2	173.4	193.4	266.6	376.9	537.1	501.3	582.1	523.0	606.6	714.7	826.4	841.7	1057.3	1239.9

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Jiangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	7.2	8.5	8.1	7.7	8.8	10.4	9.4	10.4	7.8	11.2	14.1	12.9	13.0	9.7	8.2	7.2	9.6	6.6	6.0	11.6
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	8.7	9.4	11.5	12.0	11.5	11.8	11.9	22.6	17.9	14.2	29.0	21.6	23.8	24.5	11.0	6.4	8.9	6.2	8.6	17.6
4	NMM	0.7	0.8	0.9	1.0	0.9	1.1	0.9	1.0	1.4	1.8	1.8	1.7	3.4	1.8	1.6	1.5	1.8	2.0	1.6	0.2
5	FDB	7.1	7.7	10.8	11.0	11.9	9.8	14.2	12.0	14.8	16.9	25.9	22.1	23.7	18.6	17.2	15.9	12.4	12.8	13.1	21.2
6	TBC	0.3	0.4	0.3	0.3	0.3	5.0	1.2	1.5	1.9	2.2	2.4	2.0	2.3	3.5	3.9	4.3	4.8	4.4	4.6	4.1
7	TEX	5.0	5.9	6.5	7.4	8.6	8.5	9.8	9.7	10.9	17.6	20.2	17.7	16.2	13.1	11.4	10.3	10.0	7.7	7.9	6.3
8	WEA	0.6	0.8	1.0	0.9	0.8	1.1	1.2	1.7	0.9	0.9	1.5	1.3	1.8	1.0	0.9	0.7	0.9	1.3	0.5	6.9
9	LEA	0.3	0.4	0.5	0.6	0.4	0.4	0.6	0.7	3.2	1.6	2.3	1.9	1.6	1.2	1.0	0.9	0.8	1.4	0.7	1.2
10	WDF	1.6	1.7	2.1	2.2	2.3	2.4	3.0	2.7	2.9	7.8	6.1	4.5	6.6	3.5	2.8	2.1	4.2	2.7	2.8	5.7
11	PAP	2.7	3.1	4.1	3.8	4.2	4.2	6.0	5.4	5.8	10.3	14.3	13.8	11.4	8.6	7.7	6.9	7.1	6.3	8.6	8.7
12	PET	2.1	2.3	2.0	3.2	2.5	2.5	3.8	3.3	4.0	5.0	4.8	7.4	9.7	15.1	16.7	19.5	14.2	13.7	13.6	17.7
13	CHE	8.0	9.2	12.0	10.5	12.1	13.4	15.4	16.0	31.0	27.8	33.4	31.9	51.6	32.1	29.4	26.8	25.1	33.2	32.6	51.4
14	RBP	1.4	1.7	1.8	2.3	2.5	2.2	2.5	3.0	3.5	4.0	6.5	5.8	2.6	2.5	2.0	1.5	1.3	1.8	2.9	9.4
15	BUI	7.6	9.5	10.1	10.5	11.3	13.8	13.9	14.9	19.6	25.2	36.3	31.8	29.4	26.6	25.8	26.8	19.5	20.9	33.5	40.6
16	MSP	12.2	24.9	14.2	16.0	14.6	14.3	14.7	15.9	17.4	34.5	31.2	38.2	33.7	55.8	63.3	72.3	70.4	70.5	75.5	75.6
17	MPD	0.8	0.9	1.2	1.3	1.3	1.1	1.6	1.9	2.9	3.2	4.8	3.0	2.8	2.1	1.8	1.6	1.5	3.1	1.6	3.8
18	MCH	8.7	9.3	9.4	9.7	9.3	9.5	11.0	10.7	8.2	17.2	20.5	19.4	18.7	13.1	10.9	9.7	8.5	7.0	5.2	11.0
19	TRS	5.5	6.0	6.2	5.6	6.0	6.0	7.1	6.9	9.8	10.1	18.2	21.3	26.3	21.1	22.1	23.8	25.3	23.6	24.8	23.7
20	ELE	1.5	1.8	2.7	2.5	2.9	3.3	3.9	4.1	4.7	9.1	8.6	9.6	8.2	7.8	7.6	7.7	5.4	4.4	10.4	6.4
21	ICT	2.3	2.7	2.7	2.7	3.0	3.1	3.5	3.5	3.7	5.0	6.9	5.7	5.2	4.2	3.6	3.2	4.0	5.9	5.4	3.3
22	INS	1.1	1.3	1.3	0.8	1.0	1.0	0.8	1.1	2.8	1.4	2.6	2.3	2.2	1.5	1.1	0.9	3.7	4.9	1.7	3.5
	<i>Utilities</i>	19.0	19.8	22.2	22.4	25.4	25.9	24.8	29.0	31.8	83.0	71.0	70.1	82.0	88.3	96.8	104.9	134.1	125.4	182.3	172.0
	<i>Mining</i>	16.7	18.6	20.5	20.7	21.3	23.3	22.3	34.0	27.1	27.2	44.9	36.3	40.2	36.0	20.9	15.1	20.3	14.8	16.1	29.3
	<i>Manufacturing</i>	68.9	89.2	88.9	91.2	94.9	101.6	114.2	114.9	148.1	199.7	246.5	239.8	253.8	231.3	229.3	234.7	219.0	225.5	245.4	300.7
	<i>All</i>	104.5	127.7	131.7	134.3	141.6	150.8	161.3	177.9	207.0	310.0	362.4	346.1	376.0	355.6	346.9	354.7	373.3	365.7	443.8	502.0

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Shandong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	29.5	36.1	33.0	39.9	48.3	50.7	50.1	55.9	51.3	68.1	93.4	88.7	102.4	90.9	99.3	100.4	122.5	128.1	173.1	235.7
2	PTM	40.4	64.0	74.3	86.8	101.0	119.0	136.2	136.8	158.2	130.7	196.9	161.9	162.3	165.4	116.9	464.5	292.1	304.0	256.8	443.8
3	MTM	3.8	4.2	4.0	5.5	6.1	18.0	12.4	11.9	16.8	19.3	21.2	24.5	20.6	15.7	20.5	19.5	21.4	21.2	36.3	37.4
4	NMM	4.6	5.6	4.8	7.7	8.2	10.6	9.4	11.5	11.0	12.2	14.1	10.4	9.7	5.6	7.3	9.3	13.1	11.1	10.1	6.9
5	FDB	22.3	29.0	37.5	46.4	48.0	55.9	68.3	73.3	87.0	113.9	161.0	150.1	155.0	139.7	143.5	144.9	147.7	209.1	213.7	370.2
6	TBC	1.9	2.5	2.7	2.5	3.2	3.9	4.8	7.9	9.1	8.6	13.2	16.2	47.2	10.6	20.0	17.1	16.6	16.5	20.3	16.0
7	TEX	29.3	36.0	41.8	57.1	73.3	81.6	82.4	82.6	108.8	119.1	146.1	132.2	135.4	132.1	123.8	124.4	144.5	154.5	238.7	194.0
8	WEA	2.7	3.7	3.8	4.8	4.8	6.1	6.6	7.2	10.6	10.8	16.8	18.9	16.0	11.6	15.1	14.8	15.9	17.8	44.0	35.1
9	LEA	2.2	3.0	3.3	3.8	4.1	4.5	6.3	6.2	7.1	11.8	13.0	12.4	12.8	12.1	12.0	8.8	14.0	9.5	10.5	18.5
10	WDF	2.5	2.9	4.0	4.9	5.2	5.3	7.2	6.1	9.3	8.7	12.2	12.5	11.9	6.4	5.4	11.3	13.7	17.1	28.7	37.7
11	PAP	8.5	11.4	12.8	14.8	15.7	18.1	21.3	22.9	32.3	52.2	53.5	57.7	60.3	52.5	80.5	67.9	75.4	101.3	175.1	186.1
12	PET	7.0	7.0	9.5	92.8	63.3	46.0	48.5	50.1	52.4	83.5	75.3	83.0	79.6	115.8	101.8	113.4	9.8	49.9	50.0	115.4
13	CHE	20.1	22.5	28.5	33.3	46.5	55.1	66.3	87.3	102.4	121.3	136.9	157.1	128.0	136.8	158.6	139.3	246.3	184.3	207.9	398.1
14	RBP	10.2	12.2	13.9	16.3	18.3	25.0	24.7	28.9	30.7	42.4	49.1	53.5	46.0	46.5	53.9	39.4	67.7	55.2	57.6	78.3
15	BUI	19.9	24.1	28.8	31.7	32.9	34.6	38.4	47.0	82.6	99.4	127.7	114.8	129.8	99.9	82.5	97.9	94.1	130.7	172.0	238.8
16	MSP	12.2	14.1	17.0	17.8	20.9	28.2	29.8	28.3	52.9	52.2	68.2	61.0	75.3	68.2	76.9	91.3	87.3	76.3	155.9	524.2
17	MPD	6.3	8.2	9.9	9.7	10.0	11.7	11.6	16.6	21.0	21.7	31.1	21.9	21.9	21.9	17.4	22.2	20.8	20.1	16.9	61.3
18	MCH	28.9	33.4	36.5	41.8	43.4	45.7	47.7	55.8	56.5	82.7	110.1	100.4	96.2	83.2	85.1	84.2	73.2	83.9	114.0	177.0
19	TRS	8.2	9.5	11.0	10.8	12.2	11.9	16.6	18.1	30.9	29.3	58.7	52.8	44.9	42.1	39.0	33.9	39.7	58.2	54.2	70.5
20	ELE	4.9	7.1	8.1	10.1	10.7	11.9	13.5	15.3	24.8	28.8	37.3	37.4	42.9	45.2	53.7	53.1	53.1	59.7	70.1	87.9
21	ICT	2.4	3.0	4.1	3.7	5.0	5.7	5.7	7.0	8.0	17.7	23.4	21.0	25.7	18.2	21.2	19.9	39.2	40.8	69.7	74.1
22	INS	1.1	1.3	1.4	1.8	1.5	1.9	1.8	1.6	13.2	6.5	8.7	5.8	7.4	4.3	3.4	4.1	4.6	7.3	2.7	16.4
	<i>Utilities</i>	35.6	38.8	56.5	61.4	75.1	89.7	72.4	117.7	153.1	147.7	244.3	169.5	227.5	284.7	300.5	434.3	401.2	498.1	735.0	673.7
	<i>Mining</i>	78.3	109.8	116.1	139.9	163.6	198.2	208.1	216.1	237.2	230.2	325.6	285.5	295.0	277.6	244.1	593.6	449.1	464.4	476.3	723.8
	<i>Manufacturing</i>	190.8	231.1	274.8	404.1	418.8	453.1	501.8	562.0	739.7	910.6	1142.2	1108.8	1136.5	1047.0	1093.8	1087.8	1163.7	1292.0	1702.0	2699.6
	<i>All</i>	304.7	379.7	447.3	605.5	657.6	741.0	782.2	895.8	1130.0	1288.5	1712.1	1563.8	1659.0	1609.3	1638.4	2115.7	2013.9	2254.6	2913.3	4097.1

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Henan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	27.5	28.9	31.1	28.6	37.3	33.8	36.9	37.3	41.0	44.1	90.1	67.3	63.0	74.3	65.3	83.4	94.4	135.5	109.2	109.6
2	PTM	26.6	34.7	39.0	53.0	84.2	56.1	71.8	67.6	89.2	71.7	97.0	86.5	91.3	77.5	73.8	57.0	88.3	61.5	153.3	117.1
3	MTM	1.8	2.4	2.6	3.9	4.0	4.0	6.0	7.2	7.4	8.9	11.9	10.6	9.5	7.2	10.3	17.5	15.3	11.7	13.8	20.6
4	NMM	0.7	0.8	0.6	1.0	1.2	0.7	1.8	1.7	1.2	1.8	1.5	2.6	2.9	0.7	1.7	1.1	1.7	7.9	0.7	5.6
5	FDB	10.7	13.0	18.7	15.4	17.9	19.8	27.0	28.8	38.6	51.1	74.7	70.4	72.2	71.5	72.4	69.5	69.1	62.1	75.8	87.7
6	TBC	2.3	3.2	2.7	2.5	3.6	4.7	8.1	9.9	11.5	11.3	19.6	16.7	19.3	17.0	24.5	20.6	20.6	19.1	23.5	19.8
7	TEX	14.1	16.7	19.3	20.5	24.3	25.9	34.1	33.3	42.6	63.8	46.0	53.4	50.0	38.8	36.2	34.5	35.6	30.4	31.1	50.9
8	WEA	1.1	1.3	1.2	1.8	1.6	1.9	2.2	3.9	1.7	3.4	3.5	4.8	2.6	2.4	2.3	2.7	2.0	1.4	1.6	2.3
9	LEA	1.3	1.5	1.4	2.2	1.9	2.2	2.5	3.8	4.0	7.0	6.4	7.2	6.8	5.3	5.3	5.1	6.1	4.3	4.0	5.4
10	WDF	0.9	0.9	1.1	1.4	1.2	1.6	1.6	1.3	4.4	3.3	5.5	5.4	4.1	5.2	4.0	4.6	4.4	3.0	5.9	12.4
11	PAP	4.6	5.6	5.5	8.0	7.5	9.3	10.9	13.6	14.7	16.5	26.5	22.7	21.9	32.2	26.0	27.6	24.3	27.4	22.2	36.7
12	PET	2.5	3.0	3.8	3.7	5.6	6.7	9.9	18.3	9.1	20.5	14.4	15.3	19.6	17.1	17.2	74.1	25.0	26.4	26.6	35.4
13	CHE	18.7	19.8	24.2	30.2	35.1	33.7	62.6	51.2	43.7	66.2	94.4	78.0	127.2	95.6	104.2	93.0	95.0	94.0	97.3	104.3
14	RBP	2.9	3.6	4.6	4.6	4.8	4.7	7.9	9.1	7.5	11.9	14.6	14.4	12.8	12.1	13.5	15.0	12.7	12.3	13.2	14.4
15	BUI	13.9	17.4	27.6	21.3	22.3	24.2	33.1	30.1	48.5	67.1	81.6	90.0	66.0	77.7	79.9	70.9	71.0	69.6	78.0	102.8
16	MSP	17.6	21.6	18.8	21.1	20.4	23.7	26.0	23.3	42.8	58.9	76.2	72.6	70.9	77.6	88.4	67.5	97.3	108.3	114.7	194.7
17	MPD	2.3	2.7	3.2	3.0	3.5	3.0	4.1	4.9	4.7	7.2	10.0	8.0	7.1	4.5	4.8	5.4	5.2	3.4	2.3	17.8
18	MCH	26.9	26.6	37.3	32.7	32.4	33.7	43.8	40.2	45.2	62.0	77.1	90.6	62.0	58.2	57.6	48.3	46.2	44.7	62.4	54.2
19	TRS	3.6	3.9	3.5	4.4	4.2	4.6	6.6	8.3	12.7	13.0	28.8	22.6	17.1	25.5	22.1	19.9	20.5	20.7	13.8	26.2
20	ELE	4.0	4.7	6.4	5.4	5.6	6.4	11.0	11.1	9.0	19.8	25.1	21.0	21.5	19.2	21.6	18.6	22.4	19.1	17.2	23.7
21	ICT	1.6	1.8	1.8	1.8	1.9	2.2	10.8	12.3	8.2	7.8	9.2	22.7	16.8	11.2	16.3	11.7	12.5	28.1	21.1	34.0
22	INS	1.1	0.9	1.2	1.5	2.0	1.5	1.5	2.9	2.7	2.8	3.9	3.2	2.8	2.1	2.3	1.8	3.1	2.2	0.5	27.9
	<i>Utilities</i>	42.0	51.6	43.6	53.8	57.4	64.8	72.1	64.1	103.4	143.7	192.8	200.1	202.3	302.5	255.0	300.6	375.5	436.8	459.4	793.3
	<i>Mining</i>	56.6	66.8	73.4	86.4	126.7	94.6	116.5	113.8	138.9	126.5	200.6	167.0	166.7	159.6	151.1	159.0	199.7	216.7	277.1	252.8
	<i>Manufacturing</i>	130.1	148.2	182.2	181.6	195.7	209.8	303.7	306.3	351.8	493.9	617.5	618.9	600.7	573.3	598.7	591.1	572.8	576.4	611.2	850.3
	<i>All</i>	228.7	266.7	299.2	321.8	379.9	369.2	492.4	484.2	594.1	764.0	1011	985.9	969.6	1035	1004.8	1050.8	1148.0	1229.9	1347.7	1896.4

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Hubei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2.7	3.0	2.7	2.8	3.0	3.1	2.9	2.8	2.9	2.5	4.8	4.9	4.2	2.0	2.9	1.0	2.7	1.5	2.2	1.6
2	PTM	5.3	5.4	6.2	6.9	7.4	7.6	19.3	13.2	21.4	18.8	19.7	19.6	19.1	20.0	14.4	24.9	49.8	28.2	36.4	16.0
3	MTM	0.6	0.9	1.4	0.9	1.0	0.9	1.1	0.9	2.5	2.7	3.2	2.9	3.3	2.9	7.6	4.7	4.4	4.7	5.9	13.9
4	NMM	2.8	3.1	3.1	4.9	5.0	4.5	6.6	6.3	9.1	8.9	10.8	9.8	11.1	8.2	8.5	48.0	14.9	16.1	11.9	7.3
5	FDB	11.5	14.4	18.7	18.4	23.6	21.0	21.9	23.9	24.4	31.5	49.3	53.2	53.3	48.8	55.5	44.3	47.4	45.6	45.9	39.4
6	TBC	1.8	2.2	3.2	3.7	3.9	4.7	9.4	7.4	9.9	11.6	16.2	13.8	16.7	22.8	17.0	19.5	18.8	17.5	10.7	17.6
7	TEX	23.8	25.3	38.6	39.6	45.2	41.5	45.6	44.7	40.9	54.9	64.5	57.0	63.9	44.7	40.8	36.0	33.5	29.2	31.0	25.1
8	WEA	2.5	4.0	3.5	4.4	3.9	4.3	5.5	5.2	6.7	9.5	9.8	12.6	15.0	11.3	10.2	9.6	12.3	11.0	9.8	1.9
9	LEA	0.9	1.2	1.2	1.3	1.2	1.3	1.3	1.5	9.2	2.5	2.3	2.1	2.2	0.8	0.9	0.8	1.9	0.5	0.0	0.0
10	WDF	2.1	2.6	2.4	2.4	2.5	2.8	3.1	3.0	3.1	4.7	6.1	5.9	6.5	3.8	6.7	4.6	5.8	6.9	7.2	3.2
11	PAP	5.4	6.4	7.9	8.2	7.9	8.7	9.1	9.4	14.5	13.0	20.3	14.8	15.4	14.4	15.6	9.6	15.4	14.0	15.2	27.7
12	PET	4.6	4.8	5.4	5.3	7.4	6.4	7.1	9.1	5.2	14.5	17.2	13.8	17.0	27.7	21.4	21.1	22.5	19.8	16.6	39.7
13	CHE	19.9	24.0	21.3	26.3	28.4	28.5	32.1	34.1	31.5	51.4	65.8	64.1	67.3	71.2	60.8	57.8	63.7	61.1	55.2	57.3
14	RBP	4.9	5.6	7.2	7.2	7.0	7.9	7.6	7.8	10.9	10.3	17.2	17.3	16.9	12.7	13.3	13.2	13.7	11.7	14.6	3.5
15	BUI	16.1	18.8	20.3	21.1	22.9	19.5	21.6	21.6	23.9	33.2	57.2	55.7	50.6	35.3	37.3	38.3	38.0	35.7	33.5	55.4
16	MSP	54.1	58.4	56.9	46.4	52.7	54.7	55.9	70.0	148.2	87.7	173.9	126.2	137.4	162.5	160.7	94.8	182.6	136.1	193.8	197.1
17	MPD	3.5	4.0	6.2	5.6	5.8	6.9	6.0	7.7	9.7	13.5	12.8	14.7	18.3	10.8	9.5	7.4	12.9	8.1	2.2	11.8
18	MCH	23.0	23.9	26.7	26.4	24.2	25.8	29.3	27.0	22.6	32.7	53.6	46.3	42.9	38.6	35.0	29.7	28.3	25.9	24.4	23.9
19	TRS	25.1	27.1	29.4	33.0	30.8	28.3	37.3	42.8	56.4	73.7	77.8	103.6	89.8	136.5	80.6	96.2	94.2	102.9	110.7	136.9
20	ELE	3.8	4.3	5.2	6.7	7.3	6.7	8.1	8.5	14.1	9.6	21.3	19.0	19.4	19.2	10.1	12.7	16.5	8.9	5.5	27.6
21	ICT	3.2	3.5	3.6	4.3	3.9	4.3	3.8	7.5	3.3	10.4	7.1	6.6	18.4	17.8	12.6	14.7	4.8	6.1	0.7	44.9
22	INS	1.9	2.2	1.7	2.0	3.4	2.6	2.5	2.7	2.8	3.3	3.9	5.7	2.5	3.6	3.3	2.8	3.5	1.6	1.4	3.3
	<i>Utilities</i>	53.5	61.0	70.2	71.2	71.2	79.0	79.3	80.5	137.8	133.0	157.5	158.0	196.0	228.4	268.4	272.2	277.8	297.8	1950.4	699.3
	<i>Mining</i>	11.4	12.5	13.4	15.5	16.3	16.1	29.9	23.2	35.9	32.9	38.4	37.2	37.7	33.1	33.5	78.6	71.9	50.4	56.4	38.8
	<i>Manufacturing</i>	207.9	232.6	259.7	262.3	282.3	276.0	307.2	333.6	437.4	468.3	676.2	632.5	653.6	682.2	591.1	512.8	615.8	542.6	578.4	716.2
	<i>All</i>	272.8	306.1	343.3	349.1	369.8	371.1	416.4	437.4	611.1	634.2	872.2	827.7	887.3	943.8	893.0	863.6	965.5	890.8	2585.3	1454.3

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Hunan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	9.5	9.6	12.3	11.2	12.6	13.1	11.9	11.9	9.8	11.9	22.3	18.4	16.5	13.3	13.5	7.8	9.8	11.4	15.6	11.8
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	4.7	5.7	6.0	5.9	5.7	5.7	6.0	6.4	6.2	14.6	8.1	9.4	8.9	6.0	5.8	7.0	4.7	12.2	2.9	7.1
4	NMM	1.7	1.8	2.0	2.9	2.6	3.1	3.0	2.9	3.0	4.7	6.2	5.0	4.7	2.3	4.4	2.3	2.3	1.9	3.5	2.6
5	FDB	9.7	11.0	13.3	16.0	14.2	14.5	16.4	15.6	17.2	25.9	32.6	25.7	27.2	28.2	25.3	26.8	26.1	31.0	25.6	34.4
6	TBC	1.8	2.5	2.6	2.9	3.7	5.0	8.8	7.6	8.3	27.1	30.3	25.6	26.3	29.2	28.0	26.5	24.7	23.5	26.7	21.5
7	TEX	12.2	15.5	15.1	15.3	18.0	16.5	19.2	18.6	18.6	24.0	31.1	18.8	18.4	12.8	16.7	11.8	8.3	11.3	7.5	12.3
8	WEA	1.0	1.2	1.4	1.2	1.4	1.5	1.6	1.5	1.2	2.0	2.2	2.1	2.0	1.7	1.8	2.1	2.3	2.5	1.9	2.3
9	LEA	1.0	1.3	1.4	1.4	1.5	1.5	1.6	1.5	2.3	2.8	3.9	2.8	3.4	0.9	1.6	1.8	1.6	1.0	1.4	1.7
10	WDF	1.3	1.4	1.8	4.7	2.5	2.8	2.6	2.5	3.5	5.1	5.4	7.9	7.0	3.1	6.6	5.6	5.4	6.9	4.8	7.7
11	PAP	6.2	6.7	11.0	9.5	9.7	10.6	11.2	11.1	12.3	15.6	22.1	19.1	19.2	9.7	14.5	19.1	16.7	23.2	24.0	77.9
12	PET	1.9	1.9	2.4	2.5	8.3	5.5	36.9	13.2	3.0	50.0	36.6	29.7	38.7	36.2	32.6	15.9	26.5	26.8	26.6	19.6
13	CHE	20.5	21.8	25.5	28.1	28.5	28.0	23.0	29.1	45.4	39.5	56.0	46.8	52.2	43.3	50.0	93.5	61.3	61.0	67.6	60.8
14	RBP	2.9	3.4	4.2	2.9	5.0	4.5	4.6	4.9	5.0	6.4	10.4	7.0	7.2	4.2	4.7	4.7	5.2	4.1	7.4	11.5
15	BUI	13.7	15.5	19.1	22.9	23.5	22.9	23.6	24.6	34.3	43.0	61.5	49.4	14.3	46.1	47.0	36.7	36.4	28.2	28.9	37.1
16	MSP	12.3	13.5	19.3	18.8	18.0	18.2	23.7	24.2	32.0	47.6	57.8	47.7	61.7	55.8	69.7	69.3	68.1	51.5	100.0	129.3
17	MPD	1.9	2.2	2.8	2.5	2.8	2.6	3.0	2.9	6.7	5.4	4.5	5.5	6.2	1.3	3.1	2.7	5.0	8.2	5.4	10.7
18	MCH	19.2	22.3	21.0	20.4	21.9	22.9	25.5	24.8	25.6	33.2	54.4	40.5	87.1	16.7	25.2	24.6	18.4	20.6	36.7	31.0
19	TRS	6.8	7.3	7.8	7.9	9.2	9.5	11.2	11.7	16.6	19.0	30.5	26.9	22.1	20.8	24.4	24.0	27.8	23.6	28.6	19.7
20	ELE	4.0	5.3	6.2	6.4	7.0	7.0	8.4	8.2	10.7	21.5	20.4	14.7	15.5	12.0	14.7	13.6	14.2	12.5	17.5	12.1
21	ICT	3.1	3.4	4.6	4.4	2.9	3.5	4.1	4.2	3.4	4.5	7.7	6.9	25.5	10.6	10.0	23.6	25.8	20.8	27.1	32.7
22	INS	0.6	0.3	2.0	1.1	1.1	1.0	1.2	1.4	0.5	1.6	2.7	3.2	1.7	1.5	3.0	2.0	2.7	1.3	0.3	2.5
	<i>Utilities</i>	27.5	30.6	31.5	45.5	47.7	53.6	47.2	90.4	98.1	96.1	123.0	123.3	195.6	146.9	199.4	196.4	247.3	258.6	359.1	316.2
	<i>Mining</i>	15.9	17.1	20.3	20.0	20.9	22.0	20.9	21.3	19.0	31.3	36.6	32.9	30.2	21.6	23.8	17.1	16.8	25.5	22.0	21.6
	<i>Manufacturing</i>	120.0	136.7	161.3	168.9	179.2	178.0	226.6	207.7	246.6	374.2	470.1	380.3	435.8	333.9	378.8	404.4	376.5	358.0	437.9	524.7
	<i>All</i>	163.4	184.3	213.1	234.4	247.8	253.5	294.7	319.4	363.6	501.5	629.7	536.4	661.5	502.4	601.9	617.9	640.6	642.0	819.1	862.4



Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Guangdong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.0	3.1	3.0	4.2	4.2	4.7	6.0	3.2	3.8	6.3	5.3	5.3	4.1	3.9	1.2	1.5	1.6	1.5	1.4	1.3
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	6.3	6.5	6.6	8.7	7.8	8.2	11.8	6.9	8.2	8.2	9.4	8.5	8.4	11.5	10.6	8.2	6.8	6.6	6.3	7.2
4	NMM	3.0	3.3	2.7	14.6	6.0	6.8	7.7	6.4	9.5	11.0	10.0	10.2	9.0	8.8	5.3	7.4	5.1	4.9	4.7	5.4
5	FDB	30.3	38.4	40.7	48.8	52.6	68.2	103.4	78.0	118.2	124.7	161.8	193.1	161.5	191.8	152.7	139.7	121.6	122.0	128.3	155.2
6	TBC	1.4	2.3	2.8	4.1	4.2	6.3	10.5	6.2	8.4	10.9	13.6	21.9	15.0	15.6	19.3	15.6	13.6	14.6	14.9	18.8
7	TEX	17.9	26.5	37.7	37.1	57.8	62.1	108.7	66.9	83.6	123.2	125.3	110.4	114.1	131.8	103.1	111.4	116.4	131.2	149.8	193.8
8	WEA	4.3	6.1	7.9	14.3	11.9	16.1	35.4	25.3	51.3	52.9	49.1	55.3	54.6	96.2	52.5	66.4	56.9	59.0	64.0	77.5
9	LEA	1.6	2.3	4.2	5.0	7.5	12.1	16.1	13.6	25.8	24.8	36.0	25.4	27.7	35.9	39.4	34.9	38.5	43.2	49.5	61.7
10	WDF	3.0	3.8	4.4	6.0	6.9	7.1	26.0	11.5	19.4	21.0	22.1	23.3	30.1	32.8	21.9	33.0	35.8	42.0	49.3	64.2
11	PAP	7.8	9.6	11.9	13.5	15.2	19.1	32.9	26.1	46.4	56.3	70.6	63.3	63.7	125.5	80.0	123.0	124.0	144.2	168.5	218.4
12	PET	8.6	9.1	11.0	11.8	15.3	16.0	29.6	23.5	19.1	40.6	26.0	46.2	41.7	44.1	263.9	104.0	68.3	63.0	56.1	63.1
13	CHE	15.5	18.7	30.1	43.4	42.8	46.7	82.1	74.1	104.6	123.6	141.7	161.7	150.1	168.3	146.6	145.9	131.4	137.9	149.8	186.3
14	RBP	10.6	15.9	16.2	22.5	29.1	31.1	55.8	37.7	57.5	74.4	84.3	80.5	83.8	128.5	102.4	111.4	121.5	138.3	161.5	208.5
15	BUI	18.3	22.0	34.2	41.2	43.7	55.1	96.6	67.6	127.5	180.9	225.9	181.4	169.4	271.4	159.7	145.3	122.9	120.8	124.0	151.3
16	MSP	8.7	9.8	12.9	15.6	23.3	19.9	33.4	20.8	51.6	36.8	59.0	60.0	63.0	135.0	46.8	88.6	73.7	82.6	92.7	121.2
17	MPD	6.1	8.6	10.5	14.1	14.8	15.7	31.2	18.2	45.1	54.1	67.9	59.8	79.8	99.6	70.1	81.2	72.7	77.8	87.0	109.7
18	MCH	15.1	18.2	19.6	23.3	25.0	31.9	49.8	30.5	24.6	45.4	63.9	55.2	54.5	76.5	39.0	43.2	77.3	95.7	113.0	152.9
19	TRS	7.1	7.2	9.2	9.7	10.7	12.6	21.8	22.7	47.2	42.6	63.7	77.6	75.3	63.5	59.5	62.8	67.0	79.2	88.9	118.8
20	ELE	8.9	14.1	16.7	30.6	28.6	31.0	67.1	49.9	74.8	93.2	99.8	117.2	143.4	167.2	113.4	150.2	170.6	200.6	235.8	309.9
21	ICT	9.4	13.8	17.4	19.9	23.2	17.7	119.9	47.6	68.8	114.6	132.6	118.9	145.0	237.1	199.2	283.7	406.8	493.8	598.5	797.3
22	INS	0.7	0.8	1.0	1.2	1.0	1.2	2.8	1.4	53.8	16.7	12.7	22.6	24.4	41.3	19.1	26.6	40.0	48.5	58.1	77.0
	<i>Utilities</i>	40.1	50.9	78.5	41.4	93.6	120.3	171.6	138.3	287.7	435.6	583.4	609.3	839.3	725.4	735.1	792.1	884.7	1022.0	1189.5	1539.0
	<i>Mining</i>	12.3	12.8	12.4	27.4	18.0	19.7	25.4	16.5	21.6	25.6	24.7	24.0	21.5	24.1	17.1	17.1	13.5	12.9	12.4	13.9
	<i>Manufacturing</i>	175.4	227.2	288.6	362.0	413.6	469.9	923.1	621.6	1027.9	1236.4	1456.1	1473.7	1497.0	2062.3	1688.8	1766.9	1859.2	2094.4	2389.6	3085.7
	<i>All</i>	227.8	290.9	379.5	430.8	525.2	609.9	1120	776.4	1337.2	1697.6	2064.2	2107.0	2357.8	2811.8	2441.0	2576.0	2757.4	3129.3	3591.4	4638.5

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Guangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1.3	0.6	2.6	2.5	2.4	2.9	3.3	3.0	2.5	3.0	5.8	4.5	4.2	3.5	3.4	3.7	1.8	2.0	1.7	1.0
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	4.2	4.3	5.5	4.9	6.4	7.4	7.2	6.9	7.8	8.3	11.5	9.2	8.2	6.4	14.0	13.5	10.7	6.9	7.8	6.4
4	NMM	0.5	0.5	0.7	0.5	0.9	0.8	1.2	1.6	2.7	2.3	3.5	2.2	3.2	1.9	1.0	3.0	0.5	4.2	1.5	1.4
5	FDB	11.1	11.8	15.3	15.5	23.5	21.9	27.7	29.1	38.2	45.7	74.0	69.0	67.7	65.4	65.9	67.0	59.9	45.0	51.2	67.0
6	TBC	0.5	0.7	1.4	1.6	1.9	1.9	2.8	2.8	4.1	4.5	5.5	4.8	4.7	4.2	4.6	7.0	4.1	4.5	6.6	13.9
7	TEX	4.5	5.0	6.6	7.6	8.8	9.6	10.1	9.7	9.3	11.6	16.3	15.0	11.6	5.1	8.1	4.3	6.8	3.5	2.3	3.1
8	WEA	0.4	0.5	0.7	0.6	0.6	0.7	0.7	0.8	1.1	1.1	3.0	1.9	0.8	1.2	0.6	0.3	0.3	0.3	0.3	0.4
9	LEA	0.3	0.3	0.4	0.4	0.4	0.6	0.4	0.8	1.1	1.0	1.8	1.8	1.3	0.9	0.6	1.0	0.4	0.7	0.3	1.6
10	WDF	0.7	0.7	1.0	1.2	1.1	1.1	2.5	2.3	2.4	3.1	3.9	4.0	6.8	3.1	3.8	5.1	4.8	5.5	5.4	10.6
11	PAP	2.7	3.3	3.0	4.6	4.5	5.0	6.5	6.5	8.4	8.9	12.7	22.3	15.4	10.7	12.0	28.5	21.4	18.2	19.5	22.0
12	PET	0.1	0.5	0.2	0.2	0.2	0.8	0.7	0.7	2.3	2.0	2.1	1.5	1.9	1.9	1.8	1.6	1.3	1.4	1.8	5.8
13	CHE	8.7	8.6	10.1	11.5	12.2	12.7	16.4	14.7	18.9	19.7	38.0	29.1	28.9	26.7	28.5	32.9	31.2	30.5	29.5	35.9
14	RBP	1.5	1.7	2.1	2.3	4.4	3.2	3.7	3.7	4.9	5.2	6.5	6.1	7.6	2.7	4.1	3.4	2.3	3.5	2.8	1.6
15	BUI	6.4	7.3	8.6	11.4	15.7	13.4	17.4	17.9	30.1	36.8	61.4	60.6	42.5	30.5	29.7	30.7	27.9	19.2	27.1	43.4
16	MSP	4.2	4.5	5.5	6.1	7.5	9.4	8.7	8.5	15.3	16.4	110.5	41.5	38.2	40.2	34.4	37.5	47.0	32.4	58.7	85.6
17	MPD	1.0	1.1	1.1	1.6	1.0	1.3	1.7	1.6	1.8	6.9	2.9	3.1	3.0	1.0	1.3	1.7	0.8	1.0	0.6	0.3
18	MCH	6.7	7.1	7.2	7.4	8.4	8.0	10.3	10.8	12.9	20.0	25.8	29.3	21.1	16.3	16.1	16.2	17.6	16.3	4.4	8.2
19	TRS	2.6	2.7	3.6	3.2	3.4	3.3	6.4	6.0	8.1	9.5	21.3	13.6	15.4	11.4	15.1	11.0	12.6	10.3	38.0	26.3
20	ELE	1.5	1.6	2.5	2.6	2.7	2.5	5.1	3.3	5.0	5.5	9.8	7.2	8.2	5.6	5.4	5.3	4.5	3.2	4.9	4.0
21	ICT	1.0	1.0	1.4	1.4	1.6	1.5	2.9	1.9	2.2	2.8	3.6	3.7	2.8	2.4	4.0	2.8	1.5	1.2	1.6	6.1
22	INS	0.5	0.6	0.6	0.6	0.5	0.5	0.7	0.6	1.1	1.4	1.2	1.4	1.3	1.0	1.8	0.5	0.8	1.0	1.1	1.3
	<i>Utilities</i>	19.8	20.6	19.3	20.1	25.3	27.4	28.5	27.4	46.8	43.0	106.5	80.2	96.1	101.3	106.0	178.2	135.3	182.1	201.3	257.1
	<i>Mining</i>	6.1	5.4	8.7	8.0	9.8	11.1	11.7	11.6	12.9	13.5	20.8	15.9	15.5	11.8	18.3	20.2	13.0	13.1	11.0	8.8
	<i>Manufacturing</i>	54.3	59.1	71.2	79.9	98.5	97.4	124.7	121.5	167.0	202.1	400.4	315.9	279.3	230.2	237.9	256.7	245.2	197.8	256.0	337.0
	<i>All</i>	80.1	85.1	99.3	107.9	133.6	136.0	164.9	160.4	226.7	258.6	527.6	412.0	390.9	343.3	362.1	455.1	393.6	393.0	468.3	602.9

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Sichuan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	17.6	19.7	22.6	22.3	26.7	30.5	29.8	29.5	29.2	23.2	58.3	39.7	38.7	51.2	43.9	37.7	10.7	21.3	23.4	32.2
2	PTM	9.3	10.8	11.2	14.3	18.3	17.6	26.1	27.3	49.2	33.3	52.8	41.1	46.0	45.5	54.6	63.6	62.4	59.4	106.4	153.5
3	MTM	5.7	6.0	6.2	6.0	6.5	6.5	7.4	7.5	1.4	3.6	5.1	5.8	5.0	5.4	1.4	13.0	2.1	4.1	5.3	37.2
4	NMM	4.4	4.5	4.8	4.6	5.3	7.0	7.7	6.2	12.3	13.6	15.6	12.8	13.8	11.4	12.8	4.8	3.6	4.9	7.2	4.4
5	FDB	21.3	26.1	31.4	34.0	32.5	35.0	38.3	39.9	47.1	60.4	89.8	66.8	78.7	98.3	94.7	80.6	70.6	91.5	101.8	94.5
6	TBC	1.2	1.5	1.8	2.4	3.0	3.8	4.0	6.3	5.4	12.1	16.6	15.8	14.8	34.4	21.4	23.7	12.1	19.0	15.4	28.3
7	TEX	16.6	20.8	24.9	27.8	27.8	33.6	36.1	35.6	48.8	58.7	65.5	48.6	39.3	53.1	32.1	36.5	7.8	14.1	19.0	18.0
8	WEA	1.8	2.4	2.9	2.4	2.6	2.2	3.0	2.8	2.7	4.2	3.7	3.1	3.1	2.9	3.1	2.3	2.7	2.8	2.2	3.2
9	LEA	1.6	1.9	2.2	2.1	2.3	2.5	2.6	2.5	6.3	4.9	6.3	5.9	4.5	4.4	2.0	1.0	0.6	1.5	2.8	4.7
10	WDF	1.9	2.2	2.7	2.9	2.7	2.6	3.5	3.1	4.3	5.2	7.8	5.9	11.4	8.0	6.9	4.1	3.1	5.5	4.6	9.4
11	PAP	8.7	10.2	11.8	11.9	12.8	13.7	13.9	15.7	28.0	22.4	39.7	28.8	33.8	34.3	25.5	25.3	14.0	22.4	30.5	37.5
12	PET	0.7	0.9	0.9	0.8	1.2	1.3	1.9	3.3	0.1	0.9	3.8	1.1	1.9	6.7	3.0	4.0	3.7	3.4	6.0	8.5
13	CHE	35.1	37.5	41.2	44.4	49.1	52.0	56.7	61.5	75.8	85.2	120.8	108.8	121.8	233.6	155.2	159.3	67.7	102.1	103.6	195.4
14	RBP	4.4	5.5	6.7	6.1	6.6	6.0	7.4	7.5	9.2	9.9	20.1	10.4	15.7	22.9	12.5	9.3	2.6	8.2	12.4	16.6
15	BUI	19.4	24.3	29.4	27.1	25.8	26.5	28.3	30.4	45.8	61.8	84.4	70.3	90.2	93.3	116.6	109.5	36.3	90.7	102.5	98.5
16	MSP	47.0	51.4	49.8	52.6	59.1	57.8	80.6	93.7	142.4	67.5	214.2	141.5	195.9	196.0	210.6	182.0	83.6	120.6	192.2	107.4
17	MPD	4.1	5.1	6.1	7.2	6.4	6.5	7.3	10.0	9.1	19.2	10.6	13.9	11.5	10.2	8.0	7.7	4.5	10.5	7.6	9.0
18	MCH	43.7	47.5	52.4	47.2	48.1	49.8	54.2	55.9	49.1	65.3	172.0	90.8	41.7	81.9	68.8	60.3	17.2	36.8	113.0	75.8
19	TRS	13.8	14.9	16.5	16.5	19.0	19.3	20.6	26.3	40.4	40.3	74.0	66.4	70.0	153.2	117.4	145.1	50.6	67.9	125.1	118.0
20	ELE	6.5	7.6	9.0	11.4	10.3	11.1	12.0	14.9	16.8	21.2	25.2	21.0	23.8	46.0	28.8	29.1	11.4	15.6	20.4	23.7
21	ICT	8.4	10.4	9.3	9.6	11.2	10.6	14.4	13.9	21.0	37.6	32.1	34.2	37.3	50.3	47.1	44.3	26.3	40.0	25.3	47.4
22	INS	3.7	4.1	4.5	4.1	4.2	5.2	4.9	5.3	7.1	6.1	8.0	5.7	6.2	22.7	10.9	10.8	4.3	5.6	6.8	2.6
	<i>Utilities</i>	40.0	43.4	48.7	35.7	70.5	70.4	70.3	117.4	130.5	226.7	184.9	201.5	402.3	404.1	704.6	519.1	375.0	589.1	609.1	707.3
	<i>Mining</i>	37.0	41.1	44.7	47.2	56.9	61.7	71.0	70.5	92.2	73.7	131.9	99.5	103.5	113.5	112.7	119.1	78.8	89.8	142.3	227.2
	<i>Manufacturing</i>	239.7	274.2	303.4	310.5	324.7	339.4	389.6	428.5	559.4	583.1	994.6	739.2	801.5	1152.2	964.4	934.9	419.1	658.3	891.4	898.5
	<i>All</i>	316.7	358.6	396.8	393.4	452.2	471.5	530.9	616.5	782.0	883.5	1311.3	1040.3	1307.3	1669.9	1781.7	1573.1	873.0	1337.1	1642.8	1833.0

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Guizhou																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	9.0	9.6	8.8	10.2	9.5	10.0	10.8	10.7	8.5	11.3	16.5	12.8	12.1	10.4	15.5	19.3	15.9	26.5	21.3	30.2
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	0.4	0.7	0.2	0.4	0.4	0.4	0.7	0.5	0.5	0.7	1.0	0.9	0.9	0.3	0.8	0.7	0.6	0.5	0.5	0.8
4	NMM	0.9	1.1	1.2	0.9	1.2	2.9	1.6	1.7	1.6	2.2	4.5	3.4	3.3	2.7	16.8	46.0	20.4	17.7	16.2	18.0
5	FDB	4.0	5.3	7.2	6.8	7.2	7.6	8.7	8.8	14.4	12.9	13.5	10.0	19.6	13.4	14.8	11.1	12.6	13.3	12.9	15.4
6	TBC	1.4	1.7	2.6	2.3	3.6	4.1	4.9	7.6	7.8	10.5	9.7	13.4	18.4	19.2	20.3	18.4	18.8	15.1	14.2	17.9
7	TEX	1.8	2.0	2.1	2.5	2.8	2.6	3.6	2.9	2.9	4.6	4.0	4.9	3.0	3.9	3.2	2.3	2.3	1.0	0.7	0.7
8	WEA	0.3	0.3	0.5	0.3	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.4	0.3	0.4	0.2	0.3	0.3	0.2	0.3
9	LEA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.6	0.2	0.0	0.4	0.2	0.2	0.1	0.1	0.0
10	WDF	0.4	0.4	0.4	0.4	0.5	0.5	1.0	0.4	0.6	0.7	1.2	0.8	0.7	1.1	0.8	0.8	0.4	0.8	0.6	0.8
11	PAP	1.2	1.4	1.8	1.4	1.7	1.8	2.2	2.2	3.3	3.2	3.4	3.9	3.6	2.7	4.5	2.6	3.1	2.3	2.9	2.2
12	PET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	CHE	6.8	7.2	6.8	7.9	7.1	7.7	9.6	9.6	9.5	14.7	17.1	15.3	19.5	15.0	19.2	20.4	19.7	19.2	29.3	25.8
14	RBP	0.8	1.0	1.1	0.9	1.9	2.5	2.5	2.4	4.8	3.2	3.3	6.8	4.5	6.8	6.2	4.7	10.5	5.0	6.5	9.0
15	BUI	5.0	5.8	6.9	6.6	6.4	6.6	7.8	7.1	8.0	10.1	15.0	13.9	13.4	9.6	12.5	13.7	12.1	12.9	16.8	17.6
16	MSP	16.4	16.0	15.3	16.7	20.6	20.2	23.8	22.0	24.8	17.2	51.7	35.9	39.2	39.5	34.3	33.0	35.3	62.3	50.5	56.1
17	MPD	1.4	1.4	3.3	2.0	2.0	1.9	2.0	1.9	2.5	2.9	2.7	2.5	3.1	2.1	1.8	2.2	1.8	4.7	3.2	2.9
18	MCH	6.7	5.3	10.7	8.0	6.4	8.9	8.3	4.6	6.1	6.9	5.6	8.4	6.6	4.9	5.7	4.6	4.5	4.0	4.3	5.2
19	TRS	7.1	7.1	7.7	7.6	7.3	8.0	8.1	11.6	13.1	13.1	18.8	18.2	15.6	15.6	13.3	16.3	14.9	16.7	12.0	13.2
20	ELE	1.6	2.3	3.6	2.1	3.7	1.6	4.0	3.9	1.9	2.8	3.8	4.7	4.0	3.0	2.9	2.4	2.9	2.4	4.7	1.8
21	ICT	4.8	6.8	1.4	2.3	2.2	2.3	2.3	2.2	1.8	1.8	5.2	4.1	3.7	4.0	3.3	3.5	3.0	5.0	2.3	4.8
22	INS	1.1	1.4	0.6	0.8	0.7	0.7	0.7	0.9	0.7	0.6	0.3	0.8	1.0	0.6	0.6	0.4	0.9	0.8	0.6	0.7
	<i>Utilities</i>	15.8	16.8	16.1	22.9	22.0	20.3	17.1	25.1	55.5	64.5	67.9	63.8	59.8	80.8	77.8	131.9	137.6	114.4	160.2	328.6
	<i>Mining</i>	10.4	11.3	10.2	11.5	11.0	13.4	13.0	12.9	10.6	14.2	22.0	17.1	16.3	13.4	33.0	66.0	36.8	44.7	38.1	49.0
	<i>Manufacturing</i>	61.0	65.7	72.4	68.8	74.7	77.8	90.5	88.8	103.1	106.0	156.2	144.8	156.6	141.9	144.2	136.9	143.2	166.0	161.9	174.5
	<i>All</i>	87.1	93.8	98.6	103.2	107.7	111.5	120.6	126.8	169.3	184.8	246.1	225.7	232.8	236.1	255.0	334.8	317.6	325.2	360.1	552.0

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Yunnan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	4.3	5.4	5.2	5.4	6.0	6.6	7.2	6.2	4.8	5.5	9.4	8.2	8.2	6.8	6.2	10.3	7.4	5.7	3.6	8.7
2	PTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MTM	6.5	6.4	6.7	6.6	6.8	8.7	7.6	7.8	7.3	7.4	10.1	13.2	9.8	8.7	9.9	6.8	6.7	4.2	1.7	62.8
4	NMM	1.5	1.5	2.4	2.1	2.3	2.2	2.9	6.4	3.8	2.6	3.1	3.4	6.6	4.2	3.5	2.6	4.8	3.4	3.3	2.9
5	FDB	9.5	10.7	14.3	13.3	12.8	13.9	17.0	15.5	16.6	21.3	30.3	27.2	33.3	29.2	27.8	29.5	28.4	24.9	29.4	23.9
6	TBC	3.8	7.1	6.2	6.4	10.1	10.6	11.8	19.6	20.4	35.7	60.1	66.9	71.5	99.6	91.4	79.8	92.4	72.7	76.4	76.6
7	TEX	2.4	2.8	3.6	3.5	3.6	5.1	4.5	4.5	4.1	5.6	8.2	4.0	6.0	2.3	2.7	2.1	2.7	1.6	2.4	2.5
8	WEA	0.5	0.7	0.7	0.7	0.7	0.7	0.8	0.8	1.1	1.1	0.8	0.8	0.8	0.6	0.7	1.0	0.8	0.7	0.6	0.5
9	LEA	0.4	0.4	0.4	0.5	0.4	0.6	0.6	0.6	0.8	0.7	1.1	0.8	0.7	0.3	0.2	0.3	0.1	0.2	0.3	0.3
10	WDF	0.9	0.9	2.2	2.0	2.0	2.2	2.4	2.0	2.1	2.3	6.6	5.7	6.8	5.5	6.2	5.2	5.4	3.6	2.6	5.4
11	PAP	2.2	2.6	2.9	2.7	3.3	3.5	4.1	6.3	7.6	9.0	18.9	16.1	15.3	13.4	11.4	22.2	19.7	18.2	16.4	21.3
12	PET	0.0	0.1	0.2	1.1	2.0	1.5	1.6	2.2	1.3	1.6	1.4	1.3	1.2	1.2	1.2	1.6	1.2	1.2	2.6	7.6
13	CHE	13.8	14.5	13.5	16.3	15.9	18.9	18.9	16.3	20.3	29.8	46.8	38.6	41.3	40.3	42.2	57.4	30.3	72.5	51.3	34.3
14	RBP	1.5	1.9	1.9	2.3	2.1	2.3	2.7	2.4	2.8	3.1	4.4	3.6	7.2	3.7	3.4	3.9	1.9	4.4	3.3	2.3
15	BUI	5.5	5.9	8.8	7.7	8.3	9.9	9.3	9.4	12.3	16.2	24.8	26.7	25.0	28.1	21.7	18.9	22.2	22.2	23.7	28.7
16	MSP	12.6	14.2	15.9	17.2	16.4	16.3	20.1	17.8	24.2	27.4	53.2	35.9	36.6	29.7	48.6	44.3	60.4	46.7	84.0	52.1
17	MPD	1.3	1.5	1.6	1.6	1.4	1.3	1.4	1.3	2.2	2.0	2.1	2.2	2.3	0.6	0.6	0.8	1.7	0.7	0.4	0.5
18	MCH	8.5	8.4	9.3	8.9	9.1	9.3	10.3	8.9	5.7	9.9	16.4	11.5	12.8	11.7	7.9	7.8	3.9	8.5	4.5	2.7
19	TRS	1.6	2.0	1.6	1.6	1.6	1.6	2.0	3.9	6.2	4.0	5.6	4.5	8.2	4.0	4.6	3.3	4.3	3.7	4.6	8.5
20	ELE	1.1	1.4	1.6	1.8	2.1	1.7	2.0	2.1	2.3	2.9	5.7	4.1	2.8	3.9	2.8	2.8	2.5	2.9	2.8	3.5
21	ICT	0.7	0.7	0.5	0.6	0.6	0.8	1.0	0.9	1.2	1.2	1.0	1.0	1.4	0.7	0.9	0.8	1.1	0.9	0.2	4.1
22	INS	0.9	0.9	0.8	0.9	0.9	0.9	0.9	1.0	0.9	1.0	2.3	1.2	1.3	0.7	0.7	0.8	2.0	0.9	2.0	0.5
	<i>Utilities</i>	19.4	20.0	20.7	27.6	32.1	39.0	40.5	49.0	86.5	72.5	94.0	83.6	102.1	113.5	127.6	140.2	152.7	157.4	243.0	238.1
	<i>Mining</i>	12.3	13.4	14.3	14.1	15.0	17.4	17.7	20.4	15.9	15.6	22.7	24.8	24.6	19.6	19.5	19.7	19.0	13.2	8.5	74.4
	<i>Manufacturing</i>	67.2	76.6	86.0	89.2	93.3	101.0	111.4	115.5	132.1	174.7	289.6	252.1	274.5	275.6	275.0	282.8	280.9	286.5	307.6	275.2
	<i>All</i>	98.9	109.9	121.1	130.9	140.4	157.4	169.6	185.0	234.6	262.8	406.3	360.5	401.3	408.8	422.0	442.7	452.6	457.1	559.1	587.7

Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Shaanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	11.4	11.6	12.1	14.2	13.6	12.8	15.4	14.7	12.5	12.7	22.4	24.7	19.5	18.6	12.7	12.5	28.4	44.4	45.2	105.3
2	PTM	0.9	1.3	1.5	2.7	4.1	4.4	4.7	5.4	6.9	7.3	9.4	9.8	10.5	20.0	630.0	86.1	145.2	172.3	231.1	313.6
3	MTM	4.1	4.6	5.2	6.1	6.5	7.3	8.0	7.1	4.4	9.9	9.8	9.8	8.9	8.2	13.6	10.8	8.7	9.5	12.6	12.3
4	NMM	0.7	0.7	0.7	0.9	0.8	0.8	1.0	0.7	1.3	1.1	1.0	0.5	0.6	0.2	0.5	0.5	0.3	0.2	0.1	2.0
5	FDB	4.8	5.5	6.3	8.3	7.5	9.5	11.1	10.7	13.0	14.1	22.0	17.3	20.2	21.4	19.1	21.0	25.5	18.4	20.5	34.4
6	TBC	0.8	1.0	1.1	1.0	2.0	2.4	3.9	3.0	4.4	4.7	8.0	5.6	7.1	10.1	8.5	7.0	8.9	10.1	8.3	7.3
7	TEX	10.2	11.7	13.1	13.7	15.2	16.8	18.0	18.8	23.0	26.8	29.3	29.8	26.0	21.3	19.4	19.9	15.0	16.4	9.8	18.1
8	WEA	0.8	0.8	0.9	0.9	1.1	0.9	1.2	1.0	1.0	1.2	1.8	1.7	1.3	0.4	0.6	0.6	0.6	0.6	0.5	0.4
9	LEA	0.5	0.6	0.6	0.7	0.7	0.5	0.8	0.7	0.8	1.7	1.4	1.7	0.9	0.9	0.9	0.7	0.6	0.7	0.5	0.4
10	WDF	0.9	1.0	1.1	1.7	1.4	1.0	1.4	1.3	1.2	1.6	3.3	2.9	2.1	1.0	1.7	1.1	1.1	0.9	1.6	0.2
11	PAP	3.0	3.8	4.5	4.0	4.6	4.7	6.0	7.0	7.3	7.8	13.4	12.0	11.4	9.9	11.1	10.5	10.6	12.5	13.4	11.4
12	PET	0.6	0.6	0.7	1.1	3.6	1.9	2.1	3.2	5.8	4.9	3.7	6.9	7.4	6.4	18.5	9.6	10.3	12.5	31.7	26.9
13	CHE	9.8	10.0	12.7	11.7	12.2	16.7	14.4	16.3	17.5	19.9	34.7	28.7	25.2	43.9	32.8	35.0	38.7	37.6	47.9	32.3
14	RBP	1.4	1.7	2.0	1.0	2.3	1.8	1.9	1.9	2.3	2.5	6.6	4.0	2.1	1.3	1.8	1.6	1.4	1.1	0.9	4.7
15	BUI	7.2	8.3	9.5	12.0	10.7	12.6	12.2	9.8	13.5	20.4	26.2	18.5	17.3	12.3	17.0	15.7	16.4	20.5	25.6	27.9
16	MSP	6.3	7.8	8.2	11.3	9.3	9.4	10.0	9.9	17.3	13.4	29.4	21.2	20.8	16.8	17.9	12.4	14.2	16.4	41.2	24.2
17	MPD	2.4	2.5	2.5	3.2	3.1	2.8	3.3	3.0	3.3	3.7	7.3	6.3	3.9	2.2	3.6	3.3	2.2	2.7	1.5	5.5
18	MCH	21.3	22.1	23.4	26.9	23.8	22.9	25.5	24.7	18.3	28.0	65.2	42.7	37.7	41.0	31.2	44.0	37.0	43.3	24.6	12.9
19	TRS	17.2	18.5	20.0	15.7	16.9	17.2	18.3	20.0	21.2	25.3	35.0	36.4	30.2	30.4	25.0	30.4	45.7	25.0	43.5	33.6
20	ELE	4.0	4.6	5.3	5.1	5.2	5.7	6.4	8.6	9.2	12.3	14.8	18.4	15.1	12.4	10.4	10.0	14.7	13.0	16.6	14.2
21	ICT	8.9	8.9	9.0	9.3	9.1	11.3	26.1	15.7	17.6	21.0	28.7	21.1	28.7	31.1	21.5	22.6	36.8	26.4	19.7	23.0
22	INS	2.8	3.1	3.3	4.0	4.0	3.7	5.7	4.8	6.7	7.5	9.5	7.7	7.5	4.8	6.0	4.7	4.1	5.9	2.1	9.2
	<i>Utilities</i>	20.9	23.6	23.2	24.0	23.9	27.9	27.0	85.3	42.2	84.6	89.1	75.7	97.3	123.1	144.5	149.4	179.3	175.1	174.6	305.5
	<i>Mining</i>	17.1	18.3	19.6	23.9	25.0	25.4	29.0	27.9	25.1	31.1	42.7	44.8	39.4	46.9	656.8	109.9	182.6	226.3	288.9	433.1
	<i>Manufacturing</i>	102.9	112.6	124.2	131.5	132.6	141.8	168.1	160.4	183.2	216.8	340.2	283.0	264.9	267.5	246.8	250.2	283.9	264.0	309.9	286.4
	<i>All</i>	140.8	154.5	167.0	179.5	181.5	195.0	224.2	273.5	250.5	332.5	471.9	403.5	401.7	437.5	1048.1	509.4	645.8	665.4	773.5	1025.0

## Chapter 4 Measuring Capital Input by Sector and Region

TABLE 4-2, CONT'D

		Capital input of Xinjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3.7	3.9	4.8	5.3	5.3	6.0	6.4	6.9	6.3	7.2	13.6	10.9	11.1	10.7	10.5	8.7	6.1	9.1	9.5	8.2
2	PTM	15.4	19.6	27.8	30.7	47.6	57.9	57.3	66.1	213.2	125.5	160.8	201.0	174.1	204.8	217.6	181.0	99.0	186.3	203.7	336.3
3	MTM	0.4	0.1	0.8	0.4	2.0	1.5	2.5	2.0	1.6	3.5	0.2	0.7	0.3	0.3	4.5	2.5	1.3	2.2	1.4	3.3
4	NMM	0.5	0.5	0.7	0.6	0.9	1.0	2.2	1.8	1.5	1.4	1.6	1.4	2.2	0.8	1.0	0.8	0.1	0.3	0.3	0.6
5	FDB	4.7	5.1	7.4	7.6	10.7	12.4	14.9	13.3	16.2	19.8	25.6	28.7	30.3	21.2	19.1	16.3	16.4	40.2	23.9	26.8
6	TBC	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.8	0.5	0.8	0.7	0.7	1.5	1.5	1.4	1.2	1.1	1.1	1.3
7	TEX	4.9	5.7	8.9	8.0	10.4	14.1	19.1	16.0	16.2	21.5	28.4	34.3	32.0	9.6	17.2	25.6	33.1	21.8	18.0	8.5
8	WEA	0.3	0.4	0.5	0.7	0.4	0.5	0.7	0.6	0.9	0.8	0.6	1.1	1.1	0.9	0.9	0.8	0.4	0.3	0.3	0.3
9	LEA	0.9	1.1	1.3	1.5	1.6	1.6	1.6	1.6	1.3	1.6	1.6	1.8	1.5	0.8	1.0	0.8	0.8	0.8	0.8	0.8
10	WDF	0.4	0.4	0.5	0.5	0.5	0.6	1.0	0.8	0.5	1.0	1.5	3.0	2.4	1.9	1.5	2.0	0.4	0.4	0.6	2.8
11	PAP	1.1	1.1	2.1	1.5	1.7	2.7	3.5	5.0	3.6	3.6	5.1	5.6	5.5	4.3	4.8	4.2	2.7	5.7	4.0	4.4
12	PET	6.0	6.1	6.2	6.0	5.9	6.1	6.5	5.7	8.6	29.7	32.0	24.4	29.9	31.7	35.2	30.7	46.4	62.0	46.8	67.9
13	CHE	2.2	1.9	2.9	4.2	3.6	4.4	4.2	4.6	6.6	8.4	10.5	12.5	11.7	9.8	9.3	8.8	8.3	5.9	16.6	9.6
14	RBP	0.7	0.9	1.2	1.9	1.4	1.5	1.6	1.9	3.3	2.9	3.0	4.2	6.8	7.7	8.6	9.5	10.3	11.2	9.7	14.3
15	BUI	4.9	6.1	6.2	7.1	6.8	6.3	6.9	9.8	8.7	15.8	17.0	18.2	18.6	5.9	6.0	3.7	12.8	34.9	28.8	19.6
16	MSP	2.9	3.1	5.3	5.4	4.7	8.3	6.2	6.7	8.0	12.8	21.0	11.8	12.8	12.4	12.1	11.7	11.3	11.0	13.7	17.8
17	MPD	0.5	0.7	0.7	0.4	0.6	0.7	0.7	0.8	2.7	1.7	1.8	3.3	2.8	2.3	2.2	2.0	1.6	0.4	0.3	2.0
18	MCH	3.7	3.8	4.8	3.7	3.9	3.8	4.4	4.2	2.2	3.5	6.0	8.9	6.0	5.0	4.3	3.2	2.7	4.2	1.3	1.2
19	TRS	1.3	1.2	1.9	1.6	1.5	1.9	1.8	1.8	2.1	2.8	2.8	4.2	3.1	2.8	2.9	2.5	1.9	2.5	1.1	0.8
20	ELE	0.4	0.4	0.7	0.7	0.7	0.8	0.9	0.8	2.0	1.4	2.6	2.3	2.7	1.3	0.9	0.5	4.4	5.2	3.8	3.1
21	ICT	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	10.8	11.6
22	INS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
	<i>Utilities</i>	8.6	9.3	13.0	12.6	17.9	15.5	21.9	42.4	26.1	33.4	45.8	50.2	48.0	48.6	48.9	41.6	116.8	98.4	139.2	126.1
	<i>Mining</i>	19.9	24.1	34.1	37.0	55.7	66.4	68.5	76.8	222.7	137.7	176.1	214.1	187.8	216.7	233.6	193.0	106.5	197.8	214.9	348.5
	<i>Manufacturing</i>	35.2	38.4	51.0	51.1	54.9	66.0	74.6	74.0	84.1	128.2	160.5	165.0	167.8	119.3	127.5	123.8	154.8	207.8	181.5	192.8
	<i>All</i>	63.7	71.8	98.0	100.8	128.5	147.9	165.0	193.1	332.9	299.3	382.4	429.3	403.6	384.6	410.0	358.4	378.1	504.1	535.6	667.4

TABLE 4-3: CHINA STANDARD INDUSTRIAL CLASSIFICATION

1984 Industrial Classification		1993 Industrial Classification	
Code	Industry	Code	Industry
A1	Coal mining and processing	B1	Coal mining and processing
A2	Petroleum and natural gas extraction	B2	Petroleum and natural gas extraction
A3	Ferrous metals mining and dressing	B3	Ferrous metals mining and dressing
A4	Nonferrous metals mining and dressing	B4	Nonferrous metals mining and dressing
A5	Nonmetal Minerals mining and dressing	B5	Nonmetal Minerals mining and dressing
A6	Salt mining	B6	Other minerals mining and dressing
A7	Other minerals mining and dressing	B7	Logging and transport of timber and bamboo
A8	Logging and transport of timber and bamboo	B8	Food processing
A9	Tap water	B9	Food production
A10	Food production	B10	Beverage production
A11	Beverage production	B11	Tobacco processing
A12	Tobacco processing	B12	Textile industry
A13	Feed manufacturing	B13	Garments and other fiber products
A14	Textile industry	B14	Leather, furs, down and related products
A15	Clothes	B15	Timber processing
A16	Leather, furs, down and related products	B16	Furniture manufacturing
A17	Timber processing	B17	Paper making and paper products
A18	Furniture manufacturing	B18	Printing and record medium reproduction
A19	Paper making and paper products	B19	Cultural, educational and sports goods
A20	Printing and record medium reproduction	B20	Petroleum refining and coding
A21	Cultural, educational and sports goods	B21	Raw chemical materials and chemical products
A22	Art products	B22	Medical and pharmaceutical products
A23	Power	B23	Chemical fiber
A24	Petroleum refining	B24	Rubber products
A25	Coding	B25	Plastic products
A26	Chemistry	B26	Nonmetal mineral products
A27	Medical and pharmaceutical products	B27	Smelting and pressing of ferrous metals
A28	Chemical fiber	B28	Smelting and pressing of nonferrous metals
A29	Rubber products	B29	Metal products
A30	Plastic products	B30	Ordinary machinery
A31	Nonmetal mineral products	B31	Special purposes equipment
A32	Smelting and pressing of ferrous metals	B32	Transport equipment
A33	Smelting and pressing of nonferrous metals	B33	Weapons
A34	Metal products	B34	Electric equipment and machinery
A35	Machinery	B35	Electronic and telecommunications
A36	Transport equipment	B36	Instrument machinery
A37	Electric equipment and machinery	B37	Other manufacturing
A38	Electronic and telecommunications	B38	Power, steam and hot water
A39	Instrument machinery	B39	Gas
A40	Other manufacturing	B40	Tap water



TABLE 4-4: RECLASSIFICATION OF INDUSTRIAL SECTORS

Reclassification		Wu-Yue
Code	Code	Code
A1	B1	CLM
A2	B2	PTM
A3+A4+A7	B3+B4+B6	MTM
A5+A6	B5	NMM
A10+A11+A13	B8+B9+B10	FDB
A12	B11	TBC
A14	B12	TEX
A15	B13	WEA
A16	B14	LEA
A17+A18	B15+B16	WDF
A19+A20	B17+B18	PAP
A24+A25	B20	PET
A26+27+28	B21+B22+B23	CHE
A29+A30	B24+B25	RBP
A31	B26	BUI
A32+A33	B27+B28	MSP
A34	B29	MPD
A35	B30+B31+B33	MCH
A36	B32	TRS
A37	B34	ELE
A38	B35	ICT
A39	B36	INS
A21+A22+A40	B19+B37	OTH
A9+A23	B38+B39+B40	UTL
A8	B7	WOD

# Chapter 5 Measuring Labour Input by Sector and Region

In this chapter, the quantity of labour input is to be measured by the number of workers employed, weighted by working hours. To calculate the quality of labour input, Jorgenson's Translog function will be employed. With this target, this chapter will firstly talk about the features of the official labor statistics. Secondly, problems in the official statistics will be discussed. Thirdly we will explain the procedures to build up labor input and give the methodology employed in the construction of database. Lastly, present the main results. For some part of the labor data construction that is similar with capital data work, especially the methodology in filling the gaps will not be repeated in this chapter.

## 5.1 Features of the official labour statistics

In this work, the Chinese official statistics are employed in production function analysis. The first thing need to be understood is the concept and definitions of the indicators in the official statistics.

### 5.1.1 Comparison of “employed persons” and “staff and workers employed”

There are two concepts in the Chinese official labour statistics, one is “Employed Persons” (*congye ren yuan* in Chinese), and another is “Staff and

Workers Employed” (*zhigong* in Chinese). According to the official website of NBS, “employed persons” refer to the persons who are engaged in social working and receive remuneration payment or earn business income, including total staff and workers, re-employed retirees, employers of private enterprises, self-employed workers, employees in private enterprises and individual economy, employees in township enterprises, employed persons in the rural areas, and other employed persons (including teachers in the schools run by the local people, people engaged in religious profession and the servicemen, etc.). For another indicator, “Staff and Workers”, it refers to the persons who work in (and receive payment therefore) enterprises and institutions of state ownership, collective ownership, joint ownership, share holding, foreign ownership, and ownership by entrepreneurs from Hong Kong, Macao, and Taiwan, and other types of ownership and their affiliated units, excluding the retired persons invited to work in the units again, teachers in the schools run by the local people and foreigners and persons coming from Hong Kong, Macao and Taiwan and working in the state-owned economic units.

To compare these two indicators, we find the concept of “Employed Persons” can reflect the real labour power that input into the production. Reason is that the concept of “Staff and Workers” is included in this indicator. For “Staff and Workers”, it does not include private enterprises, self-employed workers and individual economy. Employing “Staff and Workers” could under-estimate the share of labour input in the production function analysis and over-estimate the TFP growth.

### **5.1.2 Statistics from different sources**

The industrial labour statistics can be collected from two sources, respectively the Department of Industrial and Transportation Statistics (DITS) and the Department of Population and Employment Statistics (DPES). Difference of these two series is in the data coverage. For data published by DITS, the coverage is “state-owned and non-state-owned industrial enterprises above designated size” since 1998 and “industrial enterprises with independent accounting systems” before 1998. For data published by DPES, it mainly focuses on urban area and the collective enterprises in the township level. Coverage of DITS data is larger than DPES’. To this study, the data by DITS is preferred since its coverage is consistent with our capital and output measurement. However, we still need DPES data as supplementary information to fill the gaps of missing data.

### **5.1.3 Statistics of wage rate**

Another important procedure in measuring labour input is to construct wage rate index. There is detailed information on national level from each year’s CSY on “staff and workers”, namely, average wage of staff and workers. Regional information on wage rate is mainly collected from the “China labour statistical yearbook”, but the series is not continuous throughout the time period of 1985-2005. Another problem is that the coverage of wage rates is different from that of number of employees since they are published by DPES instead of DITS. But it is reasonable to apply this wage rate to DITS’ “number of employees” data in calculating labour compensation rate.

## **5.2 Gaps between the official labour statistics with the standard**

In this section, the gaps between Chinese official statistics and standard labour input data that can be used in the production function analysis will be addressed, and remaining problems will be discussed.

### **5.2.1 Standard labour input in production function**

There are two approaches in measuring quantity of labourer. One is headcounts; another is accumulation of working hours. As commented by the OECD Manual of Productivity (2001), from a perspective of production analysis, and ignoring quality differences for the moment, labour input is most appropriately measured as the total number of hours worked. Simple headcounts of employed persons will hide changes in average hours worked, caused by the evolution of part-time work or the effect of variations in overtime, absence from work or shifts in normal hours. So, accumulation of working hours is a better approach in measuring quantity of labour input.

For the standard of wage rate, it is stated in the OECD manual that, conceptually, labour income and labour shares should reflect the compensation paid to labour from a producer's point of view, i.e. including supplements to wages and salaries such as employers' contributions to social security payments.

Quality improvement of labour input is another key factor in measuring labour input. Theoretically, labour input reflects the time, effort and skills of the workforce. While data on hours worked capture the time dimension, they do not reflect the skill dimension. When total hours worked are the simple sum of all hours of all workers, no account is taken of the heterogeneity of labour. In the context of productivity measurement, Jorgenson et al (1987), Denison (1985) and the US Bureau of Labor Statistics have tackled this issue. "Labour productivity measures have traditionally defined labour input as the sum of all hours worked by employees, proprietors and unpaid workers. As a result, an hour worked by a highly experienced surgeon and an hour worked by a newly hired teenager at a fast food restaurant are treated as equal amounts of labour. It does not matter who was actually working or what kind of job workers held. All workers are treated as if they were identical" (Bureau of Labor Statistics, 1993). When quality-adjusted measures of labour input are used in growth accounting instead of unadjusted hours worked, a larger share of output growth will be attributed to the factor "labour" instead of the residual factor "productivity growth". In other words, substituting quality-adjusted labour input measures for simple ones can shift the appreciation of the sources of growth, from externalities or spillovers captured by the productivity residual to the effects of investment in human capital. A comparison of an adjusted and unadjusted measure of labour input yields a measure of the corresponding compositional or quality change of labour input. This can usefully be interpreted as one aspect in the formation of human capital. As such it is a step towards measuring one important aspect of the effects of "intangible investment".

## **5.2.2 Problems of Chinese official statistics**

There are several problems of China's official statistics on labourer compared with international standard. In the following, major problems will be addressed.

### **5.2.2.1 Lack of regional information**

As statistics on capital, there is not enough information on regional level from the official statistics. Major part of the raw "Employed Persons" data is collected from the statistical yearbooks of selected regions. However, availability of raw data cannot be satisfied except a few years. Before 1990, most statistics only focus on SOEs, ignoring other types of ownership. Furthermore, since 1998, it is difficult for us to get information from the regional statistical yearbooks. As supplementary sources, "China Labour Statistical Yearbook (CLSY)" for some years and the "China Industrial Economy Statistical Yearbook (CIESY)" are used to fill these gaps.

### **5.2.2.2 Problems for industrial classification**

This problem also happens in capital data work, the CSIC change over time in the official labour statistics. Major changes were in 1993 and 1998. We need to compose some of the sectors to reconcile the raw data. The method of filling data gaps is the same as capital data work and will not be repeated here.

### **5.2.2.3 Decomposition of ownership**

Behavior of SOEs and nonSOEs are different in wage rate and weekly working hours, to accurately measure total labour input, it is a better approach to decompose the industry by different ownership, and measure them individually. However, it is difficult to measure this difference on regional level due to data

limitation. The best we can do under current situation is to employ the national compensation ratio series weighted by some years' information from the "China labour statistical yearbook".

#### **5.2.2.4 Non-productive labour**

The official statistics are lack of systematic information on non-productive labor such as workers in the schools and hospitals operated by enterprises. Since 1998, many workers especially from SOEs, were in the status of lay-off (*xiagang* in Chinese) and did not join any production activities. However, we cannot find systematic official information about these two parts of non-productive labor. So, we cannot take this measurement in this study, and this could overstate the labor input and thus underestimate TFP growth.

### **5.3 Procedures of Data Construction**

The first step is data collection. There are three major data sources, respectively the statistical yearbooks for selected regions, CLSY for available years and CIESY. To be consistent with capital and output work, raw data of labourer is reconcile into 24 industrial branches.

The second step is to transfer the number of employed persons into working hours with yearly average working hour on nation level. This index is cross-classified by sectors and ownership types. It is assumed that there is no regional difference here.



The third step is to calculate the regional labor compensation ratio. This ratio is mainly based on the national data and adjusted by available regional information from the “China labour statistical yearbook”. This study will only consider the working hours and sectoral average wage ratio to calculate the compensation ratio.

The final step is to combine price and quantity data, into price and quantity indexes of labour input. To construct an index of labour input for each sector, we express sectoral labour input, say,  $L_t$  as a translog function of its components, say,  $L_{jt}$ . The corresponding index of sectoral labour input is a translog quantity index of individual labor inputs:

$$(51) \quad d \ln L_t = \sum_l \bar{v}_{L_{lt}} d \ln L_{lt}$$

## 5.4 Comparison of Labour Input Series

There are three options of labour input series that can be chosen in the production function exercises. They are “Number of workers”, “Working hours” and “Labour input” respectively. In these three series, “Number of workers” is directly adopted from official statistics. “Working hours” is estimated based on “Number of workers” and “Weekly working hours” published by NBS in some years. “Labour input” is estimated based on “Working hours” and quality improvement of laborer. As commented by the OECD Manual of Productivity (2001), “Labour input” is the best choice in production function analysis and “Working hours” is the second best choice.

CHART 5-1: INDICES OF LABOUR INPUT

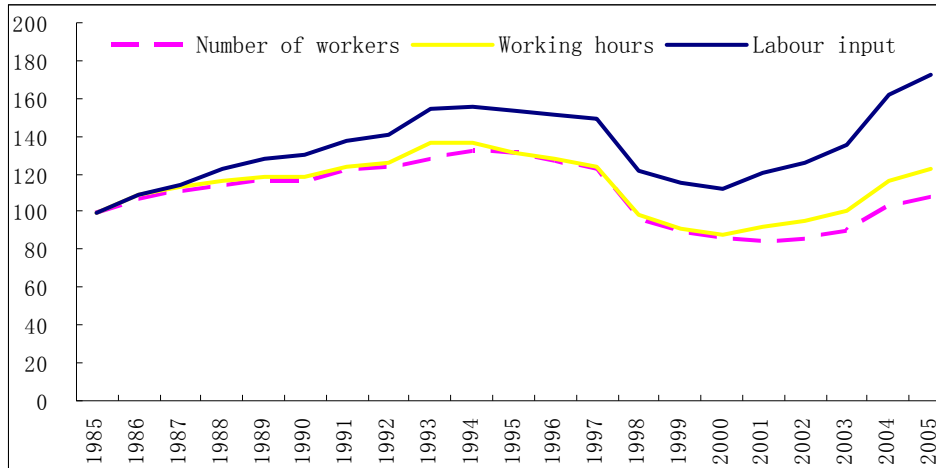
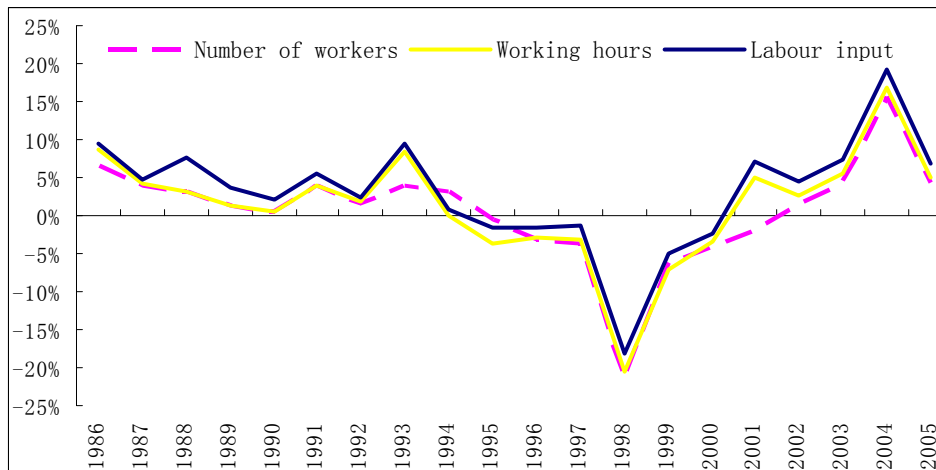


CHART 5-2: GROWTH RATE OF LABOUR INPUT



In comparison of these three series, it can be found that the index of “Labour input” is always higher than the others. It means that quality improvement has made positive contribution to labour input during the period of 1986-2005. Before year 2001, the level of “Working hours” is almost the same with “Number of workers”. Since 2001, “Working hours” grew faster than “Number of workers” continuously. There are two major reasons behind. There are two major reasons behind. First, after year 2000, China has recovered from the Asian financial crisis. Quickly growing economy demands more labour input. On the other side, welfare of the workers was not well protected before the launch of the new version of “Labour Law” in 2008. As a result, weekly working hours kept

rising. According to the news from Xinhua Net in 2003, it has been normal phenomenon for workers in China to work over time. In Shunde City of Guangdong Province, over 80% enterprises have the problem of overtime.<sup>13</sup> Second, non-SOEs' weekly working hour is normally higher than SOEs'. Since 2001, weight of non-SOEs in the whole industry became larger. This also made the whole industry's working hours rising.

From Chart 5-2, growth rate of "labour input" and "Working hours" kept higher than "Number of workers" except year 1994 and 1995. During these two years, Chinese economy just pasted 1993's over-heat and was quickly slowing down. However, at that time, SOEs were still the majority part in the economy. During depression period, SOEs will not fire their employees, but reduce their weekly working hours. This policy changed since the late 1990s. During the Asian financial crisis, large amount of workers from SOEs were laid off. So, the number of workers and employees dropped together with working hours.

As conclusion of the comparison, there are significant differences among the three series. Direct adoption of official "Number of workers" may under estimate total working hours and labour input for most years, and result in over-estimated TFP growth.

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<sup>13</sup> For detailed information, please refer to the website:  
[http://news.xinhuanet.com/newscenter/2003-09/25/content\\_1099806.htm](http://news.xinhuanet.com/newscenter/2003-09/25/content_1099806.htm) (in Chinese)

## **5.5 Results Presentation**

Results presented in the appendix are the reclassified quantity of labour input. The coverage of the data before 1998 is “industrial enterprises with independent accounting systems” and “all state-owned industrial enterprises and non-state-owned industrial enterprises above designated size” from 1998.

TABLE 5-1: LABOUR INPUT BY REGION AND SECTOR

		Labour input of Beijing																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	154	137	143	149	157	168	177	146	148	137	130	109	99	110	96	92	98	87	85	82
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	2	3	3	3	5	6	9	9	8	8	25	15	7	7	8	7	12	12	13
4	NMM	10	10	10	12	12	10	10	22	12	7	6	9	7	6	4	5	5	5	8	5
5	FDB	214	227	245	248	259	270	274	305	277	325	330	302	272	294	291	270	275	294	314	373
6	TBC	4	4	4	4	4	4	4	4	3	4	3	2	2	3	3	3	3	3	3	3
7	TEX	297	301	316	325	332	339	334	330	271	209	194	195	149	134	119	136	125	125	115	105
8	WEA	214	211	221	227	232	231	233	300	252	149	157	225	187	181	191	213	234	243	282	303
9	LEA	59	59	55	54	51	53	53	71	67	60	54	54	37	28	25	31	19	15	20	27
10	WDF	95	97	95	94	96	98	92	102	77	74	52	78	61	57	52	67	63	53	76	105
11	PAP	197	203	214	215	213	216	220	175	228	223	232	221	192	206	190	202	219	216	244	114
12	PET	34	37	41	44	48	100	157	90	138	155	157	108	101	113	115	123	105	39	42	80
13	CHE	259	282	291	318	347	311	279	382	359	382	322	306	322	411	250	258	279	310	314	301
14	RBP	120	120	126	128	132	133	135	117	105	96	104	129	97	79	67	77	79	71	102	140
15	BUI	322	324	323	319	309	312	311	383	597	279	290	317	283	304	259	248	255	226	264	238
16	MSP	269	274	292	349	403	353	412	395	396	659	653	367	264	213	343	328	315	292	266	274
17	MPD	165	170	180	181	182	188	200	217	186	155	146	173	137	127	109	128	164	122	158	161
18	MCH	695	693	709	712	713	711	707	624	582	545	539	477	417	450	387	301	293	325	410	457
19	TRS	281	278	303	305	310	326	341	439	436	453	421	386	310	289	275	296	308	295	367	369
20	ELE	190	198	204	208	214	219	222	231	222	215	205	204	169	164	143	151	147	132	164	168
21	ICT	248	237	242	247	248	249	244	244	231	264	265	262	226	238	254	302	309	300	366	437
22	INS	103	103	114	109	99	102	98	107	111	143	133	123	100	94	92	109	107	125	141	153
	<i>Utilities</i>	62	65	71	77	84	88	94	170	127	156	158	283	195	146	121	125	138	172	233	246
	<i>Mining</i>	164	149	156	164	172	183	193	177	169	152	144	142	121	123	107	104	111	105	104	99
	<i>Manufacturing</i>	3766	3818	3976	4087	4194	4215	4319	4516	4537	4388	4257	3929	3326	3386	3163	3242	3298	3187	3647	3808
	<i>All</i>	3992	4032	4203	4327	4449	4486	4605	4863	4833	4696	4559	4354	3642	3655	3391	3471	3547	3464	3984	4153

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Tianjin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	55	54	64	70	72	70	82	168	208	225	223	875	195	204	168	205	181	174	175	176
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	48	46	50	51	53	51	50	51	53	51	51	38	45	42	41	48	48	45	36	47
5	FDB	159	167	180	186	198	200	218	280	265	250	237	182	234	235	221	242	258	222	213	236
6	TBC	12	11	11	11	12	11	11	11	11	12	11	14	6	6	6	6	6	4	6	4
7	TEX	505	500	524	545	555	536	530	483	451	421	409	279	273	193	193	212	215	208	212	184
8	WEA	162	179	179	181	192	198	212	184	260	139	124	189	253	243	252	266	287	285	265	326
9	LEA	62	57	71	72	75	78	83	85	112	92	71	74	76	65	63	90	84	76	80	77
10	WDF	59	55	55	53	53	55	56	64	69	72	61	52	78	92	94	78	83	95	96	93
11	PAP	140	141	152	158	162	159	160	256	189	176	159	130	149	131	103	115	117	114	124	161
12	PET	35	39	38	43	48	48	49	66	68	81	120	55	60	56	53	15	30	34	42	55
13	CHE	309	321	367	383	401	407	431	508	431	438	406	331	399	383	367	515	455	447	448	420
14	RBP	123	146	145	151	157	155	164	161	179	164	158	129	170	161	156	177	185	174	216	209
15	BUI	213	207	221	219	210	204	215	214	230	179	160	171	139	132	102	103	102	93	95	105
16	MSP	164	161	180	154	160	160	169	258	266	273	255	202	268	242	218	292	313	306	361	363
17	MPD	230	368	258	267	272	268	273	318	311	282	277	230	260	240	225	247	248	216	264	258
18	MCH	682	649	714	723	727	707	723	664	598	611	587	433	364	292	276	311	302	317	366	364
19	TRS	166	169	183	188	194	195	209	360	419	362	342	268	371	344	306	296	275	285	355	339
20	ELE	194	205	228	238	242	241	251	266	260	239	238	182	185	149	140	179	174	159	216	194
21	ICT	168	163	173	181	186	183	194	179	188	233	259	195	228	247	270	295	324	351	454	453
22	INS	65	62	70	73	77	79	81	177	130	178	163	107	96	83	96	96	95	104	81	79
	<i>Utilities</i>	56	48	51	58	68	71	74	134	80	138	98	88	123	124	149	113	132	128	136	140
	<i>Mining</i>	102	100	113	121	125	121	132	219	261	276	275	913	239	246	210	253	228	219	210	223
	<i>Manufacturing</i>	3448	3601	3751	3827	3923	3884	4028	4534	4436	4202	4036	3224	3609	3295	3138	3536	3553	3490	3895	3918
	<i>All</i>	3607	3750	3915	4006	4116	4076	4234	4886	4777	4616	4409	4225	3971	3664	3497	3903	3914	3837	4242	4281

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Hebei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	936	944	973	1035	1058	1086	1087	1105	1090	1252	1219	973	893	854	853	830	911	875	890	910
2	PTM	85	91	84	97	111	118	122	120	296	126	137	1055	123	125	44	49	48	219	236	221
3	MTM	140	158	177	135	135	183	166	282	274	213	202	240	216	210	217	246	241	261	350	410
4	NMM	96	93	108	112	111	109	113	131	128	110	110	116	88	87	87	87	87	78	89	90
5	FDB	457	486	447	458	454	467	500	668	610	624	589	565	490	510	515	771	586	598	646	712
6	TBC	17	20	19	20	21	22	23	23	22	28	29	22	12	24	23	24	22	5	23	22
7	TEX	648	698	953	1063	1142	1199	1216	1148	984	1009	959	731	636	585	607	722	645	642	631	710
8	WEA	178	185	259	275	277	275	283	293	299	305	256	271	200	178	193	246	265	282	292	283
9	LEA	101	108	120	120	114	119	120	153	170	138	128	164	111	102	111	139	121	187	222	207
10	WDF	111	106	123	121	113	117	122	127	133	125	104	131	131	140	134	143	112	123	122	114
11	PAP	257	277	350	376	396	424	451	532	542	467	478	483	391	381	371	374	381	367	356	519
12	PET	59	68	59	64	68	74	82	94	88	106	115	89	76	71	78	83	167	78	119	130
13	CHE	457	495	593	637	660	704	764	869	886	993	1027	848	865	846	807	896	881	898	883	919
14	RBP	145	209	195	210	224	235	240	277	258	233	251	267	218	204	200	223	223	258	267	249
15	BUI	1119	1155	1091	1102	1034	1046	1122	1329	1532	1078	1060	1238	943	901	850	897	902	945	891	906
16	MSP	537	584	531	552	583	619	651	913	1217	1081	1058	907	933	916	888	964	985	1190	1482	1572
17	MPD	270	287	309	331	336	348	364	504	461	369	329	364	262	262	275	306	293	293	344	373
18	MCH	1029	1041	1218	1230	1196	1230	1311	1289	1213	1358	1348	1025	890	844	779	771	725	759	829	853
19	TRS	239	241	264	274	276	292	315	374	385	438	398	378	320	296	286	297	288	316	327	358
20	ELE	145	156	191	204	212	231	249	285	266	259	235	250	211	194	199	201	192	197	206	222
21	ICT	35	39	71	78	83	86	94	88	101	94	106	86	67	60	54	70	65	67	80	81
22	INS	41	44	50	52	51	56	56	80	66	69	69	64	37	35	34	43	44	40	49	49
	<i>Utilities</i>	168	178	214	235	258	282	314	430	375	548	543	400	464	477	518	538	543	595	639	635
	<i>Mining</i>	1256	1286	1342	1379	1414	1497	1487	1637	1788	1701	1669	2384	1321	1277	1200	1211	1287	1434	1565	1631
	<i>Manufacturing</i>	5845	6197	6842	7166	7240	7545	7961	9047	9234	8776	8539	7883	6792	6547	6404	7171	6896	7244	7768	8277
	<i>All</i>	7268	7662	8398	8780	8912	9323	9762	11114	11398	11024	10751	10667	8578	8301	8121	8920	8726	9273	9972	10544

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Shanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1597	1644	1794	1960	2087	2088	2272	2551	2340	2452	2393	2492	2189	1984	1981	2114	2255	2358	3080	3389
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	20	23	28	23	24	35	34	99	110	51	42	37	33	36	36	44	54	69	96	114
4	NMM	55	54	56	58	56	51	52	56	53	55	46	47	20	18	15	15	10	7	12	14
5	FDB	189	196	213	228	237	227	242	248	251	256	245	229	192	177	185	173	169	175	196	214
6	TBC	6	6	6	6	6	6	7	8	8	8	8	8	8	8	5	5	6	6	6	5
7	TEX	292	304	343	373	383	368	389	361	323	297	293	245	182	155	152	162	160	136	132	127
8	WEA	74	73	78	82	84	81	83	71	67	66	57	52	18	18	17	17	17	23	27	23
9	LEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	WDF	54	53	55	58	58	56	56	51	51	56	48	45	15	7	8	7	7	5	5	4
11	PAP	134	138	155	166	181	189	189	178	171	178	211	171	109	90	64	59	51	48	48	50
12	PET	36	47	61	75	93	108	137	121	136	149	152	178	236	242	209	254	305	384	510	578
13	CHE	417	439	502	549	589	596	642	637	617	621	628	623	563	516	494	501	533	526	550	553
14	RBP	83	83	87	93	97	95	105	102	92	87	105	107	40	32	32	45	47	64	46	42
15	BUI	364	377	410	441	448	417	443	461	465	467	454	443	336	309	332	351	386	396	440	416
16	MSP	432	464	519	388	381	563	407	684	753	831	802	797	807	745	793	837	845	895	1012	1039
17	MPD	165	167	182	198	204	202	228	259	265	263	255	309	172	174	158	160	152	124	110	95
18	MCH	780	786	833	875	886	853	884	951	853	804	800	788	629	575	542	551	546	499	560	497
19	TRS	140	137	143	149	151	148	184	187	177	197	201	174	122	111	120	126	132	144	129	123
20	ELE	106	107	115	123	126	127	137	139	133	129	116	125	83	76	72	80	70	64	86	58
21	ICT	60	58	60	64	63	58	66	60	56	64	61	57	50	25	18	24	38	33	34	38
22	INS	23	23	25	27	27	29	27	40	35	34	33	33	25	22	24	22	12	10	11	26
	<i>Utilities</i>	150	155	168	182	194	201	226	271	263	310	304	315	346	362	383	348	344	374	412	396
	<i>Mining</i>	1673	1721	1879	2041	2166	2174	2358	2706	2503	2557	2482	2576	2243	2038	2032	2173	2318	2435	3188	3517
	<i>Manufacturing</i>	3355	3459	3787	3894	4013	4124	4226	4559	4453	4507	4469	4382	3586	3281	3225	3375	3476	3530	3900	3889
	<i>All</i>	5178	5335	5834	6118	6374	6499	6810	7536	7219	7374	7254	7273	6175	5682	5640	5896	6138	6340	7500	7802



## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Inner Mongolia																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	449	451	489	533	572	589	607	677	615	594	639	572	517	518	448	456	457	435	534	550
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	61	75	100	107	107	148	138	106	116	85	93	106	84	76	76	88	88	81	144	160
4	NMM	66	65	68	75	82	84	87	97	98	56	52	72	30	27	25	25	25	29	35	42
5	FDB	246	246	263	278	302	324	340	392	381	362	422	386	278	236	236	258	260	332	325	361
6	TBC	5	5	6	6	7	7	7	8	7	7	8	7	7	7	7	7	7	7	9	7
7	TEX	167	177	205	220	236	243	246	255	233	211	247	211	154	150	144	154	167	166	169	171
8	WEA	64	63	68	71	73	81	83	74	66	71	59	53	29	26	27	29	29	29	37	32
9	LEA	78	75	78	81	84	89	91	89	81	82	83	55	7	9	9	7	6	8	7	5
10	WDF	126	117	118	135	167	186	190	235	264	205	209	159	11	9	6	10	10	11	38	30
11	PAP	89	88	97	103	114	122	127	80	132	133	148	116	56	46	49	49	47	48	52	77
12	PET	7	7	9	10	12	14	16	18	17	16	19	15	17	17	13	13	11	22	51	61
13	CHE	144	152	176	178	183	194	206	216	207	244	267	251	210	196	196	181	186	199	225	254
14	RBP	36	36	39	41	45	48	49	52	49	42	50	36	20	13	12	12	15	6	9	7
15	BUI	289	287	304	296	285	292	305	389	376	248	276	323	137	121	118	117	126	133	161	167
16	MSP	273	289	323	340	363	398	385	404	409	397	424	375	382	367	377	408	365	391	474	484
17	MPD	108	104	111	118	123	125	125	124	120	121	86	85	36	30	29	24	21	21	25	24
18	MCH	360	344	352	366	381	395	408	251	237	388	418	317	226	228	207	195	200	195	198	204
19	TRS	53	49	49	49	49	52	53	63	57	46	38	51	36	31	29	27	27	20	23	30
20	ELE	49	47	49	52	55	59	61	67	60	53	66	47	30	26	19	16	20	21	21	22
21	ICT	16	17	19	21	23	25	26	25	24	30	28	19	14	12	10	8	13	15	16	27
22	INS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Utilities</i>	105	106	116	127	144	157	170	249	206	251	268	238	260	263	276	288	300	317	336	327
	<i>Mining</i>	575	591	658	716	761	821	832	879	829	735	784	750	631	620	550	570	570	545	714	752
	<i>Manufacturing</i>	2110	2104	2263	2364	2500	2654	2718	2742	2720	2657	2848	2506	1648	1524	1490	1516	1509	1623	1839	1963
	<i>All</i>	2789	2801	3037	3207	3405	3631	3720	3870	3755	3643	3900	3494	2539	2408	2315	2373	2380	2485	2888	3042

TABLE 5-1, CONT'D

		Labour input of Liaoning																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1001	912	1012	1055	1105	1169	1150	1312	1140	1170	1007	1083	631	708	701	617	607	618	675	712
2	PTM	109	115	132	143	155	169	175	316	199	319	326	276	233	235	201	230	225	232	303	305
3	MTM	165	165	184	199	210	231	247	265	271	271	307	230	373	189	165	191	180	233	270	335
4	NMM	214	220	213	214	211	213	214	226	242	256	208	199	90	106	87	80	96	76	70	70
5	FDB	698	827	586	603	606	622	620	682	818	741	699	700	518	456	437	400	408	451	543	679
6	TBC	14	14	14	15	17	17	17	22	20	16	16	5	8	11	11	10	10	10	10	9
7	TEX	865	869	986	1076	1102	1144	1117	1048	932	821	739	717	475	357	314	368	301	293	281	269
8	WEA	375	400	380	391	392	404	404	440	572	445	410	391	238	185	212	198	248	267	333	377
9	LEA	139	137	137	138	134	146	140	141	153	168	212	204	141	118	111	102	99	98	82	85
10	WDF	202	179	149	150	149	158	154	170	197	216	188	187	79	84	99	89	114	129	168	173
11	PAP	459	511	570	571	557	596	617	647	706	614	833	553	291	231	206	205	176	167	180	258
12	PET	210	161	222	241	265	285	292	236	251	266	269	246	255	193	172	184	194	209	179	181
13	CHE	789	826	970	1022	1055	1138	1167	1337	1360	1340	1337	1268	905	833	865	734	666	621	683	726
14	RBP	376	365	396	418	429	443	443	449	465	435	430	416	207	193	222	203	227	212	255	262
15	BUI	1341	1334	1373	1336	1227	1208	1202	1409	1407	1324	1233	1174	629	559	536	520	515	480	566	616
16	MSP	1355	1348	1487	1571	1608	1648	1686	1830	1897	1842	1830	1740	1603	1492	1354	1354	1296	1298	1301	1345
17	MPD	554	559	611	612	580	590	590	687	706	654	686	547	247	212	191	199	213	174	223	238
18	MCH	2514	2517	2654	2705	2668	2748	2771	2755	2824	2599	2593	2575	1473	1167	1180	1000	947	987	1042	1151
19	TRS	751	729	778	780	769	781	780	907	948	897	1307	1115	714	672	605	582	560	496	638	651
20	ELE	570	585	717	736	721	747	746	772	764	711	724	696	391	344	329	319	344	281	328	380
21	ICT	26	247	279	293	295	296	291	295	304	292	306	320	251	229	238	210	219	221	250	286
22	INS	170	160	166	171	172	182	178	267	264	261	287	287	130	91	85	84	93	99	102	109
	<i>Utilities</i>	236	246	267	281	289	312	332	462	452	501	519	565	563	628	630	647	660	648	722	709
	<i>Mining</i>	1490	1412	1541	1611	1682	1782	1787	2120	1851	2015	1848	1788	1326	1237	1154	1117	1108	1160	1317	1422
	<i>Manufacturing</i>	11409	11768	12475	12830	12746	13154	13216	14095	14588	13641	14101	13139	8553	7429	7166	6760	6631	6494	7164	7797
	<i>All</i>	13135	13427	14283	14723	14716	15248	15335	16677	16891	16158	16468	15492	10443	9294	8950	8524	8399	8303	9203	9928

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Jilin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	539	526	534	569	600	621	622	618	594	571	530	517	470	343	327	330	314	301	315	318
2	PTM	51	51	53	57	63	68	76	166	90	179	178	108	106	105	55	61	52	115	184	172
3	MTM	66	61	61	53	56	65	69	71	74	82	81	71	59	77	72	75	69	67	71	73
4	NMM	59	59	61	60	59	59	59	77	84	33	25	66	20	28	33	30	25	23	16	20
5	FDB	370	388	416	436	486	505	486	573	514	516	491	447	339	324	298	292	290	306	307	326
6	TBC	14	14	15	16	18	19	19	21	22	24	23	20	22	17	15	16	16	17	14	14
7	TEX	277	285	312	333	348	354	352	349	293	277	264	235	175	141	126	114	111	101	85	74
8	WEA	118	117	123	130	137	139	145	140	124	125	110	106	40	35	37	44	44	41	39	39
9	LEA	67	67	70	71	72	77	75	72	64	74	56	50	19	15	12	11	5	3	4	4
10	WDF	350	330	324	376	433	458	442	424	387	402	361	324	138	107	122	128	122	304	320	294
11	PAP	291	302	333	354	374	393	394	427	396	425	415	335	189	163	139	123	115	79	73	94
12	PET	34	37	41	46	51	52	56	43	33	31	28	30	23	19	18	27	27	26	25	22
13	CHE	420	435	479	510	548	590	613	702	772	763	712	713	634	578	519	505	475	478	444	482
14	RBP	154	160	172	177	180	182	179	199	164	165	138	133	65	58	48	77	50	42	49	45
15	BUI	589	604	638	620	570	552	552	671	670	460	395	533	296	258	223	214	191	199	191	184
16	MSP	154	171	192	216	227	241	266	360	344	352	347	301	277	229	265	210	208	180	196	165
17	MPD	210	208	217	220	225	232	226	241	232	179	174	181	67	60	57	47	34	29	31	28
18	MCH	637	635	653	679	698	696	693	681	658	671	594	563	350	274	252	242	234	186	188	181
19	TRS	436	447	472	495	516	536	561	662	645	700	728	742	653	601	575	642	636	617	613	679
20	ELE	120	127	140	151	162	170	174	173	157	143	149	127	72	64	62	45	38	36	48	41
21	ICT	62	62	65	69	72	76	75	69	67	69	67	66	64	61	55	53	53	38	43	28
22	INS	57	58	61	61	59	61	61	86	82	87	79	84	49	38	34	33	35	29	35	12
	<i>Utilities</i>	130	135	145	158	171	186	198	225	241	254	282	383	319	282	279	293	293	298	431	402
	<i>Mining</i>	714	696	710	740	778	813	825	932	843	865	813	761	656	551	487	495	460	506	585	584
	<i>Manufacturing</i>	4359	4447	4726	4962	5177	5334	5371	5895	5625	5462	5131	4991	3472	3041	2856	2823	2683	2714	2706	2713
	<i>All</i>	5203	5278	5581	5860	6125	6332	6394	7051	6709	6581	6225	6134	4447	3875	3622	3611	3437	3518	3722	3698

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Heilongjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1099	1017	1188	1256	1353	1435	1452	1799	1507	1617	1383	1281	1153	933	915	908	885	873	1001	1107
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	42	40	7	7	5	3	3	54	59	64	44	67	45	32	36	39	36	33	32	35
4	NMM	71	46	72	74	75	75	76	84	104	65	48	100	39	32	25	24	21	20	20	22
5	FDB	707	658	715	750	792	828	826	907	910	860	811	976	642	489	397	400	425	435	452	482
6	TBC	18	19	23	24	25	28	27	32	29	30	25	33	27	23	22	21	21	15	21	24
7	TEX	415	487	519	560	597	614	596	545	468	438	364	332	250	199	178	177	169	143	148	130
8	WEA	153	122	139	146	151	157	151	135	106	112	86	58	12	14	15	15	9	20	9	10
9	LEA	91	93	98	100	99	101	97	101	96	103	82	73	18	11	9	11	7	8	5	4
10	WDF	649	597	624	674	714	745	731	763	763	727	730	669	232	197	188	166	168	170	193	159
11	PAP	277	274	306	322	342	357	351	394	349	373	306	331	195	188	167	169	166	116	148	194
12	PET	85	130	148	154	164	168	166	193	178	192	173	182	184	143	108	132	145	163	148	167
13	CHE	251	306	298	318	346	379	391	484	424	431	384	439	336	301	284	292	274	293	335	296
14	RBP	178	169	199	204	211	227	225	219	201	190	158	196	100	77	63	78	72	76	83	68
15	BUI	748	505	744	714	673	666	645	764	745	518	439	616	300	275	236	219	203	203	190	174
16	MSP	173	189	145	165	190	202	198	274	273	284	236	522	202	164	127	132	144	154	144	157
17	MPD	294	270	345	344	330	345	337	347	326	289	225	552	114	96	86	91	63	68	99	63
18	MCH	1157	1205	1216	1237	1245	1273	1284	1236	1177	1368	1287	910	904	721	614	508	504	473	485	407
19	TRS	277	272	311	314	324	350	339	364	378	347	298	270	280	264	251	261	236	236	209	208
20	ELE	285	274	310	314	313	332	328	276	315	298	268	57	162	157	144	128	123	110	117	103
21	ICT	48	46	50	53	53	53	52	52	54	74	64	67	37	38	31	24	19	29	16	11
22	INS	82	77	85	86	88	93	89	103	99	120	98	83	54	60	52	42	36	15	57	42
	<i>Utilities</i>	178	213	227	236	248	276	300	326	352	391	388	376	416	386	535	547	579	651	805	715
	<i>Mining</i>	1212	1104	1267	1337	1433	1512	1531	1937	1670	1746	1475	1448	1236	997	976	971	942	926	1053	1164
	<i>Manufacturing</i>	5888	5693	6272	6480	6657	6917	6831	7188	6891	6754	6034	6366	4051	3417	2973	2867	2784	2725	2858	2698
	<i>All</i>	7278	7010	7766	8053	8338	8705	8662	9451	8913	8892	7896	8190	5703	4800	4484	4385	4305	4302	4717	4577

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Shanghai																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	FDB	268	285	294	305	315	321	320	334	331	342	315	312	300	291	299	309	314	289	333	331
6	TBC	15	15	16	16	16	16	16	15	18	19	19	19	17	17	21	21	20	18	15	16
7	TEX	1221	1268	1385	1459	1500	1520	1491	1295	1068	899	723	622	462	405	382	450	436	448	542	494
8	WEA	344	343	370	386	404	427	442	435	457	491	473	443	486	441	467	590	616	708	823	847
9	LEA	93	96	106	112	120	136	146	181	191	200	179	178	155	142	134	155	184	224	240	248
10	WDF	107	99	100	101	101	104	102	99	106	128	125	130	150	140	132	151	152	174	241	250
11	PAP	224	235	254	268	277	280	282	278	282	312	296	284	294	269	205	223	220	252	317	276
12	PET	68	92	90	94	97	102	98	60	53	48	50	71	61	61	45	93	97	93	92	87
13	CHE	543	545	609	642	669	706	753	773	763	788	742	689	571	541	598	563	587	600	644	631
14	RBP	296	306	323	337	347	353	360	326	301	321	298	305	318	303	260	308	344	390	528	546
15	BUI	384	400	404	407	400	392	375	360	353	337	309	286	266	228	184	211	214	236	304	298
16	MSP	521	539	570	588	604	612	620	638	647	609	566	526	420	414	394	384	288	279	334	327
17	MPD	459	472	505	519	521	531	522	509	498	510	473	438	507	477	338	384	421	445	587	599
18	MCH	1683	1694	1775	1820	1828	1829	1807	1487	1356	1419	1295	1174	1021	896	801	835	836	952	1181	1211
19	TRS	425	423	440	443	452	476	494	688	657	658	613	595	508	465	468	540	552	548	628	659
20	ELE	502	519	542	568	583	609	630	646	600	620	568	577	523	457	434	484	483	541	736	723
21	ICT	400	404	410	430	438	435	422	392	378	384	321	318	280	298	386	446	547	681	865	1025
22	INS	207	216	218	226	227	239	241	367	333	378	338	301	212	176	150	155	170	199	258	247
	<i>Utilities</i>	91	85	97	99	105	117	132	187	192	199	211	221	179	179	209	193	192	182	176	170
	<i>Mining</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Manufacturing</i>	7760	7951	8410	8721	8898	9087	9120	8883	8391	8462	7700	7268	6550	6021	5699	6303	6482	7076	8667	8815
	<i>All</i>	7851	8035	8507	8820	9003	9204	9252	9070	8583	8661	7911	7489	6729	6200	5908	6496	6674	7258	8844	8985

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Jiangsu																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	553	569	459	479	499	529	524	572	63	854	821	513	493	486	377	388	444	416	412	415
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	49	48	41	41	40	46	47	44	38	55	56	36	26	29	30	28	52	53	53	54
4	NMM	365	359	352	350	336	345	332	353	365	307	288	262	221	215	189	195	185	184	165	139
5	FDB	1038	1092	968	952	928	977	976	1072	1117	1379	1374	1118	1003	926	857	840	803	756	830	859
6	TBC	17	19	17	18	18	18	18	22	20	26	26	14	14	14	20	23	23	24	28	27
7	TEX	2202	2419	3216	3369	3493	3735	3697	3724	3461	2728	2707	2566	2272	2087	1945	2247	2348	2587	3503	3207
8	WEA	560	537	599	611	628	703	723	859	899	744	752	854	777	812	873	1141	1342	1461	2167	2106
9	LEA	275	302	307	301	298	336	334	399	444	284	280	356	291	305	314	350	389	536	542	507
10	WDF	273	278	234	228	219	233	223	235	257	186	163	276	220	230	272	292	339	416	547	512
11	PAP	439	488	514	529	545	596	603	657	665	667	641	595	466	491	439	436	449	467	594	747
12	PET	108	113	132	118	105	131	147	101	103	145	145	100	113	113	111	101	80	79	69	75
13	CHE	1000	1137	1301	1377	1494	1674	1706	1934	1979	2197	2197	2021	1825	1824	1683	1828	1888	1922	2142	2206
14	RBP	519	564	672	667	664	718	725	718	679	522	537	586	508	452	433	500	560	635	947	885
15	BUI	2819	2954	2597	2469	2260	2316	2230	2197	2228	1197	1101	1971	1154	1104	979	944	931	904	1041	967
16	MSP	561	746	504	526	545	569	571	680	767	730	731	646	617	588	589	625	652	762	1085	1115
17	MPD	649	589	787	795	788	845	841	912	961	603	590	762	645	634	635	703	793	903	1185	1140
18	MCH	2354	2460	2748	2768	2762	2943	2991	3020	3121	3015	3003	2973	2507	2261	2168	2192	2166	2257	2950	2839
19	TRS	488	547	544	546	550	587	597	831	847	1125	1001	802	746	699	693	758	813	934	1117	1107
20	ELE	583	657	764	792	818	923	950	1072	1062	869	830	978	862	858	801	898	965	1072	1537	1516
21	ICT	447	465	695	728	747	803	803	790	784	1001	1038	758	725	718	716	821	1012	1535	2410	3062
22	INS	200	205	244	248	248	284	293	341	332	447	400	314	250	232	227	227	249	313	401	440
	<i>Utilities</i>	189	212	232	244	261	290	298	353	387	681	698	439	415	434	458	452	446	467	528	500
	<i>Mining</i>	967	976	852	870	875	921	903	970	465	1216	1166	810	740	730	595	612	681	653	629	607
	<i>Manufacturing</i>	14533	15574	16842	17041	17111	18391	18427	19564	19727	17863	17511	17690	14996	14348	13755	14923	15802	17564	23095	23316
	<i>All</i>	15688	16762	17926	18155	18247	19601	19629	20887	20579	19760	19375	18939	16151	15512	14808	15987	16929	18684	24252	24423

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Zhejiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	65	63	64	64	66	69	67	21	73	94	87	43	40	38	35	37	35	33	21	29
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	27	28	30	31	32	37	38	46	41	67	63	68	38	100	84	34	29	28	28	37
4	NMM	213	206	213	207	203	207	206	224	214	111	96	137	82	0	0	61	63	75	99	76
5	FDB	692	698	760	725	688	719	732	724	685	1038	995	594	521	505	491	500	534	572	632	684
6	TBC	11	12	14	14	15	15	14	14	13	23	23	12	10	9	10	9	10	11	11	11
7	TEX	1631	1852	2051	2035	2028	2202	2329	2310	2208	1401	1350	1388	1348	1256	1204	1523	1696	2018	3036	3060
8	WEA	358	338	354	352	364	422	490	662	719	482	434	575	650	689	847	1184	1518	1799	1889	2162
9	LEA	173	176	196	194	214	279	319	341	402	325	325	368	394	394	450	759	1004	1214	1702	1787
10	WDF	206	192	195	194	193	217	222	223	203	173	157	156	126	142	168	229	276	360	655	689
11	PAP	299	317	345	350	359	386	416	434	421	459	468	387	351	345	358	446	524	619	767	1132
12	PET	36	40	44	45	46	48	48	34	33	41	46	37	39	41	40	38	38	38	38	39
13	CHE	445	480	543	547	560	623	682	752	770	1074	1081	805	794	767	772	898	956	1052	1251	1375
14	RBP	452	473	500	485	479	529	567	572	560	425	431	489	437	425	474	544	642	786	1105	1158
15	BUI	1143	1202	1259	1217	1149	1145	1149	1159	1268	603	605	851	521	496	459	471	520	614	751	695
16	MSP	151	163	185	190	196	208	217	252	264	312	309	250	231	236	233	257	278	331	492	539
17	MPD	361	401	427	427	431	459	486	539	567	477	462	433	409	407	471	621	740	854	1057	1221
18	MCH	1304	1280	1367	1341	1314	1384	1460	1466	1503	1548	1459	1127	998	1001	1107	1316	1475	1786	2490	2700
19	TRS	210	243	258	258	260	276	296	388	386	470	461	399	370	366	413	525	604	834	1121	1259
20	ELE	464	519	538	531	537	580	602	620	622	607	588	557	564	561	670	863	1059	1283	1766	1869
21	ICT	186	206	225	234	242	266	279	280	272	359	393	282	288	289	344	399	443	590	795	926
22	INS	137	151	152	154	154	167	175	198	192	269	252	182	165	159	186	228	233	411	552	645
	<i>Utilities</i>	147	155	153	167	185	202	211	253	263	486	516	307	302	301	307	323	333	355	424	423
	<i>Mining</i>	305	297	308	303	301	313	311	291	329	272	246	248	161	138	120	132	127	136	148	143
	<i>Manufacturing</i>	8258	8743	9415	9294	9230	9923	10485	10969	11087	10086	9838	8890	8215	8086	8697	10809	12549	15172	20110	21949
	<i>All</i>	8709	9195	9876	9763	9716	10438	11006	11514	11679	10844	10600	9445	8677	8525	9124	11264	13009	15662	20682	22515

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Anhui																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	584	550	647	674	703	712	741	886	883	848	947	930	856	832	808	801	832	864	1131	1057
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	48	41	46	49	50	54	60	66	161	159	165	143	119	119	116	135	133	136	141	154
4	NMM	134	135	148	148	140	150	159	194	242	205	317	236	62	51	52	53	45	47	51	52
5	FDB	509	529	584	589	587	605	625	749	781	794	846	826	529	472	466	460	477	464	482	528
6	TBC	33	35	41	41	42	41	41	45	44	42	44	43	44	46	44	45	42	41	40	34
7	TEX	536	586	694	759	788	957	894	932	912	810	806	825	541	459	432	485	461	416	392	383
8	WEA	113	120	132	137	128	142	158	175	187	181	178	130	72	68	68	81	92	106	127	148
9	LEA	61	68	70	71	67	76	79	112	114	122	120	109	50	57	61	58	68	75	85	88
10	WDF	136	138	141	144	138	150	149	156	184	194	204	174	67	80	98	110	118	149	126	130
11	PAP	202	224	245	256	271	286	296	331	399	363	384	335	187	169	153	133	125	122	127	175
12	PET	39	41	46	48	51	52	54	44	44	47	48	49	42	38	25	27	25	22	25	22
13	CHE	295	334	374	397	419	437	487	576	593	656	684	639	493	452	460	435	421	393	402	426
14	RBP	141	145	163	166	185	199	208	215	247	237	243	237	137	133	129	144	162	165	171	177
15	BUI	1008	1101	1219	1207	1144	1141	1151	1199	1227	1284	1408	1321	471	418	374	355	351	346	335	310
16	MSP	315	339	365	373	387	393	404	505	423	447	511	436	369	350	355	364	376	389	386	392
17	MPD	164	181	193	195	186	197	199	213	222	214	213	196	96	76	66	64	69	77	100	112
18	MCH	526	542	603	628	632	656	700	758	772	765	781	733	488	475	386	354	367	368	394	383
19	TRS	173	177	195	195	197	210	222	260	273	273	287	266	181	180	185	218	220	243	251	276
20	ELE	121	137	143	150	154	166	185	243	236	247	246	252	170	142	137	155	164	214	232	251
21	ICT	47	62	55	62	70	73	77	74	89	88	88	78	70	58	51	57	62	62	83	85
22	INS	36	38	41	42	42	49	52	56	54	70	69	62	30	25	22	19	29	28	28	30
	<i>Utilities</i>	110	117	131	141	159	166	177	279	223	234	234	261	241	315	344	260	281	318	305	303
	<i>Mining</i>	766	727	841	871	893	916	959	1146	1286	1212	1429	1309	1036	1002	975	989	1011	1048	1322	1263
	<i>Manufacturing</i>	4454	4797	5304	5458	5489	5830	5980	6643	6800	6832	7159	6711	4035	3697	3513	3564	3628	3679	3787	3950
	<i>All</i>	5330	5641	6277	6470	6541	6912	7117	8068	8309	8277	8822	8280	5312	5014	4833	4814	4921	5045	5414	5516



## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Fujian																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	103	106	119	123	126	122	118	120	121	120	134	131	97	83	72	73	79	85	122	156
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	26	21	21	22	23	27	25	28	26	21	20	24	17	15	18	22	24	30	39	54
4	NMM	74	79	85	86	90	90	94	108	119	113	103	103	60	54	51	47	50	50	49	57
5	FDB	399	400	457	480	463	451	434	507	554	556	534	525	414	379	363	386	397	477	613	684
6	TBC	11	11	13	14	15	16	16	19	16	15	14	14	13	12	12	15	17	15	14	13
7	TEX	201	234	270	279	283	290	287	263	250	252	237	241	202	183	201	235	269	429	568	641
8	WEA	127	146	164	183	214	267	286	261	324	350	340	412	348	302	389	475	671	917	1062	1116
9	LEA	58	62	72	76	89	142	182	311	593	486	481	492	556	534	592	723	873	1204	1681	1751
10	WDF	196	215	225	232	249	231	239	299	287	279	262	302	135	161	141	172	203	269	380	396
11	PAP	202	210	233	244	258	274	287	306	322	340	326	307	206	198	206	245	240	276	341	533
12	PET	1	1	2	2	2	1	7	8	9	8	9	9	10	12	7	10	11	10	11	11
13	CHE	238	255	288	302	313	326	334	368	387	373	367	373	297	286	260	284	283	295	321	342
14	RBP	139	147	179	185	189	196	207	226	238	214	218	263	224	229	222	273	325	435	612	637
15	BUI	258	260	283	291	296	301	319	371	437	440	433	456	362	373	412	411	468	555	753	767
16	MSP	79	86	100	101	105	108	106	132	129	144	143	142	127	120	121	129	130	143	185	196
17	MPD	86	95	99	105	117	126	128	115	129	138	127	136	92	94	105	113	139	143	172	216
18	MCH	347	340	357	361	365	359	357	338	362	351	334	305	210	196	198	193	202	248	344	340
19	TRS	87	90	98	99	101	103	109	137	128	126	119	127	93	100	102	105	131	170	219	245
20	ELE	98	104	113	121	127	132	142	156	180	160	183	186	159	165	162	198	207	284	423	436
21	ICT	74	83	97	104	118	124	129	128	214	168	173	220	256	259	316	357	401	465	585	694
22	INS	28	25	27	29	31	30	28	38	41	70	58	74	43	43	43	54	64	195	236	288
	<i>Utilities</i>	118	130	145	156	168	175	187	215	237	261	275	296	286	244	259	302	286	309	334	361
	<i>Mining</i>	203	206	225	231	239	239	237	256	265	254	257	258	173	153	141	142	153	165	210	267
	<i>Manufacturing</i>	2629	2765	3075	3208	3335	3477	3597	3985	4602	4471	4358	4586	3748	3645	3853	4376	5031	6530	8522	9307
	<i>All</i>	2949	3100	3445	3595	3742	3890	4021	4456	5104	4986	4891	5140	4207	4042	4253	4820	5470	7004	9066	9934

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Jiangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	445	451	479	500	521	540	518	494	512	470	433	436	293	276	234	258	225	235	264	323
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	205	219	236	245	249	277	273	278	264	280	249	230	124	119	104	114	116	111	143	148
4	NMM	67	68	75	75	76	79	78	87	100	104	114	104	70	35	46	55	45	46	25	30
5	FDB	307	335	344	356	370	381	381	392	425	441	412	410	291	310	258	239	213	208	211	248
6	TBC	6	6	7	8	10	10	17	17	16	15	15	15	11	19	16	24	24	25	25	23
7	TEX	288	315	356	379	395	417	426	422	408	380	354	336	229	223	192	201	213	228	236	259
8	WEA	68	69	82	84	86	92	95	64	68	70	60	53	42	28	24	30	47	52	181	203
9	LEA	40	40	51	51	49	52	52	105	108	113	91	86	55	45	39	43	54	60	78	93
10	WDF	171	171	187	186	185	198	193	204	261	258	227	217	151	82	76	76	78	83	102	120
11	PAP	167	174	208	211	219	238	247	276	293	297	279	260	163	155	127	111	106	94	97	135
12	PET	17	20	23	23	23	25	26	24	27	27	26	26	16	19	24	25	24	24	27	30
13	CHE	238	253	295	304	316	346	361	425	432	434	431	425	292	318	303	300	312	375	384	447
14	RBP	89	94	102	102	101	106	106	119	114	109	112	91	58	46	28	29	41	34	52	61
15	BUI	557	578	626	632	633	658	654	729	832	822	735	773	525	396	345	326	291	329	327	375
16	MSP	192	208	230	242	251	264	267	437	350	355	352	352	302	302	316	364	316	340	341	374
17	MPD	96	101	110	111	111	115	115	136	146	137	124	116	64	44	41	42	45	43	51	60
18	MCH	505	516	548	555	558	575	581	588	585	549	688	541	372	282	280	232	199	155	197	177
19	TRS	234	235	238	241	245	260	263	297	320	327	332	308	236	240	226	225	230	239	215	212
20	ELE	109	115	126	131	136	147	151	149	157	148	135	132	90	95	89	79	75	73	102	132
21	ICT	90	93	96	99	95	100	105	102	110	107	110	104	70	77	66	53	74	85	81	113
22	INS	45	48	47	48	48	52	51	56	69	83	76	73	49	56	55	56	58	60	54	64
	<i>Utilities</i>	145	150	165	171	180	197	205	227	262	283	294	307	269	304	323	332	338	394	379	400
	<i>Mining</i>	717	737	791	820	846	896	870	859	876	854	796	770	487	431	384	427	386	391	432	501
	<i>Manufacturing</i>	3223	3370	3677	3763	3831	4036	4092	4540	4722	4673	4558	4319	3015	2738	2505	2456	2400	2506	2762	3124
	<i>All</i>	4084	4257	4632	4754	4858	5129	5167	5626	5860	5809	5648	5397	3771	3473	3211	3215	3125	3291	3573	4025

TABLE 5-1, CONT'D

		Labour input of Shandong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	976	1027	1096	1194	1279	1341	1358	1477	1432	1691	1401	1513	1479	1460	1481	1548	1706	1803	1903	1826
2	PTM	243	329	363	394	232	248	260	494	485	737	490	498	522	532	230	252	249	252	571	220
3	MTM	89	93	106	120	147	165	176	197	219	228	223	215	242	237	259	270	284	318	335	364
4	NMM	173	183	195	216	234	236	252	285	274	175	239	224	165	164	163	176	163	179	222	273
5	FDB	703	799	895	948	1009	1089	1172	1320	1583	1491	1664	1692	1768	1718	1817	1973	2499	2408	2957	3439
6	TBC	52	54	53	54	56	55	56	55	53	72	47	53	49	45	40	45	40	45	36	33
7	TEX	1281	1420	1714	1997	2075	2249	2253	2101	2033	2070	1805	1738	1515	1501	1478	1791	1947	2143	2491	2768
8	WEA	245	268	301	330	339	375	380	373	455	479	458	468	364	367	406	470	567	735	989	1137
9	LEA	151	172	188	227	200	239	253	283	416	426	440	434	405	399	415	467	467	498	606	548
10	WDF	168	183	196	202	206	225	256	266	298	193	277	263	156	146	181	225	263	343	503	455
11	PAP	356	406	474	511	538	587	631	672	809	750	881	891	764	794	802	864	873	922	1032	1708
12	PET	117	144	168	183	187	202	223	234	227	294	238	257	294	281	294	232	138	201	232	247
13	CHE	546	597	728	768	853	922	993	1097	1230	1400	1460	1360	1281	1256	1277	1439	1545	1648	1952	2232
14	RBP	268	295	334	365	387	437	490	480	512	530	573	566	514	522	518	581	667	683	784	708
15	BUI	1171	1295	1326	1294	1240	1302	1419	1563	1844	1005	1760	1648	1223	1190	1165	1250	1347	1618	1818	1886
16	MSP	283	312	330	353	369	389	420	472	615	681	612	543	522	499	480	551	506	642	919	1053
17	MPD	374	415	447	469	477	518	560	593	619	486	581	599	489	446	474	512	532	519	638	703
18	MCH	1382	1477	1636	1699	1702	1785	1887	1759	2060	1849	1996	2011	1793	1742	1752	1750	1789	1939	2203	2510
19	TRS	343	367	377	411	411	437	458	553	569	680	617	595	577	543	508	550	610	683	809	950
20	ELE	234	256	290	313	337	363	394	434	502	510	503	581	472	493	477	515	555	612	804	930
21	ICT	115	121	128	148	143	153	159	161	171	259	199	221	203	204	227	255	299	406	546	706
22	INS	73	75	84	83	86	93	94	163	165	236	167	173	123	109	107	134	128	135	173	208
	<i>Utilities</i>	203	221	260	284	306	402	440	459	490	718	548	591	602	650	668	691	897	991	916	941
	<i>Mining</i>	1481	1631	1760	1924	1892	1990	2046	2452	2411	2832	2353	2451	2408	2392	2133	2246	2402	2552	3031	2683
	<i>Manufacturing</i>	7862	8657	9670	10353	10617	11420	12097	12579	14161	13409	14277	14091	12514	12256	12417	13604	14772	16180	19493	22220
	<i>All</i>	9546	10509	11690	12562	12815	13812	14583	15490	17061	16959	17177	17132	15524	15298	15218	16541	18071	19723	23440	25844

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Henan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1103	1102	1146	1248	1273	1346	1398	1491	1433	1494	1490	1490	1578	1495	1472	1579	1611	1690	1823	2074
2	PTM	97	107	228	122	132	148	161	335	299	303	306	323	213	205	211	200	193	330	319	300
3	MTM	45	57	56	66	74	91	103	128	138	158	156	150	162	168	170	196	207	206	226	248
4	NMM	55	54	54	59	63	63	69	75	90	84	84	99	57	62	66	80	73	78	78	101
5	FDB	452	480	504	531	538	582	648	791	832	1015	959	1113	1041	1069	1023	1080	1051	1093	1167	1508
6	TBC	71	72	75	80	76	86	89	96	86	94	86	90	92	87	85	94	84	71	62	74
7	TEX	777	813	921	988	1048	1105	1109	1123	1043	980	958	976	848	751	702	837	792	707	825	807
8	WEA	158	160	158	156	165	174	185	165	165	174	163	146	95	85	84	95	87	85	118	127
9	LEA	113	120	124	122	127	139	147	195	218	254	216	231	172	137	130	140	123	116	133	116
10	WDF	104	103	106	110	109	113	125	138	133	150	145	157	99	102	106	124	117	138	207	182
11	PAP	301	322	373	396	400	432	475	517	537	604	574	547	509	477	483	505	549	508	496	779
12	PET	33	38	46	50	54	61	76	82	87	85	92	82	107	67	62	49	46	51	68	80
13	CHE	506	534	646	682	700	765	827	966	992	1090	1133	1132	1054	984	921	985	958	941	979	1102
14	RBP	151	154	162	172	178	197	220	222	215	234	227	226	203	196	210	226	240	234	246	215
15	BUI	875	929	973	996	979	1049	1084	1184	1257	1414	1363	1476	1179	1159	1185	1160	1171	1180	1190	1362
16	MSP	295	311	341	351	351	367	369	472	512	574	611	597	644	617	613	686	647	680	777	820
17	MPD	201	207	233	220	229	241	242	277	277	293	258	248	172	153	145	158	167	141	172	177
18	MCH	1257	1300	1370	1373	1389	1460	1533	1714	1702	1705	1698	1662	1431	1266	1213	1211	1151	1129	1161	1230
19	TRS	194	195	203	212	230	251	251	321	313	376	375	363	344	315	308	326	309	294	395	357
20	ELE	243	256	266	292	292	306	328	327	342	344	326	331	281	258	244	263	250	254	298	314
21	ICT	68	67	73	74	74	81	90	95	88	89	100	101	91	120	71	81	78	67	65	90
22	INS	57	55	58	65	65	68	72	97	100	104	107	102	68	65	60	74	70	49	97	116
	<i>Utilities</i>	228	243	277	306	324	359	351	479	508	547	588	628	663	739	796	799	814	849	907	931
	<i>Mining</i>	1301	1319	1485	1495	1542	1648	1732	2029	1961	2040	2037	2062	2009	1931	1920	2054	2085	2304	2446	2723
	<i>Manufacturing</i>	5858	6118	6632	6872	7006	7477	7870	8783	8899	9580	9392	9581	8431	7908	7645	8096	7890	7739	8455	9456
	<i>All</i>	7386	7680	8393	8672	8873	9484	9952	11291	11368	12167	12016	12272	11103	10577	10360	10949	10789	10893	11809	13111

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Hubei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	148	176	153	164	171	174	168	177	171	173	182	186	122	100	67	70	82	75	68	79
2	PTM	58	114	61	67	76	82	79	90	92	143	93	81	166	92	72	123	58	71	107	112
3	MTM	34	22	34	37	41	50	53	71	67	72	84	81	56	71	77	80	93	86	130	91
4	NMM	155	121	147	154	161	173	171	220	233	217	265	234	165	156	155	150	152	140	100	114
5	FDB	556	580	529	552	570	587	569	626	697	677	736	711	611	604	571	531	514	522	419	531
6	TBC	44	77	57	62	65	66	65	69	67	65	62	63	64	57	64	63	62	49	52	51
7	TEX	1120	1262	1435	1512	1530	1556	1484	1394	1315	1172	1135	1069	867	757	709	709	704	742	652	708
8	WEA	292	70	309	315	314	344	337	320	344	347	344	318	263	278	274	307	344	307	267	289
9	LEA	122	24	104	106	97	96	92	137	193	139	124	102	45	42	35	38	34	34	27	28
10	WDF	203	65	176	180	177	185	169	161	169	186	198	187	90	77	70	66	69	103	67	69
11	PAP	289	234	332	351	368	382	377	398	424	405	411	387	272	266	248	248	235	236	223	271
12	PET	53	84	57	61	65	67	67	59	46	67	60	61	63	50	35	35	39	35	61	37
13	CHE	445	611	568	601	629	673	690	747	810	850	862	908	781	760	712	744	801	751	617	721
14	RBP	209	124	247	259	259	268	259	273	255	243	237	251	164	148	142	157	158	156	126	130
15	BUI	1110	698	1078	1069	1017	1019	995	1032	1155	1164	1207	1220	730	663	626	583	547	505	423	468
16	MSP	620	1016	686	706	704	712	702	777	837	838	639	821	723	645	606	603	585	605	598	666
17	MPD	283	106	338	349	348	350	338	379	371	393	394	369	248	227	169	177	175	160	166	171
18	MCH	1008	1257	1103	1125	1148	1205	1169	1106	1137	1110	1065	1066	781	692	654	802	543	526	428	466
19	TRS	564	869	672	694	704	740	769	1022	1078	1009	1037	998	934	856	787	789	850	815	834	814
20	ELE	211	193	259	267	270	289	286	318	275	263	249	242	172	158	159	154	156	142	128	141
21	ICT	127	178	149	150	147	154	145	139	133	134	135	112	101	111	98	114	115	156	102	138
22	INS	80	103	85	93	97	108	108	118	116	97	126	113	78	74	74	81	75	130	44	67
	<i>Utilities</i>	228	334	260	265	286	333	348	314	380	374	387	401	374	387	406	412	399	485	463	486
	<i>Mining</i>	394	433	394	422	449	478	471	557	563	605	624	582	509	419	371	423	385	371	404	396
	<i>Manufacturing</i>	7334	7548	8185	8452	8511	8801	8621	9076	9423	9159	9023	8998	6987	6464	6033	6201	6005	5973	5234	5765
	<i>All</i>	7957	8314	8839	9139	9247	9612	9439	9947	10366	10139	10034	9981	7870	7269	6809	7036	6789	6829	6101	6648

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Hunan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	590	620	671	703	726	739	741	762	718	744	758	721	514	507	477	458	453	497	557	557
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	218	229	196	212	222	254	275	309	295	278	288	288	157	151	140	136	147	138	150	170
4	NMM	47	80	133	137	140	146	148	178	178	172	182	155	68	71	55	58	57	82	72	79
5	FDB	469	502	404	417	425	424	424	507	494	456	451	453	295	281	283	289	321	359	388	464
6	TBC	54	64	55	58	60	63	69	72	70	73	74	76	64	63	58	58	55	43	35	38
7	TEX	566	651	576	617	631	641	659	662	568	505	576	421	269	251	221	214	251	258	280	317
8	WEA	110	120	128	129	131	137	134	154	111	110	106	94	31	29	33	41	46	55	60	65
9	LEA	96	104	111	111	108	116	118	160	134	144	123	117	44	31	36	41	42	54	61	54
10	WDF	91	95	137	139	138	141	144	178	189	178	187	206	61	93	82	95	107	119	158	140
11	PAP	254	287	337	360	384	407	423	499	460	440	474	449	244	204	190	201	210	215	239	364
12	PET	41	46	37	41	45	80	114	51	110	113	112	111	112	105	71	64	49	67	68	71
13	CHE	527	594	577	599	613	628	649	834	748	720	719	720	568	549	549	537	535	751	812	849
14	RBP	140	159	169	177	181	182	189	216	185	174	184	170	88	80	76	80	78	79	92	82
15	BUI	537	577	943	983	981	988	1043	1298	1190	1203	1297	1222	665	688	659	656	650	648	652	680
16	MSP	373	391	347	374	397	428	460	563	505	567	574	561	516	516	493	560	506	537	618	627
17	MPD	138	137	180	182	181	189	197	287	240	209	198	186	71	67	67	83	76	86	109	104
18	MCH	909	981	918	944	967	1005	1044	1177	1026	1006	1023	1034	671	592	548	506	466	487	467	463
19	TRS	328	347	320	329	339	351	367	707	441	447	421	400	307	282	325	266	276	285	288	283
20	ELE	261	287	278	290	303	322	333	405	364	322	311	296	200	180	152	164	161	160	158	187
21	ICT	47	82	106	112	113	114	129	171	119	114	123	124	82	79	64	68	74	79	87	89
22	INS	60	62	56	56	56	59	63	91	57	62	68	65	34	35	36	42	40	42	38	42
	<i>Utilities</i>	200	222	212	221	233	247	260	293	312	330	369	371	335	351	359	385	389	435	479	416
	<i>Mining</i>	856	930	1000	1051	1088	1139	1164	1249	1191	1194	1228	1164	738	729	671	653	658	716	779	806
	<i>Manufacturing</i>	5000	5485	5678	5917	6053	6276	6560	8033	7009	6844	7023	6707	4319	4123	3942	3963	3942	4325	4612	4919
	<i>All</i>	6055	6637	6890	7189	7374	7662	7984	9575	8512	8368	8619	8242	5392	5202	4973	5000	4988	5476	5869	6141

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Guangdong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	195	185	185	207	223	225	194	173	192	207	200	138	117	78	67	24	28	36	53	27
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	103	104	116	116	112	63	64	166	114	134	155	78	67	59	54	53	70	59	65	68
4	NMM	116	119	141	133	144	146	150	140	214	122	119	146	104	113	116	119	115	111	88	86
5	FDB	662	690	721	724	880	959	945	868	1162	1205	1228	917	891	839	792	815	863	883	925	1069
6	TBC	30	33	31	33	36	38	36	40	34	42	45	32	32	33	30	30	28	28	29	25
7	TEX	718	777	857	915	932	1008	969	962	875	738	781	706	677	676	672	841	954	1091	1603	1736
8	WEA	477	568	714	771	833	1022	1097	1416	1479	1263	1213	1442	1887	1769	1871	1888	2174	2462	2916	3155
9	LEA	153	203	297	325	346	495	594	750	891	869	847	1172	1150	1352	1426	1689	1962	2254	3141	3307
10	WDF	248	253	258	249	259	284	282	292	365	318	306	355	336	371	449	508	581	797	1198	1262
11	PAP	304	319	360	369	396	446	472	499	594	639	655	622	817	667	676	781	928	1079	1475	1782
12	PET	82	85	91	97	102	107	106	99	102	131	133	94	103	106	129	117	65	58	73	80
13	CHE	393	432	543	554	570	636	659	690	801	965	964	775	720	715	718	786	877	950	1060	1153
14	RBP	361	395	447	455	486	543	576	594	581	646	627	648	818	867	897	1038	1215	1407	2104	2212
15	BUI	680	718	819	829	863	935	952	1024	1252	1169	1122	1119	1180	1187	1133	1137	1161	1229	1438	1554
16	MSP	196	208	234	244	165	168	161	373	322	420	389	312	374	362	327	331	331	362	506	619
17	MPD	369	381	428	420	420	464	466	514	650	583	635	658	852	862	944	1114	1325	1397	1999	2338
18	MCH	782	798	889	872	880	929	907	809	788	845	826	703	601	565	566	538	576	776	1407	1603
19	TRS	245	262	266	272	285	307	313	408	417	528	501	413	418	456	472	497	547	608	739	830
20	ELE	436	472	567	598	595	717	780	901	1078	920	925	1025	1205	1202	1399	1639	2005	2679	4096	4715
21	ICT	237	331	422	510	413	651	777	1062	1039	1250	1276	1336	1751	1940	2245	2624	3181	4099	6400	7535
22	INS	39	44	45	46	43	48	46	251	216	315	323	285	383	368	410	483	624	1015	1284	1411
	<i>Utilities</i>	225	239	275	301	351	397	416	454	563	733	798	668	596	625	624	661	675	694	763	730
	<i>Mining</i>	415	408	443	456	479	434	408	480	519	463	473	362	288	250	236	196	212	206	206	181
	<i>Manufacturing</i>	6410	6969	7989	8286	8505	9758	10138	11553	12646	12846	12797	12613	14194	14338	15154	16857	19397	23175	32395	36388
	<i>All</i>	7050	7617	8706	9044	9335	10589	10961	12487	13728	14042	14068	13643	15078	15213	16015	17714	20285	24075	33364	37299

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Guangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	148	145	155	164	172	180	184	193	192	183	181	174	149	110	90	77	75	64	53	63
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	118	126	144	148	145	162	173	190	178	196	131	157	145	143	142	164	138	131	89	109
4	NMM	38	36	35	39	42	44	64	64	74	72	62	71	47	33	32	32	29	26	30	29
5	FDB	349	358	386	421	454	477	519	529	531	549	513	524	479	449	420	413	386	402	425	449
6	TBC	19	22	26	28	30	30	35	30	28	27	23	23	21	23	18	16	14	14	9	11
7	TEX	202	213	245	273	278	276	283	276	239	211	185	170	122	112	98	122	110	102	115	128
8	WEA	52	54	56	60	57	61	64	66	64	68	65	49	30	15	12	10	12	11	12	15
9	LEA	23	26	28	29	32	35	35	43	46	45	42	37	23	16	20	20	21	29	41	38
10	WDF	66	68	69	74	74	78	85	102	117	119	114	129	46	38	39	43	44	74	109	102
11	PAP	113	119	141	150	157	169	183	213	220	234	226	224	154	143	137	143	129	132	146	220
12	PET	2	3	4	4	5	7	7	5	6	6	6	7	6	7	6	6	6	7	8	8
13	CHE	199	206	243	254	257	270	283	331	341	364	347	353	308	283	278	304	305	333	346	400
14	RBP	62	65	81	80	75	79	83	87	88	93	85	87	56	51	49	53	57	57	56	52
15	BUI	292	297	340	361	366	382	413	503	584	680	620	623	402	359	361	373	359	401	436	431
16	MSP	94	110	123	140	152	159	168	209	220	279	275	291	273	249	254	300	243	252	352	374
17	MPD	80	82	89	89	86	88	87	83	102	100	90	104	40	34	47	55	51	24	35	34
18	MCH	304	309	319	333	331	335	349	378	379	384	369	354	291	245	230	221	220	187	184	179
19	TRS	101	105	110	115	116	120	129	165	170	185	176	178	156	143	136	140	142	172	183	199
20	ELE	78	87	94	99	98	99	99	117	112	108	102	108	89	119	74	68	64	62	60	53
21	ICT	42	42	44	47	50	53	52	48	51	52	48	46	39	33	34	31	28	28	33	35
22	INS	19	18	19	19	19	19	20	23	28	33	31	29	24	22	21	21	26	27	22	23
	<i>Utilities</i>	105	108	119	129	136	149	161	183	190	215	213	245	238	251	261	265	287	301	312	330
	<i>Mining</i>	304	307	333	351	358	385	420	447	444	452	373	402	341	286	265	273	241	221	172	202
	<i>Manufacturing</i>	2096	2186	2417	2576	2636	2735	2891	3210	3326	3537	3318	3336	2562	2342	2235	2339	2217	2313	2572	2751
	<i>All</i>	2505	2601	2869	3056	3130	3269	3473	3840	3961	4203	3905	3983	3141	2878	2760	2877	2746	2835	3055	3283



## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Sichuan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1125	1164	1221	1304	1398	1456	1466	1722	351	1339	1304	1493	930	842	764	779	825	879	997	1152
2	PTM	115	114	116	59	64	130	135	0	312	158	183	301	525	297	64	98	132	183	233	218
3	MTM	81	74	71	75	82	95	102	105	109	78	83	89	87	66	85	98	98	128	172	114
4	NMM	237	244	253	260	273	284	282	327	380	289	275	317	192	160	131	122	112	109	105	110
5	FDB	961	1001	1045	1070	1090	1094	1090	1647	1307	1164	1109	1159	675	662	647	684	707	740	804	958
6	TBC	36	40	46	49	53	56	59	63	55	76	76	68	58	60	43	43	41	42	43	44
7	TEX	853	949	1090	1184	1292	1387	1469	1640	1798	1285	1225	1047	545	485	506	515	481	486	482	474
8	WEA	238	231	231	232	230	229	222	195	168	169	171	120	80	63	56	53	52	51	58	42
9	LEA	158	161	166	168	169	175	164	210	195	199	187	146	97	78	61	73	79	103	140	131
10	WDF	180	182	187	189	187	193	188	202	222	186	155	182	123	98	80	81	85	96	122	113
11	PAP	452	480	529	552	581	610	643	715	891	725	704	668	405	342	298	307	319	326	336	433
12	PET	35	36	37	39	43	46	46	24	31	32	8	25	27	26	24	28	34	37	46	59
13	CHE	714	773	868	913	968	1031	1092	1494	1697	1522	1518	1356	994	965	956	1005	1014	1071	1133	1190
14	RBP	201	214	228	234	242	258	265	274	274	241	232	236	188	155	124	131	140	163	193	185
15	BUI	1076	1144	1219	1237	1243	1263	1315	1689	1845	924	911	1727	929	915	925	902	877	961	1001	1022
16	MSP	680	679	680	714	763	793	831	1355	1387	1730	1724	1313	1034	1035	943	916	874	854	849	972
17	MPD	330	348	378	385	395	409	424	487	735	397	384	379	171	164	143	156	160	175	189	193
18	MCH	1640	1705	1782	1830	1879	1936	2009	1629	1607	2174	1667	1507	950	814	744	691	669	844	873	867
19	TRS	557	573	594	627	674	701	734	967	1010	1077	1048	1041	747	756	821	960	984	1106	1256	1345
20	ELE	303	320	343	360	386	417	428	785	1560	407	421	381	290	269	243	250	241	259	258	268
21	ICT	244	254	269	285	304	321	336	378	617	564	599	428	446	378	323	321	323	341	356	398
22	INS	138	144	152	156	157	165	170	193	203	194	189	169	152	122	110	117	108	110	129	130
	<i>Utilities</i>	285	293	305	350	432	495	532	764	593	747	796	742	732	689	648	664	669	761	819	843
	<i>Mining</i>	1557	1595	1662	1699	1817	1965	1985	2154	1151	1865	1846	2201	1734	1366	1043	1096	1166	1299	1507	1594
	<i>Manufacturing</i>	8795	9235	9844	10225	10655	11084	11485	13946	15603	13066	12328	11953	7909	7387	7048	7233	7187	7765	8268	8826
	<i>All</i>	10637	11123	11811	12274	12903	13545	14002	16864	17347	15678	14970	14896	10376	9442	8738	8993	9023	9826	10594	11263

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Guizhou																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	296	292	300	301	312	328	329	281	274	324	346	307	275	269	258	271	275	309	396	442
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	27	29	34	31	28	32	31	34	44	16	47	38	18	23	24	31	24	22	38	53
4	NMM	37	40	44	40	40	45	44	42	44	54	65	68	51	44	45	51	53	48	50	19
5	FDB	144	152	165	157	156	162	164	182	192	204	185	178	136	124	129	142	148	143	150	145
6	TBC	48	50	53	53	53	55	56	66	74	61	52	49	75	79	73	68	66	64	56	52
7	TEX	83	88	100	101	103	104	100	100	103	93	72	62	55	49	40	47	41	30	24	17
8	WEA	39	37	38	36	36	36	34	31	26	30	25	23	13	13	12	10	13	9	12	12
9	LEA	28	28	29	28	29	29	25	23	19	24	17	14	3	4	2	1	1	1	0	0
10	WDF	31	30	30	30	29	32	31	34	32	35	35	35	17	17	16	15	12	15	18	19
11	PAP	69	71	78	78	85	95	99	116	106	106	105	96	70	63	54	47	51	48	43	37
12	PET	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	CHE	116	120	132	136	145	155	166	187	214	218	214	246	189	196	200	219	230	270	261	316
14	RBP	39	40	41	46	50	51	56	71	60	71	61	67	56	51	47	59	54	53	57	63
15	BUI	191	196	207	204	202	206	207	232	245	220	267	252	176	178	189	187	199	202	201	194
16	MSP	213	223	238	240	253	264	270	347	270	348	370	358	320	310	313	356	348	379	392	385
17	MPD	61	61	63	63	63	65	65	67	158	73	66	55	35	35	35	39	44	53	53	53
18	MCH	280	276	281	273	278	286	261	238	235	225	202	183	144	137	124	110	104	104	101	91
19	TRS	209	210	218	218	222	225	237	287	266	328	316	271	251	232	231	218	221	179	160	167
20	ELE	50	50	52	58	59	61	70	63	64	74	55	54	41	40	46	48	46	40	38	47
21	ICT	68	68	71	71	72	73	74	81	78	99	83	77	54	56	46	44	47	47	42	38
22	INS	32	32	32	32	32	34	35	39	35	38	25	25	20	17	16	32	25	16	15	17
	<i>Utilities</i>	78	82	89	91	107	114	111	128	137	169	213	162	149	168	180	193	202	228	255	288
	<i>Mining</i>	360	361	378	372	380	405	404	358	362	394	458	412	344	335	327	353	352	380	483	515
	<i>Manufacturing</i>	1701	1731	1828	1827	1866	1931	1951	2164	2177	2247	2150	2044	1655	1601	1573	1643	1650	1653	1623	1656
	<i>All</i>	2139	2174	2295	2290	2353	2450	2466	2650	2676	2810	2820	2619	2148	2105	2080	2189	2203	2260	2362	2459

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Yunnan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	243	223	186	198	211	227	221	209	217	154	201	201	145	133	127	130	129	123	129	185
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	175	154	169	175	193	212	211	251	233	192	230	195	185	169	168	152	148	137	149	162
4	NMM	58	48	44	44	47	52	62	78	58	52	60	57	45	45	42	43	37	31	35	32
5	FDB	224	234	235	235	233	242	238	271	266	282	275	265	238	222	208	206	209	217	203	223
6	TBC	44	47	54	62	69	72	79	101	87	126	93	86	99	108	89	94	95	96	92	110
7	TEX	109	118	127	136	144	152	153	150	128	119	110	97	77	60	52	61	59	54	50	46
8	WEA	58	57	57	57	56	55	53	54	48	43	36	32	9	8	10	9	9	8	4	3
9	LEA	26	28	29	29	29	33	35	39	32	33	29	26	20	11	10	8	7	4	3	3
10	WDF	56	65	66	68	67	73	72	73	73	89	89	95	69	53	48	45	43	38	44	43
11	PAP	72	79	80	85	92	102	110	135	145	151	154	149	123	116	104	106	111	100	103	98
12	PET	2	1	8	8	8	9	10	2	3	4	3	3	4	4	6	6	5	7	16	26
13	CHE	186	190	201	214	229	251	255	292	303	348	339	429	311	319	310	340	283	320	308	328
14	RBP	46	49	51	53	56	66	67	66	63	63	64	73	48	42	38	38	33	34	33	32
15	BUI	232	251	204	209	215	222	222	254	262	211	289	283	239	216	210	198	198	190	189	191
16	MSP	292	285	305	324	333	341	356	398	359	443	431	421	376	333	325	352	371	429	454	513
17	MPD	79	83	76	79	78	79	75	87	77	73	63	58	32	28	26	25	28	23	24	24
18	MCH	302	293	297	304	308	330	328	254	254	312	274	218	210	180	171	156	160	140	122	112
19	TRS	69	70	69	69	69	71	75	133	123	104	89	85	63	56	58	56	54	56	63	67
20	ELE	50	57	58	61	60	70	75	70	66	63	66	62	59	50	44	43	43	39	40	37
21	ICT	18	17	17	17	17	18	18	18	17	25	13	14	12	9	8	8	8	7	7	6
22	INS	23	24	26	27	28	30	31	33	34	48	40	38	32	30	27	29	32	30	34	21
	<i>Utilities</i>	107	110	119	127	141	152	151	177	180	233	207	213	209	217	300	271	301	260	262	272
	<i>Mining</i>	476	424	400	417	451	491	494	538	509	398	490	453	376	347	337	326	314	291	313	378
	<i>Manufacturing</i>	1888	1949	1959	2037	2090	2216	2252	2428	2339	2537	2458	2434	2020	1845	1744	1781	1747	1792	1789	1882
	<i>All</i>	2472	2484	2478	2580	2682	2859	2897	3144	3028	3168	3156	3100	2606	2408	2382	2377	2362	2344	2364	2533

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Shaanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	394	398	415	428	458	486	500	519	450	500	502	462	388	357	303	320	346	337	431	426
2	PTM	12	15	18	19	22	25	27	36	37	59	65	43	48	209	89	111	119	136	235	252
3	MTM	41	47	58	66	76	89	98	113	128	102	102	126	91	102	96	98	106	112	123	131
4	NMM	31	30	31	33	36	38	39	51	50	19	13	12	10	11	11	9	9	6	9	9
5	FDB	173	184	198	206	220	226	236	285	271	242	249	265	244	243	232	234	228	221	247	252
6	TBC	25	27	28	35	44	48	49	52	43	52	52	42	38	39	34	36	34	27	24	24
7	TEX	426	446	495	521	556	563	564	487	509	495	527	434	328	266	256	266	277	272	263	246
8	WEA	97	94	95	97	98	96	94	88	82	74	85	70	35	27	32	31	30	24	14	16
9	LEA	35	35	36	36	36	36	35	42	46	48	35	34	19	17	15	16	11	9	6	3
10	WDF	80	82	86	88	86	85	85	95	85	67	67	79	28	25	25	21	21	22	20	11
11	PAP	146	159	182	197	227	231	234	269	262	220	229	259	145	137	134	139	146	142	157	162
12	PET	15	16	17	21	26	28	30	34	32	38	46	38	37	36	36	40	43	56	58	70
13	CHE	230	241	267	282	309	324	337	399	379	326	356	401	320	322	321	346	362	382	318	361
14	RBP	69	71	75	78	81	82	86	88	86	68	82	84	45	37	31	32	35	31	39	21
15	BUI	399	407	425	432	441	449	444	485	487	328	344	487	251	250	240	239	252	244	237	227
16	MSP	117	128	142	154	167	168	172	240	224	244	248	244	189	180	155	164	156	187	203	212
17	MPD	134	134	141	143	145	147	150	155	150	150	164	134	71	66	68	59	58	42	63	51
18	MCH	763	782	822	837	870	882	897	862	875	962	906	821	623	541	509	474	454	439	379	432
19	TRS	408	415	435	447	468	475	489	493	549	549	540	507	477	463	430	443	445	456	428	470
20	ELE	162	171	188	195	216	224	236	278	240	215	249	230	176	142	206	139	139	147	148	168
21	ICT	154	162	176	182	193	201	208	211	238	249	224	234	223	201	190	194	189	180	214	219
22	INS	87	90	95	98	102	109	111	146	139	115	127	145	104	100	88	81	73	67	106	84
	<i>Utilities</i>	100	105	112	118	127	130	138	161	168	233	277	238	254	241	241	263	261	292	324	361
	<i>Mining</i>	478	490	523	547	593	637	664	721	665	680	682	643	537	680	499	539	579	590	797	818
	<i>Manufacturing</i>	3521	3644	3904	4050	4285	4375	4456	4709	4698	4441	4531	4506	3354	3092	3001	2951	2953	2950	2925	3028
	<i>All</i>	4099	4239	4539	4714	5004	5143	5258	5590	5530	5354	5490	5388	4145	4013	3742	3753	3792	3832	4047	4207

## Chapter 5 Measuring Labour Input by Sector and Region

TABLE 5-1, CONT'D

		Labour input of Xinjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	158	156	158	173	176	184	181	215	205	201	200	206	147	154	142	137	143	154	148	151
2	PTM	120	122	130	199	198	159	163	338	336	357	400	374	405	371	102	100	103	105	262	305
3	MTM	22	23	27	31	33	38	38	38	38	21	17	16	23	20	22	26	26	34	34	42
4	NMM	33	34	35	35	35	37	37	41	40	36	32	33	20	15	16	14	12	13	11	14
5	FDB	128	133	140	155	172	188	186	213	228	232	224	215	196	192	159	140	151	138	149	147
6	TBC	3	3	3	3	4	4	4	3	3	3	3	4	4	4	2	2	2	2	2	2
7	TEX	169	186	216	246	276	320	333	335	304	312	318	315	256	238	226	236	211	193	175	166
8	WEA	35	37	39	42	41	41	38	35	30	24	24	18	11	8	6	5	5	5	4	4
9	LEA	48	51	57	62	64	67	62	53	53	44	39	28	11	6	4	5	3	5	3	3
10	WDF	20	20	21	22	22	24	23	22	22	28	28	27	14	11	13	9	12	16	21	21
11	PAP	47	49	53	60	65	76	84	88	90	89	85	85	67	56	52	49	48	47	51	72
12	PET	22	24	27	29	32	37	39	43	42	51	51	53	49	52	46	56	61	59	67	74
13	CHE	61	60	62	70	77	97	96	106	110	136	127	120	94	78	67	75	74	83	89	93
14	RBP	20	22	24	28	32	37	35	43	42	36	39	42	34	28	27	48	47	34	43	44
15	BUI	153	154	157	166	158	161	168	212	198	210	202	196	145	125	128	108	109	113	105	110
16	MSP	82	86	92	101	103	108	109	132	146	150	121	120	100	85	62	70	73	64	91	99
17	MPD	30	31	32	36	36	38	38	61	67	55	60	56	31	27	20	19	21	18	22	22
18	MCH	124	125	127	134	130	136	139	114	106	112	107	105	85	72	58	43	38	35	34	29
19	TRS	63	63	64	67	65	68	67	67	65	56	53	47	37	27	26	20	23	18	18	17
20	ELE	17	18	19	22	24	27	26	27	28	25	24	24	20	22	21	16	18	19	18	19
21	ICT	4	4	5	5	5	5	5	4	4	5	5	5	2	2	2	1	0	0	8	9
22	INS	1	1	1	1	1	1	1	2	2	1	1	1	0	0	0	0	0	0	2	1
	<i>Utilities</i>	64	70	78	87	97	107	122	140	141	145	157	175	165	158	156	170	173	182	193	205
	<i>Mining</i>	333	335	349	439	442	418	419	631	619	615	650	628	595	560	282	277	284	307	455	513
	<i>Manufacturing</i>	1026	1066	1140	1250	1307	1433	1452	1560	1540	1570	1511	1460	1156	1032	919	903	896	850	904	933
	<i>All</i>	1423	1471	1568	1775	1845	1958	1994	2331	2300	2331	2318	2263	1916	1751	1356	1350	1354	1340	1553	1651

## **Chapter 6 Measuring Output by Sector and Region**

This chapter aims to construct standard output and intermediate input series that to be used in the production function analysis. Gaps between Chinese official statistics and the international standard will be discussed and solved with available information.

In the OECD manual of measuring productivity of 2001, gross output is defined as the goods or services that are produced within a producer unit and that become available for use outside the unit. This is a gross measure in the sense that it represents the value of sales and net additions to inventories without, however, allowing for purchases of intermediate inputs. When purchases of intermediate inputs are deducted from gross output, one obtains a measure of value added. In this sense, value added is a net measure. It may not be considered a net measure in the sense that it includes the value of depreciation or consumption of fixed capital.

Output is produced by capital, labour, combined with intermediate goods. A measure of output in current and constant prices is essential to productivity measurement. For an individual firm or industry, measures of gross output, combined with labour, capital and intermediate inputs, correspond directly to a specific model of a production function with “neutral” or “output-augmenting”

technical change. When productivity measures are based on such a gross-output concept, TFP growth approximates the rate of neutral, disembodied technical change. Alternatively, productivity measurement can be based on value added approach. As commented by OECD (2001), Value added based productivity measures reflect an industry's capacity to contribute to economy wide income and final demand. In this sense, they are valid complements to gross output based measures. It is also discussed by Jorgenson (1995), value added is compatible when measuring the whole economy. When we measure part of the economy, such as industrial branches, we should employ the gross output series.

Since this study is on sectoral and regional level, gross output approach will be employed and value added is used to derive intermediate inputs. With this method, contents of this chapter will be arranged as following. First, definitions and features of published official statistics will be discussed. Secondly, problems of official statistics will be discussed. Thirdly, detailed procedures of output data work are discussed. In the last of this chapter, results of output data work will be presented.

## **6.1 Features of Official Output Statistics**

In the Chinese official will normally publish statistics on GVO in current price and comparable price. From 1994, they publish the GVO and GDP at current prices. These three series are the main information we can get to derive our output and intermediate input series.

By the definition from NBS, Gross industrial output value is the total volume of final industrial products produced and industrial services provided during a given period. It reflects the total achievements and overall scale of industrial production during a given period. Content and calculation method: The old definition of gross industrial output value was modified during the national industrial census in 1995. The new definition of gross industrial output value consists of 3 components: value of the finished products during the reference period, income from external processing, and value of change in semi-finished products at the end and at the beginning of the reference period. Value-added of Industry (GDP) refers to the final results of industrial production of industrial enterprises in money terms during the reference period.

Industrial value-added can be calculated by two approaches: the production approach, i.e. gross industrial output value minus intermediate input plus value-added tax, and the income approach, i.e. income for various factors used in the course of production, including depreciation of fixed assets, remuneration of labourer, net of production tax, and operating surplus. Value-added of industry in the Yearbook is calculated by production approach as following:

Value-added of industry = gross industrial output - industrial intermediate input  
+ value-added tax

(1) Gross industrial output: refers to the total achievements of industrial production during a given period. Gross industrial output includes value of finished products, income from external processing, and value of change in semi-finished products at the end and at the beginning of the reference period. Since 1995, it was substituted by the gross industrial output value by new method.



(2) Industrial intermediate input: refers to purchased goods and paid services consumed during the industrial production of enterprises. Fees paid for services include fees paid for the services provided by material production sectors (industry, agriculture, wholesale and retail trade, construction, transport, post and telecommunications) and by non-material production sectors (insurance, banking, culture, education, scientific research, health and medical care, public administration, etc.). The determination of industrial intermediate input follows the principle that the goods and services must be purchased from outside and included in the gross industrial output, and that the goods and services are inputted into production and consumed (include low-value consumables) during the reference period.

Industrial intermediate input includes 5 components, namely direct consumption of materials, industrial intermediate input in manufacturing cost, industrial intermediate input in management cost, industrial intermediate input in marketing cost and expenditure on interest.

## **6.2 Main Problems of the Official Data**

China's official statistics on industrial output is also problematic as capital and labour. Major problems have to be removed to avoid serious bias in our measurement. Following content will discuss these problems in detail.

### **6.2.1 Possible level and growth rate biases of official output**

#### **data**

Since China's economic reform in 1978, the industrial sectors has experienced rapid annual growth, more than 10% by official publications. However, the statistics of the level and growth rate of Chinese industry are widely criticized by researchers. It is generally accepted that the GDP level is underestimated (Maddison, 1998; World Bank, 1994; Wu, 2000) and the official growth rate estimates contain serious upward biases (Woo, 1998; Ren, 1997; Maddison, 1998; Wu, 2002a).

China's official statistics tends to underestimate the level of industrial output are because of under coverage effect. The official is not capable to sufficiently cover the quickly emerging non-state sectors, especially small-sized rural enterprises. The statistics of small-sized rural enterprises were basically by estimations. This could be the reason that DITS stopped publish "all the industry" data since 1993. The coverage of DITS publications is controlled in "township and above level" for 1985-1992, "industrial enterprises with independent accounting systems" for 1993-1997, and "above designated size (annual sales volume 5 million" since 1998 at sectoral level. DITS has to narrow down the coverage to maintain the reliability of published data, since the quick structural change of industrial sectors. The adjustment of GDP level in 2004, after the first economic census, also reflected the concern of this problem. However, compared to services sector, the under coverage effect is not so significant in industrial sectors.

There are basically two opinions on the discussions of upward-bias of growth rate of the official output data. The first is due to the “comparable price” system; the second is based on the institutional effect. These will be discussed in the following.

### 6.2.2 Problem of output price index

In the construction of output series, a set a constant price index is a key indicator to deflate the output and GDP into comparable series. According to the definition by System of National Accounts, 1993 (SNA93), constant prices are obtained by directly factoring changes over time in the values of flows or stocks of goods and services into two components reflecting changes in the prices of the goods and services concerned and changes in their volumes (i.e. changes in “constant price terms”); the term “at constant prices” commonly refers to series which use a fixed-base Laspeyres formula<sup>14</sup>.

In China, the Soviet-style “comparable price” system is adopted since the early 1950s in constructing constant price series GDP. Under this system, there are five constant prices with benchmark years of 1952, 1957, 1970, 1980 and 1990. In every benchmark year, the “representative products” and their weights in computing average prices are adjusted. Price manuals are provided to

<sup>14</sup> Laspeyres suggested this index formula in 1871. In case of calculating the price index, assuming that for individual item  $i$ , price at the base period to be  $p_{i0}$ , at the observation period to be  $p_{it}$ , and quantity at the base period to be  $q_{i0}$ , the following equation is called “Laspeyres formula”.

$$\frac{\sum_i p_{it} q_{i0}}{\sum_i p_{i0} q_{i0}} \quad \dots\dots (1)$$

enterprises as references to report output in comparable prices. In the Chinese statistics yearbooks, output in comparable prices was published together with that in current prices until 2003. However, this comparable price system is widely criticized for its reliability. This system tends to understate inflation and thus exaggerates real growth because of four reasons. First, the ten-year interval is long enough to introduce substitution biases, also known as Gerschenkron effect (Gerschenkron, 1951). Consumers switch their expenditure towards relatively cheap products. Wu (2002a) commented that this effect could be more significant since 1980 benchmark when the economy became increasingly market-oriented. Secondly, there could be coverage biases towards (low) state listed prices and insufficient coverage of the (high) prices of other market-oriented transactions (Maddison, 1998). The official does not give detailed information about how the “representative products” were chosen and how their average prices were computed may make researchers more worried about this. Thirdly, new products which are not in the price manual of the benchmark year are difficult to turn into something equivalent in the benchmark years. Fourthly, for those new firms, especially non-SOEs, that have not established in the benchmark years tend to report their products only in current prices. The reported data are adjusted into “constant prices” by the upper level statistical offices based on the “real” growth rate of small-sized SOEs. However, such adjustment is very likely to serve special policy purpose.

### **6.2.3 Upward-bias due to institutional effect**

In China, achieving high economic growth is always a political task, growth rates could be exaggerated, especially when the leadership promoted an

expansionary policy. Growth statistics are important for performance assessment of enterprises, sectors and regions. As argued by Maddison (1998), this system by its nature leads to underestimated inflation and exaggerated output. With this background, NBS normally makes adjustment to the national total instead directly using the sum of regional data. So, our regional data is controlled by the information published by NBS.

Another problem is that the regional total often cannot meet the sum of every industrial branch, and frequently larger than the sum. Some reasons may behind this. One is that in the local statistics, some sectors will not be published due to security consideration or the local NBS offices were not sure about the value. The scale of one sector in one region could be insignificant, and then they will not appear in the yearly statistics book. However, they will be considered in the total. Under such situation, we need to distribute the difference to the omitted sectors by related information. Another reason result the difference could be that since the GDP indicator is important in the Chinese official promotion process, the local government is incentive to overstate this number. Under this situation, we are difficult to distribute the difference to sectors. But we can refer to the total value published by the NBS to control it.

#### **6.2.4 Problem of the intermediate deflator**

We have three series raw official data of output, GDP and Gross value of output (GVO) in current price and constant price. The intermediate input is derived by GDP and GVO. By the discussion of Jorgenson (1995), the output deflator is measured in producers' prices; the intermediate deflator is measured in

purchasers' prices. The reason is that output is gross of all subsidies received by the producing sectors but net of all sales and excise taxes and trade and transportation margins. Intermediate input is net of subsidies but gross of sales and excise taxes attributed to the output of the sector supplying the intermediate input. The trade and transportation margins paid by the consuming sector are captured in the intermediate input flows from the trade and transportation sectors.

By Jorgenson's argument, double deflation is the proper way to deal with these two series. As defined by 1993 SNA, double deflation is a method whereby gross value added (GVA) or GDP is measured at constant prices by subtracting intermediate consumption at constant prices from output at constant prices; this method is feasible only for constant price estimates which are additive, such as those calculated using a Laspeyres' formula (either fixed base or for estimates expressed in the previous year's prices).

In this study, double deflation is quite difficult to practice with available information, especially on regional level. However, it is definitely a potential improvement to the productivity measurement of China. So, single deflator is employed here. Methods of single deflation use a single price index to deflate current-price series of value added. The price index used for single deflation is a gross-output price index, a consumer price index, or its relevant components. It is not difficult to show that as the wedge between double-deflated and single-deflated value added increases, the less stable the share of intermediate inputs in gross output becomes. As stated in OECD manual, in general, single

deflation constitutes an inferior alternative to double deflation, especially when the latter uses a chained or superlative index number formula.

## 6.3 Procedures of Data Construction

### 6.3.1 Fill missing data

Three series of raw data of output, respectively GVO in current and comparable prices and GVA in current price are need to construct required output series in the production function. With official publications, the availability of output data is comparably better than capital and labour at regional level except two aspects. First, the data is not satisfactory of comparable priced GVO; second, there is no sectoral GVA data before 1993<sup>15</sup>. Main objective of this part is to fill the missing data of comparable priced GVO and pre-1993 GVA.

We try to use systematic methods to fill the missing GVO data. Fortunately, we seldom meet situation that several continuous years' data missed. Assuming one year's sectoral GVO in comparable prices,  $Y_{t,i}^c$  is missed,  $i$  stands for the  $i$ th sector,  $c$  stands for comparable prices. There are three parts of information to fill the gap. The total of sectors, which is controlled by data from "Zhongguo gongjiao nengyuan 50 nian", denoted as  $Y_t^c$ ; the sectoral GVO in comparable prices of adjoining two years, denoted as  $Y_{t-1,i}^c$  and  $Y_{t+1,i}^c$ ; GVO in current price of these three years,  $Y_{t-1,i}$ ,  $Y_{t,i}$  and  $Y_{t+1,i}$ . Such situation is very common in this

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<sup>15</sup> There is one recently compiled regional IO table for 1987, containing 25 industrial sectors' information.

study, for example,  $Y_{1990,i}^c$  and  $Y_{1992,i}^c$  of Beijing,  $Y_{1992,i}^c$ ,  $Y_{1996,i}^c$  and  $Y_{1998,i}^c$  of Tianjin etc.. then,

$$(52) \quad Y_{t,i}^c = \frac{1}{2} \times \left( \frac{Y_{t-1,i}^c}{Y_{t-1,i}} + \frac{Y_{t+1,i}^c}{Y_{t+1,i}} \right) \times Y_{t,i} \times \frac{Y_t^c}{\sum_{i=1}^n \frac{1}{2} \times \left( \frac{Y_{t-1,i}^c}{Y_{t-1,i}} + \frac{Y_{t+1,i}^c}{Y_{t+1,i}} \right)}$$

By this estimation, it is assumed that the ratio of  $\frac{Y_{t,i}^c}{Y_{t,i}}$  has linear trend in the

continuous three years' period and the total is controlled by official publications.

Moreover, to be consistent with labour and capital panels, data coverage of output is controlled as “industrial enterprises with independent accounting systems” before 1998, and “all state-owned industrial enterprises and non-state-owned industrial enterprises above designated size” from 1998. The designated size here means that annual sales income of this enterprise should be over 5 million.

### 6.3.2 Estimate the pre-1993 GDP

The SNA was launched and followed by the regional statistical bureau since 1993. So, we can only get GDP series of the period from 1993 to 2005. To solve this problem, we first employed the data from “*Compilation of 50 Years Statistics of China*” to get the officially estimated regional total of GDP. However, the classification of this part of data is of all the industry instead of “industrial enterprises with independent accounting systems”. We adjusted the official data with information of 1993 to satisfy our classification. Then, we decompose the regional GDP into industrial branches by the regional GDP/GVO ratio of 1993.



This part of estimation is very rough but the best we can do with limitations of raw data.

### 6.3.3 Reconcile the CSIC

As the second step, sectors are regrouped to make the whole time series consistent throughout the period of 1985-2005 since the CSIC was changed in 1993. The 40 pre-1993 and 40 post-1993 industrial sectors are composed into 25. Reclassification method is same as the approached used in dealing with capital and labour data, so it will not be discussed in detail in this chapter.

### 6.3.4 Reconcile the prices to 1990 price

Before this step, the GVO in comparable prices cannot be used as constant-prices GVO because during the period of 1985-2005, there are two official benchmark years of the comparable price system, respectively 1980 price and 1990 price. To make the two intervals (1985-1989, 1990-2005) comparable, 1990 is chosen as the base year in this study since it covers longer period (1990-2005). There is also information on 1990 with both 1980 prices and 1990 prices, which can be used to change the 1985-1989 GVO in 1980 prices to 1990 prices. Denote 1990's GOV in 1990 prices as  $Y_{1990}^{1990}$ , 1990's GVO in 1980 prices as  $Y_{1990}^{1980}$ , year between 1985 and 1989's GVO in 1980 prices as  $Y_{1990-n}^{1980}$ ,  $n \leq 5$  in this study. Then the pre-1990' annual GVO in 1990 prices,  $Y_{1990-n}^{1990}$  will be,

$$(53) \quad Y_{1990-n}^{1990} = Y_{1990-n}^{1980} \times \frac{Y_{1990}^{1990}}{Y_{1990}^{1980}}$$

There could be one problem that the products and each product's weight could be different between these two price systems. However, this approach is the best we can do with available information.

### 6.3.5 Derive the output deflator

A set of output deflator is needed to construct GVA in constant prices. In the last step, GVO in 1990 prices of 1985-2005 has been constructed. Then the output deflator for year  $t$ ,  $p_t$  is derived as,

$$(54) \quad p_t = \frac{Y_t^c}{Y_t}$$

### 6.3.6 Estimate GVA in constant prices

With the derived output deflator and GVA in current prices, GVA in constant prices,  $V_t^c$  can be estimated as,

$$(55) \quad V_t^c = p_t \times V_t$$

By this approach, single deflator is employed. Related problems have been discussed above.

### 6.3.7 Derive the intermediate input

Since this study is on sectoral level, gross output based productivity measurement is employed. The intermediate input series in constant prices are

necessary in this measurement. With GVO and estimated GDP in constant prices, the intermediate input,  $X_t$ , can be derived as,

$$(56) \quad X_t = Y_t^c - V_t^c$$

## 6.4 Results Presentation

In the appendix, results of gross value of output and intermediate input are presented. Both variables are in constant prices and their units are 100 million Renminbi.

TABLE 6-1: GROSS VALUE OF OUTPUT IN CONSTANT PRICES

		Gross value of output in constant prices of Beijing																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2	2	2	2	3	4	5	5	4	4	6	5	11	5	6	9	18	20	38	30
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	0	0	0	0	0	1	1	1	2	2	2	1	2	1	1	1	1	3	4	5
4	NMM	0	0	0	1	1	1	1	2	2	1	3	1	4	2	2	2	2	2	3	2
5	FDB	25	25	29	33	42	75	86	72	91	91	100	129	173	128	174	155	181	217	272	316
6	TBC	1	1	1	2	3	4	4	3	4	4	5	3	6	4	5	6	6	6	7	8
7	TEX	24	25	28	29	33	48	52	56	66	46	48	41	42	33	39	44	43	55	56	65
8	WEA	12	13	15	17	21	25	23	38	59	36	41	33	45	35	39	44	44	51	68	73
9	LEA	4	4	4	4	4	6	7	9	13	7	6	5	6	4	3	4	4	4	7	9
10	WDF	5	5	6	6	6	8	8	13	21	14	13	11	17	13	16	22	27	26	35	45
11	PAP	12	13	16	17	16	25	28	32	35	29	35	33	57	40	48	57	73	82	109	85
12	PET	3	4	4	4	4	66	103	62	62	69	71	76	109	85	115	112	145	68	114	209
13	CHE	53	61	70	74	67	64	49	90	104	106	113	115	128	154	180	202	249	337	525	362
14	RBP	12	12	14	15	15	26	29	22	25	23	43	39	36	34	39	39	42	47	75	95
15	BUI	13	14	15	16	16	26	30	38	60	40	57	55	83	68	77	73	99	108	157	165
16	MSP	32	33	34	36	34	81	103	107	133	137	132	134	156	107	142	215	222	240	309	318
17	MPD	9	10	12	14	13	20	23	32	50	29	41	37	53	44	54	62	75	75	107	118
18	MCH	33	37	47	49	50	69	71	89	123	87	96	94	129	127	163	156	191	248	390	480
19	TRS	20	24	31	31	42	71	81	111	126	150	148	134	98	94	88	145	218	439	741	824
20	ELE	15	16	19	20	17	26	28	38	47	34	42	42	62	82	99	117	117	161	225	247
21	ICT	19	24	33	34	42	50	46	72	118	201	236	382	445	721	1199	1317	1306	1410	2087	3168
22	INS	4	4	5	5	4	6	6	11	14	21	26	30	30	33	38	44	67	84	137	178
	<i>Utilities</i>	8	9	10	10	9	20	25	25	24	23	30	28	42	31	35	36	36	42	163	193
	<i>Mining</i>	2	2	3	3	4	6	7	8	9	7	11	7	18	8	9	12	21	25	45	36
	<i>Manufacturing</i>	295	325	383	407	429	698	779	895	1151	1124	1253	1396	1675	1806	2519	2814	3111	3658	5422	6766
	<i>All</i>	305	337	395	420	442	724	811	927	1184	1153	1294	1431	1735	1845	2564	2862	3168	3725	5630	6995

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Tianjin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	6	6	6	7	7	12	10	16	23	25	27	31	36	42	47	57	62	78	67	80
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	2	2	2	3	2	3	4	4	4	4	4	5	5	6	6	8	8	10	4	7
5	FDB	16	15	20	21	23	41	46	45	82	95	114	135	166	200	229	283	310	397	287	353
6	TBC	4	4	5	4	4	5	5	5	6	4	4	3	3	3	2	2	1	1	1	1
7	TEX	40	42	43	42	43	60	62	69	75	62	63	65	71	77	82	94	97	117	76	87
8	WEA	9	10	9	11	14	17	23	27	43	32	38	44	53	63	72	88	96	122	61	92
9	LEA	4	4	4	4	5	6	10	12	18	14	18	23	29	36	42	53	59	77	57	53
10	WDF	3	2	2	2	2	4	5	11	11	13	16	20	24	30	34	42	46	60	49	45
11	PAP	7	8	8	9	8	14	14	18	20	20	22	25	30	35	39	48	52	65	44	69
12	PET	7	8	8	9	10	17	17	24	32	35	40	46	55	65	73	89	96	122	104	131
13	CHE	40	43	48	50	55	94	109	100	115	123	141	161	193	228	258	314	340	432	366	333
14	RBP	14	14	15	15	16	22	25	34	32	37	40	44	51	58	64	76	81	102	93	84
15	BUI	7	7	7	8	8	18	20	21	21	20	24	29	36	43	50	62	68	87	82	102
16	MSP	27	29	28	28	30	67	67	91	88	125	103	83	184	194	198	219	218	256	356	377
17	MPD	14	16	17	17	18	29	32	51	52	48	51	55	63	71	77	91	96	120	110	129
18	MCH	36	41	47	47	44	58	75	99	75	90	97	106	123	140	155	185	197	246	312	352
19	TRS	10	13	17	17	17	35	60	117	130	146	163	184	218	255	286	346	373	471	728	1016
20	ELE	14	16	20	24	21	26	32	41	42	51	60	70	85	101	116	142	155	198	231	246
21	ICT	16	23	28	27	29	34	43	67	107	210	257	310	385	467	540	670	736	947	1102	1406
22	INS	3	3	3	3	3	4	5	13	10	13	16	18	22	26	30	36	39	50	65	63
	<i>Utilities</i>	6	6	7	8	8	12	13	16	18	22	20	18	17	17	15	15	13	13	22	25
	<i>Mining</i>	8	8	8	9	9	15	15	20	27	29	32	35	42	48	54	65	70	88	71	87
	<i>Manufacturing</i>	272	297	330	337	348	550	647	844	958	1139	1265	1418	1789	2091	2347	2839	3060	3870	4127	4938
	<i>All</i>	286	310	345	354	365	577	675	880	1004	1190	1317	1471	1848	2156	2416	2919	3142	3971	4220	5049

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Hebei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	15	17	15	15	32	31	31	34	37	39	46	48	38	40	42	34	44	55	63	73
2	PTM	14	12	8	8	17	17	18	22	23	23	36	48	50	33	17	15	14	29	23	26
3	MTM	5	6	6	6	11	12	15	22	26	29	39	46	41	44	47	51	66	84	98	120
4	NMM	3	2	4	4	5	6	9	10	13	12	16	20	12	13	13	13	13	13	19	23
5	FDB	28	34	33	34	60	66	75	87	106	127	172	205	197	228	261	310	371	502	532	651
6	TBC	5	7	6	8	14	15	18	18	19	18	20	21	18	19	21	17	20	21	21	26
7	TEX	52	59	72	77	130	136	140	133	152	166	183	185	163	188	214	238	246	282	301	388
8	WEA	8	9	11	13	18	20	22	29	37	36	49	59	42	45	49	57	63	68	76	80
9	LEA	4	4	5	5	8	8	8	15	19	28	41	51	47	55	65	77	97	123	157	175
10	WDF	3	4	4	4	5	5	7	10	13	19	26	32	26	30	35	40	44	62	68	77
11	PAP	10	13	15	17	27	31	37	43	50	61	80	93	83	86	90	108	121	132	144	284
12	PET	10	12	10	11	17	19	21	26	28	29	34	37	6	32	58	71	87	77	140	172
13	CHE	32	42	49	53	93	109	128	153	187	226	291	333	369	414	463	462	527	542	635	783
14	RBP	9	16	16	18	26	31	38	44	49	62	75	83	75	84	94	108	118	160	182	199
15	BUI	27	32	31	33	56	63	78	106	123	137	174	198	161	176	193	196	225	280	309	374
16	MSP	30	36	30	34	78	85	108	144	179	211	251	273	303	358	417	521	646	973	1405	1831
17	MPD	10	13	15	16	24	27	34	51	65	69	90	104	72	91	111	136	153	170	183	293
18	MCH	34	41	51	53	73	83	101	117	131	147	173	187	153	160	169	198	217	271	385	484
19	TRS	8	10	13	13	21	27	38	51	63	66	83	94	90	94	99	118	153	233	257	329
20	ELE	7	9	12	14	21	25	34	51	61	72	87	96	81	96	113	144	150	186	214	286
21	ICT	3	5	10	9	8	11	11	13	20	17	23	28	30	39	49	60	73	80	89	99
22	INS	1	2	2	2	2	3	4	7	6	8	9	9	3	5	6	10	10	12	14	22
	<i>Utilities</i>	19	21	25	27	43	48	55	60	64	68	77	80	76	90	105	114	111	128	240	299
	<i>Mining</i>	37	37	33	34	65	66	73	88	98	103	137	162	141	129	119	113	138	181	203	242
	<i>Manufacturing</i>	279	346	387	414	682	765	901	1098	1308	1501	1863	2088	1918	2202	2507	2869	3320	4172	5114	6552
	<i>All</i>	335	404	444	474	789	879	1029	1246	1470	1672	2077	2330	2135	2421	2731	3096	3568	4482	5557	7093

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Shanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	47	49	52	59	64	111	128	151	161	169	193	203	163	153	151	167	199	247	351	428
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	2	2	9	10	4	6	6	5	5	5	8	9	14	19	23
4	NMM	1	1	1	1	1	2	2	3	4	4	6	7	3	4	3	3	3	4	4	6
5	FDB	14	14	15	15	15	31	32	31	34	34	40	41	37	38	40	40	51	69	77	92
6	TBC	1	1	2	2	2	3	3	4	3	4	4	5	5	6	6	6	7	7	7	8
7	TEX	14	15	17	16	15	29	29	27	27	27	26	26	21	22	26	23	25	23	23	26
8	WEA	3	3	3	3	3	4	4	4	4	4	4	4	2	1	1	2	2	3	3	4
9	LEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	WDF	1	1	2	2	2	2	2	3	4	4	6	6	2	1	1	1	1	1	1	1
11	PAP	4	4	5	5	5	8	9	9	10	12	14	14	12	13	8	8	9	10	10	15
12	PET	2	2	3	5	4	10	15	16	22	27	39	49	70	62	59	67	93	138	245	272
13	CHE	21	25	29	30	33	55	65	68	76	85	100	107	107	113	129	135	170	198	218	251
14	RBP	4	5	6	7	7	9	13	14	15	14	18	18	16	15	15	18	22	25	26	31
15	BUI	8	8	9	10	9	18	22	28	32	31	43	49	37	36	42	47	57	67	76	78
16	MSP	28	31	34	35	36	94	85	94	102	123	139	152	176	200	237	288	344	508	609	734
17	MPD	6	6	7	8	7	13	14	17	23	24	28	32	27	26	24	26	27	22	22	33
18	MCH	22	26	30	31	32	44	49	51	66	66	72	76	63	66	79	84	79	131	168	238
19	TRS	3	4	5	5	6	10	12	14	15	18	20	21	15	14	25	35	44	46	45	44
20	ELE	5	6	7	8	8	11	14	17	16	17	19	21	19	15	19	20	27	20	30	19
21	ICT	2	3	3	3	3	3	4	5	3	4	4	4	4	4	5	9	18	11	12	18
22	INS	0	1	1	1	1	1	1	2	2	2	1	2	1	2	2	2	12	3	5	10
	<i>Utilities</i>	14	16	18	19	21	38	38	44	46	54	51	53	57	59	62	72	78	91	146	196
	<i>Mining</i>	48	51	54	61	66	115	132	163	176	178	205	217	171	162	159	178	212	264	374	457
	<i>Manufacturing</i>	139	156	175	185	187	344	374	405	454	498	577	627	613	632	720	811	988	1282	1579	1877
	<i>All</i>	201	222	247	265	275	498	544	612	676	730	833	896	841	853	941	1061	1278	1637	2099	2529

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Inner Mongolia																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	6	7	7	8	9	18	19	23	24	27	35	37	20	25	31	31	39	55	77	103
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	2	4	5	6	7	8	10	11	7	8	9	9	8	12	22	34
4	NMM	2	2	2	3	3	5	5	6	7	6	8	7	6	6	5	4	5	8	12	17
5	FDB	17	18	18	20	20	34	34	39	41	44	45	61	41	56	70	102	141	212	289	400
6	TBC	2	2	2	3	3	5	5	6	7	7	12	6	5	6	6	6	7	8	10	13
7	TEX	9	11	12	12	11	22	26	32	40	37	6	50	35	51	67	74	80	97	99	131
8	WEA	2	2	2	3	3	4	4	4	5	4	45	7	7	7	8	8	5	6	7	7
9	LEA	2	2	2	3	2	4	4	4	4	4	5	4	3	3	2	2	2	2	3	4
10	WDF	2	2	2	2	2	4	4	5	5	4	9	6	4	4	2	1	1	2	10	13
11	PAP	2	3	3	3	3	6	6	7	7	8	9	8	4	7	9	10	10	11	14	34
12	PET	0	0	0	0	0	2	3	4	5	5	0	6	7	7	8	7	7	10	15	17
13	CHE	6	7	8	9	9	17	19	23	25	33	42	42	37	45	52	51	66	71	112	152
14	RBP	1	2	2	2	2	3	3	4	4	4	2	5	4	4	4	4	4	2	4	5
15	BUI	6	6	5	6	7	14	16	19	20	20	3	26	14	16	17	18	23	34	48	59
16	MSP	15	16	16	19	20	40	44	53	62	59	81	75	95	107	117	119	137	189	262	342
17	MPD	3	3	4	4	4	7	7	9	9	9	12	11	5	5	6	6	5	5	7	7
18	MCH	8	10	12	14	15	34	40	50	46	41	44	35	27	29	31	32	36	59	73	89
19	TRS	1	1	1	1	1	3	4	4	5	6	5	8	9	9	9	10	12	14	35	44
20	ELE	2	2	2	3	3	5	6	7	7	6	7	6	5	5	5	4	4	6	8	8
21	ICT	1	3	4	5	4	7	7	8	10	9	7	5	8	20	11	40	86	142	143	197
22	INS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Utilities</i>	7	8	8	10	10	19	21	25	26	27	34	34	30	37	44	48	54	69	124	157
	<i>Mining</i>	9	10	11	13	14	27	29	35	38	40	53	55	33	39	45	44	53	75	110	155
	<i>Manufacturing</i>	78	89	97	108	110	212	231	277	301	302	333	360	310	380	426	494	626	872	1137	1522
	<i>All</i>	93	107	116	130	134	257	281	337	365	369	420	449	373	457	515	586	733	1016	1372	1834



Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Liaoning																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	12	11	12	13	13	32	28	29	32	29	32	33	23	23	26	38	42	48	56	62
2	PTM	13	14	16	17	18	35	43	46	48	50	49	99	53	50	52	45	43	55	36	35
3	MTM	4	5	5	6	7	13	14	18	23	22	28	28	26	22	21	21	23	35	44	57
4	NMM	4	5	6	7	6	12	13	16	21	23	24	26	24	20	18	15	16	18	14	23
5	FDB	42	47	45	45	48	88	89	104	134	134	141	163	156	173	202	237	274	310	398	564
6	TBC	4	4	4	5	1	5	8	8	8	9	9	9	10	8	6	9	15	18	21	23
7	TEX	58	59	63	62	64	96	98	96	108	92	81	80	64	69	80	92	91	104	118	146
8	WEA	15	16	17	19	20	28	32	41	55	55	56	54	56	50	48	46	58	62	76	105
9	LEA	5	5	5	5	5	6	9	11	18	19	17	17	20	20	22	24	22	23	56	69
10	WDF	5	5	5	5	5	7	8	15	24	25	34	31	38	40	45	50	56	58	90	110
11	PAP	19	21	22	23	23	40	38	41	45	44	56	55	46	40	37	38	42	45	57	103
12	PET	61	64	66	70	70	128	122	131	136	132	155	180	158	183	222	211	236	279	318	345
13	CHE	73	84	94	95	101	155	184	205	234	233	258	283	278	307	358	352	352	330	498	612
14	RBP	23	24	27	28	29	46	56	63	70	70	77	80	94	96	104	112	119	151	198	236
15	BUI	30	32	34	34	33	63	84	108	132	120	144	162	135	142	160	139	142	171	186	265
16	MSP	109	119	128	133	134	277	310	343	368	352	352	344	369	391	443	442	535	630	891	1008
17	MPD	22	24	25	25	25	37	45	70	93	86	104	105	79	85	98	94	87	100	116	165
18	MCH	89	100	113	115	110	161	203	249	286	272	298	299	238	256	293	317	341	495	606	827
19	TRS	35	39	45	49	46	73	97	116	122	127	159	193	185	229	289	300	374	451	699	786
20	ELE	36	41	44	50	48	64	79	100	114	126	145	147	122	144	175	167	158	207	288	392
21	ICT	13	21	31	33	33	29	39	59	86	113	140	200	271	332	416	678	840	1203	1204	1129
22	INS	6	5	6	6	6	8	10	17	24	17	17	18	13	15	18	19	24	15	47	59
	<i>Utilities</i>	22	25	26	26	28	48	53	59	63	68	74	78	52	90	134	118	136	126	285	338
	<i>Mining</i>	33	35	39	43	44	93	98	109	123	124	133	185	125	116	116	119	124	156	149	176
	<i>Manufacturing</i>	643	709	774	800	800	1310	1508	1775	2057	2025	2243	2420	2333	2582	3018	3327	3767	4651	5868	6946
	<i>All</i>	699	769	839	870	871	1451	1659	1943	2244	2217	2449	2683	2511	2789	3267	3564	4026	4933	6302	7460

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Jilin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	5	5	5	6	6	12	12	12	13	11	13	13	11	10	11	11	12	15	15	23
2	PTM	3	3	3	4	4	10	10	10	10	11	14	15	14	14	12	11	11	20	18	21
3	MTM	1	1	1	1	1	3	3	4	4	4	5	5	4	6	6	6	6	6	9	12
4	NMM	1	1	1	1	1	2	2	4	5	4	7	7	3	3	4	3	4	3	3	4
5	FDB	27	29	29	31	32	60	61	64	70	70	87	79	85	102	126	145	181	214	243	328
6	TBC	4	5	6	6	6	11	12	13	12	13	13	15	15	14	15	18	20	21	24	31
7	TEX	13	14	15	15	15	23	22	20	22	20	20	22	22	26	29	28	31	32	31	27
8	WEA	5	5	6	6	7	8	9	9	12	8	8	8	4	5	6	7	6	8	9	14
9	LEA	2	2	2	2	2	3	3	4	4	3	3	2	2	1	1	2	1	1	2	2
10	WDF	5	6	6	6	6	10	11	15	14	16	23	26	16	18	24	29	30	44	65	64
11	PAP	11	13	14	15	15	25	25	25	24	24	27	25	19	19	20	20	19	22	27	43
12	PET	4	4	5	5	6	11	12	9	7	9	10	11	9	9	10	15	15	15	12	14
13	CHE	38	47	53	55	57	95	103	106	132	142	167	201	219	246	273	307	335	372	505	602
14	RBP	8	10	11	11	11	17	20	19	19	18	20	19	13	14	17	19	24	24	31	29
15	BUI	12	13	14	15	14	27	31	35	38	39	48	51	33	34	38	36	39	52	61	78
16	MSP	10	12	12	13	14	28	32	44	41	45	49	50	47	51	60	75	87	90	132	131
17	MPD	7	8	8	8	8	11	12	15	16	12	13	17	7	7	10	11	8	7	12	14
18	MCH	21	24	27	28	26	34	40	44	45	41	46	46	30	26	32	37	37	43	65	71
19	TRS	21	32	41	42	41	58	94	153	194	203	256	310	371	443	558	737	1012	1300	1446	1435
20	ELE	6	7	8	10	10	13	15	17	18	15	16	14	10	15	23	18	18	17	21	26
21	ICT	4	6	7	8	6	8	8	9	11	13	14	20	57	75	77	72	64	64	70	63
22	INS	2	2	2	2	2	2	3	4	4	3	3	5	3	3	4	4	5	3	3	4
	<i>Utilities</i>	12	12	12	12	13	23	24	29	30	36	40	46	37	39	43	44	45	46	125	120
	<i>Mining</i>	10	11	11	12	12	26	27	30	32	30	38	41	32	34	33	32	33	44	46	60
	<i>Manufacturing</i>	199	237	266	277	277	444	513	603	682	695	824	922	962	1111	1323	1578	1933	2331	2759	2977
	<i>All</i>	220	260	290	300	303	492	564	662	745	761	902	1009	1031	1185	1398	1654	2011	2421	2930	3157

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Heilongjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2	2	2	2	3	4	5	5	4	4	6	5	11	5	6	9	18	20	38	30
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	16	18	18	21	22	46	47	45	45	46	52	51	41	39	40	41	46	56	54	63
4	NMM	62	62	63	63	63	154	155	163	159	162	171	175	177	179	148	147	170	123	157	160
5	FDB	1	1	1	1	1	4	4	3	3	4	4	4	3	3	4	3	4	4	6	7
6	TBC	2	2	2	2	2	4	4	5	7	8	10	12	4	4	4	4	6	5	8	8
7	TEX	44	52	49	53	56	106	102	88	104	129	157	168	135	148	151	146	158	267	191	238
8	WEA	3	4	5	6	5	10	11	13	16	17	16	19	17	14	13	14	19	15	22	24
9	LEA	20	22	24	26	26	36	36	35	37	31	31	33	26	28	29	28	18	31	21	18
10	WDF	5	6	5	5	5	6	6	6	7	5	7	5	1	1	1	1	0	1	0	0
11	PAP	3	3	3	3	3	5	5	5	5	5	6	6	2	1	1	2	1	2	0	0
12	PET	11	13	13	14	13	23	24	27	33	41	53	63	28	28	31	37	16	46	17	15
13	CHE	10	12	12	13	13	26	27	25	24	28	31	31	22	27	29	36	42	42	39	46
14	RBP	23	31	34	38	41	72	72	75	75	81	87	93	92	88	148	155	156	194	175	182
15	BUI	19	23	28	30	33	50	54	64	65	74	89	104	111	125	166	182	200	241	212	228
16	MSP	11	12	14	15	15	24	28	28	29	32	37	38	26	26	25	40	20	27	24	20
17	MPD	12	15	15	16	14	26	29	35	37	39	46	50	24	30	32	33	23	35	29	26
18	MCH	11	12	14	15	15	30	35	38	34	34	35	34	27	27	28	34	29	47	46	46
19	TRS	9	11	11	12	12	15	19	23	24	28	30	35	15	13	15	16	5	21	11	7
20	ELE	39	46	50	47	44	64	73	81	85	89	91	108	82	70	76	87	76	134	219	275
21	ICT	10	13	15	15	14	21	26	30	38	61	70	68	73	86	118	130	203	199	278	294
22	INS	14	14	15	17	17	23	26	22	28	30	34	37	30	36	38	42	22	42	57	62
	<i>Utilities</i>	2	3	3	3	3	4	4	5	6	5	6	7	5	6	7	7	42	10	8	10
	<i>Mining</i>	80	82	83	86	87	204	207	212	209	212	228	231	229	222	194	197	235	199	249	253
	<i>Manufacturing</i>	249	292	311	328	331	544	581	601	650	735	834	907	719	756	908	990	999	1353	1356	1499
	<i>All</i>	331	376	397	417	420	752	792	818	864	953	1068	1146	953	984	1109	1194	1275	1562	1613	1762

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Shanghai																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	FDB	35	37	41	42	44	84	95	90	105	124	140	161	199	220	257	309	360	479	362	370
6	TBC	8	8	9	10	10	19	21	23	26	25	26	29	33	35	40	46	52	68	50	50
7	TEX	144	139	138	136	131	254	258	242	250	236	212	196	195	174	162	153	137	135	138	141
8	WEA	23	27	31	34	36	65	80	77	119	134	134	139	156	160	174	195	214	270	199	220
9	LEA	7	8	8	8	10	15	18	32	41	42	41	42	46	46	49	54	57	71	65	69
10	WDF	6	7	7	7	7	11	13	15	19	27	38	50	68	81	100	126	153	209	220	232
11	PAP	19	21	22	23	23	38	40	44	49	58	62	68	80	86	97	114	130	169	155	167
12	PET	17	21	22	23	23	36	38	33	34	37	46	56	72	83	100	123	146	198	145	152
13	CHE	113	114	124	127	139	237	267	286	348	413	436	475	560	596	673	786	892	1160	869	939
14	RBP	34	36	39	40	42	62	69	81	100	127	138	153	184	199	229	271	311	408	396	408
15	BUI	18	20	22	21	20	29	35	46	60	67	72	80	96	103	118	138	158	207	219	227
16	MSP	101	103	101	104	113	243	318	367	395	391	395	413	470	484	530	602	665	844	700	818
17	MPD	32	35	37	37	39	88	103	87	122	142	149	162	190	202	228	266	301	391	362	368
18	MCH	118	128	142	146	138	203	248	240	272	318	342	377	449	483	551	648	740	969	1128	1289
19	TRS	29	31	36	40	49	90	135	261	318	422	506	608	775	881	1051	1285	1518	2044	1536	1449
20	ELE	52	56	62	66	66	95	97	168	217	273	301	341	415	454	525	626	724	957	978	1042
21	ICT	50	62	74	72	77	112	120	153	260	312	384	469	606	695	835	1027	1220	1650	2439	3116
22	INS	13	14	15	15	14	18	24	49	55	65	73	84	103	115	134	160	187	248	300	342
	<i>Utilities</i>	15	15	16	16	17	29	40	43	52	50	55	62	75	83	95	114	131	174	185	211
	<i>Mining</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Manufacturing</i>	818	865	931	950	981	1700	1979	2292	2787	3212	3495	3901	4697	5098	5853	6929	7964	10477	10259	11397
	<i>All</i>	834	880	947	966	997	1728	2020	2335	2840	3262	3550	3963	4773	5180	5948	7043	8096	10650	10444	11608

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Jiangsu																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	6	6	6	7	7	15	16	18	19	18	20	20	18	20	23	25	29	33	29	33
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	2	2	2	2	4	5	5	5	6	7	8	10	12	11	11
4	NMM	8	9	9	9	8	11	16	22	26	29	34	36	34	38	45	50	59	69	49	49
5	FDB	84	92	93	89	95	175	202	235	296	314	394	432	422	494	601	681	830	995	734	870
6	TBC	7	7	7	7	7	11	12	13	14	17	19	20	18	20	23	25	29	35	35	37
7	TEX	225	260	298	308	341	519	727	957	1206	968	1062	1042	918	975	1080	1122	1259	1391	1481	1778
8	WEA	23	28	33	38	47	67	110	184	252	233	278	293	277	315	373	413	493	580	586	701
9	LEA	10	13	16	16	20	29	39	69	96	97	116	123	116	132	157	174	208	245	172	177
10	WDF	8	11	11	10	10	14	21	32	48	56	75	87	89	107	134	156	194	237	259	268
11	PAP	18	23	26	27	30	46	61	77	92	99	127	141	139	164	201	229	281	338	332	932
12	PET	17	19	24	19	20	44	50	52	54	66	74	73	65	70	79	83	95	106	101	127
13	CHE	106	142	170	199	244	381	503	622	764	825	1001	1069	1022	1173	1401	1564	1883	2228	2164	2770
14	RBP	39	48	58	58	66	104	144	181	220	229	277	296	282	324	387	432	520	615	637	638
15	BUI	58	67	72	68	68	114	163	226	284	293	341	352	326	364	423	461	543	630	591	678
16	MSP	39	45	53	56	64	113	184	279	350	332	371	371	334	361	408	433	496	559	826	1015
17	MPD	31	41	47	50	54	82	132	204	278	263	307	319	297	333	388	425	503	585	587	733
18	MCH	119	147	180	181	180	276	415	562	705	738	861	892	829	928	1082	1183	1396	1622	1744	2049
19	TRS	23	31	38	39	44	70	126	227	304	371	426	435	399	441	508	549	641	737	798	969
20	ELE	50	60	72	82	86	121	185	288	386	493	578	602	561	631	738	809	958	1116	1336	1582
21	ICT	56	82	111	114	120	159	218	259	317	374	528	626	650	800	1011	1186	1489	1828	3833	5005
22	INS	9	12	13	13	14	23	40	70	95	60	86	102	107	131	166	195	245	301	442	628
	<i>Utilities</i>	18	21	23	24	27	46	52	60	72	80	92	95	88	98	113	123	144	167	251	319
	<i>Mining</i>	14	15	16	16	16	29	34	42	48	50	59	61	57	64	75	82	98	114	88	92
	<i>Manufacturing</i>	922	1126	1321	1376	1509	2348	3334	4535	5761	5829	6922	7276	6851	7763	9161	10121	12062	14147	16657	20957
	<i>All</i>	955	1162	1360	1416	1552	2423	3419	4638	5881	5959	7073	7432	6996	7925	9349	10326	12304	14428	16997	21368

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Zhejiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	0	0
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	2	3	5	4	5	5	4	4	4	5	6	6	8	3	6
4	NMM	4	4	5	5	5	9	12	14	16	14	16	17	19	22	27	32	39	50	46	38
5	FDB	53	57	66	61	63	125	171	159	183	198	238	259	318	371	478	590	751	1002	488	566
6	TBC	7	8	9	8	9	15	19	16	17	18	19	20	22	24	29	34	41	52	28	27
7	TEX	120	147	160	168	200	341	441	611	748	589	647	651	746	815	989	1154	1394	1773	1174	1410
8	WEA	14	17	21	25	30	49	63	144	193	175	205	218	263	301	383	466	587	776	338	464
9	LEA	7	8	10	11	15	30	41	69	102	107	128	138	169	196	252	310	394	524	294	330
10	WDF	7	7	9	9	9	13	16	25	33	36	43	46	56	65	83	102	129	172	152	171
11	PAP	15	18	20	22	24	39	50	59	72	84	102	112	138	162	210	260	331	444	270	518
12	PET	8	9	9	11	11	25	36	30	33	33	42	48	62	74	98	124	161	220	126	150
13	CHE	39	48	58	61	72	131	174	203	271	343	449	517	667	808	1077	1366	1782	2430	1684	2072
14	RBP	27	33	42	44	47	75	96	128	159	182	212	224	269	307	389	472	593	781	558	610
15	BUI	27	30	33	32	34	68	93	101	132	141	161	168	199	224	280	336	417	545	366	421
16	MSP	15	18	21	23	22	46	63	86	108	122	141	148	177	201	254	307	384	505	431	512
17	MPD	18	23	26	30	32	48	59	91	113	120	133	135	155	171	209	246	300	384	212	264
18	MCH	56	66	78	81	81	127	159	235	274	304	326	320	358	382	453	515	607	753	519	623
19	TRS	9	13	16	18	19	30	38	89	114	137	152	155	179	198	242	285	347	446	313	430
20	ELE	37	44	57	52	50	78	97	165	214	255	299	319	385	442	563	686	864	1143	740	872
21	ICT	14	20	27	30	32	41	47	76	125	171	215	241	304	362	477	598	772	1044	866	1060
22	INS	7	8	10	10	10	14	17	31	36	45	49	48	54	58	69	78	93	116	108	162
	<i>Utilities</i>	12	13	14	15	16	29	38	39	47	54	67	74	92	109	142	177	227	305	388	463
	<i>Mining</i>	6	6	7	7	7	13	17	21	23	21	23	23	25	27	33	38	46	59	50	44
	<i>Manufacturing</i>	479	574	672	695	758	1295	1678	2318	2927	3060	3561	3767	4523	5160	6534	7931	9948	13108	8667	10663
	<i>All</i>	497	593	693	717	781	1337	1733	2378	2997	3135	3650	3864	4641	5296	6709	8146	10221	13471	9105	11170

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Anhui																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	8	8	8	9	9	18	19	23	25	26	36	36	28	29	30	33	37	43	49	52
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	2	3	4	10	11	13	14	10	10	10	10	11	14	12	14
4	NMM	2	2	3	4	4	8	9	15	23	28	40	41	10	8	7	6	5	10	4	5
5	FDB	38	40	43	44	45	87	93	119	160	178	261	271	139	141	143	151	168	194	179	237
6	TBC	13	15	17	18	18	32	34	36	37	42	44	45	46	46	46	48	53	52	56	64
7	TEX	31	36	41	44	43	76	90	104	120	126	144	147	99	98	98	102	110	121	106	118
8	WEA	4	5	5	6	6	8	11	16	24	24	28	26	16	14	13	12	12	18	15	20
9	LEA	2	3	3	3	3	5	5	14	20	26	34	33	15	15	16	17	18	24	26	30
10	WDF	3	3	4	4	4	5	7	12	20	26	34	34	13	17	22	28	35	39	46	54
11	PAP	7	8	10	11	12	19	21	28	37	43	50	50	33	25	29	33	41	57	41	98
12	PET	7	8	9	9	9	17	18	18	16	20	26	26	20	25	30	37	46	33	56	59
13	CHE	19	24	29	31	34	64	73	86	109	139	171	171	137	154	172	197	234	243	296	345
14	RBP	9	10	12	13	15	24	29	35	47	61	80	75	58	79	101	128	165	150	208	236
15	BUI	16	18	22	23	24	41	52	68	96	110	147	150	70	71	72	76	84	113	122	133
16	MSP	21	22	23	24	26	58	64	75	85	85	107	112	112	119	127	141	162	203	264	348
17	MPD	6	7	8	9	9	14	16	24	32	35	46	45	19	17	16	14	14	31	29	46
18	MCH	19	22	27	30	32	47	60	79	103	134	142	144	104	106	109	116	129	178	164	185
19	TRS	5	6	8	9	9	15	24	40	57	55	72	69	66	86	108	134	170	286	218	287
20	ELE	7	9	13	17	20	26	34	53	69	92	106	100	106	121	137	160	192	300	343	439
21	ICT	3	7	8	9	9	13	15	17	21	22	18	15	36	59	83	112	150	139	190	224
22	INS	1	2	2	2	2	3	4	5	6	9	11	9	5	6	6	7	8	16	11	15
	<i>Utilities</i>	10	11	12	13	13	22	27	43	37	39	42	35	40	47	54	63	77	68	117	152
	<i>Mining</i>	11	11	12	13	14	28	31	42	59	66	89	91	47	47	47	49	53	67	64	71
	<i>Manufacturing</i>	212	245	282	306	322	553	651	830	1063	1226	1520	1522	1095	1199	1328	1512	1790	2197	2371	2939
	<i>All</i>	234	268	307	332	350	603	709	915	1158	1330	1650	1647	1181	1293	1428	1624	1920	2332	2552	3163

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Fujian																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2	1	2	2	2	3	4	4	5	4	6	5	4	4	3	4	5	6	9	12
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	2	2	2	2	2	3	4	3	3	5	6	8	11	17	21
4	NMM	1	1	2	2	2	4	4	7	11	11	12	13	6	6	8	8	9	13	17	21
5	FDB	27	25	33	34	34	64	73	99	129	168	195	213	208	207	212	228	269	343	488	581
6	TBC	5	5	6	7	7	14	17	19	19	19	20	23	24	25	28	29	31	32	31	34
7	TEX	10	14	17	19	21	30	34	39	50	65	75	81	86	90	115	134	170	259	362	459
8	WEA	3	5	7	11	16	27	38	41	64	72	84	88	89	81	109	128	167	231	313	411
9	LEA	2	2	3	3	7	16	27	52	73	97	101	90	118	110	119	143	175	245	324	360
10	WDF	5	6	7	8	9	13	18	27	39	30	40	55	29	33	46	60	74	101	150	167
11	PAP	10	10	12	14	15	27	33	41	49	56	61	66	62	70	89	102	115	145	194	370
12	PET	0	0	0	0	0	0	0	8	8	12	12	14	17	22	28	24	21	26	27	26
13	CHE	17	21	25	28	31	53	60	70	83	99	124	136	140	178	223	244	291	369	481	585
14	RBP	8	11	14	16	19	32	39	48	64	79	84	106	108	125	131	149	189	247	333	361
15	BUI	8	7	8	10	11	22	28	42	60	71	89	99	97	106	129	152	187	267	422	506
16	MSP	5	5	6	7	8	18	21	26	30	31	46	52	64	86	93	109	121	163	237	284
17	MPD	3	3	4	5	7	12	16	20	26	34	37	52	45	48	66	69	91	96	109	157
18	MCH	11	14	18	19	19	29	38	45	60	59	66	63	56	58	74	93	125	186	271	309
19	TRS	3	4	5	6	6	11	19	33	24	31	38	56	57	66	103	159	197	289	293	353
20	ELE	5	7	10	11	11	18	28	40	47	50	64	76	83	95	113	136	161	215	345	374
21	ICT	7	21	33	34	39	50	62	101	120	136	171	264	361	484	564	674	961	1306	1903	2215
22	INS	1	1	1	2	3	3	3	8	9	16	13	20	16	18	22	30	40	88	139	170
	<i>Utilities</i>	7	7	8	8	9	14	18	24	31	38	50	49	47	48	57	61	73	93	159	183
	<i>Mining</i>	4	4	4	5	5	10	10	14	18	18	20	22	12	13	16	19	22	31	44	55
	<i>Manufacturing</i>	131	162	211	236	264	440	553	760	952	1124	1320	1553	1659	1901	2262	2664	3385	4608	6422	7722
	<i>All</i>	142	172	223	249	278	464	581	798	1001	1180	1389	1624	1718	1962	2335	2744	3479	4731	6625	7960



Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Jiangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	5	5	5	5	5	10	10	10	13	12	13	18	13	11	10	10	9	9	11	14
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	8	9	9	10	10	20	20	21	23	25	27	26	11	10	11	12	15	18	42	49
4	NMM	1	1	2	2	2	3	4	7	11	7	9	11	8	4	5	6	8	10	10	15
5	FDB	22	25	26	25	26	49	49	53	64	59	72	85	67	67	67	68	73	80	94	121
6	TBC	2	2	3	3	4	7	8	9	10	10	11	11	9	15	17	20	25	31	26	29
7	TEX	14	18	18	20	20	31	36	38	44	43	46	43	32	33	38	44	54	66	81	114
8	WEA	3	4	6	6	7	8	10	5	7	7	12	13	10	7	7	7	8	9	41	57
9	LEA	1	1	2	2	2	3	3	14	16	10	14	14	9	8	8	9	11	13	21	29
10	WDF	4	4	5	5	6	9	11	15	25	18	20	25	20	13	14	15	18	21	23	33
11	PAP	6	6	7	8	8	14	17	21	22	23	28	28	22	25	24	23	24	25	31	56
12	PET	6	4	5	5	5	10	12	13	12	13	15	15	15	22	23	25	29	33	35	36
13	CHE	13	18	22	23	24	43	54	64	74	75	87	100	81	102	113	128	150	179	210	274
14	RBP	4	5	6	7	7	10	13	14	17	14	20	17	11	10	9	9	9	9	14	19
15	BUI	12	12	13	14	15	28	32	41	55	52	59	66	49	38	40	43	49	56	84	115
16	MSP	19	21	21	21	20	43	47	53	60	65	71	74	70	89	113	141	180	228	347	456
17	MPD	3	3	4	5	5	7	8	12	16	13	16	15	10	7	9	11	14	17	21	30
18	MCH	14	18	21	22	21	31	41	45	52	48	54	62	43	36	35	34	35	36	46	49
19	TRS	8	9	11	12	13	20	29	52	58	56	71	78	89	100	113	132	158	192	175	205
20	ELE	4	6	7	9	8	13	16	21	26	26	31	31	26	29	33	38	46	0	76	114
21	ICT	3	7	9	9	9	13	16	21	28	24	25	22	19	28	31	35	41	55	61	114
22	INS	1	2	2	2	2	3	3	3	5	6	7	6	6	8	8	9	10	49	15	17
	<i>Utilities</i>	7	7	8	9	9	15	17	20	23	25	27	30	23	23	25	27	31	36	48	56
	<i>Mining</i>	14	15	16	18	18	33	35	37	47	44	49	55	32	24	26	28	32	37	63	78
	<i>Manufacturing</i>	141	167	189	198	203	341	404	495	592	561	658	707	588	638	702	793	930	1098	1399	1868
	<i>All</i>	162	189	214	224	229	388	455	552	661	631	734	791	643	686	752	848	992	1171	1510	2002

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Shandong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	14	15	16	18	19	41	45	62	73	71	96	101	106	105	109	127	173	219	297	292
2	PTM	34	36	38	38	38	92	94	92	86	86	90	85	81	80	83	81	78	88	103	92
3	MTM	3	3	4	5	6	14	17	26	36	37	43	50	70	74	87	92	110	159	154	168
4	NMM	6	7	10	13	14	21	29	39	55	43	54	55	43	44	52	54	61	73	104	137
5	FDB	61	70	91	101	112	208	254	353	463	475	591	642	678	714	975	1125	1319	1562	2089	2852
6	TBC	13	14	15	16	17	32	35	39	45	51	54	54	54	56	58	57	53	68	71	75
7	TEX	108	122	146	158	167	275	300	344	402	371	428	444	430	452	550	633	738	911	1252	1791
8	WEA	12	15	19	23	26	34	40	59	81	69	90	99	103	101	120	115	144	214	292	412
9	LEA	7	9	11	13	16	25	30	50	78	79	103	113	108	111	119	133	133	162	232	229
10	WDF	6	8	10	12	13	18	23	40	52	44	51	58	47	48	60	73	89	113	239	237
11	PAP	17	21	27	32	34	56	70	100	125	128	175	178	177	207	248	271	336	460	676	1526
12	PET	22	27	36	46	49	91	108	118	126	134	127	130	143	162	208	161	234	282	382	460
13	CHE	40	51	65	74	86	162	206	271	353	368	473	524	548	610	716	901	1059	1333	1919	2799
14	RBP	25	29	39	47	54	88	119	150	184	200	247	248	275	296	339	396	466	567	721	695
15	BUI	29	35	43	48	53	97	131	229	317	287	342	364	362	357	423	475	558	784	1083	1520
16	MSP	18	21	24	28	29	70	83	104	130	139	159	170	177	220	254	296	405	613	1052	1483
17	MPD	18	23	28	32	36	51	68	111	143	125	146	150	171	160	186	219	237	249	379	528
18	MCH	62	77	107	115	120	172	225	301	406	426	518	591	600	690	782	820	954	1331	1750	2274
19	TRS	16	17	24	30	33	50	74	127	163	183	248	259	263	262	295	334	485	606	944	1231
20	ELE	17	21	28	34	37	57	75	119	168	193	253	333	420	516	662	741	812	993	1399	1818
21	ICT	8	14	19	23	25	28	36	57	84	129	122	201	236	341	473	580	685	941	1380	2017
22	INS	3	4	5	5	5	7	9	17	21	22	27	29	27	23	27	38	39	44	73	133
	<i>Utilities</i>	21	25	28	30	32	54	63	72	82	88	93	100	110	121	152	172	223	232	464	531
	<i>Mining</i>	57	61	68	74	77	169	185	219	249	238	283	291	300	303	330	353	423	539	657	689
	<i>Manufacturing</i>	483	578	741	838	914	1520	1885	2590	3341	3422	4152	4588	4817	5326	6495	7369	8745	11233	15936	22079
	<i>All</i>	561	663	836	943	1023	1743	2133	2881	3672	3748	4528	4978	5227	5750	6977	7894	9391	12004	17057	23299

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Henan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	17	17	19	21	23	43	53	53	62	72	88	96	57	105	112	123	138	150	195	285
2	PTM	10	11	12	12	11	19	21	25	25	22	20	26	17	35	40	47	56	64	60	65
3	MTM	1	2	2	3	4	7	10	13	20	23	24	38	29	63	77	94	115	135	148	185
4	NMM	1	1	1	2	2	4	5	5	8	7	10	12	8	16	18	21	24	27	27	60
5	FDB	33	34	39	40	41	72	84	139	192	230	259	334	225	458	531	622	739	849	901	1338
6	TBC	18	20	22	21	21	35	38	54	60	64	84	81	42	68	64	60	58	54	61	71
7	TEX	53	47	51	54	55	98	115	127	137	130	128	166	113	230	267	314	373	430	435	592
8	WEA	6	6	7	8	8	15	18	13	18	17	19	16	7	7	3	10	10	9	13	17
9	LEA	4	5	6	6	6	10	11	21	34	38	38	42	25	46	49	53	60	65	71	76
10	WDF	3	3	3	3	3	6	7	9	13	14	18	21	12	23	25	27	31	34	54	58
11	PAP	10	11	13	15	15	28	34	41	56	61	70	70	37	62	60	60	60	60	77	247
12	PET	5	5	8	8	8	15	17	21	26	28	27	31	19	36	39	43	49	54	63	72
13	CHE	30	38	47	50	52	94	112	140	185	227	253	270	157	281	294	315	346	372	439	561
14	RBP	11	11	13	15	17	32	40	41	48	57	68	57	25	30	17	26	24	22	15	15
15	BUI	20	21	25	28	30	55	68	103	140	155	186	200	116	210	220	237	262	282	374	536
16	MSP	18	20	22	24	26	49	59	83	94	101	107	132	86	171	195	225	264	301	456	599
17	MPD	7	7	8	10	11	20	25	25	34	36	36	37	20	34	34	35	36	37	51	71
18	MCH	43	52	63	63	62	106	120	148	185	203	253	250	134	223	215	213	215	212	314	448
19	TRS	5	6	8	10	12	25	32	40	54	72	75	64	28	35	22	50	69	88	109	127
20	ELE	13	14	16	18	20	39	48	51	70	79	91	85	43	66	58	51	45	117	50	70
21	ICT	3	4	6	7	8	14	18	20	27	36	36	35	19	31	30	29	30	37	38	43
22	INS	1	2	2	2	3	5	6	7	7	7	8	6	2	2	1	3	3	29	8	10
	<i>Utilities</i>	18	19	21	23	24	43	51	57	63	82	98	128	87	177	206	244	292	337	455	550
	<i>Mining</i>	30	31	34	38	40	74	90	97	115	124	142	173	111	219	248	285	332	377	431	595
	<i>Manufacturing</i>	285	304	359	383	399	717	854	1084	1380	1554	1759	1898	1110	2013	2123	2374	2675	3050	3529	4952
	<i>All</i>	333	355	414	444	463	834	995	1238	1558	1759	1999	2199	1308	2409	2577	2903	3299	3764	4415	6097

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Hubei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1	2	2	2	2	4	4	5	6	6	11	13	13	15	17	19	22	25	29	38
2	PTM	4	5	5	6	6	10	12	11	12	12	14	14	12	11	12	12	13	14	19	23
3	MTM	1	1	1	1	1	2	2	5	7	9	14	17	17	19	21	23	27	30	30	24
4	NMM	4	5	5	6	6	11	13	16	28	28	43	49	47	52	57	63	73	81	94	137
5	FDB	42	44	44	45	44	67	75	95	130	146	219	249	242	267	291	325	372	418	503	617
6	TBC	11	15	19	17	15	20	20	41	53	52	64	63	55	55	56	59	65	70	108	139
7	TEX	80	89	94	97	95	149	168	150	194	188	236	237	210	216	222	237	261	284	370	446
8	WEA	14	16	18	22	24	40	49	46	67	66	94	104	99	107	116	128	146	163	123	161
9	LEA	4	4	4	4	4	7	8	13	19	18	24	25	22	23	24	26	29	32	26	31
10	WDF	6	7	7	8	7	12	13	15	23	26	40	46	45	50	55	62	71	80	81	98
11	PAP	12	14	15	17	17	27	32	35	47	48	65	70	65	70	74	82	92	102	130	205
12	PET	15	16	16	16	16	25	28	27	28	29	39	41	38	40	43	46	52	58	90	97
13	CHE	34	42	48	51	52	82	94	117	162	191	270	295	279	301	324	357	405	452	573	757
14	RBP	15	18	20	22	22	35	40	43	53	60	81	87	81	86	91	100	113	125	112	132
15	BUI	24	26	27	27	25	38	42	79	113	124	181	202	194	211	228	254	289	324	366	485
16	MSP	57	62	64	66	64	100	112	169	184	169	202	194	166	165	166	173	186	199	394	444
17	MPD	12	15	17	19	20	34	40	43	63	65	92	102	97	105	113	125	142	158	146	211
18	MCH	37	46	53	52	49	73	79	94	122	132	177	186	172	182	192	209	235	260	347	436
19	TRS	43	52	60	66	68	112	131	192	267	251	331	345	315	331	348	378	423	466	837	897
20	ELE	14	18	20	21	21	32	36	45	51	54	72	75	69	72	76	83	93	102	125	179
21	ICT	8	11	14	14	13	20	21	18	28	27	44	53	53	59	65	74	85	97	144	243
22	INS	2	3	3	4	5	10	13	8	8	10	12	12	10	10	10	10	11	12	16	34
	<i>Utilities</i>	17	19	21	23	25	42	50	47	59	58	70	67	58	57	58	60	65	69	236	230
	<i>Mining</i>	10	12	13	14	15	26	31	36	53	55	82	92	89	97	105	117	134	150	173	223
	<i>Manufacturing</i>	430	496	544	566	561	883	1002	1227	1613	1657	2243	2386	2212	2351	2495	2729	3071	3400	4488	5612
	<i>All</i>	457	526	578	604	601	951	1083	1310	1725	1771	2394	2545	2358	2505	2658	2906	3270	3620	4897	6064

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Hunan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	6	6	6	7	7	12	14	16	19	19	26	28	23	27	33	39	49	61	87	109
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	5	6	6	6	7	12	14	18	22	23	30	32	26	31	36	42	53	66	82	119
4	NMM	3	3	4	4	4	7	8	9	13	13	17	18	14	17	19	22	28	35	49	64
5	FDB	30	35	38	34	30	43	40	66	86	87	105	104	79	90	103	116	141	173	221	313
6	TBC	13	17	19	20	21	36	42	55	66	67	75	69	49	53	57	62	72	84	101	113
7	TEX	26	29	30	31	31	52	58	50	55	50	55	50	35	37	40	42	48	56	68	93
8	WEA	4	5	5	6	6	11	12	8	9	8	9	9	7	8	8	9	11	14	18	25
9	LEA	4	4	4	4	4	8	9	9	14	17	18	16	11	11	12	12	13	15	19	21
10	WDF	3	3	4	4	4	6	7	11	16	16	23	26	22	28	34	40	51	65	75	84
11	PAP	11	14	16	17	18	31	36	38	44	44	53	51	39	43	49	55	66	81	107	264
12	PET	9	11	11	11	11	18	20	20	39	40	51	52	41	48	56	64	79	99	106	111
13	CHE	32	40	44	46	48	82	94	107	113	120	142	137	103	115	129	145	174	211	263	328
14	RBP	9	11	11	12	12	21	24	24	26	26	29	26	19	20	22	23	27	31	47	51
15	BUI	18	22	23	23	23	37	41	75	93	92	119	123	98	115	135	156	194	242	268	358
16	MSP	24	26	26	28	31	55	65	86	98	94	115	114	88	100	115	131	159	196	298	373
17	MPD	6	8	8	9	9	17	19	24	28	23	28	28	22	25	29	33	40	50	59	75
18	MCH	29	36	40	43	45	77	90	90	97	86	95	86	60	64	67	71	82	94	182	215
19	TRS	12	17	20	21	22	38	45	65	75	75	89	86	64	72	80	90	108	131	154	179
20	ELE	13	16	17	20	23	42	51	46	54	50	58	55	41	45	50	55	65	81	97	135
21	ICT	5	7	9	10	11	19	22	15	17	16	27	33	30	38	47	58	75	79	109	117
22	INS	2	2	2	3	3	5	5	5	4	4	5	5	4	4	4	5	6	96	7	10
	<i>Utilities</i>	11	12	13	13	14	24	27	31	37	38	47	47	37	42	49	56	68	85	162	179
	<i>Mining</i>	14	15	16	17	18	32	37	43	54	55	73	77	62	74	88	103	129	162	218	291
	<i>Manufacturing</i>	250	301	328	341	352	597	680	793	936	915	1096	1071	810	916	1036	1167	1412	1800	2199	2864
	<i>All</i>	275	329	357	372	385	652	745	867	1027	1008	1216	1196	910	1033	1173	1326	1609	2047	2579	3335

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Guangdong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2	2	2	2	2	4	5	5	6	6	5	4	3	3	2	2	2	2	2	1
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	5	6	8	7	7	12	14	19	22	16	19	21	23	23	23	24	26	32	26	30
4	NMM	3	4	5	5	5	9	11	19	27	26	31	35	41	45	50	56	64	82	32	31
5	FDB	57	69	79	81	88	156	194	345	386	439	499	546	599	619	671	743	846	1076	829	976
6	TBC	9	11	14	16	20	39	53	41	48	46	48	49	53	54	55	57	62	75	93	101
7	TEX	43	57	69	84	107	214	294	248	334	327	363	389	436	460	493	540	609	769	810	931
8	WEA	14	21	29	38	51	105	149	178	266	284	328	364	424	460	503	561	643	822	740	886
9	LEA	5	9	13	17	24	49	70	103	152	200	221	236	266	282	302	330	372	469	542	590
10	WDF	8	12	15	16	19	35	46	51	70	86	102	116	138	152	168	189	219	282	411	448
11	PAP	16	21	26	29	34	64	84	111	152	175	206	232	276	305	356	417	497	658	1061	1564
12	PET	20	22	24	26	29	54	70	55	59	66	81	95	113	125	164	207	262	362	403	409
13	CHE	40	62	83	97	119	234	316	321	460	490	576	647	738	788	968	1179	1448	1959	2525	2635
14	RBP	25	36	45	51	61	117	156	168	234	281	323	358	415	449	491	546	625	799	1248	1322
15	BUI	18	24	30	34	41	78	104	171	259	296	310	317	425	512	521	543	585	708	1350	1579
16	MSP	14	19	23	26	31	58	77	104	123	143	148	149	205	250	280	318	370	480	1438	1817
17	MPD	18	27	36	40	47	89	118	137	211	257	298	332	436	518	617	735	888	1186	1685	1980
18	MCH	35	48	61	65	75	139	180	142	180	185	213	236	264	276	305	342	393	505	983	1140
19	TRS	11	15	18	24	32	65	91	159	205	249	299	342	394	424	502	595	717	956	1611	2053
20	ELE	44	68	90	100	119	226	297	346	474	550	663	759	957	1105	1404	1747	2180	2986	5029	6135
21	ICT	32	43	53	51	54	90	107	377	642	960	1222	1452	2173	2788	3575	4477	5612	7712	20121	25409
22	INS	2	2	3	3	3	5	5	61	70	88	137	183	234	273	330	397	483	649	899	1088
	<i>Utilities</i>	13	15	16	20	25	50	69	71	114	116	137	155	174	183	202	226	261	335	727	799
	<i>Mining</i>	9	12	14	14	15	26	31	43	55	48	55	60	67	71	75	82	92	116	60	62
	<i>Manufacturing</i>	413	566	711	799	953	1820	2412	3118	4324	5120	6038	6803	8545	9841	11704	13921	16811	22452	41777	51062
	<i>All</i>	435	593	742	832	993	1895	2512	3232	4493	5284	6230	7018	8786	10095	11980	14229	17163	22903	42563	51924

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Guangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	2	2	1	2	2	3	4	4	5	5	6	5	4	3	4	3	3	3	4	4
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	5	4	4	4	4	7	8	18	25	26	26	29	30	39	42	35	21	21	16	23
4	NMM	1	1	1	1	1	2	3	6	10	12	13	14	9	5	5	5	5	4	6	7
5	FDB	27	29	30	32	35	66	85	121	145	137	158	164	177	177	168	161	233	293	279	345
6	TBC	5	7	8	9	10	19	25	19	23	21	21	22	20	20	17	19	21	26	34	41
7	TEX	12	15	17	18	19	34	42	33	35	30	26	27	19	20	21	23	22	22	28	37
8	WEA	2	2	3	3	3	6	7	7	7	8	11	6	3	2	2	1	2	1	1	2
9	LEA	1	1	1	1	1	3	4	5	7	7	8	8	7	5	6	8	9	11	14	15
10	WDF	2	2	2	2	2	5	6	8	13	13	16	18	8	10	12	13	15	27	34	36
11	PAP	6	7	8	8	9	18	23	23	28	31	34	36	25	26	31	32	34	39	50	92
12	PET	0	0	0	0	0	1	1	1	3	3	4	4	3	3	4	4	5	8	6	7
13	CHE	15	17	18	19	21	39	49	61	73	84	89	95	89	98	116	132	144	171	180	233
14	RBP	5	6	7	7	8	14	18	19	23	23	25	27	20	19	19	18	21	23	22	22
15	BUI	9	9	8	9	10	18	24	43	60	72	75	76	57	52	58	57	63	76	91	119
16	MSP	8	7	6	7	7	14	18	34	46	58	66	74	78	84	96	114	107	135	223	278
17	MPD	3	4	4	4	4	8	11	12	16	19	19	21	11	10	12	16	16	14	9	11
18	MCH	13	17	19	20	21	38	48	56	71	66	58	62	52	55	62	79	123	91	117	137
19	TRS	4	6	7	8	9	17	22	45	57	58	60	73	82	84	99	119	154	259	356	409
20	ELE	6	8	10	9	8	12	12	20	23	25	27	27	22	20	31	30	36	43	43	58
21	ICT	2	3	5	5	5	8	10	11	14	16	15	19	16	18	22	28	24	29	44	81
22	INS	1	1	1	1	1	2	3	4	4	4	4	5	3	4	5	5	7	9	8	10
	<i>Utilities</i>	6	7	8	8	9	16	20	20	21	26	29	29	28	31	33	34	36	42	85	111
	<i>Mining</i>	7	7	6	6	7	12	15	29	40	43	44	48	43	47	51	43	29	29	26	34
	<i>Manufacturing</i>	118	141	153	163	174	322	409	521	647	674	715	763	691	707	780	860	1035	1277	1538	1933
	<i>All</i>	131	155	167	177	189	350	444	570	709	743	789	840	762	786	865	937	1100	1348	1649	2077

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Sichuan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	11	12	13	14	15	27	28	35	39	42	37	38	33	34	20	20	26	29	66	81
2	PTM	13	10	5	5	6	9	13	16	17	18	20	21	23	25	15	15	17	18	20	22
3	MTM	3	3	3	4	3	6	7	7	7	7	8	7	7	8	7	8	10	11	33	27
4	NMM	5	6	7	7	9	13	15	19	24	22	21	23	16	18	11	12	13	17	24	27
5	FDB	86	83	75	69	73	132	170	173	188	221	187	218	226	248	179	190	257	313	578	824
6	TBC	9	10	11	13	14	23	34	37	31	46	34	37	61	67	38	36	52	53	87	92
7	TEX	43	47	50	51	56	89	136	136	139	118	78	74	81	85	63	61	75	87	168	222
8	WEA	7	9	10	10	11	19	16	14	13	12	9	8	6	6	5	7	10	7	17	22
9	LEA	5	5	5	5	5	9	11	19	22	23	18	15	14	14	10	13	16	21	63	66
10	WDF	5	6	6	6	5	9	11	15	20	20	16	16	19	21	14	13	14	18	55	58
11	PAP	18	20	22	23	24	40	52	53	53	66	56	57	59	67	46	49	62	71	134	200
12	PET	2	2	1	2	2	4	4	3	3	5	5	4	5	6	5	6	8	16	37	52
13	CHE	46	55	64	67	74	128	175	178	205	251	178	215	324	172	217	279	342	402	770	951
14	RBP	10	13	15	15	15	27	32	32	50	40	29	30	38	43	25	30	39	52	146	149
15	BUI	24	27	29	29	29	54	72	104	127	131	109	142	128	161	120	126	174	208	365	464
16	MSP	55	57	57	58	55	93	100	195	185	199	147	154	216	253	175	191	240	321	573	668
17	MPD	12	14	16	18	20	33	37	49	66	51	44	40	34	38	27	30	39	37	80	95
18	MCH	53	67	80	84	82	151	178	149	156	166	125	127	142	155	116	108	152	237	477	622
19	TRS	18	26	33	39	42	81	97	136	133	176	90	93	240	329	318	386	509	693	1385	1628
20	ELE	17	22	27	28	26	42	54	62	63	74	56	64	92	99	75	68	85	116	248	336
21	ICT	11	22	33	35	39	61	69	81	115	162	215	317	422	405	306	297	430	485	690	892
22	INS	5	6	8	9	8	14	15	16	17	18	5	4	17	25	19	70	26	37	62	76
	<i>Utilities</i>	17	17	17	22	29	51	42	52	53	62	53	57	67	79	55	60	89	94	301	349
	<i>Mining</i>	33	31	28	31	33	56	63	77	88	90	86	89	79	85	54	55	65	76	143	157
	<i>Manufacturing</i>	425	490	543	561	581	1010	1261	1452	1586	1779	1401	1615	2128	2195	1756	1960	2530	3174	5937	7416
	<i>All</i>	474	539	588	614	643	1117	1366	1580	1727	1930	1540	1761	2274	2360	1866	2075	2685	3343	6382	7921



## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Guizhou																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	5	4	4	4	4	5	6	12	13	13	16	16	16	17	20	22	48	29	49	64
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	1	1	2	3	3	4	3	3	3	3	3	7	4	4	5
4	NMM	1	1	1	1	1	1	1	2	2	3	7	9	10	12	16	18	43	28	38	5
5	FDB	10	12	9	8	7	5	4	19	21	20	24	22	22	23	25	27	57	34	39	45
6	TBC	8	10	14	16	17	19	23	33	42	51	67	68	69	76	87	97	215	133	101	116
7	TEX	3	4	4	4	4	4	5	6	7	6	7	6	5	5	5	5	10	6	6	6
8	WEA	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	5	3	3	3
9	LEA	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
10	WDF	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	5	3	5	5
11	PAP	2	3	3	3	3	4	4	7	7	9	11	11	11	12	13	14	32	19	16	17
12	PET	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	CHE	6	7	8	9	9	10	12	26	31	37	52	56	60	68	80	92	207	130	139	211
14	RBP	3	3	4	4	5	6	8	18	16	19	25	25	26	28	32	36	80	50	54	61
15	BUI	4	4	4	5	5	5	6	14	16	17	21	21	21	23	26	28	62	38	38	44
16	MSP	10	10	10	10	11	12	13	40	41	49	62	61	61	65	73	81	177	108	149	147
17	MPD	1	2	2	2	2	3	3	5	15	6	9	9	10	11	13	14	32	20	18	21
18	MCH	8	11	13	12	10	9	9	20	18	16	18	16	15	15	16	17	35	21	30	39
19	TRS	5	7	9	10	12	14	17	32	33	36	43	41	40	41	46	49	106	64	53	66
20	ELE	1	3	3	6	10	14	19	8	9	8	9	8	7	7	8	8	17	10	17	19
21	ICT	6	5	6	7	7	8	10	7	9	11	15	16	17	18	21	24	54	34	44	45
22	INS	1	1	1	1	1	1	1	2	2	1	1	1	1	1	2	2	4	2	3	3
	<i>Utilities</i>	5	6	6	6	7	8	9	15	20	24	30	30	30	35	40	45	98	62	124	144
	<i>Mining</i>	6	6	5	6	6	7	8	16	18	19	27	28	30	33	38	44	98	61	91	74
	<i>Manufacturing</i>	72	85	94	101	108	118	138	241	271	288	371	366	369	397	451	500	1099	676	715	852
	<i>All</i>	83	96	105	113	120	132	155	272	308	331	428	423	429	465	529	588	1295	799	929	1070

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Yunnan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	4	4	3	3	3	5	6	8	9	9	10	10	11	11	12	13	14	17	21	26
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	4	4	4	4	3	5	6	13	14	17	19	19	20	20	22	23	26	31	35	43
4	NMM	1	1	1	2	1	3	3	6	4	5	6	6	7	7	8	9	10	12	15	19
5	FDB	16	17	18	15	9	13	12	44	44	49	54	54	55	55	59	62	68	80	89	103
6	TBC	17	24	29	35	29	56	68	119	150	171	178	166	159	152	153	153	158	178	162	178
7	TEX	7	7	7	7	5	10	11	12	12	12	11	9	6	6	6	7	7	8	7	10
8	WEA	2	2	2	2	2	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1
9	LEA	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	0	0	0	0	0
10	WDF	2	2	2	1	1	1	1	4	4	6	8	10	11	12	15	17	20	26	25	27
11	PAP	3	4	5	5	4	7	8	14	19	26	30	31	32	34	37	40	45	55	50	50
12	PET	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	5	10
13	CHE	11	13	14	15	11	19	22	45	57	67	80	85	91	97	108	119	134	165	169	204
14	RBP	4	4	5	5	4	7	8	12	12	14	17	18	20	21	23	25	29	35	26	28
15	BUI	5	5	5	5	4	6	7	17	18	21	25	27	29	31	34	38	43	52	53	69
16	MSP	15	17	17	18	14	26	30	59	71	73	88	93	100	107	119	131	148	183	273	372
17	MPD	3	4	4	4	3	5	6	8	8	7	8	8	8	8	9	9	10	12	8	11
18	MCH	8	12	15	16	11	20	23	25	28	30	32	30	29	28	29	29	31	35	33	38
19	TRS	3	4	4	4	3	6	6	20	23	17	17	14	12	10	9	7	6	5	11	14
20	ELE	4	4	4	4	3	6	6	11	12	13	14	14	14	15	15	16	18	21	24	31
21	ICT	1	2	3	3	1	2	2	5	5	6	6	5	5	4	4	4	3	3	4	4
22	INS	1	1	1	1	1	3	4	3	5	6	7	7	8	8	9	9	10	13	10	11
	<i>Utilities</i>	6	7	7	8	6	12	14	21	24	26	29	30	31	31	34	36	40	48	71	87
	<i>Mining</i>	9	9	9	9	7	13	14	27	27	31	35	36	37	38	42	45	50	60	71	88
	<i>Manufacturing</i>	103	123	136	144	107	191	217	404	473	525	580	574	583	590	631	669	732	873	950	1161
	<i>All</i>	119	139	151	161	120	216	245	451	524	581	644	639	651	659	707	750	822	982	1092	1336

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Shaanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	5	5	5	6	6	9	10	15	17	17	19	23	16	13	14	31	39	49	86	89
2	PTM	1	1	1	1	1	1	1	4	3	4	5	7	9	34	36	45	52	60	70	74
3	MTM	2	2	2	3	3	5	6	10	13	14	16	18	15	16	20	19	21	24	33	48
4	NMM	1	1	1	1	1	2	2	3	3	3	3	3	1	1	2	1	1	1	2	3
5	FDB	15	14	14	15	15	25	28	33	37	37	44	51	57	58	65	73	83	101	123	149
6	TBC	5	6	7	9	12	22	27	25	29	31	30	31	32	32	28	28	27	32	34	37
7	TEX	29	32	37	35	33	49	50	60	63	53	54	52	45	45	47	46	49	49	57	62
8	WEA	3	4	4	4	5	7	8	6	7	6	8	9	5	4	4	5	4	4	3	3
9	LEA	1	1	1	1	1	2	3	2	3	5	6	6	5	4	3	2	2	2	1	1
10	WDF	2	2	2	3	3	5	5	6	6	6	8	8	4	4	5	5	3	3	4	3
11	PAP	5	6	7	7	8	13	14	17	21	23	28	29	25	27	27	31	31	36	44	37
12	PET	1	1	1	1	2	4	5	7	8	9	10	13	13	16	19	23	25	39	55	65
13	CHE	14	15	16	18	18	30	34	48	55	60	69	82	82	95	107	129	140	170	182	210
14	RBP	4	4	5	5	5	9	10	9	9	12	13	10	6	6	7	6	7	8	14	9
15	BUI	10	10	10	10	11	18	21	27	31	28	34	39	24	26	27	30	37	41	50	52
16	MSP	8	8	9	10	11	18	21	29	30	32	36	36	32	33	36	39	52	80	115	145
17	MPD	5	5	6	6	6	10	12	13	15	15	17	18	12	14	14	11	11	9	17	15
18	MCH	27	30	35	35	34	51	54	55	58	60	76	75	70	81	93	109	136	152	202	230
19	TRS	12	15	18	21	24	42	49	54	63	65	78	81	76	81	105	140	171	216	273	308
20	ELE	10	11	12	13	13	21	22	30	35	55	52	52	52	49	59	68	73	96	116	142
21	ICT	10	18	27	30	32	54	62	61	79	85	109	131	184	192	181	172	222	252	262	241
22	INS	4	4	5	6	7	11	13	12	12	12	12	13	11	14	12	14	17	16	33	29
	<i>Utilities</i>	9	9	10	11	11	19	21	23	25	27	29	31	29	30	33	35	39	49	107	106
	<i>Mining</i>	9	9	9	10	10	17	19	32	37	37	43	51	40	64	72	96	112	133	191	213
	<i>Manufacturing</i>	164	186	215	230	241	391	439	494	561	593	684	735	735	779	838	932	1090	1305	1586	1737
	<i>All</i>	181	204	234	250	263	427	479	549	623	657	755	818	804	874	942	1063	1242	1487	1885	2056

Chapter 6 Measuring Output by Sector and Region

TABLE 6-1, CONT'D

		Gross value of output in constant prices of Xinjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3	3	3	4	4	8	8	9	10	10	11	10	8	8	8	9	10	11	10	9
2	PTM	15	16	16	18	20	38	42	53	56	66	77	128	89	95	70	59	62	68	80	94
3	MTM	1	1	1	1	1	3	3	4	4	2	2	1	3	3	3	4	6	6	9	13
4	NMM	1	2	2	4	3	4	3	3	3	3	4	3	2	3	3	3	3	4	2	3
5	FDB	12	12	11	11	12	29	31	33	33	36	37	34	42	45	46	49	64	70	80	78
6	TBC	1	1	1	1	1	2	2	3	3	3	4	3	3	3	2	2	2	3	3	4
7	TEX	15	15	13	14	16	41	40	35	46	45	42	38	36	42	46	41	43	36	41	43
8	WEA	1	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	0	0	1	0
9	LEA	2	2	2	2	2	4	3	3	3	2	2	1	1	1	1	1	2	2	6	7
10	WDF	1	1	1	1	1	1	1	1	1	2	2	2	3	3	4	2	3	4	6	7
11	PAP	2	2	2	2	2	4	5	6	6	7	7	6	7	6	7	7	8	10	11	18
12	PET	5	6	6	6	6	12	13	17	17	21	26	25	31	36	67	90	94	103	111	130
13	CHE	3	3	4	4	5	9	10	10	13	16	17	17	16	18	21	24	30	38	46	53
14	RBP	1	2	3	3	3	6	7	8	8	11	14	13	15	14	17	21	19	23	27	29
15	BUI	5	4	3	3	4	8	10	11	12	12	14	14	15	16	18	22	24	31	26	28
16	MSP	3	4	4	4	4	9	11	13	15	19	21	20	28	27	33	42	53	54	64	72
17	MPD	1	1	1	1	1	2	3	5	5	4	5	5	6	6	6	7	5	6	9	10
18	MCH	4	5	5	6	6	9	10	9	9	11	13	13	16	14	9	9	8	8	10	9
19	TRS	2	2	3	3	3	6	7	6	5	4	5	4	4	5	5	7	10	5	6	5
20	ELE	1	1	1	1	1	2	3	3	3	4	5	6	8	9	12	15	17	23	23	24
21	ICT	0	1	1	2	1	1	1	1	1	0	1	0	0	1	0	0	0	0	6	6
22	INS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Utilities</i>		3	3	3	3	4	7	11	9	10	11	12	12	14	15	16	19	21	25	35	39
<i>Mining</i>		19	22	23	26	27	52	57	68	73	81	94	142	102	108	84	75	80	89	101	119
<i>Manufacturing</i>		57	63	61	66	71	149	157	165	182	199	217	203	234	246	295	341	383	417	476	525
<i>All</i>		79	88	87	95	102	208	225	242	265	291	323	357	351	370	396	435	483	531	612	683

TABLE 6-2: INTERMEDIATE INPUT IN CONSTANT PRICES

		Intermediate input in constant prices of Beijing																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3	3	3	4	5	4	4	5	4	2	4	2	8	2	5	10	21	26	52	40
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	0	0	0	0	0	0	0	1	2	1	2	1	2	1	1	1	1	3	3	3
4	NMM	0	0	0	0	0	0	0	0	2	1	3	1	3	3	1	1	1	2	3	1
5	FDB	28	29	36	44	57	56	66	64	76	105	114	138	172	129	163	154	181	216	314	319
6	TBC	1	1	1	1	2	2	2	2	2	3	5	4	3	1	2	3	3	3	3	3
7	TEX	21	23	26	30	33	32	35	43	49	41	44	35	30	28	33	38	35	48	52	57
8	WEA	5	6	7	10	12	11	11	23	40	31	37	28	34	29	30	33	34	40	61	59
9	LEA	2	2	2	2	2	2	3	5	9	7	5	4	4	4	3	3	3	4	7	9
10	WDF	5	5	6	6	6	6	6	11	14	11	11	10	13	20	13	18	23	22	32	41
11	PAP	9	11	14	16	15	16	18	23	26	22	28	25	36	31	32	39	59	57	81	73
12	PET	8	9	10	11	12	113	176	111	110	98	108	119	166	126	214	212	261	130	226	393
13	CHE	50	59	70	79	71	45	35	71	79	86	97	96	108	117	136	152	176	271	392	283
14	RBP	9	10	12	13	14	16	19	16	19	21	39	32	28	37	30	29	31	35	61	76
15	BUI	12	13	15	18	18	17	19	29	45	33	53	45	68	64	62	61	79	88	149	152
16	MSP	39	44	48	55	53	60	79	97	126	119	132	144	214	121	140	240	262	281	403	285
17	MPD	4	5	7	9	8	9	11	19	34	22	35	29	39	45	41	47	56	58	94	99
18	MCH	26	31	40	43	45	48	50	69	73	67	78	72	97	102	124	116	128	186	320	387
19	TRS	16	20	26	28	38	49	57	86	99	121	117	92	88	77	69	124	189	363	676	735
20	ELE	10	11	14	15	13	15	17	25	30	25	31	27	41	59	69	77	77	106	169	171
21	ICT	6	9	12	14	18	20	19	35	59	115	140	235	255	415	777	879	887	917	1520	2194
22	INS	2	2	3	3	3	3	3	7	7	12	19	21	19	20	25	28	48	62	100	118
	<i>Utilities</i>	17	19	21	24	22	29	37	40	34	32	29	26	39	22	31	32	30	35	166	268
	<i>Mining</i>	3	3	3	4	5	4	5	6	8	4	10	4	13	6	8	12	24	30	58	45
	<i>Manufacturing</i>	252	290	348	397	419	521	624	735	896	939	1093	1154	1414	1425	1963	2251	2530	2886	4661	5453
	<i>All</i>	272	312	372	425	445	554	665	780	938	975	1131	1184	1466	1453	2002	2295	2583	2952	4885	5766

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Tianjin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	21	22	23	25	26	21	18	30	32	20	41	48	67	42	58	37	65	65	24	28
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	0	0	0	1	1	1	1	1	2	2	2	2	2	3	3	4	5	5	1	2
5	FDB	29	27	37	40	43	44	50	50	94	109	135	157	195	230	264	315	385	432	334	366
6	TBC	3	3	4	3	3	2	2	3	5	2	1	2	2	2	1	1	1	0	0	0
7	TEX	53	55	57	58	59	54	56	64	73	61	62	63	70	75	75	87	89	110	63	76
8	WEA	8	9	9	11	14	14	19	24	40	30	34	39	48	57	64	79	84	105	51	73
9	LEA	5	5	5	5	6	6	9	11	18	14	18	23	30	36	43	53	63	75	54	50
10	WDF	3	3	3	3	2	4	5	10	10	13	15	18	22	27	29	37	38	51	43	40
11	PAP	9	10	10	11	11	12	12	16	18	17	19	21	25	31	36	43	46	58	41	62
12	PET	18	20	21	23	26	28	29	42	56	56	69	78	95	112	137	169	182	222	206	258
13	CHE	45	49	56	59	66	75	87	84	103	109	130	138	169	201	219	279	307	345	318	269
14	RBP	14	15	16	16	17	17	19	27	26	31	34	34	41	46	49	57	60	74	70	63
15	BUI	9	10	10	12	11	15	17	18	18	17	22	28	36	44	46	57	66	81	80	86
16	MSP	70	77	73	75	80	88	89	122	118	157	130	107	237	252	251	281	282	302	478	454
17	MPD	15	16	18	18	20	24	27	44	47	43	46	50	56	65	69	82	81	99	98	111
18	MCH	33	38	45	45	43	45	58	80	56	65	74	88	100	116	124	146	153	183	252	273
19	TRS	11	14	19	19	19	31	52	105	118	121	134	152	182	214	249	312	255	393	628	842
20	ELE	13	14	18	22	19	18	23	30	32	40	47	58	71	84	94	114	129	158	189	198
21	ICT	11	15	19	18	20	23	29	46	73	138	173	212	262	312	338	408	430	628	698	919
22	INS	2	2	2	2	2	3	4	9	6	9	11	13	16	19	21	25	28	37	50	44
	<i>Utilities</i>	13	12	15	17	17	17	18	24	27	29	26	24	26	24	16	18	18	12	31	36
	<i>Mining</i>	21	23	24	26	27	21	19	31	34	22	43	50	69	44	61	40	71	70	25	30
	<i>Manufacturing</i>	351	381	422	440	461	503	586	787	912	1029	1153	1281	1658	1923	2109	2547	2677	3352	3655	4183
	<i>All</i>	385	415	461	483	505	542	623	842	973	1080	1222	1355	1753	1991	2186	2605	2766	3435	3711	4249

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Hebei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	25	26	25	26	55	26	27	30	32	31	39	42	34	35	36	31	38	47	66	63
2	PTM	40	33	22	22	50	22	24	29	34	28	35	58	59	43	9	9	11	31	25	22
3	MTM	7	9	9	10	18	10	13	19	24	27	35	43	39	41	43	47	60	74	96	168
4	NMM	2	1	2	3	4	3	4	5	6	6	10	11	6	7	7	7	8	8	13	13
5	FDB	46	55	54	56	101	64	73	85	105	139	177	207	201	232	267	323	391	545	571	690
6	TBC	5	6	6	8	15	9	11	11	12	10	11	12	9	10	11	8	9	9	10	10
7	TEX	72	80	97	105	180	123	127	121	140	158	168	167	144	164	189	210	215	249	264	341
8	WEA	7	8	10	11	16	15	17	22	30	30	40	53	36	38	39	45	51	55	66	65
9	LEA	4	5	6	6	9	7	7	12	17	23	33	39	36	43	52	60	83	99	134	112
10	WDF	3	3	4	4	5	4	5	7	10	15	21	24	19	23	27	30	35	48	53	40
11	PAP	11	14	17	20	32	25	29	35	41	51	64	73	65	67	74	88	100	110	118	210
12	PET	21	25	21	23	39	28	32	39	46	44	52	58	9	55	105	137	122	131	231	303
13	CHE	37	48	56	62	110	86	103	123	151	186	234	266	298	339	372	384	433	453	512	659
14	RBP	9	16	16	18	26	22	28	32	37	48	55	61	55	62	68	78	87	115	136	107
15	BUI	31	36	36	39	67	45	57	78	95	108	141	160	131	145	155	160	186	235	261	321
16	MSP	58	68	57	66	152	83	106	141	179	222	273	293	334	393	451	554	703	1069	1590	2071
17	MPD	10	12	14	16	23	20	26	39	51	55	68	79	55	70	84	101	117	129	135	225
18	MCH	31	37	46	49	68	61	75	87	101	115	135	140	118	120	125	143	163	207	314	373
19	TRS	7	10	13	13	20	20	29	39	50	52	64	72	69	72	77	91	120	181	204	278
20	ELE	6	7	10	11	17	16	22	33	43	51	60	65	55	67	79	101	106	127	149	194
21	ICT	1	3	6	5	5	6	7	8	11	9	10	15	18	23	26	30	35	38	49	57
22	INS	1	1	2	2	2	2	2	5	4	6	5	5	2	3	4	5	6	6	9	13
	<i>Utilities</i>	40	43	51	57	92	66	76	83	95	74	88	90	77	89	105	103	102	118	361	457
	<i>Mining</i>	74	70	58	60	126	61	68	83	95	92	119	155	137	125	95	94	117	159	200	266
	<i>Manufacturing</i>	359	434	469	514	889	637	755	917	1123	1322	1612	1790	1656	1925	2205	2548	2961	3804	4806	6069
	<i>All</i>	473	547	577	632	1107	764	900	1082	1313	1488	1818	2034	1870	2139	2404	2746	3180	4081	5366	6792

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Shanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	66	76	84	100	108	91	99	124	149	133	163	174	148	140	131	153	182	217	282	359
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	2	2	2	2	8	12	4	6	5	4	5	4	7	8	11	15	32
4	NMM	1	1	1	1	1	1	1	2	2	3	4	5	2	2	2	2	2	2	4	4
5	FDB	14	16	17	18	18	21	21	21	28	37	39	39	35	34	38	38	48	65	85	84
6	TBC	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	2	4
7	TEX	17	19	21	20	19	24	23	22	22	25	25	22	19	18	22	20	21	20	23	23
8	WEA	2	2	2	3	3	3	3	3	3	3	3	3	1	1	1	1	2	2	2	3
9	LEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	WDF	1	1	1	1	1	1	1	2	2	3	4	4	2	1	1	1	1	1	1	1
11	PAP	3	3	4	4	4	4	5	5	7	10	10	10	9	9	6	6	7	8	9	8
12	PET	2	4	5	8	7	11	15	18	34	39	60	66	99	86	85	98	135	203	420	398
13	CHE	23	29	34	36	39	43	50	54	64	70	80	85	86	86	103	107	131	157	187	201
14	RBP	4	5	6	7	7	6	9	10	11	11	13	13	12	11	11	14	15	18	22	14
15	BUI	6	8	9	10	9	11	12	17	24	24	35	38	29	28	34	39	48	56	66	68
16	MSP	56	63	70	74	76	97	86	98	111	132	153	162	190	215	258	311	363	533	698	791
17	MPD	4	4	5	6	5	7	8	10	17	20	19	24	20	19	19	21	22	17	20	26
18	MCH	19	23	27	29	29	32	35	37	50	52	56	57	50	54	69	70	65	107	140	198
19	TRS	4	4	5	6	6	9	10	12	13	14	17	17	11	11	20	27	34	36	37	36
20	ELE	4	5	6	7	7	8	9	12	12	13	14	15	12	11	13	14	19	14	22	14
21	ICT	1	1	1	1	2	1	2	2	2	2	3	3	3	2	3	6	11	6	8	10
22	INS	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	7	2	3	7
	<i>Utilities</i>	25	30	35	38	42	48	46	56	61	76	63	66	68	69	70	76	79	87	190	273
	<i>Mining</i>	68	77	86	103	111	94	102	133	163	141	173	185	154	147	138	161	192	230	301	395
	<i>Manufacturing</i>	161	187	215	233	236	281	292	326	402	459	534	562	582	591	689	777	934	1247	1744	1885
	<i>All</i>	253	295	336	373	389	422	440	515	626	676	770	813	804	807	897	1015	1205	1563	2235	2554



Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Inner Mongolia																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	8	9	10	12	14	13	14	18	25	25	31	32	17	23	29	30	34	47	57	74
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	2	2	2	2	3	3	5	6	7	8	9	6	6	7	6	7	10	15	38
4	NMM	1	2	2	2	3	3	3	4	4	3	4	4	2	3	2	2	2	4	7	9
5	FDB	29	31	31	36	37	35	35	41	42	50	48	61	41	55	66	98	135	203	327	371
6	TBC	1	2	2	3	3	3	3	4	4	4	7	4	2	4	4	3	3	3	0	5
7	TEX	10	13	15	15	13	18	21	27	36	33	5	42	28	39	57	58	66	78	86	100
8	WEA	1	2	2	2	2	3	2	3	3	4	34	5	5	5	5	6	4	5	5	6
9	LEA	2	3	3	3	3	3	3	4	3	4	4	3	2	2	2	1	1	1	3	2
10	WDF	1	2	2	2	2	3	3	3	4	3	5	4	3	3	2	1	1	2	8	6
11	PAP	3	3	3	4	4	4	5	6	7	7	7	7	3	5	7	7	7	9	13	24
12	PET	1	1	1	1	1	4	6	8	9	11	0	11	12	13	15	14	12	17	25	25
13	CHE	6	8	10	11	11	14	15	18	21	28	34	32	28	33	37	34	45	49	90	106
14	RBP	1	1	2	2	2	2	2	3	3	3	2	3	3	3	3	3	3	1	2	3
15	BUI	6	6	6	7	8	9	11	14	15	17	3	20	11	12	12	12	18	24	35	43
16	MSP	28	29	30	36	39	38	42	53	64	50	74	69	89	113	124	125	141	188	254	328
17	MPD	3	3	3	4	4	5	5	7	7	7	9	8	4	4	4	4	4	3	6	5
18	MCH	9	12	14	17	18	32	37	47	37	34	35	29	23	25	26	27	28	47	49	66
19	TRS	1	1	1	1	1	2	2	3	4	4	4	6	7	7	7	9	10	12	29	32
20	ELE	1	2	2	2	3	4	4	5	5	5	5	4	3	3	4	3	3	4	6	5
21	ICT	1	2	3	3	3	5	5	6	6	6	5	3	5	14	6	21	43	73	67	120
22	INS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Utilities</i>	11	13	15	18	19	23	25	32	35	29	39	34	33	42	47	54	60	79	145	163
	<i>Mining</i>	11	12	13	17	19	18	20	27	35	35	43	45	25	32	38	38	43	60	79	122
	<i>Manufacturing</i>	105	119	130	148	154	184	201	250	269	271	280	313	270	339	381	426	524	718	1006	1246
	<i>All</i>	127	144	159	183	191	225	247	309	339	335	362	392	328	413	466	518	627	857	1230	1530

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Liaoning																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	21	20	22	25	27	33	28	30	33	30	34	38	22	26	28	39	47	48	47	57
2	PTM	24	27	33	39	43	41	48	54	53	46	37	89	42	39	44	40	41	50	15	29
3	MTM	5	6	7	9	11	10	11	14	22	20	29	29	27	22	20	22	23	33	34	54
4	NMM	3	3	4	6	5	7	7	9	14	16	17	20	20	15	14	12	12	14	9	17
5	FDB	62	69	68	70	77	82	82	98	127	162	162	184	174	191	216	262	286	324	489	554
6	TBC	4	5	5	6	2	3	5	6	6	6	4	4	8	6	4	6	9	11	5	11
7	TEX	64	67	72	73	78	77	78	79	99	98	83	80	61	65	75	86	84	96	119	126
8	WEA	8	9	10	12	13	16	18	24	42	50	48	44	48	43	41	39	48	50	60	81
9	LEA	5	5	5	5	5	5	7	9	14	18	16	14	17	18	21	22	19	18	59	70
10	WDF	3	3	3	3	4	4	4	8	18	21	29	25	32	34	37	40	47	45	80	91
11	PAP	21	23	25	27	27	33	31	33	37	39	51	47	40	35	32	33	36	39	50	90
12	PET	148	155	161	175	177	216	204	222	227	223	257	302	281	336	416	388	424	514	588	631
13	CHE	77	88	101	106	115	120	141	161	190	205	223	246	247	261	310	319	311	281	428	511
14	RBP	17	18	21	23	24	28	34	39	52	58	62	64	74	75	77	82	85	111	157	171
15	BUI	30	32	35	38	38	45	58	78	115	110	134	155	127	133	147	125	128	154	170	231
16	MSP	178	195	216	236	245	258	284	323	363	379	387	389	414	439	496	468	592	688	899	1033
17	MPD	15	17	18	20	21	24	28	46	68	72	87	86	65	68	78	77	71	83	103	130
18	MCH	68	77	88	95	93	110	136	172	216	209	234	237	185	203	224	252	268	384	502	641
19	TRS	33	37	43	48	46	58	76	92	99	107	133	163	150	185	238	249	314	379	621	645
20	ELE	26	30	34	40	39	41	50	65	77	88	106	109	92	108	132	125	116	151	224	280
21	ICT	6	10	16	17	18	16	21	32	58	63	81	121	173	219	266	427	537	782	874	706
22	INS	3	3	4	4	4	4	5	10	10	11	11	12	10	10	12	12	15	9	32	38
	<i>Utilities</i>	38	43	45	49	54	61	65	75	81	77	84	94	61	104	143	126	143	121	410	504
	<i>Mining</i>	53	57	66	79	85	91	94	108	123	112	117	176	111	103	105	112	123	145	106	157
	<i>Manufacturing</i>	770	843	924	998	1024	1140	1262	1496	1818	1919	2107	2282	2197	2428	2823	3011	3389	4119	5459	6040
	<i>All</i>	860	942	1035	1126	1163	1292	1421	1679	2022	2108	2308	2552	2368	2635	3071	3250	3655	4385	5974	6701

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Jilin																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	10	10	10	12	13	13	13	13	15	13	15	15	13	11	12	13	12	16	12	20
2	PTM	4	4	4	6	7	8	8	8	11	7	11	13	12	12	12	6	6	13	12	11
3	MTM	2	2	2	1	1	2	2	3	3	4	4	5	4	6	5	5	5	5	4	15
4	NMM	1	1	1	1	1	1	1	2	3	3	5	5	2	2	3	2	2	2	2	2
5	FDB	47	49	49	53	57	61	61	65	70	80	94	82	94	102	120	143	184	214	273	319
6	TBC	4	4	5	6	7	7	7	8	8	9	10	8	10	8	9	11	13	14	6	15
7	TEX	17	19	20	21	21	21	20	19	20	21	18	20	20	23	26	25	27	29	32	22
8	WEA	4	4	5	6	6	6	7	6	8	7	7	7	3	3	4	5	5	6	7	10
9	LEA	2	2	2	2	2	2	2	3	3	3	3	2	1	1	1	2	1	0	2	2
10	WDF	4	5	5	5	5	7	7	10	11	14	18	20	13	15	19	23	22	33	48	44
11	PAP	12	14	15	17	18	20	20	20	20	21	22	20	16	15	15	16	15	17	20	34
12	PET	9	10	11	13	14	17	19	15	12	14	16	19	15	12	18	23	25	28	23	26
13	CHE	39	46	52	57	61	68	73	76	107	115	135	180	196	218	234	244	255	293	399	524
14	RBP	8	10	11	11	11	13	15	14	13	15	15	14	10	12	13	13	18	17	24	22
15	BUI	14	15	17	18	18	20	23	26	33	33	40	45	29	28	30	31	32	43	49	65
16	MSP	18	19	21	23	25	26	29	40	43	50	53	58	53	57	69	90	99	97	151	144
17	MPD	6	7	7	8	8	8	9	11	12	10	10	13	6	6	7	8	5	5	10	10
18	MCH	18	21	23	25	24	25	28	31	35	35	37	37	26	20	29	28	27	33	53	50
19	TRS	20	28	36	39	39	43	69	113	145	152	201	254	289	349	454	584	818	1042	1223	1168
20	ELE	6	6	7	9	9	9	11	12	13	12	11	10	7	10	16	12	12	13	15	18
21	ICT	3	4	5	5	5	6	6	6	8	9	8	14	38	50	40	41	33	26	55	38
22	INS	1	1	1	1	1	2	2	2	3	2	2	3	3	2	2	3	3	3	1	2
	<i>Utilities</i>	23	23	23	24	27	30	32	39	41	41	50	60	41	46	41	49	56	55	174	171
	<i>Mining</i>	17	17	17	20	23	23	24	27	32	26	35	38	30	32	32	26	26	35	30	49
	<i>Manufacturing</i>	232	265	291	318	331	361	408	477	563	602	700	807	828	933	1106	1303	1593	1913	2392	2513
	<i>All</i>	272	305	330	361	380	415	464	543	635	669	785	904	900	1010	1180	1378	1675	2004	2595	2733

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Heilongjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	676	675	743	811	944	91	96	88	99	85	113	105	258	99	134	197	393	425	812	573
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	21	22	25	26	29	31	29	26	43	46	40	47	40	36	36	40	39	48	38	55
4	NMM	61	61	64	62	64	104	99	100	116	123	130	135	120	119	98	111	125	90	139	113
5	FDB	2	2	2	2	2	4	4	2	3	4	4	5	4	3	3	3	4	4	7	8
6	TBC	2	2	2	2	3	3	3	3	5	5	6	8	3	3	3	3	3	3	-1	4
7	TEX	55	65	62	66	72	88	82	69	98	133	141	157	128	131	131	125	133	223	193	205
8	WEA	2	2	4	4	4	6	6	6	13	14	11	15	14	11	10	11	13	13	22	19
9	LEA	23	25	29	30	30	30	29	27	34	31	26	31	26	23	16	26	14	23	18	11
10	WDF	5	5	5	5	5	4	4	4	5	4	5	4	1	1	1	1	0	1	0	0
11	PAP	4	4	5	4	4	4	4	4	5	4	5	5	1	1	1	1	0	1	0	0
12	PET	28	33	33	36	33	38	40	42	50	59	76	92	42	46	54	65	27	77	29	28
13	CHE	13	15	16	16	17	22	22	20	21	25	26	27	19	22	25	30	35	35	37	37
14	RBP	23	30	35	38	42	52	50	51	54	65	68	70	66	64	110	110	124	151	163	153
15	BUI	24	29	37	39	43	39	41	47	57	64	80	97	104	108	142	156	160	198	206	203
16	MSP	26	27	32	33	34	27	31	30	30	39	46	47	32	32	30	49	23	31	31	25
17	MPD	11	13	13	14	12	18	19	23	30	31	37	37	18	23	25	27	19	28	28	22
18	MCH	11	12	14	15	16	24	27	28	28	28	31	28	23	22	24	29	25	38	42	37
19	TRS	10	12	13	13	14	13	16	19	20	23	25	29	12	10	12	13	5	19	11	6
20	ELE	34	40	45	41	39	45	49	53	58	67	65	76	59	52	55	62	53	95	186	203
21	ICT	6	8	9	9	8	12	15	17	22	37	41	43	52	55	75	83	127	119	201	166
22	INS	10	10	11	12	12	14	15	13	17	21	24	25	20	25	27	28	14	28	41	41
	<i>Utilities</i>	6	7	8	8	7	7	7	9	7	7	7	9	6	6	9	9	44	10	13	14
	<i>Mining</i>	758	758	832	900	1037	227	225	215	258	254	283	286	418	254	269	349	558	562	989	740
	<i>Manufacturing</i>	289	336	366	381	391	444	456	460	551	655	717	796	623	633	745	822	780	1088	1216	1167
	<i>All</i>	1053	1102	1206	1288	1435	677	688	684	816	916	1006	1091	1047	893	1023	1180	1381	1661	2217	1921

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Shanghai																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	NMM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	FDB	56	62	69	72	77	85	96	91	119	138	152	177	225	241	275	321	372	461	425	358
6	TBC	3	4	4	6	7	7	8	9	8	9	11	13	18	15	14	10	10	10	11	6
7	TEX	173	171	171	174	171	218	221	208	227	221	190	169	175	149	148	132	114	105	130	119
8	WEA	19	24	28	31	34	52	63	61	105	116	103	105	136	147	149	158	164	179	170	164
9	LEA	8	9	9	10	13	13	15	27	36	38	36	34	40	39	42	47	54	68	58	57
10	WDF	7	7	8	8	7	9	11	12	15	23	34	41	67	84	94	107	117	144	200	200
11	PAP	20	23	25	27	28	30	32	35	40	49	52	47	64	68	78	93	106	135	134	152
12	PET	45	56	58	62	62	65	69	60	59	62	83	102	137	157	193	216	228	284	243	296
13	CHE	115	120	131	140	156	180	202	217	284	332	351	371	459	461	567	649	812	1098	749	781
14	RBP	32	34	37	40	42	44	50	58	77	100	104	101	145	167	175	201	232	290	315	302
15	BUI	21	24	27	27	26	24	28	37	48	54	61	61	86	97	107	124	135	169	206	192
16	MSP	195	205	201	215	240	256	334	388	410	427	435	461	542	530	586	668	693	898	694	892
17	MPD	28	31	33	35	37	66	77	66	96	113	116	115	152	161	190	211	243	297	309	284
18	MCH	102	114	126	135	130	152	185	179	201	238	272	275	355	371	425	498	591	795	962	957
19	TRS	27	30	35	41	50	72	108	209	263	334	390	477	638	694	847	989	1210	1636	1133	1165
20	ELE	43	47	53	58	59	67	68	118	156	207	253	244	318	345	396	457	513	933	751	750
21	ICT	26	33	40	40	44	63	67	86	152	176	252	290	382	413	535	661	796	1231	1734	2100
22	INS	9	9	10	10	10	12	15	30	35	43	50	55	78	90	101	112	132	178	216	237
	<i>Utilities</i>	35	36	38	39	42	46	65	69	70	68	96	71	84	70	48	95	176	274	253	304
	<i>Mining</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Manufacturing</i>	928	1003	1066	1129	1192	1414	1650	1890	2331	2678	2945	3138	4019	4227	4921	5653	6522	8913	8440	9011
	<i>All</i>	963	1039	1104	1168	1233	1460	1715	1959	2401	2746	3041	3209	4103	4297	4970	5748	6698	9187	8694	9314

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Jiangsu																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	8	7	9	10	11	12	12	15	15	12	15	16	14	18	21	22	23	27	20	23
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	2	2	2	2	2	2	4	4	5	5	5	6	7	8	10	11	9
4	NMM	6	7	8	8	8	7	10	14	18	20	24	26	24	27	36	38	45	53	37	36
5	FDB	154	164	173	168	179	189	219	256	331	359	450	483	472	543	659	736	893	1057	771	908
6	TBC	6	6	7	8	8	7	7	8	8	9	7	10	9	6	7	9	10	12	10	6
7	TEX	298	338	402	421	471	469	658	871	1147	917	986	970	857	892	981	1023	1148	1247	1352	1596
8	WEA	21	25	31	36	45	55	89	150	222	201	242	251	239	270	313	346	420	518	491	563
9	LEA	12	15	19	19	24	25	34	61	86	88	102	109	103	115	136	153	183	194	127	134
10	WDF	8	10	11	11	11	10	16	25	41	49	66	77	80	94	117	132	166	196	218	203
11	PAP	22	27	32	35	38	40	53	66	83	90	111	128	125	147	186	202	238	286	285	891
12	PET	45	49	63	52	54	79	90	93	95	114	131	132	119	125	147	143	166	178	186	248
13	CHE	126	164	207	245	303	317	419	522	671	726	883	934	890	998	1216	1362	1630	1897	1834	2380
14	RBP	40	48	60	62	70	79	109	138	176	183	217	231	222	252	297	334	397	477	499	471
15	BUI	78	87	99	96	97	98	140	196	256	260	310	326	301	334	381	422	498	596	544	605
16	MSP	92	103	126	133	154	135	220	336	431	409	458	466	415	439	497	525	596	663	998	1191
17	MPD	30	39	47	50	55	65	104	162	233	221	257	268	248	273	319	352	406	466	463	592
18	MCH	116	140	179	183	183	222	334	455	584	600	705	727	686	763	887	972	1147	1342	1439	1656
19	TRS	24	31	39	41	47	58	104	189	259	315	357	366	338	371	428	463	532	586	665	815
20	ELE	45	53	66	76	81	88	135	212	290	371	431	441	415	457	530	586	688	841	992	1147
21	ICT	34	49	69	72	76	99	136	163	202	242	335	397	428	509	645	745	929	1082	2492	3184
22	INS	7	8	9	10	11	16	27	47	63	41	61	72	74	96	117	134	171	205	314	456
	<i>Utilities</i>	39	43	50	54	61	67	75	89	113	95	124	131	97	108	127	146	158	205	405	526
	<i>Mining</i>	16	16	19	20	20	21	24	31	36	36	44	46	44	50	63	66	76	89	68	68
	<i>Manufacturing</i>	1157	1357	1639	1717	1907	2050	2895	3951	5177	5196	6110	6388	6021	6686	7861	8639	10218	11841	13680	17047
	<i>All</i>	1212	1415	1708	1790	1988	2139	2994	4071	5325	5326	6278	6565	6162	6844	8051	8850	10451	12135	14153	17641

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Zhejiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	1	1	2	2	2	2	2	2	3	2	2	2	2	1	1	1	1	1	0	0
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	2	2	2	2	2	3	5	4	4	4	4	4	4	5	5	6	8	3	7
4	NMM	4	4	5	5	6	7	9	11	12	10	12	13	14	16	20	24	30	40	36	30
5	FDB	97	105	123	115	119	137	187	173	210	230	267	290	357	403	523	648	811	1091	563	628
6	TBC	6	7	8	8	9	8	10	8	9	9	9	7	11	12	14	16	13	14	1	7
7	TEX	161	199	221	235	280	315	406	561	744	567	613	616	711	768	941	1103	1327	1695	1120	1354
8	WEA	13	16	20	24	29	41	52	118	175	156	177	193	235	264	330	401	500	661	278	396
9	LEA	8	10	12	14	19	27	37	62	94	98	109	125	157	180	233	282	350	463	263	298
10	WDF	7	8	10	10	10	11	13	21	29	31	37	41	51	58	75	92	114	151	136	155
11	PAP	19	22	26	28	31	35	44	52	65	78	90	99	128	145	190	232	290	400	247	491
12	PET	22	24	25	30	29	45	64	53	55	55	69	81	101	122	183	226	277	393	210	287
13	CHE	47	58	72	77	91	111	147	171	241	310	397	462	591	704	943	1206	1587	2174	1567	1933
14	RBP	27	34	43	46	49	57	72	96	129	149	167	179	216	245	310	371	464	620	440	487
15	BUI	33	38	43	43	46	55	75	81	115	120	142	158	184	202	250	298	369	467	320	399
16	MSP	34	41	47	53	52	53	74	99	139	154	176	184	223	253	319	386	478	626	563	659
17	MPD	18	23	27	32	34	40	49	76	97	102	110	114	133	147	181	210	255	327	182	226
18	MCH	52	62	76	80	80	100	125	183	221	241	260	259	294	310	369	419	491	613	418	516
19	TRS	8	13	17	18	19	25	31	72	98	114	126	131	149	166	206	244	296	381	262	373
20	ELE	33	40	52	49	47	57	71	121	166	195	229	243	293	331	424	510	645	864	574	677
21	ICT	8	12	17	19	20	26	29	47	83	114	143	163	199	223	304	388	486	665	580	725
22	INS	5	6	7	8	7	9	11	20	25	31	33	33	37	41	47	55	65	82	75	113
	<i>Utilities</i>	30	33	36	39	42	47	62	63	71	70	88	76	89	108	143	176	219	279	624	742
	<i>Mining</i>	7	8	9	9	10	11	14	18	18	16	18	18	20	22	26	31	38	49	40	37
	<i>Manufacturing</i>	598	719	844	890	971	1153	1497	2014	2697	2753	3155	3379	4070	4573	5842	7089	8818	11687	7801	9721
	<i>All</i>	634	759	889	939	1022	1211	1572	2094	2787	2839	3261	3474	4179	4702	6011	7295	9074	12015	8465	10501

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Anhui																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	14	13	14	15	15	15	17	20	22	22	34	38	27	28	30	31	35	38	23	38
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	2	2	2	2	3	4	8	8	10	12	7	6	6	6	7	10	6	18
4	NMM	2	2	3	3	3	5	5	9	19	22	32	33	7	6	5	4	4	8	2	4
5	FDB	61	63	68	70	71	79	86	110	161	195	272	276	142	141	146	155	172	198	204	232
6	TBC	12	13	14	16	16	16	18	18	24	22	24	24	21	22	23	26	23	20	9	24
7	TEX	41	46	52	57	55	64	77	89	111	125	134	132	88	85	83	87	92	103	100	101
8	WEA	3	4	4	5	5	6	7	11	20	21	24	22	11	10	11	10	10	15	12	16
9	LEA	2	3	3	3	4	4	4	12	18	23	28	26	14	13	13	14	16	20	24	25
10	WDF	3	3	4	4	4	4	5	8	16	22	34	27	10	14	17	22	28	31	40	39
11	PAP	8	9	10	12	13	14	16	21	32	38	44	43	28	20	23	27	33	47	37	80
12	PET	21	24	25	26	27	31	34	33	28	35	47	42	38	40	57	68	83	53	105	121
13	CHE	24	30	35	38	42	53	62	72	97	126	147	146	120	132	147	161	196	203	271	276
14	RBP	8	9	12	13	14	17	20	25	35	49	60	55	40	57	72	91	120	108	169	164
15	BUI	20	22	26	28	29	30	39	51	82	93	129	132	60	59	58	62	69	84	91	106
16	MSP	38	38	39	43	45	51	58	68	91	95	119	129	136	134	139	152	173	205	291	367
17	MPD	6	7	8	9	9	10	13	18	26	29	38	35	15	14	12	11	11	24	26	35
18	MCH	18	21	25	28	30	35	45	60	83	110	114	114	83	87	83	88	101	141	134	136
19	TRS	5	6	8	9	9	12	19	32	49	48	63	57	56	72	88	105	133	228	191	237
20	ELE	6	8	11	15	17	18	24	37	48	72	78	70	75	79	97	113	125	195	297	296
21	ICT	2	4	5	6	6	9	10	11	14	15	12	9	23	38	56	68	95	84	128	134
22	INS	1	1	1	1	1	2	3	3	4	7	8	6	3	3	3	4	5	9	7	8
	<i>Utilities</i>	6	5	5	6	5	7	10	56	48	50	48	43	39	41	54	74	87	71	129	217
	<i>Mining</i>	17	16	18	20	21	22	25	33	49	52	76	83	41	41	42	41	45	56	31	60
	<i>Manufacturing</i>	279	311	351	383	397	453	540	681	939	1125	1375	1347	963	1018	1130	1266	1485	1768	2138	2395
	<i>All</i>	302	332	374	409	423	481	575	769	1035	1226	1499	1473	1043	1100	1226	1380	1617	1895	2298	2672



## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Fujian																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3	3	3	3	3	3	3	4	4	2	4	4	2	2	2	3	4	4	5	9
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	5	7	10	9	27
4	NMM	1	1	2	2	2	3	3	4	8	8	8	9	4	4	5	5	5	8	8	14
5	FDB	52	50	64	68	68	71	81	110	134	188	209	221	217	216	226	233	273	358	516	595
6	TBC	6	6	7	9	10	10	12	13	10	9	10	17	10	12	14	14	10	13	9	11
7	TEX	14	20	24	27	29	28	31	35	46	60	68	74	74	77	97	117	144	229	314	389
8	WEA	3	5	6	10	15	21	29	31	53	60	70	69	73	65	86	104	139	184	238	324
9	LEA	3	4	5	5	11	17	28	55	57	84	87	77	100	93	97	119	129	190	251	272
10	WDF	5	6	7	9	10	10	13	20	30	26	32	45	22	24	37	46	57	81	119	130
11	PAP	13	13	16	19	21	24	29	36	40	50	52	55	52	59	71	85	92	125	164	313
12	PET	1	0	0	0	0	0	1	14	13	19	23	25	28	38	55	43	39	48	49	49
13	CHE	22	28	33	38	42	47	53	62	69	87	109	118	126	142	192	205	226	307	396	488
14	RBP	9	12	15	18	20	24	30	36	48	65	66	80	80	93	99	109	136	180	245	260
15	BUI	10	9	11	13	15	17	22	33	50	62	78	84	86	87	104	126	154	218	333	421
16	MSP	12	11	14	17	19	21	25	31	34	34	52	62	75	98	102	125	127	177	276	341
17	MPD	3	4	5	6	8	10	13	16	20	27	31	40	36	39	54	57	72	80	88	130
18	MCH	12	15	19	20	21	24	31	37	48	48	54	49	45	47	58	76	99	150	213	237
19	TRS	3	4	6	6	7	10	17	29	19	27	30	46	47	56	84	129	142	225	238	286
20	ELE	4	6	9	10	10	12	19	27	34	37	47	54	59	67	64	93	88	146	240	255
21	ICT	5	14	22	23	26	32	40	65	74	92	110	161	223	299	336	428	615	848	1241	1455
22	INS	0	1	1	1	2	2	2	4	6	11	10	13	11	12	15	21	25	60	94	104
	<i>Utilities</i>	15	15	18	19	21	21	26	34	39	37	54	54	43	44	60	58	73	93	237	265
	<i>Mining</i>	6	5	6	7	8	8	8	10	14	12	15	16	8	10	12	13	16	22	23	50
	<i>Manufacturing</i>	178	206	264	299	333	381	475	655	785	987	1137	1290	1364	1526	1790	2130	2567	3618	5023	6060
	<i>All</i>	198	226	287	325	362	409	509	700	838	1036	1206	1360	1416	1579	1861	2202	2656	3733	5283	6375

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Jiangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	13	12	13	13	13	12	13	12	14	10	14	20	15	11	11	10	9	10	7	14
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	13	16	17	19	19	18	18	19	24	26	28	26	10	9	10	11	13	16	29	48
4	NMM	1	1	2	2	2	2	2	4	8	6	6	8	6	3	4	5	6	7	8	11
5	FDB	30	37	39	38	39	41	40	45	64	68	72	88	69	68	70	69	77	79	105	119
6	TBC	2	2	3	4	4	4	4	5	5	6	6	7	5	9	10	11	11	13	11	12
7	TEX	16	22	23	26	25	25	29	31	38	42	42	39	29	29	32	38	47	54	72	91
8	WEA	2	3	4	4	5	5	6	3	5	7	9	12	8	6	5	6	6	7	36	43
9	LEA	1	1	1	1	1	1	1	6	13	9	11	11	8	7	8	9	10	11	20	26
10	WDF	3	3	4	4	5	5	6	9	20	14	16	19	16	10	11	12	14	15	19	23
11	PAP	6	7	9	10	10	11	13	16	18	20	23	22	17	18	18	17	18	18	23	43
12	PET	16	12	14	15	15	20	23	26	19	21	25	24	24	36	44	42	50	55	64	68
13	CHE	14	20	25	26	27	32	40	48	61	66	72	82	72	88	91	102	120	145	184	204
14	RBP	4	5	6	6	6	7	8	9	12	11	14	12	8	7	6	6	6	6	11	13
15	BUI	13	14	16	17	18	20	23	29	46	45	47	56	42	32	34	36	41	45	70	92
16	MSP	43	47	48	48	47	48	53	60	73	87	92	97	83	106	130	162	199	259	407	527
17	MPD	2	3	4	4	5	5	5	8	11	11	11	12	8	6	7	8	10	14	17	22
18	MCH	13	17	21	22	20	23	30	33	40	38	40	48	32	26	25	24	25	27	37	36
19	TRS	8	9	12	13	14	16	23	42	49	46	54	62	71	81	94	107	127	158	140	171
20	ELE	4	5	7	8	7	9	11	14	18	19	21	23	18	21	22	28	32	0	60	77
21	ICT	2	4	5	5	5	7	9	11	16	14	15	13	11	16	18	21	22	33	37	67
22	INS	1	1	1	1	1	1	2	2	3	4	4	4	3	5	5	5	6	34	9	11
	<i>Utilities</i>	11	13	15	16	16	17	18	22	32	26	31	43	32	33	28	33	43	48	74	84
	<i>Mining</i>	27	29	31	34	34	32	33	35	47	42	48	54	31	23	25	26	29	33	44	73
	<i>Manufacturing</i>	180	214	240	252	256	280	326	396	510	528	574	630	525	570	632	703	822	974	1321	1646
	<i>All</i>	217	256	285	302	306	328	378	454	589	596	654	727	587	626	685	762	893	1055	1439	1803

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Shandong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	33	36	40	46	48	51	55	77	91	56	84	87	93	96	99	108	148	191	180	235
2	PTM	68	78	82	93	93	101	94	103	109	77	73	67	58	51	77	56	61	59	115	52
3	MTM	5	6	7	9	11	14	16	26	37	35	40	46	67	74	84	91	108	160	125	191
4	NMM	6	7	10	14	15	15	20	28	48	31	41	44	34	35	43	43	48	59	87	109
5	FDB	114	132	172	195	216	228	274	390	549	536	631	688	731	750	1023	1172	1369	1607	2365	2928
6	TBC	18	20	21	23	24	25	26	31	39	26	21	20	21	24	23	30	30	32	49	34
7	TEX	143	163	196	219	231	248	265	311	390	355	389	396	387	400	478	547	635	784	1127	1518
8	WEA	13	15	20	24	28	31	36	54	75	59	75	84	87	83	99	93	118	169	232	329
9	LEA	9	11	14	17	21	23	27	45	75	71	86	96	94	97	102	107	108	131	214	197
10	WDF	8	10	13	16	17	17	22	38	50	38	42	47	37	39	49	58	71	92	201	181
11	PAP	24	29	37	44	48	52	64	93	119	111	139	147	143	171	204	223	277	375	564	1207
12	PET	58	72	98	127	135	164	192	214	223	163	178	204	220	238	322	256	379	450	692	771
13	CHE	50	63	81	95	111	138	172	233	322	316	388	424	456	508	592	726	844	1060	1582	2254
14	RBP	26	31	42	51	59	68	90	117	152	161	188	190	211	226	258	299	346	416	591	532
15	BUI	42	50	63	72	79	88	116	208	322	259	308	326	324	310	368	415	485	674	931	1327
16	MSP	43	51	59	68	72	85	100	128	167	158	173	188	196	241	278	327	444	672	1176	1626
17	MPD	20	25	31	36	40	44	58	97	126	102	118	124	136	127	148	169	181	192	315	392
18	MCH	63	81	111	123	128	144	186	254	365	350	426	488	493	558	628	653	759	1055	1466	1778
19	TRS	16	17	24	31	34	40	58	103	145	151	205	214	215	217	242	273	397	489	815	967
20	ELE	16	20	27	33	35	42	55	89	129	142	178	244	307	373	481	552	597	718	1157	1284
21	ICT	5	8	11	14	15	16	20	34	52	89	76	125	148	216	285	365	433	571	936	1186
22	INS	2	3	4	4	4	5	6	12	15	15	18	20	18	16	18	26	26	30	46	89
	<i>Utilities</i>	40	48	54	62	67	70	78	94	143	104	113	116	126	135	169	195	274	309	600	751
	<i>Mining</i>	112	128	138	162	167	180	185	233	285	200	238	244	253	256	302	298	365	469	508	588
	<i>Manufacturing</i>	668	802	1025	1193	1298	1459	1771	2451	3315	3101	3639	4024	4224	4594	5599	6292	7498	9518	14460	18600
	<i>All</i>	820	978	1217	1418	1532	1710	2034	2779	3743	3404	3990	4384	4603	4985	6070	6785	8137	10296	15568	19939

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Henan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	32	33	35	43	48	44	49	50	66	56	75	81	48	88	97	104	118	134	102	237
2	PTM	36	40	42	45	44	33	34	39	34	28	25	28	21	41	47	53	64	58	46	90
3	MTM	2	4	4	5	7	7	9	13	21	23	25	38	29	63	77	94	115	137	130	184
4	NMM	1	1	2	2	3	3	4	4	7	6	9	9	7	13	15	17	20	23	19	41
5	FDB	59	62	70	76	78	77	86	143	200	251	277	350	240	486	562	658	787	905	1044	1315
6	TBC	18	21	23	25	25	23	22	31	38	38	47	41	23	37	36	33	33	33	0	32
7	TEX	72	64	70	76	79	91	102	114	120	118	115	146	101	204	240	281	336	388	403	479
8	WEA	6	6	6	7	8	12	14	10	15	15	17	12	5	6	3	8	8	7	10	12
9	LEA	5	6	7	7	7	9	10	18	28	32	31	35	21	38	41	45	50	55	64	64
10	WDF	3	3	3	4	4	5	5	6	11	12	15	16	10	18	20	22	25	27	44	43
11	PAP	13	14	17	19	20	25	28	34	48	52	59	57	31	51	50	50	51	51	64	190
12	PET	13	14	19	20	21	25	28	34	41	38	39	48	27	52	57	63	72	66	114	121
13	CHE	36	46	57	64	67	80	91	115	155	190	206	224	128	228	239	255	282	301	362	444
14	RBP	12	12	14	17	19	26	31	32	37	45	52	41	19	23	13	20	19	16	12	11
15	BUI	25	27	32	38	41	46	53	80	120	129	158	172	98	178	189	203	225	233	328	435
16	MSP	35	39	43	51	56	51	58	81	102	106	120	146	96	189	216	246	289	303	511	644
17	MPD	7	7	8	10	11	16	20	19	27	30	29	29	16	27	27	28	29	30	45	53
18	MCH	41	51	61	64	64	86	92	114	146	162	199	197	106	176	172	168	171	166	263	340
19	TRS	5	7	8	11	13	20	25	32	43	58	62	52	23	29	18	40	55	74	89	104
20	ELE	12	13	15	18	20	29	35	37	51	58	66	63	31	47	42	37	32	85	38	50
21	ICT	2	2	3	4	4	8	9	10	16	18	21	19	10	17	16	16	16	21	19	26
22	INS	1	1	1	2	2	3	4	4	5	5	5	4	2	2	0	2	2	22	5	7
	<i>Utilities</i>	36	40	44	51	54	61	67	76	88	108	128	176	104	214	233	273	330	442	673	909
	<i>Mining</i>	71	78	82	95	102	88	96	106	128	112	134	157	104	205	236	268	317	353	297	552
	<i>Manufacturing</i>	365	395	459	511	539	631	714	915	1202	1354	1517	1653	986	1807	1943	2172	2482	2783	3416	4372
	<i>All</i>	473	513	586	657	695	780	877	1097	1418	1574	1779	1985	1194	2226	2412	2713	3129	3578	4386	5833

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Hubei																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3	3	3	4	4	3	4	4	6	6	11	11	14	15	16	18	23	24	13	37
2	PTM	2	2	2	3	3	2	2	2	17	16	19	18	14	13	15	18	18	15	13	48
3	MTM	1	1	1	2	2	1	2	4	7	8	12	16	15	18	19	23	26	27	22	29
4	NMM	3	4	4	5	5	6	7	9	17	22	34	35	37	40	41	42	49	57	68	91
5	FDB	62	65	65	67	65	57	62	79	127	161	229	246	238	248	280	307	343	405	551	583
6	TBC	14	19	23	21	18	14	13	28	33	32	44	41	33	34	32	34	44	32	50	66
7	TEX	101	111	118	123	120	122	136	122	164	179	226	195	175	173	184	199	210	233	351	377
8	WEA	10	12	14	16	18	25	30	28	53	55	83	81	80	87	90	96	114	126	106	119
9	LEA	4	4	3	4	4	4	5	8	13	16	20	19	17	18	19	22	24	25	24	26
10	WDF	5	6	6	6	6	7	8	9	17	22	31	33	35	40	41	49	48	62	72	77
11	PAP	12	14	16	17	18	19	21	24	39	44	57	54	53	53	58	64	70	79	106	153
12	PET	39	41	41	43	42	43	48	46	48	49	70	67	67	69	77	86	91	100	161	197
13	CHE	39	48	56	60	60	63	71	89	132	168	225	231	224	238	253	276	323	366	500	597
14	RBP	14	16	19	20	20	23	26	28	38	47	60	58	56	59	62	67	77	86	85	83
15	BUI	28	30	31	31	30	27	28	54	88	109	158	167	166	171	185	208	236	264	299	384
16	MSP	116	126	131	136	132	101	111	169	193	173	217	210	173	174	168	176	179	195	346	437
17	MPD	10	12	14	16	17	22	26	28	46	53	75	74	73	83	86	94	103	116	112	160
18	MCH	33	42	49	48	45	53	56	67	92	99	135	140	128	127	141	146	179	172	274	323
19	TRS	42	51	59	65	67	85	99	146	207	214	282	284	231	258	262	292	331	358	695	694
20	ELE	11	14	16	16	16	19	21	26	38	40	48	49	47	48	54	59	62	69	100	120
21	ICT	4	6	8	8	7	10	11	9	16	17	23	28	25	32	38	37	47	53	98	132
22	INS	1	2	2	3	3	6	7	4	5	6	8	8	8	7	7	7	7	7	10	19
	<i>Utilities</i>	18	20	22	26	27	28	31	30	59	47	64	61	57	52	58	65	78	72	210	262
	<i>Mining</i>	9	10	11	14	14	13	14	19	46	52	76	81	80	86	92	101	116	123	116	206
	<i>Manufacturing</i>	545	617	668	701	688	700	781	963	1351	1483	1992	1983	1829	1920	2040	2217	2488	2750	3941	4546
	<i>All</i>	572	648	701	740	729	741	826	1012	1457	1583	2132	2125	1966	2059	2189	2383	2683	2945	4266	5014

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Hunan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	13	15	14	16	17	14	17	18	20	17	26	30	23	30	36	43	53	64	73	107
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	10	11	11	12	13	12	14	17	23	22	32	32	25	29	35	40	51	63	78	123
4	NMM	3	4	4	5	5	6	7	7	10	9	11	13	10	13	15	17	21	26	39	46
5	FDB	53	63	68	62	55	45	42	68	89	99	103	98	77	92	106	115	143	174	240	305
6	TBC	15	20	22	25	26	25	29	36	38	34	38	33	20	18	20	20	23	29	-2	33
7	TEX	35	39	40	42	42	46	52	44	49	51	44	41	30	33	34	37	43	50	65	81
8	WEA	4	5	5	6	6	9	10	7	8	7	7	7	6	7	7	8	9	11	14	19
9	LEA	4	5	5	5	5	7	8	8	12	16	15	13	10	10	10	10	11	12	17	18
10	WDF	3	4	4	4	4	5	5	9	13	13	17	19	19	23	27	33	41	52	64	66
11	PAP	14	18	20	22	23	27	31	33	38	39	42	40	30	36	39	43	52	65	82	196
12	PET	24	27	27	28	28	31	35	35	66	66	81	93	70	81	96	108	127	159	193	171
13	CHE	42	52	58	61	64	73	84	93	100	108	118	112	89	98	108	122	144	169	223	249
14	RBP	10	11	12	13	13	16	18	18	20	20	22	19	13	15	16	17	20	22	35	35
15	BUI	24	29	31	32	31	31	34	60	77	79	98	105	82	100	116	137	168	207	228	301
16	MSP	47	52	51	58	63	55	66	85	99	103	129	130	98	111	127	141	172	207	330	410
17	MPD	6	7	8	9	9	13	15	18	22	19	21	22	18	20	23	27	32	38	46	55
18	MCH	29	36	40	43	45	61	71	70	76	68	70	65	48	49	52	54	63	71	139	155
19	TRS	13	17	21	22	24	32	37	54	64	61	70	69	52	60	68	74	87	105	128	141
20	ELE	11	14	16	18	21	30	37	33	38	36	41	39	27	34	37	40	47	57	75	92
21	ICT	3	5	6	6	7	12	14	9	10	9	15	22	19	24	30	37	46	51	64	70
22	INS	1	2	2	2	2	3	4	3	3	3	3	4	3	3	3	3	4	63	5	6
<i>Utilities</i>		20	23	24	26	28	30	35	38	52	35	49	46	35	43	44	53	69	83	206	235
<i>Mining</i>		26	29	30	33	35	32	37	42	53	48	69	75	58	72	86	100	125	153	191	277
<i>Manufacturing</i>		341	406	436	457	468	520	590	681	824	831	932	929	709	816	921	1027	1231	1542	1946	2400
<i>All</i>		387	458	490	516	531	582	662	762	929	915	1050	1050	802	931	1051	1180	1425	1779	2343	2912

Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Guangdong																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	4	4	4	5	5	5	6	5	6	6	5	4	4	3	3	3	3	4	1	1
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	9	12	14	14	14	12	14	16	21	15	17	19	22	23	24	25	27	32	16	34
4	NMM	3	4	5	5	5	7	9	12	21	19	22	26	33	36	41	48	56	73	24	24
5	FDB	106	129	150	156	167	172	215	350	420	492	535	580	662	685	763	861	989	1268	923	968
6	TBC	11	14	18	22	26	30	41	26	31	22	21	23	27	25	35	44	52	68	84	34
7	TEX	58	77	95	118	146	196	271	208	316	314	339	364	414	430	473	528	602	765	749	817
8	WEA	13	20	28	38	49	89	127	136	228	241	272	306	367	396	447	509	590	761	572	729
9	LEA	6	11	16	22	29	43	62	83	135	183	196	210	241	252	275	306	347	439	422	469
10	WDF	9	13	17	19	21	30	39	39	63	73	85	97	117	128	146	168	196	254	357	393
11	PAP	20	27	33	38	43	56	74	88	134	160	177	195	238	259	311	372	448	598	911	1384
12	PET	40	46	50	56	61	78	101	66	99	118	150	181	214	232	275	324	383	502	708	717
13	CHE	48	75	103	123	146	196	268	243	393	406	469	538	639	684	814	969	1158	1534	2039	2024
14	RBP	28	40	52	59	69	96	128	128	184	227	250	274	322	342	382	432	497	638	957	1027
15	BUI	25	34	43	49	57	68	91	131	225	272	282	294	374	406	425	452	488	589	1233	1377
16	MSP	34	45	55	63	73	70	93	116	148	177	178	180	237	270	284	304	329	396	1861	2198
17	MPD	19	28	38	43	49	74	99	105	177	219	246	274	355	404	491	592	718	962	1406	1597
18	MCH	35	48	62	68	77	115	149	106	144	152	165	180	217	233	262	298	345	446	763	900
19	TRS	12	16	20	26	34	56	79	126	172	215	247	279	329	350	430	523	638	860	1192	1620
20	ELE	40	62	85	96	111	168	223	235	355	415	488	563	717	811	1011	1245	1529	2072	3953	4461
21	ICT	21	28	35	35	35	60	71	231	416	619	765	914	1375	1723	2162	2675	3299	4485	13880	16438
22	INS	1	2	2	2	2	3	4	39	53	61	101	141	180	205	256	314	387	524	690	804
	<i>Utilities</i>	30	35	39	49	60	78	109	99	150	136	140	155	194	201	225	256	292	374	1016	1239
	<i>Mining</i>	15	20	24	24	24	24	29	34	48	41	45	50	59	62	68	76	86	110	42	59
	<i>Manufacturing</i>	524	715	903	1033	1194	1599	2136	2456	3690	4367	4966	5592	7024	7834	9242	10916	12993	17163	32702	37958
	<i>All</i>	569	770	966	1106	1278	1701	2274	2588	3889	4544	5151	5797	7276	8097	9534	11248	13372	17647	33759	39255

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Guangxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	3	3	3	3	3	3	4	4	5	4	5	4	3	3	3	3	3	3	3	3
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	7	7	7	7	7	6	8	16	25	23	21	26	27	32	36	32	22	21	13	17
4	NMM	1	1	1	1	1	1	2	4	6	9	8	11	7	4	3	3	3	3	5	4
5	FDB	46	51	53	59	64	69	88	120	135	149	166	174	189	186	171	160	240	310	294	330
6	TBC	6	9	11	12	14	15	19	13	14	13	13	12	9	10	8	9	10	11	7	17
7	TEX	16	20	24	25	26	31	38	28	30	28	23	23	16	17	18	19	18	19	26	32
8	WEA	2	2	2	3	3	5	6	5	6	7	9	5	2	1	1	1	1	1	1	2
9	LEA	1	1	1	2	2	2	3	4	6	6	7	6	6	5	6	7	8	10	14	14
10	WDF	2	2	2	2	3	4	5	6	10	10	12	15	7	8	10	11	12	21	29	26
11	PAP	7	9	10	11	13	16	21	20	22	28	28	31	21	22	26	29	29	33	45	77
12	PET	1	1	1	1	1	1	2	2	4	4	6	7	5	5	6	6	7	12	10	11
13	CHE	18	21	23	25	27	33	42	50	59	70	71	79	71	78	91	104	112	135	150	180
14	RBP	5	6	7	8	9	11	14	14	18	18	19	19	14	14	14	13	15	17	19	18
15	BUI	10	10	10	11	13	15	19	31	45	62	62	69	51	46	50	50	54	65	78	97
16	MSP	17	17	15	16	18	17	21	38	50	68	81	86	89	95	99	118	117	144	232	298
17	MPD	3	3	4	4	4	6	8	8	12	14	15	16	9	8	9	13	13	12	7	8
18	MCH	13	16	19	20	21	31	38	43	51	48	45	49	42	43	48	65	99	75	101	111
19	TRS	5	6	8	9	10	15	20	39	50	47	47	62	70	72	85	104	135	219	303	356
20	ELE	6	8	10	9	8	9	9	15	16	18	19	19	16	14	22	21	24	29	32	38
21	ICT	1	2	3	3	3	5	6	6	8	10	9	11	10	11	12	15	12	16	27	48
22	INS	1	1	1	1	1	2	2	3	3	3	3	3	2	2	3	3	4	6	4	6
	<i>Utilities</i>	12	14	16	17	18	33	42	37	41	34	46	41	36	41	44	42	45	50	170	243
	<i>Mining</i>	11	11	11	11	12	11	13	24	36	36	34	41	37	39	43	39	28	26	21	24
	<i>Manufacturing</i>	159	186	203	222	238	286	362	446	538	601	633	687	629	636	680	747	910	1135	1378	1668
	<i>All</i>	182	211	229	251	268	331	417	507	615	671	712	770	701	716	767	828	983	1211	1569	1935



TABLE 6-2, CONT'D

		Intermediate input in constant prices of Sichuan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	15	18	19	24	27	24	24	30	39	35	27	4	31	32	20	19	24	26	40	65
2	PTM	67	50	26	29	31	22	30	38	26	15	31	31	35	15	21	24	23	27	33	39
3	MTM	4	4	4	6	4	5	5	5	6	6	5	3	6	7	6	6	7	8	20	17
4	NMM	4	5	5	7	8	8	9	12	16	15	12	16	12	12	7	8	8	10	13	16
5	FDB	111	113	103	104	110	115	147	150	190	246	134	234	221	228	164	171	227	287	613	734
6	TBC	7	10	11	14	16	14	21	23	21	27	4	22	40	35	16	16	22	20	5	33
7	TEX	45	52	55	60	67	70	107	107	126	124	69	69	74	77	54	53	65	76	158	182
8	WEA	5	6	7	8	9	13	11	9	14	10	7	7	5	5	4	6	9	5	13	16
9	LEA	5	5	5	5	6	7	9	15	20	22	16	11	12	13	8	11	13	17	60	58
10	WDF	4	5	5	5	5	6	7	10	17	18	12	13	15	16	10	10	11	14	49	47
11	PAP	19	23	25	28	29	32	42	43	47	59	42	46	48	52	37	40	48	57	112	161
12	PET	3	3	3	3	4	5	6	4	5	9	7	6	8	9	7	9	12	25	60	71
13	CHE	48	60	70	77	87	100	137	139	173	210	111	176	262	136	166	208	258	307	582	684
14	RBP	7	10	12	13	14	17	20	20	38	32	20	21	29	31	18	22	27	37	106	95
15	BUI	22	27	28	32	33	37	49	71	100	113	65	127	105	130	97	100	138	162	285	349
16	MSP	98	107	106	115	112	94	100	195	178	229	150	173	243	276	193	205	250	337	670	704
17	MPD	9	12	13	16	18	23	26	34	51	41	31	28	26	29	20	21	28	26	66	68
18	MCH	45	59	71	79	78	113	133	111	122	130	89	96	110	116	87	80	113	178	354	454
19	TRS	15	23	29	36	40	60	72	101	122	147	60	75	191	262	257	315	404	556	1128	1313
20	ELE	12	17	21	23	22	28	36	41	47	54	33	46	62	70	56	50	59	83	186	238
21	ICT	6	12	18	21	23	35	40	47	68	95	91	206	253	255	173	173	258	294	652	514
22	INS	3	5	6	7	6	10	10	11	13	12	3	3	12	17	13	45	16	22	41	48
	<i>Utilities</i>	6	10	10	20	29	32	26	32	51	65	28	59	67	73	84	48	60	79	296	411
	<i>Mining</i>	90	77	55	65	71	58	69	85	88	72	76	54	84	67	54	56	62	71	104	137
	<i>Manufacturing</i>	466	547	588	648	679	779	972	1132	1350	1579	942	1358	1717	1756	1380	1535	1958	2503	5140	5766
	<i>All</i>	562	634	653	733	779	869	1067	1249	1489	1717	1046	1471	1868	1896	1517	1639	2080	2654	5541	6314

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Guizhou																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	7	6	6	7	7	4	5	10	11	9	15	16	18	18	21	26	52	31	39	61
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	7	4	3	5
4	NMM	1	1	1	1	1	1	1	1	1	2	5	6	7	9	12	17	34	23	29	4
5	FDB	10	12	9	8	7	3	3	12	16	16	22	20	18	18	20	22	45	29	28	33
6	TBC	8	10	13	15	17	11	13	19	28	32	43	45	46	48	60	65	169	81	46	51
7	TEX	4	4	4	4	5	3	4	4	6	6	6	5	5	4	4	4	10	5	5	6
8	WEA	1	1	1	1	2	2	2	1	1	2	2	2	2	2	2	2	5	2	2	3
9	LEA	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0
10	WDF	0	0	0	0	0	0	0	1	1	1	2	1	1	1	2	2	4	3	4	5
11	PAP	2	3	3	3	3	2	3	5	6	7	9	9	9	9	10	12	27	17	13	14
12	PET	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	CHE	6	7	8	9	10	7	9	18	24	30	37	44	47	53	62	72	173	101	121	164
14	RBP	3	3	3	4	5	4	5	12	12	14	18	17	17	19	22	25	57	39	44	49
15	BUI	4	4	4	5	5	3	4	9	12	13	16	16	16	18	21	24	57	33	32	39
16	MSP	14	15	14	15	17	9	11	32	42	52	65	60	66	69	78	86	187	116	175	161
17	MPD	1	2	2	2	2	2	2	4	12	4	7	7	8	9	10	11	24	14	14	16
18	MCH	6	7	9	8	8	5	5	12	12	11	13	12	11	12	12	13	27	16	24	32
19	TRS	5	7	9	10	12	11	14	25	27	28	36	33	32	33	36	37	78	47	37	53
20	ELE	1	3	3	6	9	10	14	6	6	5	6	5	5	6	6	7	13	8	15	15
21	ICT	3	3	4	4	4	5	6	4	6	8	10	10	10	11	12	15	27	21	31	29
22	INS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	2	2
	<i>Utilities</i>	6	7	6	7	9	6	7	12	30	19	32	40	39	47	55	61	118	75	192	207
	<i>Mining</i>	9	8	7	8	9	5	6	13	14	14	23	26	28	29	36	46	93	57	72	70
	<i>Manufacturing</i>	69	82	87	98	108	81	96	166	214	232	292	287	292	313	359	398	907	533	594	671
	<i>All</i>	84	97	100	113	126	93	109	191	258	265	348	353	360	390	449	504	1119	665	857	948

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Yunnan																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	6	6	6	6	5	4	5	7	9	7	10	8	8	9	10	10	12	14	19	24
2	PTM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	MTM	5	6	6	6	4	4	4	9	12	13	15	16	17	17	19	20	22	25	20	39
4	NMM	1	2	2	2	2	2	2	4	3	3	3	4	4	5	6	7	6	7	8	10
5	FDB	26	29	29	26	16	13	11	42	42	47	59	58	65	67	60	58	73	81	100	105
6	TBC	11	17	20	25	23	24	30	49	59	57	25	39	36	42	41	45	50	52	34	57
7	TEX	8	9	9	10	7	8	9	10	10	11	10	8	6	6	5	6	6	6	5	9
8	WEA	2	2	2	2	1	2	2	2	3	2	2	1	1	1	1	1	1	1	1	1
9	LEA	1	1	1	1	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0
10	WDF	2	2	2	1	1	1	1	3	3	5	6	7	10	11	12	14	16	19	20	19
11	PAP	4	5	6	6	5	6	6	12	16	23	23	25	25	26	28	30	34	40	40	37
12	PET	0	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	9	16
13	CHE	14	16	17	18	14	16	18	37	47	54	62	70	77	79	87	97	108	132	137	166
14	RBP	4	4	5	5	4	5	6	8	9	11	13	13	15	15	17	19	22	26	24	23
15	BUI	5	5	5	5	4	4	4	11	13	15	19	20	23	24	26	29	33	38	42	58
16	MSP	32	35	35	39	31	28	32	62	75	81	95	101	114	121	131	140	158	193	331	460
17	MPD	3	3	3	3	3	4	4	5	6	6	6	6	6	6	7	7	8	10	8	9
18	MCH	7	11	13	14	10	14	16	17	20	21	22	22	22	21	21	22	24	27	28	29
19	TRS	3	4	4	5	3	5	5	18	20	16	16	12	10	9	8	6	5	4	10	11
20	ELE	3	4	4	4	3	4	5	9	8	10	14	10	10	11	11	12	13	16	20	24
21	ICT	1	1	2	2	1	1	1	3	3	4	5	4	4	3	3	2	2	2	3	3
22	INS	0	1	1	1	1	2	2	1	3	4	7	5	5	5	5	6	6	8	7	9
	<i>Utilities</i>	9	10	10	11	10	12	14	20	27	23	65	31	21	26	29	32	34	58	97	112
	<i>Mining</i>	13	14	13	14	11	10	12	21	24	22	27	29	30	31	34	37	40	46	48	74
	<i>Manufacturing</i>	125	148	158	167	127	138	155	291	340	370	384	405	430	447	465	494	562	657	819	1036
	<i>All</i>	147	171	180	193	148	159	181	332	390	414	476	464	481	504	529	563	636	762	964	1222

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Shaanxi																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	11	11	11	12	13	10	11	17	18	15	18	22	15	11	13	32	39	50	83	70
2	PTM	4	4	5	4	4	2	2	8	5	5	5	9	12	41	46	65	71	75	57	64
3	MTM	3	3	3	4	4	4	4	8	12	11	14	16	13	15	19	17	19	20	21	22
4	NMM	0	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	2	2
5	FDB	25	24	22	25	26	24	27	32	40	43	47	54	62	62	69	76	85	97	148	148
6	TBC	5	7	8	11	14	15	18	17	21	21	18	15	17	18	16	16	16	17	14	16
7	TEX	41	46	52	51	49	47	47	57	56	53	55	47	41	39	39	39	41	42	57	51
8	WEA	3	3	3	4	4	5	6	4	5	5	6	7	3	3	3	4	3	3	2	2
9	LEA	1	1	1	2	2	2	2	2	3	4	5	4	4	3	2	2	1	1	1	1
10	WDF	1	2	2	2	2	2	3	3	4	5	5	6	3	3	4	3	2	3	4	2
11	PAP	5	6	7	8	9	9	10	13	16	19	22	21	19	21	22	24	23	27	35	30
12	PET	3	2	2	4	5	6	8	11	14	14	16	20	22	27	31	37	41	64	100	117
13	CHE	17	18	19	21	23	25	27	39	44	51	53	64	67	74	83	93	100	124	162	160
14	RBP	4	4	5	5	6	7	7	7	6	9	9	7	4	5	5	5	4	5	11	7
15	BUI	12	12	12	13	15	14	16	21	26	24	27	30	21	22	23	24	30	33	45	43
16	MSP	18	18	19	22	25	21	24	33	35	39	44	45	41	41	40	43	58	89	151	167
17	MPD	4	5	5	6	6	7	8	9	11	12	14	14	9	10	11	9	8	6	14	11
18	MCH	26	29	33	34	33	39	41	43	45	48	60	59	58	64	71	81	100	110	163	170
19	TRS	12	15	19	22	25	34	39	44	51	50	63	64	59	63	84	111	127	169	228	244
20	ELE	9	10	11	12	12	15	16	22	26	41	38	38	38	35	43	48	51	66	92	93
21	ICT	6	11	16	18	20	32	37	36	49	39	55	78	109	117	106	105	134	157	168	140
22	INS	1	2	2	3	3	4	5	4	8	8	9	9	7	9	8	9	12	11	27	18
	<i>Utilities</i>	16	17	18	20	22	23	25	27	31	20	28	38	29	32	32	40	46	59	171	159
	<i>Mining</i>	18	19	20	21	22	17	18	34	37	33	39	49	41	68	79	115	130	147	163	158
	<i>Manufacturing</i>	193	214	239	262	277	308	341	396	459	486	545	584	585	616	660	728	837	1025	1424	1418
	<i>All</i>	227	250	276	303	321	348	385	457	527	539	612	671	655	716	771	883	1012	1230	1758	1735

## Chapter 6 Measuring Output by Sector and Region

TABLE 6-2, CONT'D

		Intermediate input in constant prices of Xinjiang																			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	CLM	4	5	5	7	7	7	7	8	10	7	9	5	6	5	6	7	7	7	7	6
2	PTM	51	59	58	67	77	66	69	87	96	81	118	257	95	97	71	40	50	46	54	56
3	MTM	1	1	1	1	2	2	2	3	4	1	2	1	2	2	3	4	5	6	8	14
4	NMM	1	1	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2
5	FDB	20	21	19	20	22	30	31	33	33	40	38	31	46	52	48	51	64	73	93	80
6	TBC	1	1	1	1	1	1	1	1	2	2	2	1	2	2	2	2	1	2	2	2
7	TEX	17	18	16	18	20	34	32	28	38	43	39	32	34	38	39	36	38	31	44	39
8	WEA	1	1	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0
9	LEA	2	3	3	3	3	4	3	3	2	2	2	1	1	1	1	1	2	2	6	6
10	WDF	1	1	1	1	1	1	1	1	1	1	2	1	2	2	3	2	2	3	6	6
11	PAP	2	2	2	2	3	4	4	5	5	5	5	3	5	5	5	5	6	8	9	14
12	PET	12	14	15	17	17	20	22	30	26	32	45	27	54	66	115	159	160	178	207	263
13	CHE	3	4	4	5	6	8	8	9	10	13	14	11	14	15	17	19	24	31	39	43
14	RBP	1	2	3	3	3	4	5	6	6	9	10	8	11	11	14	15	13	18	20	20
15	BUI	5	5	4	4	4	6	6	8	10	10	10	7	11	12	14	16	19	25	22	23
16	MSP	5	6	6	7	7	8	9	11	17	21	21	16	32	32	38	46	56	62	72	89
17	MPD	1	1	1	1	1	2	2	4	4	3	3	3	5	5	5	5	4	5	9	9
18	MCH	4	5	5	6	6	8	8	7	7	9	11	10	14	12	8	8	6	7	8	6
19	TRS	2	3	3	3	4	5	6	6	4	4	4	4	4	5	5	6	9	5	6	4
20	ELE	1	1	1	1	1	2	2	2	2	4	4	3	6	6	8	10	12	15	19	18
21	ICT	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	3	3
22	INS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<i>Utilities</i>	4	5	5	6	7	8	13	10	13	11	14	8	16	15	16	22	22	30	49	50
	<i>Mining</i>	56	67	66	79	88	78	80	99	111	91	131	265	105	106	81	52	64	62	71	78
	<i>Manufacturing</i>	77	88	85	95	102	140	143	154	171	200	212	158	243	263	321	382	417	466	564	627
	<i>All</i>	138	159	156	180	197	226	235	263	295	302	358	430	363	384	419	456	503	558	683	754

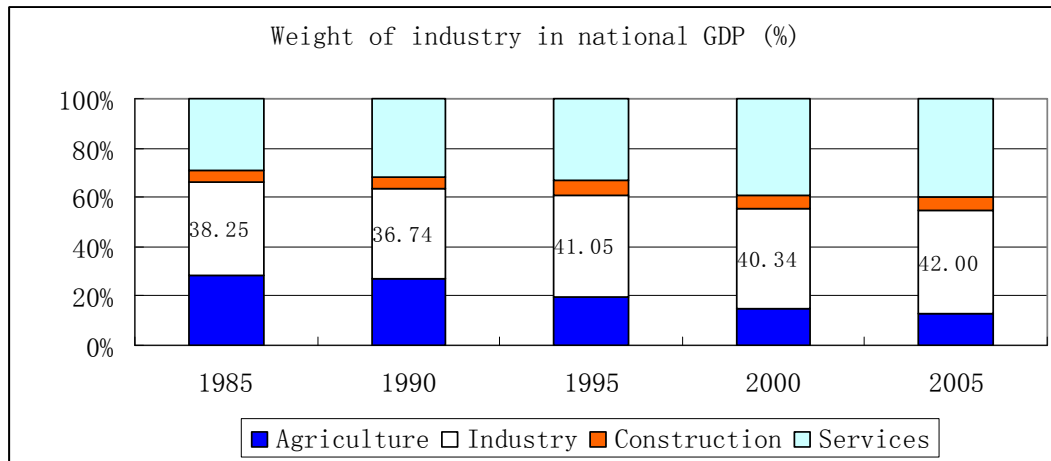
## **Chapter 7 Results and Discussion**

This chapter presents and discusses the results of this thesis. They are calculated by applying the methodology in Chapter Three and data constructed in Chapter Four, Five and Six. The presentation and discussions are structured as follows. Section 7.1 discusses the coverage of this study. Section 7.2 compares changes of regional industrial structure of China. Section 7.3 reports and discusses levels of labour productivity and capital-labour ratio. Section 7.4 reports and discusses the estimated TFP results by region for three major sectors, i.e. mining, manufacturing and utilities. Section 7.5 focuses on regional TFP performance among manufacturing industries. Lastly, in section 7.6, we test the convergence of Chinese regional industrial economy within the period of 1985-2005 and two sub-period of 1985-1993, 1994-2005.

### **7.1 Research coverage**

Before any discussion, it is necessary to show the position of the regions covered in this study in the national industrial economy. As shown in Chart 7-1, the industrial sector played the most important role in the economy during the post-reform period. The sectoral shares in GDP are measured at current prices. It is clear that over this period, the industrial share remained the largest and grew steadily.

CHART 7-1: WEIGHT OF INDUSTRY IN NATIONAL GDP



Source: NBS, Chapter Three of "China Statistical Yearbook, 2006"

Annual statistics by NBS do not provide sufficient information on the whole industrial economy. In this study, raw data come from the DITS department of NBS as discussed in chapter Four to Six. Statistics of DITS do not fully cover the whole industrial economy, but the majority part. Take year 2005 as example, statistics by DITS on "at or above the designated size enterprises" accounted for 93.86% of the whole industrial economy of GVA.

As already discussed in Chapter Four, due to data problem, we have dropped five small provinces in this study, namely Hainan, Gansu, Qinghai, Ningxia and Tibet. Except Hainan, all of them are located in the west of China. As shown in Table 7-1, their share in the national industrial economy is insignificant. Based on the statistics from NBS and the DITS definition, the 25 regions covered in this study always have accounted for around 95% of gross value of output (GVO), original value of fixed assets and employment in the national industrial economy over the two decades since 1985.

TABLE 7-1: WEIGHT OF STUDIED REGIONS IN THE NATIONAL INDUSTRIAL ECONOMY

<b>Weight of studied regions in the national industrial economy (%)</b>			
	1985	1995	2005
Gross value-added in current prices	n.a	97.7	98.4
Gross value of output in current prices	98.1	98.5	98.6
Original value of fixed assets	95.4	96.9	98.6
Number of workers and employees	94.7	97.8	98.2

Source: NBS, Industry chapter of "China statistical yearbook various years".

Note: During 1985-2005, coverage of statistics by NBS changed three times. For detailed information on coverage changes, refer to discussions in Chapter One.

To quantify the coverage of our study, we can take 2005's current-price GVA as the benchmark. Coverage by this study accounts for 98.43% of "above designated size enterprises", or 92.39% of Chinese industry, or 38.8% of national GDP. So, the coverage of this research is basically able to represent the performance of Chinese industry and the whole economy.

## **7.2 Changes of industrial structures in economic development**

To discuss productivity growth of Chinese industry, it is better to understand the industrial reform and its influence first. There are two major stages during the reforms period, respectively 1978 to 1993 and 1993 to now. Before 1993, reforms mainly aimed at agriculture in the countryside and industrial reform was delayed. Though prices were released at the margin with double track system, distortions were still serious in the market. The second stage that started from 1993 is basically a process of marketization. With piece meal approach, factor prices were released more and more, and flow of capital and labour became gradually flexible. At the same time, market support establishment was being built up, firms were given more autonomy and profit retention. In the end of 1993, there were several industrial policy reforms launched, such as legislation



of “Corporation law” and the “system innovation experiment of 100 firms”. Later in 1994, industrial reforms entered into institutional change. Influence on Chinese industrial performance is very significant. In this chapter, regional structural changes are employed to discuss changes brought by the reform.

If treated as individual economy, one region’s industrial structure can reflect this region’s characteristics in economic growth and its resources endowment. However, during central planning era, capital and labour flows across regions were under control by the government. Markets were protected and segmented by local government with fiscal and employment consideration. Comparative advantage could not be utilized since production was planned by the government. Under free market situation, a sector is expected to grow faster in the regions that can enjoy comparative advantages. On the other hand, competitive sectors can attract more investment and labour flow-in to continuously support their quick growth.

Based on the above discussions, it can be expected that after the 1993 industrial reform, sectoral performance of difference regions should be more diversified. With less price distortions and local protectionism, sectors with comparative advantages are expected to perform better.

### **7.2.1 Regional structure during pre-reform period**

Before the 1993’s industrial reform, there are several major distortions in the market. These distortions are going to be discussed one by one in the following.

First is tight control on prices by the governments. Though double-track price system was introduced, prices were only released at the margin. Under this situation, products' prices were still seriously distorted. This pricing barrier was set by the government through policy instruction of pricing, taxing of export and import, local market protection and also due to incomplete market mechanism. SOEs were major producer in the market, so, with close connection between SOEs and governments, this price barrier was workable during pre-reform period. For production factor, resources allocation aimed at national plans to serve political agenda ignoring market conditions, hence distorting factor costs.

Second, local markets were segmented by local governments with fiscal and employment considerations. Under market barrier, free flow of capital and labour was difficult. Successful firms cannot grow up quickly through expanding their market; on the other hand, unsuccessful firms can keep surviving with market protection. There was little competition among one sector's firms in different regions. Shown by calculation results in Table 7-7, structures of local economies were very close to the nation for most regions. Except some regions that need to take the role of resources providers, like Xinjiang, Shanxi, Guizhou and Yunnan, most regions' variation of sectoral shares was very small to the cross-regional mean.

Third, bank loans need to follow local governments' instruction. So, unsuccessful enterprises were kept surviving, without incentive for improvement. This made productivity growth very slow during pre-reform period, as shown in Table 7-2, and detailed sectoral information in Table 7-10. With quick growth of

labour productivity, TFP growth was very slow within 1985-1993, which means economic development during this period was mainly driven by capital input and intermediate input.

TABLE 7-2: COMPOUND ANNUAL GROWTH RATE OF PRODUCTIVITY

	1985-1993			1993-2005		
	Y/L	K/L	TFP	Y/L	K/L	TFP
Beijing	15.34	14.35	(1.55)	20.76	12.12	1.70
Tianjin	13.84	8.05	(0.97)	17.43	14.79	2.59
Hebei	15.06	7.93	(0.66)	16.23	10.62	3.56
Shanxi	13.49	4.36	(0.92)	12.34	10.68	5.10
Inner Mongolia	17.06	4.65	0.24	17.82	18.09	6.56
Liaoning	13.31	8.65	(1.55)	17.13	11.89	3.26
Jilin	13.47	7.29	0.12	20.59	14.37	4.44
Heilongjiang	11.98	5.42	(3.94)	13.59	13.52	5.11
Shanghai	15.43	9.63	(1.14)	15.18	13.09	1.02
Jiangsu	21.28	11.75	0.95	12.61	12.81	1.26
Zhejiang	21.35	11.44	1.18	10.03	11.27	0.35
Anhui	15.96	4.92	0.64	14.60	13.42	3.18
Fujian	21.71	9.00	1.67	13.51	8.62	2.36
Jiangxi	15.21	3.42	0.90	14.66	12.85	4.09
Shandong	19.01	9.64	(0.36)	14.25	7.79	3.15
Henan	15.25	5.59	0.55	15.75	9.03	3.57
Hubei	13.71	5.42	1.04	18.18	14.78	3.54
Hunan	12.06	3.09	0.33	16.41	12.98	5.22
Guangdong	24.06	13.97	2.44	15.29	4.04	1.59
Guangxi	18.25	6.00	1.69	13.07	11.74	2.74
Sichuan	13.06	3.68	(0.90)	21.53	15.34	6.13
Guizhou	16.26	3.71	1.31	17.12	11.84	3.54
Yunnan	21.32	6.56	1.75	11.63	11.52	1.55
Shaanxi	13.36	3.15	0.57	14.44	15.29	5.35
Xinjiang	13.01	11.55	(2.44)	12.52	12.30	1.93

### 7.2.2 Expectations of sectoral restructuring during post-reform period

Industrial reform in 1993 aimed to remove barriers in the market, including prices distortion and local protection, and release enterprises from government control through changing share-holding or form of ownership, except some strategic sectors. With “piecemeal” approach of reform, performance of

industrial firms was significantly diversified due to different policies and how they were implemented. On the other hand, initial conditions were different for different sectors because of the heritages of state policies during the central planning era. Moreover, the “piecemeal” approach implies that different policy treatments could be introduced to different sectors at various stages, which also mean that exposure to foreign trade, investment and competition were different across sectors, time periods and regions. This made situation in post-reform period very complex. To clearly understand the influence of the reform, it is necessary to discuss on sectoral level and regional level. To make discussion simple, manufacturing sectors can be classified into capital goods which is capital-intensive heavy industry, consumer goods which is labour-intensive light industry and material sectors which is energy and resources intensive.

First, after the 1993’s industrial reform, performance of different sectors in different regions should be more diversified. With different resources endowment, sectors that have comparative advantages are expected to perform better than the others. Local governments were losing control over industrial firms and banks. Sectoral structure of regions would depend more on the market instead of political consideration. As discussed in section 7.21, sectoral structure during pre-reform period was designed by the government. Except a few sectors in some regions that had the responsibility to cooperate with strategies of the nation, others’ industrial structures were very close to national structure. Target of this policy was autarky of each region. After the reform, policy instructions on industrial development continuously decreased. Under

different resources endowment, deviation of sectoral shares is expected to increase.

Second, sectors with comparative advantages should be able to perform better in one region, which means shares of these sectors are expected to increase. In contrast, sectors that depended on policy loans to survive were difficult to make quick growth during post-reform period. Their shares in the whole industry were expected to decrease.

Third, with released control of capital and labour shift, sectors are expected to attract more investment and employment in the regions that can enjoy comparative advantage.

### **7.2.3 Regional restructuring during post-reform period**

During the post-reform period, every region's industrial structure changed significantly towards their comparative advantage. To assess the structural change, this study use the regional/national ratio (R/N ratio) to clarify each region's relative change compared with the whole country's trend.

#### **7.2.3.1 Deviation of sectoral structure across regions**

One result of industrial reform is that sectoral structure of regions is expected to be deviated from the nation. According to the results, nearly all sectors' standard deviations of R/N ratio continuously rise, especially after 1993. Compared with output and net capital stock, labour's change is not so significant.

Xinjiang's deviation is the largest in all the regions due to its special characteristics. Xinjiang is in the north-west of China and endowed with plentiful oil and gas resources. So, Xinjiang is expected to be very competitive in extraction of oil and gas industry and petroleum industry. However, as shown by the result, Xinjiang's R/N ratio of petroleum industry dropped from 2.34 to 2.02 during 1985-1992 and had no significant change of extraction of oil and gas industry's R/N ratio. Comparative advantage was not utilized before the industrial reform. Since 1993, Xinjiang's advantage in oil and gas extraction, petroleum industry began to be realized quickly. In 2005, its R/N ratio was respectively 51.3 and 12.08 in these two sectors. Moreover, due to Xinjiang's geographic position that is too far from the market, it is very difficult for Xinjiang to develop light industries as those east regions. Those two reasons make Xinjiang's R/N ratio continuously to be very high. It can be found from the results that most middle and west regions that with natural resources suffered from the same with Xinjiang, like Yunnan, Guizhou, Shanxi and Shaanxi. These regions acted the role of material and energy suppliers to factories located in the east regions in the central planning era. After the industrial reform, they began to utilize their advantage of mineral resources and develop related resources processing industries quickly.

Stories are different to those more-developed regions in the east or middle of China. These regions normally developed as a complete economy during the central planning era. As shown by the results, these regions' R/N ratios were very close to 1 during 1985-1992. Since 1993, nearly all regions' R/N ratios rose, however, the growth is not so significant. This can be explained that, first,

characteristics of these regions are very close. Second, local markets were still segmented due to protectionism and local governments' fiscal and employment consideration. Third, there are only 12 years during the 1993-2005, that is not long enough for enterprises to fully utilize local comparative advantage.

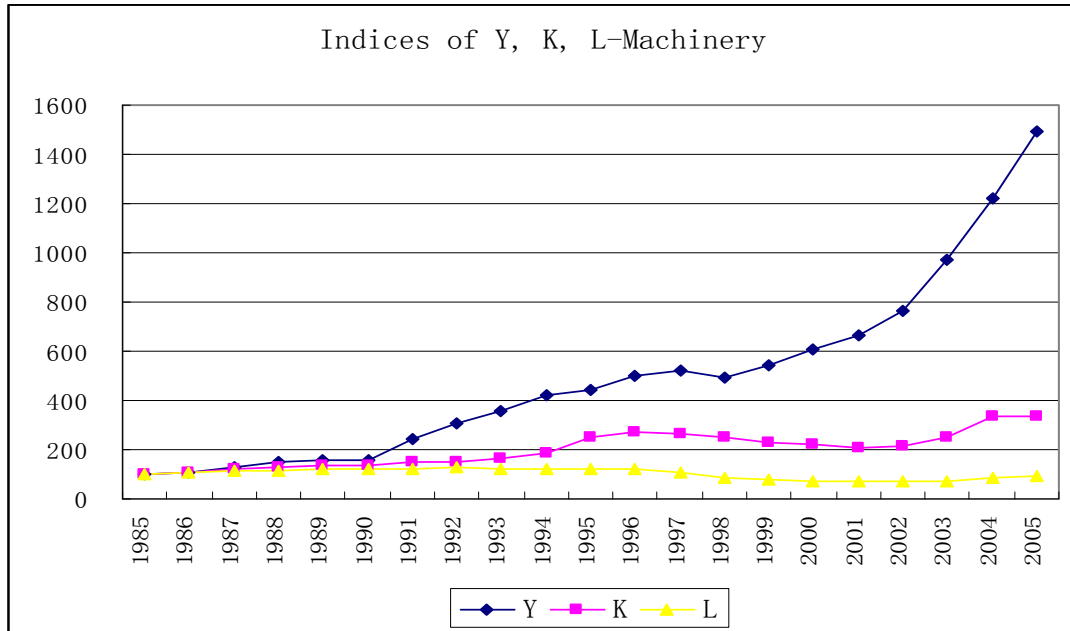
From the above discussion, production distribution of different sectors before the industrial reform was mainly planned by the central and local governments. Some regions took the role of resource suppliers to serve the country's strategy. The others without such tasks normally had very close industrial structures. Comparative advantages cannot be utilized under this condition due to the fact that local markets were segmented by governments to protect local employment and fiscal income. Since the 1993's industrial reform, local governments have gradually lost the control of enterprises and cannot continue to instruct policy loans to unsuccessful firms. Without help from local governments, it was difficult for some firms or sectors that have no comparative advantages to survive in the market. Moreover, local government also gradually lost the power of market protection. This made products from other regions easier to enter into the market. So, both reasons caused the deviation of regional industrial structure bigger from the national.

### **7.2.3.2 Structural change of capital goods sectors**

For capital intensive sectors, they are heavily dependent on capital, technology and skilled labour. During the reform period, they are expected to grow faster of in post-reform period, with more investment embodied with technology, more FDI since China's entering into WTO and more skilled labour. As for machinery,

the indices of value-added in constant prices (Y), net capital stock (K) and working hours (L) are as follows,

CHART 7-2: INDICES OF Y, K AND L OF MACHINERY



Shown by the chart, with slow capital and negative labour growth, machinery's output grew quickly during 1985-2005. There are two periods that machinery experienced quick growth, respectively 1990-1997, and 2002-2005. The slope of growth rate became even sharper since 2003. Just as expected, efficiency of machinery grew very fast. Apparently, growth of Y/L is much quicker than K/L. In the next assessment of TFP, it is expected that machinery can achieve fast growth.

Looked from the regional perspective, released capital and labour flow across regions and sectors will lead to better performance in regions with comparative advantage.

TABLE 7-3: SHARES OF MACHINERY & EQUIPMENT IN LOCAL ECONOMIES

Shares of machinery & equipment in local economies									
	Y			K			L		
Raw data	1985	1993	2005	1985	1993	2005	1985	1993	2005



<i>All</i>	0.11	0.09	0.06	0.11	0.07	0.04	0.15	0.12	0.08
Beijing	0.11	0.10	0.07	0.13	0.09	0.04	0.17	0.13	0.11
Tianjin	0.13	0.11	0.07	0.12	0.07	0.04	0.18	0.14	0.08
Hebei	0.11	0.09	0.07	0.11	0.06	0.03	0.15	0.12	0.08
Shanxi	0.12	0.08	0.09	0.12	0.06	0.03	0.15	0.13	0.06
Inner Mongolia	0.13	0.15	0.05	0.08	0.05	0.02	0.13	0.06	0.07
Liaoning	0.13	0.13	0.11	0.11	0.08	0.05	0.19	0.17	0.12
Jilin	0.10	0.07	0.02	0.09	0.04	0.01	0.12	0.10	0.05
Heilongjiang	0.03	0.05	0.03	0.14	0.09	0.03	0.16	0.13	0.09
Shanghai	0.14	0.10	0.11	0.15	0.08	0.06	0.21	0.16	0.13
Jiangsu	0.12	0.12	0.10	0.13	0.10	0.06	0.15	0.14	0.12
Zhejiang	0.11	0.10	0.06	0.11	0.08	0.06	0.14	0.13	0.12
Anhui	0.08	0.09	0.06	0.07	0.06	0.03	0.11	0.09	0.07
Fujian	0.09	0.06	0.04	0.07	0.04	0.02	0.11	0.08	0.03
Jiangxi	0.10	0.08	0.02	0.09	0.05	0.01	0.12	0.10	0.04
Shandong	0.11	0.10	0.10	0.10	0.06	0.05	0.15	0.11	0.10
Henan	0.14	0.12	0.07	0.14	0.08	0.04	0.17	0.15	0.09
Hubei	0.08	0.07	0.07	0.09	0.05	0.02	0.13	0.11	0.07
Hunan	0.10	0.10	0.06	0.11	0.08	0.05	0.14	0.12	0.08
Guangdong	0.08	0.04	0.02	0.07	0.03	0.03	0.12	0.06	0.04
Guangxi	0.10	0.10	0.07	0.08	0.06	0.01	0.12	0.10	0.05
Sichuan	0.13	0.09	0.08	0.14	0.08	0.03	0.15	0.10	0.08
Guizhou	0.11	0.07	0.04	0.10	0.04	0.01	0.13	0.09	0.04
Yunnan	0.08	0.05	0.03	0.09	0.04	0.01	0.13	0.08	0.04
Shaanxi	0.15	0.10	0.11	0.16	0.09	0.03	0.19	0.15	0.10
Xinjiang	0.06	0.04	0.01	0.06	0.01	0.00	0.09	0.05	0.02

Table 7-3 is the share of machinery & equipment in local economies. Taking machinery as an example of capital and energy intensive heavy industry, we can see that in 1985, Shaanxi, Shanghai, Henan, Liaoning and Inner Mongolia are the top five compared with cross-regional mean (R/N ratio). In these five regions, Shanghai and Liaoning are the most important traditional industry bases in China. Shaanxi, Henan and Inner Mongolia are safer places for heavy industry with strategic consideration. In 1993, the top five are Inner Mongolia, Liaoning, Jiangsu, Henan and Tianjin. In 2005, the top five are Shaanxi, Shanghai, Liaoning, Shandong and Jiangsu. From the results, there is no big change of Shaanxi, Shanghai and Liaoning's performance of machinery industry. Better infrastructure of heavy industry had made them more

competitive. Jiangsu and Shandong, with more capital resource, grew faster than the others. Because of higher entrance requirement of capital, most large-scale investments are from SOEs or the government, different from private investment, they have more political and fiscal consideration. So, distribution change of machinery industry is slower than light industries. One more interesting point is Shaanxi's case. In 1994, Shaanxi's R/N ratio continuously dropped to the lowest 1.02, and then gradually increased to 2005's 1.75. This means that Shaanxi does have comparative advantage in developing machinery industry. However, before the industrial reform, the advantage was not well utilized. Higher growth rate means this sector in the studied region grows faster than cross-regional mean. So, better performance is expected since the policy break in 1993 especially industrial conglomeration to the region that with comparative advantages.

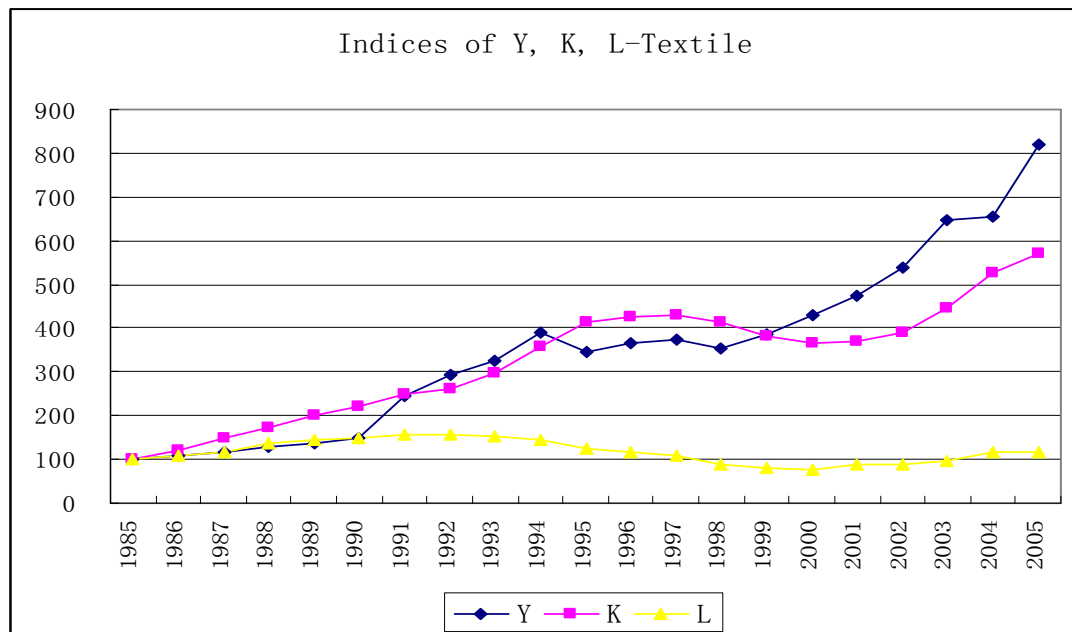
However, share of machinery in the whole industrial economy continuously dropped during 1985-2005. It is the same with every local economy. Benefit from growing ability of domestic investment and more FDI, growth of this sector was still slower than the cross-sector mean. It is necessary to question whether these advantages had been well utilized. Due to high entrance cost, this sector was dominated by SOEs for a long time during post-reform period. On the other hand, some sub-sectors of machinery are treated as strategic industries, so, FDI and private capital are prohibited. Moreover, machinery is the traditional heavy industry in China with military consideration. Major firms encountered many kinds of difficulties in the reform process. Historical burdens such as redundant employees, heavy social responsibility, too close relationship with

local government were all obstacles to further growth of this sector. At the same time, to unsuccessful firms, they need longer time and higher cost to exit. But, since Chinese economy has entered into the stage of heavy industry, with quick market orientation and productivity growth, machinery is expected to expand faster than before. Shown by Chart 7-2, since 2000, rebound has happened after China's entering WTO. This rebound certainly does not depend on policy favor, but the comparative advantage of this sector in contemporary Chinese economy.

### 7.2.3.3 Structural change of consumer goods sectors

Consumer goods sectors often appear to be labour-intensive. With low labour cost, China is very competitive in these sectors, such as textile. However, from Chart 7-3, it can be found that growth of textile was almost investment-driven, especially before 1999.

CHART 7-3: INDICES OF Y, K AND L OF TEXTILE



If one firm can enjoy profit just from exploiting cheap labour resources, it will lose incentive to improve efficiency, just as what happened during the 1980s

and 1990s of China. Since year 2000, China was losing her comparative advantage of cheap labour cost, investment growth became much slower. However, output experienced fastest growth during 2000-2005. This means that growth pattern in the 2000s of textile had been mainly driven by productivity growth instead of capital input. Then, it is interesting to discuss the reasons of the growth pattern change. It can be caused by several reasons. First, with increasing labour cost, firms were pushed to survive through productivity improvement. Second, with years of wealth accumulation, firms were able to replace equipment embodied with higher technology, thus increase output by higher quality of capital input. Third, under quickly growing scale of textile industry in China, keen competition drove firms to improve efficiency. Fourth, quality of FDI since China's entering into WTO was better than before. In the earlier stage of reform, production lines were moved to China from other east-Asia regions that with higher labour cost. These firms only aimed to exploiting China's low cost advantage, and their products were mainly for export. So, the incentive was very low for these firms to keep improving efficiency. If labour cost rose or foreign market depressed, they will just move to other regions of China or other countries, or just exit the sector. As shown in the chart, growth of net capital stock during 1997-2000 appeared to be negative, which means FDI in the earlier stage of reform had been leaving from China. In contrast, FDI after 2000 aimed at domestic market of China instead of export. They cannot lower their cost just through moving around, but to continuously improve productivity and efficiency.

Compared with machinery, market of textile is more open and with less policy distortions. However, there is no evidence showing that textile had achieved better performance in productivity improvement. Scale of production did expand for both sectors, but growth of machinery looks more health. Ignoring policy effects, different purposes of FDI and market condition can bring significant different results of productivity performance.

TABLE 7-4: SHARES OF TEXTILE IN LOCAL ECONOMIES

<b>Shares of textile in local economies</b>									
<b>Raw data</b>	<b>Y</b>			<b>K</b>			<b>L</b>		
	<b>1985</b>	<b>1993</b>	<b>2005</b>	<b>1985</b>	<b>1993</b>	<b>2005</b>	<b>1985</b>	<b>1993</b>	<b>2005</b>
All	0.15	0.12	0.05	0.07	0.07	0.04	0.10	0.10	0.07
Beijing	0.09	0.06	0.01	0.05	0.03	0.00	0.08	0.07	0.03
Tianjin	0.15	0.08	0.02	0.10	0.07	0.02	0.13	0.10	0.04
Hebei	0.20	0.11	0.05	0.07	0.08	0.03	0.11	0.10	0.07
Shanxi	0.07	0.04	0.01	0.03	0.02	0.00	0.06	0.05	0.02
Inner Mongolia	0.09	0.09	0.07	0.03	0.04	0.01	0.06	0.07	0.06
Liaoning	0.09	0.05	0.02	0.05	0.04	0.01	0.07	0.06	0.03
Jilin	0.06	0.03	0.01	0.04	0.03	0.00	0.05	0.05	0.02
Heilongjiang	0.13	0.11	0.14	0.05	0.05	0.01	0.06	0.06	0.03
Shanghai	0.18	0.10	0.01	0.10	0.07	0.01	0.16	0.14	0.05
Jiangsu	0.24	0.21	0.08	0.16	0.16	0.08	0.16	0.18	0.13
Zhejiang	0.23	0.26	0.13	0.14	0.19	0.13	0.18	0.20	0.14
Anhui	0.13	0.11	0.04	0.07	0.08	0.03	0.10	0.12	0.07
Fujian	0.09	0.05	0.06	0.05	0.05	0.07	0.07	0.06	0.06
Jiangxi	0.10	0.07	0.06	0.05	0.06	0.02	0.07	0.07	0.06
Shandong	0.22	0.12	0.08	0.10	0.10	0.07	0.14	0.14	0.11
Henan	0.14	0.10	0.10	0.06	0.07	0.03	0.11	0.10	0.06
Hubei	0.18	0.11	0.07	0.09	0.09	0.02	0.14	0.14	0.11
Hunan	0.10	0.06	0.03	0.07	0.06	0.02	0.07	0.07	0.05
Guangdong	0.10	0.08	0.02	0.07	0.08	0.04	0.10	0.08	0.05
Guangxi	0.12	0.06	0.02	0.05	0.05	0.01	0.08	0.07	0.04
Sichuan	0.09	0.09	0.03	0.05	0.06	0.01	0.08	0.10	0.04
Guizhou	0.04	0.02	0.01	0.02	0.02	0.00	0.04	0.04	0.01
Yunnan	0.06	0.03	0.01	0.02	0.02	0.00	0.04	0.05	0.02
Shaanxi	0.19	0.11	0.03	0.07	0.08	0.01	0.10	0.09	0.06
Xinjiang	0.16	0.14	0.06	0.07	0.07	0.02	0.11	0.14	0.10

At regional level, shown by Table 7-4, the five regions with highest R/N ratio are Jiangsu, Zhejiang, Shandong, Hebei and Shaanxi in 1985, and Zhejiang,

Jiangsu, Xinjiang, Shandong and Hubei in 1993, and Heilongjiang, Zhejiang, Henan, Jiangsu and Shandong in 2005. Jiangsu, Zhejiang and Shandong are traditional textile zones in China. However, though with better infrastructure, they have no advantage in labour cost, which is very important to textile industry. Since the industrial reform, we can see that the center of textile production is moving from the east to middle regions, where have much more labour resources. In Heilongjiang, many workers were released by SOEs in the late 1990s, which caused a large number of labour resources. Henan is the province with largest population in middle China. Local labour cost is much lower than the east. Zhejiang still performs very well in the post-reform era since its active private investment and better export condition than the others. Jiangsu and Shandong's situation is close to Zhejiang. Their production of textile is also export-driven compared with middle regions.

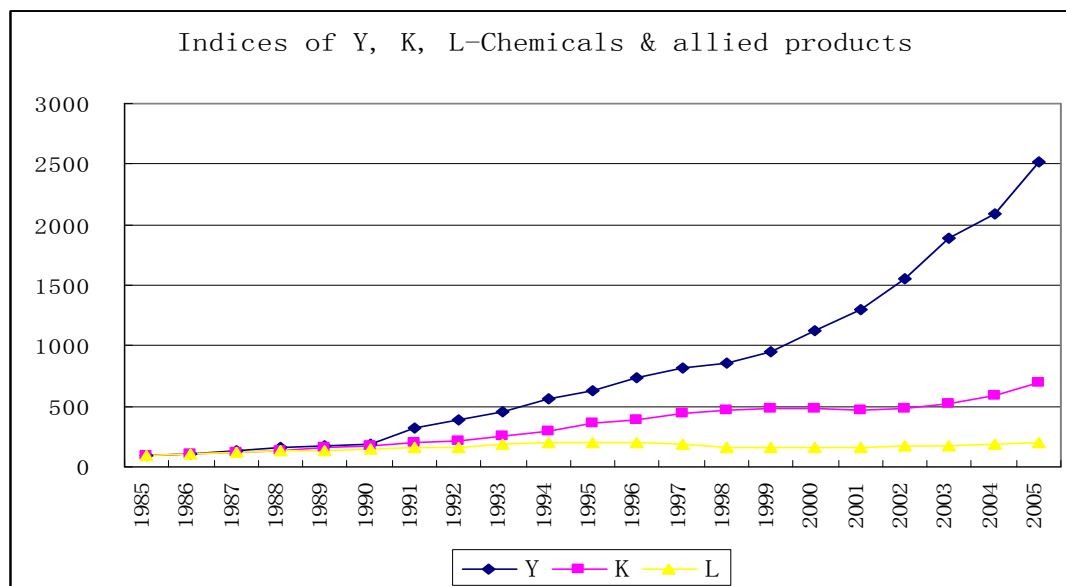
It also needs to be pointed out that, shares of capital and labour significantly dropped during 1985-2005, especially after 1993 for most regions. This means that the importance of textile continuously decrease in Chinese economy. Compared with output, capital and labour's share are smaller. It means that productivity of textile is relatively higher than the industrial mean. However, keen competition due to low entrance cost had reduced profitability and attractiveness of this industry.

#### **7.2.3.4 Structural change of material sectors**

Another typical kind of industry in China is material, which is energy and resource intensive, often brings serious pollution. Taking the sector of

chemicals & allied products as example, we can see its performance at national level first.

CHART 7-3: INDICES OF Y, K AND L OF CHEMICALS & ALLIED PRODUCTS



Shown by chart 7-3, its growth was even faster than the sector of machinery. It can be found that output growth was mainly pulled by investment during 1990s, and productivity growth during 2000s. Compared with machinery and textile industry, chemical industry's market is more open than machinery, and higher entrance cost than textile. These two characteristics made its performance better than the other two. However, it needs to be pointed out that, material sectors are often energy and resources intensive, with serious pollutions. Quick growth of these sectors does not mean improvement of welfare of the whole society. Under high labour productivity, it is necessary to improve efficiency of energy and resources consumption. Proper government policy guide seems not enough during the past twenty years.

TABLE 7-5: SHARES OF CHEMICALS & ALLIED PRODUCTS IN LOCAL ECONOMIES

Shares of chemicals & allied products in local economies									
	Y			K			L		
Raw data	1985	1993	2005	1985	1993	2005	1985	1993	2005

All	0.10	0.11	0.10	0.11	0.10	0.08	0.06	0.08	0.08
Beijing	0.17	0.10	0.05	0.18	0.05	0.03	0.07	0.08	0.07
Tianjin	0.14	0.11	0.07	0.21	0.11	0.06	0.09	0.10	0.10
Hebei	0.09	0.12	0.11	0.09	0.10	0.06	0.07	0.08	0.09
Shanxi	0.10	0.11	0.10	0.10	0.06	0.06	0.08	0.08	0.07
Inner Mongolia	0.06	0.07	0.08	0.04	0.04	0.04	0.05	0.06	0.08
Liaoning	0.10	0.11	0.08	0.13	0.10	0.07	0.06	0.08	0.07
Jilin	0.16	0.16	0.19	0.20	0.15	0.15	0.08	0.10	0.13
Heilongjiang	0.03	0.03	0.03	0.04	0.07	0.06	0.03	0.05	0.06
Shanghai	0.13	0.12	0.08	0.18	0.14	0.08	0.07	0.09	0.07
Jiangsu	0.11	0.13	0.13	0.12	0.17	0.12	0.07	0.09	0.09
Zhejiang	0.08	0.09	0.19	0.09	0.09	0.09	0.05	0.07	0.06
Anhui	0.08	0.09	0.11	0.09	0.09	0.06	0.06	0.07	0.08
Fujian	0.11	0.09	0.07	0.12	0.11	0.07	0.08	0.08	0.03
Jiangxi	0.08	0.12	0.14	0.08	0.12	0.08	0.06	0.08	0.11
Shandong	0.07	0.09	0.12	0.07	0.09	0.10	0.06	0.07	0.09
Henan	0.09	0.11	0.09	0.09	0.09	0.07	0.07	0.09	0.08
Hubei	0.07	0.09	0.12	0.07	0.06	0.06	0.06	0.08	0.11
Hunan	0.12	0.12	0.10	0.13	0.11	0.08	0.08	0.09	0.14
Guangdong	0.09	0.10	0.05	0.07	0.08	0.05	0.06	0.06	0.03
Guangxi	0.10	0.11	0.11	0.11	0.09	0.07	0.08	0.09	0.12
Sichuan	0.10	0.11	0.12	0.12	0.10	0.08	0.07	0.09	0.11
Guizhou	0.07	0.10	0.20	0.08	0.07	0.11	0.05	0.07	0.13
Yunnan	0.10	0.10	0.15	0.15	0.10	0.09	0.08	0.09	0.13
Shaanxi	0.07	0.09	0.10	0.08	0.07	0.05	0.06	0.07	0.09
Xinjiang	0.04	0.04	0.08	0.04	0.02	0.02	0.05	0.05	0.06

On regional level, according to Table 7-5, shares of Y, K and L kept steady during 1985-2005. However, regional shares change was very significant. On regional level, Beijing, Jilin, Tianjin, Shanghai and Hunan are the top five of R/N ratio in 1985. Jilin, Jiangsu, Hunan, Hebei and Shanghai are the top five in 1993. Guizhou, Jilin, Zhejiang, Yunnan and Jiangxi became the top five in 2005. From the results, in 1985, chemistry industry distribute in the most industrialized regions, like the three municipalities. After 1993, some west and middle regions with more natural resources grew much faster in chemistry, like Guizhou, Yunnan and Jiangxi. Jilin is close to oil resources and with better infrastructure, so its growth in chemistry industry continues to be faster than the national mean. Zhejiang also grew very fast from the industrial reform. Since 1993, China's net



import of raw oil became positive. With geographic advantage, Zhejiang improves quickly in oil processing and related sectors. It also needs to be pointed out that the cost of pollution in China is comparatively low, especially in the less-developed regions. So, these regions actually have more advantages in developing energy and resource intensive industry.

From above discussion, share of chemicals & allied products kept steady during 1985-2005 in the whole economy. However, it experienced regional transfer during this period, from more-developed regions to less-developed regions, or from the east to the west of China. This shift was driven by several reasons. First, firms moved to the places that are close to resources. Most natural resources in China are distributed in the west. Shandong is an exception in that it is in east China but close to oil resource. Second, pollution cost is much lower in the west of China. As discussed above, energy and resources intensive sectors often bring serious pollution problems. So, after years of development, east regions began to resist such sectors for environmental and industrial structure upgrade consideration. Third, after the industrial reform, capital and labour flow across regions were much easier, but west regions can only attract investment to these energy and resources intensive sectors with incomplete infrastructure.

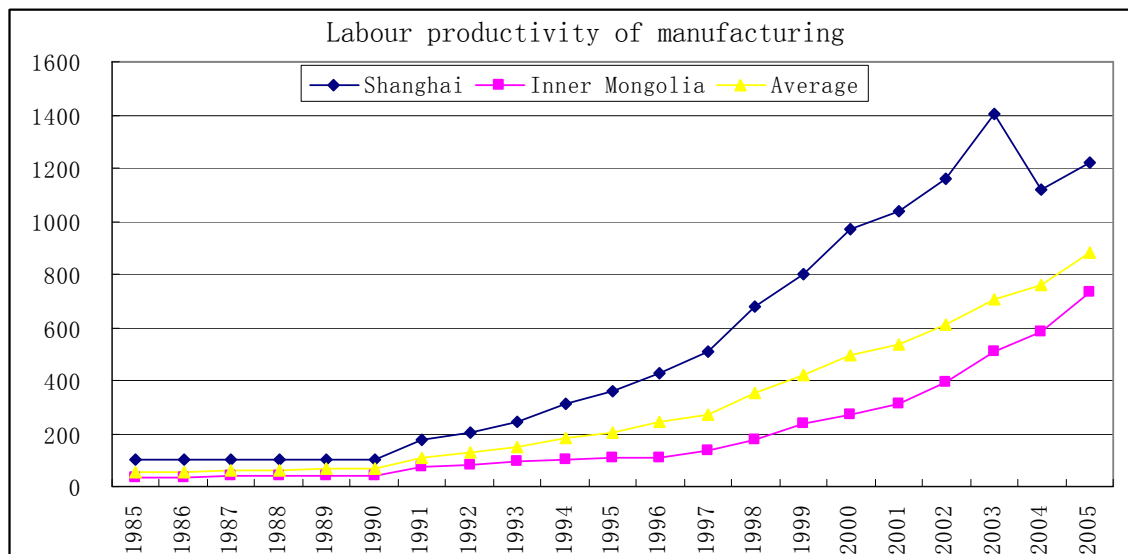
## 7.3 Levels of labour productivity and capital deepness

Before discussing regional TFP growth, it is essential to understand the actual level of one region's productivity and its status in the country. In this section, sectoral labour productivity and capital-labour ratio will be discussed by region.

### 7.3.1 Regional labour productivity

As discussed in the methodology chapter, the ratio of output over labour input is one approach to measure partial productivity. In this measurement, both variables are in constant prices. We can take Shanghai as an example of rich region and Inner Mongolia as an example of poor region in China.

CHART 7-4: LABOUR PRODUCTIVITY OF SHANGHAI, INNER MONGOLIA AND CROSS-REGIONAL MEAN OF MANUFACTURING



Note: taking labour productivity of Shanghai in 1985 as 100.

Referring to Chart 7-4, China's labour productivity of manufacturing improved significantly during 1985-2003, especially after 1990. The time period can be divided into three sub-periods, respectively 1985-1990, 1991-1996 and 1997-2005. During 1985-1990, Shanghai, Inner Mongolia and the cross-regional mean remained very steady and had little improvement. The ratio of Shanghai's

Y/L over Inner Mongolia's was 2.95 in 1985. In 1991-1996, the gap between Shanghai and Inner Mongolia enlarged and reached maximum in 1996. Within 1997-2005, Inner Mongolia caught up and significantly reduced the gap to 60% of Shanghai's Y/L.

Since labour productivity can be measured by level, rough regional comparison of productivity becomes possible. Picking up the leading regions in selected year, we can get,

	1985	1990	1995	2000	2005
Total	Heilongjiang	Heilongjiang	Shanghai	Shanghai	Beijing
Mining	Heilongjiang	Heilongjiang	Xinjiang	Xinjiang	Heilongjiang
Manufacturing	Shanghai	Shanghai	Guangdong	Shanghai	Beijing
Utility	Shanghai	Hebei	Shanghai	Zhejiang	Shanghai

The results show that except Xinjiang, every leading region is in east China. As discussed above, Xinjiang and Heilongjiang are endowed with plentiful oil and gas resources. They are very competitive in the extraction of oil and gas industry, which has the largest weight in mining sectors. So, it is reasonable that Xinjiang and Heilongjiang's productivity in mining are on the "frontier" of China. Shanghai is the most important industrial city in China. Strong foundation of industry enabled Shanghai to remain the leader of labour productivity in manufacturing and utility. Guangdong and Zhejiang are quickly developing industrial zones of China. Together with Beijing, these four regions can be treated as the frontier of productivity in manufacturing and utility in China. In Wang and Szirmai's work (2007), they compared regional labor productivity during the period of 1978-2002. Their results show that Shanghai has the highest labor productivity in almost all years which is very close to our result.

### 7.3.2 Regional capital-labour ratio

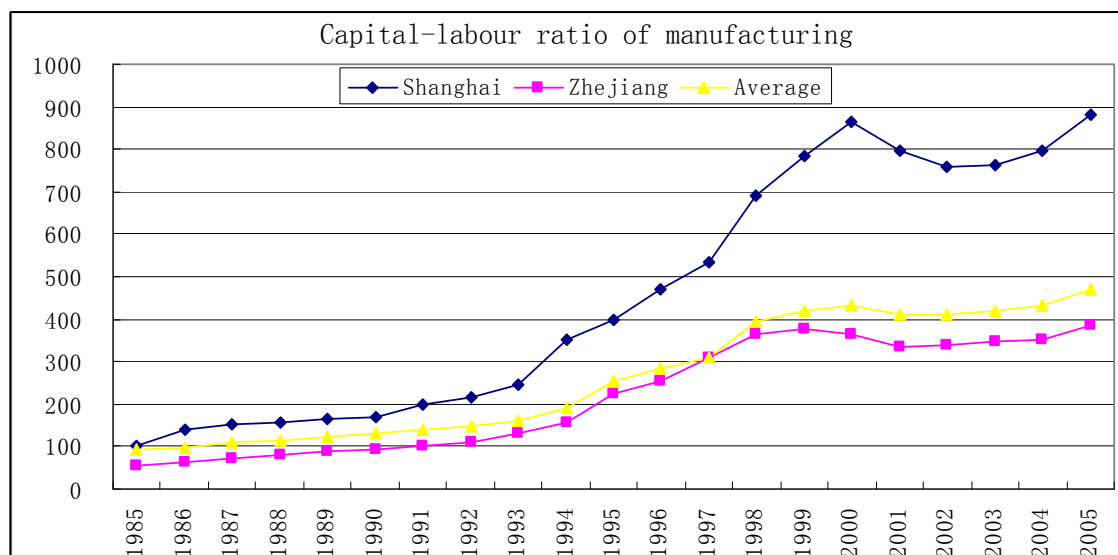
As discussed, it is expected that rich regions can produce more, and then invest more. This means regions with high R/N ratio should also have high K/L ratio. Moreover, compared with labour-intensive light industries, heavy industries often appear to be capital-intensive. So, a region with high heavy industry weight should also have high capital-labour ratio.

Picking up the region with highest capital-labour ratio,

	1986	1990	1995	2000	2005
Total	Xinjiang	Xinjiang	Shanghai	Xinjiang	Beijing
Mining	Tianjin	Tianjin	Tianjin	Shaanxi	Tianjin
Manufacturing	Guizhou	Guangdong	Shanghai	Shanghai	Shanghai
Utility	Beijing	Tianjin	Shanghai	Beijing	Beijing

It can be found that during studied period, Shanghai's capital-labour ratio kept higher than the others in almost every year of manufacturing. Employing the same approach used in regional comparison of labour productivity, we can find,

CHART 7-5: CAPITAL-LABOUR RATIO OF SHANGHAI, ZHEJIANG AND CROSS-REGIONAL MEAN OF MANUFACTURING



Note: taking capital-labour ratio of Shanghai in 1985 as 100.

However, regions with lowest capital-labour ratio during 1985-2005 were not poor regions. Zhejiang is in the east of China, and one of the most developed

regions. From the results, capital-labour ratio is more related to sectoral structure instead of economic development. Zhejiang focuses more on labour-intensive light industries, such as textile and appareling. It also needs to be pointed out that there is quick growth period during 1993-1998, and significant slow-down during 1999-2003. After the Asian financial crisis, ability of investment was weakened. As we can see from Chart 7-4, labour productivity continuously increased during this period, which means economic growth was not mainly driven by investment.

#### **7.4 TFP performance by region in major sectors**

As discussed in section 7-3, labour productivity had been growing quickly during 1985-2005. There are two explanations behind this: one is increasing capital-labour ratio, the other is growth of TFP. According to results of this study, during the period of 1987-2005, every studied region has achieved positive average annual growth rate of TFP as shown in Table 7-11. The rates of growth are quite different across regions. The slowest growing region, Shanghai, only attained 0.22 percent per year in average, which is only one-nineteenth of Inner Mongolia. On average, mining has attained the highest growth rate among the three big industries, which is 2.47 percent per annum. Utilities are the slowest in average, which are 0.68 percent annually. In manufacturing, every region's TFP growth rates are positive and very close with the whole industry's performance because manufacturing's weight of output is the highest in every studied region.

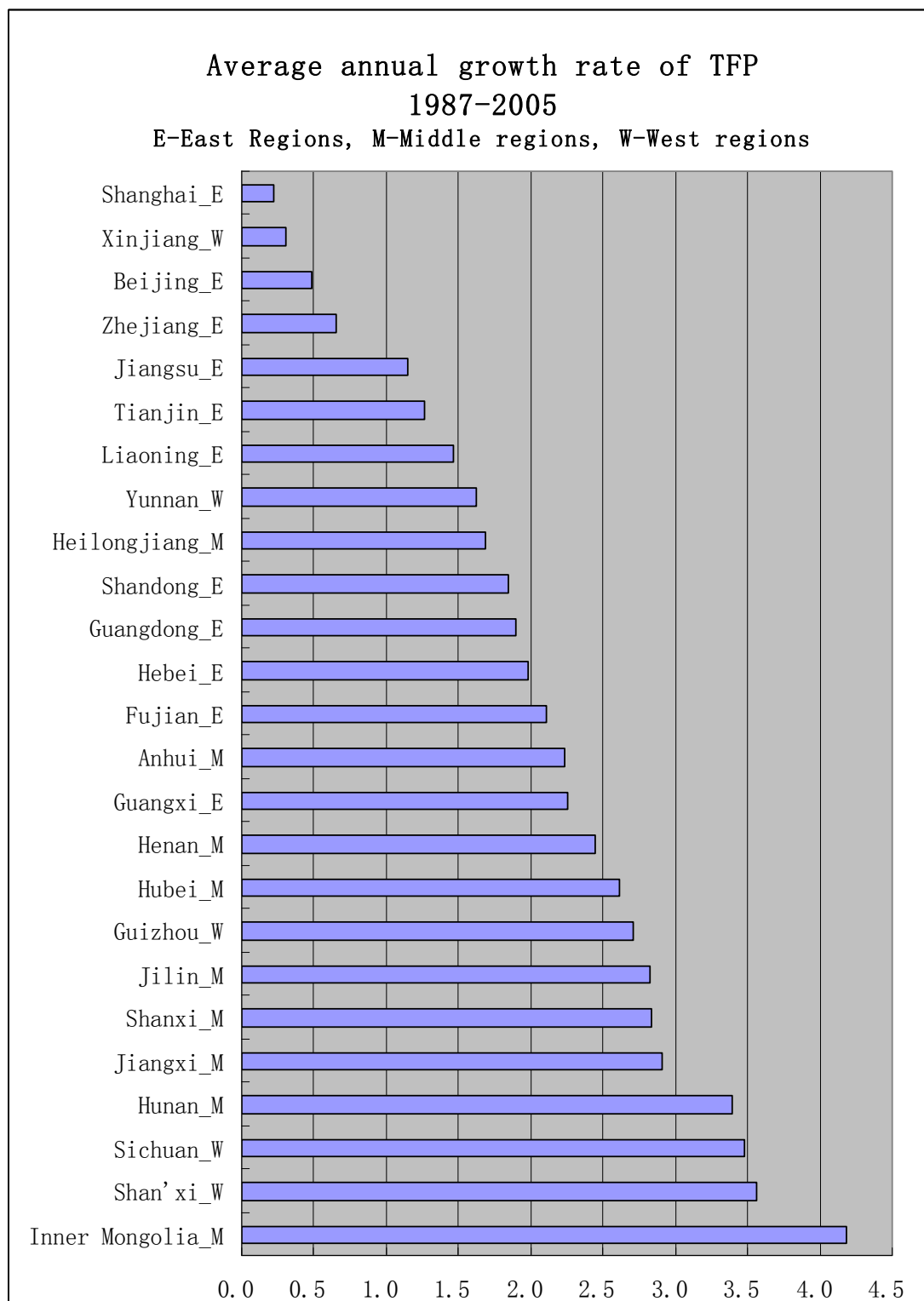
TABLE 7-6: RANKING OF AVERAGE ANNUAL GROWTH RATE OF TFP

<b>Ranking of average annual growth rate of TFP</b>				
<b>Rank</b>	<b>All</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Utility</b>
1	Inner Mongolia	Inner Mongolia	Shanxi	Inner Mongolia
2	Shaanxi	Guizhou	Inner Mongolia	Sichuan
3	Sichuan	Yunnan	Shaanxi	Hunan
4	Hunan	Hunan	Sichuan	Henan
5	Jiangxi	Sichuan	Hunan	Zhejiang
6	Shanxi	Beijing	Jilin	Xinjiang
7	Jilin	Jiangsu	Heilongjiang	Guangxi
8	Guizhou	Zhejiang	Hubei	Guangdong
9	Hubei	Jilin	Guizhou	Fujian
10	Henan	Shaanxi	Jiangxi	Shanxi
11	Guangxi	Fujian	Hebei	Hubei
12	Anhui	Henan	Henan	Jilin
13	Fujian	Guangdong	Anhui	Shandong
14	Hebei	Anhui	Shandong	Jiangxi
15	Guangdong	Jiangxi	Fujian	Guizhou
16	Shandong	Guangxi	Guangxi	Hebei
17	Heilongjiang	Shanxi	Guangdong	Yunnan
18	Yunnan	Heilongjiang	Yunnan	Liaoning
19	Liaoning	Hubei	Liaoning	Beijing
20	Tianjin	Hebei	Tianjin	Shaanxi
21	Jiangsu	Liaoning	Jiangsu	Heilongjiang
22	Zhejiang	Shandong	Xinjiang	Jiangsu
23	Beijing	Xinjiang	Beijing	Anhui
24	Xinjiang	Tianjin	Zhejiang	Shanghai
25	Shanghai		Shanghai	Tianjin

In Table 7-6, these regions rank by their growth rates of TFP of all the industry, mining, manufacturing and utilities. From the results, it can be found that Inner Mongolia's performance ranks first in mining and utility, and the second in manufacturing. In contrast, Shanghai ranked last in manufacturing; Tianjin is the last in mining and utility. Interestingly, the most important industrial regions, including the three municipalities, and provinces, like Guangdong, Jiangsu and Zhejiang are obviously slower of TFP growth of manufacturing than other regions. Shanxi and Inner Mongolia attained remarkable improvement in productivity of manufacturing sectors, especially resources-intensive industry,

like heavy chemical industry. These two provinces have sufficient natural resources and land supply. They have more advantage in developing heavy chemical industry.

CHART 7-6: AVERAGE ANNUAL GROWTH RATE OF TFP IN PERCENTAGE



As discussed in the introduction chapter, there are three zones in China distinguished by their economic development status. They are the east, the middle and the west. It is known that the east regions' economy is the most developed. The middle regions are less developed but better than the west regions. However, from the results of this study, it can be found that during the period of 1987-2005, the middle regions' TFP growth is the fastest with an average growth rate of 2.79% per year in the three zones as shown in Chart 7-6, followed by the west regions with average growth rate of 2.34% per year. East regions' growth rates are averagely 1.4% per year.

The most developed regions in China, including Shanghai, Beijing and Tianjin these three municipalities and Jiangsu, Zhejiang and Shandong these east provinces are in the slowest ten of average annual TFP growth rate. Middle regions take seven of the ten places in the fastest ten of TFP growth. Performance of west regions is quite different. However, from our result, Shanghai's TFP growth is the slowest in China's provincial-level regions. This can be explained by two reasons. First, Shanghai is in the frontier of China's productivity curve. It is difficult for Shanghai to shift the productivity curve quickly. But to less-developed regions, they can improve their TFP by learning from Shanghai and other more-developed regions. Second, since our capital input and labor input have considered the effect of quality improvement, some advantages of more-developed regions, like sufficient investment in high technology-embodied fixed assets and more educated labor will be decomposed from our results. These two reasons are the same in explaining Xinjiang and Yunnan's cases. Though Xinjiang and Yunnan are in the west of



China, their productivity performances were the best two in the west regions (see Wang and Szirmai, 2007). Around regions can learn from them, but they are too far from the most-developed east regions. So, their TFP growth rates are also very slow.

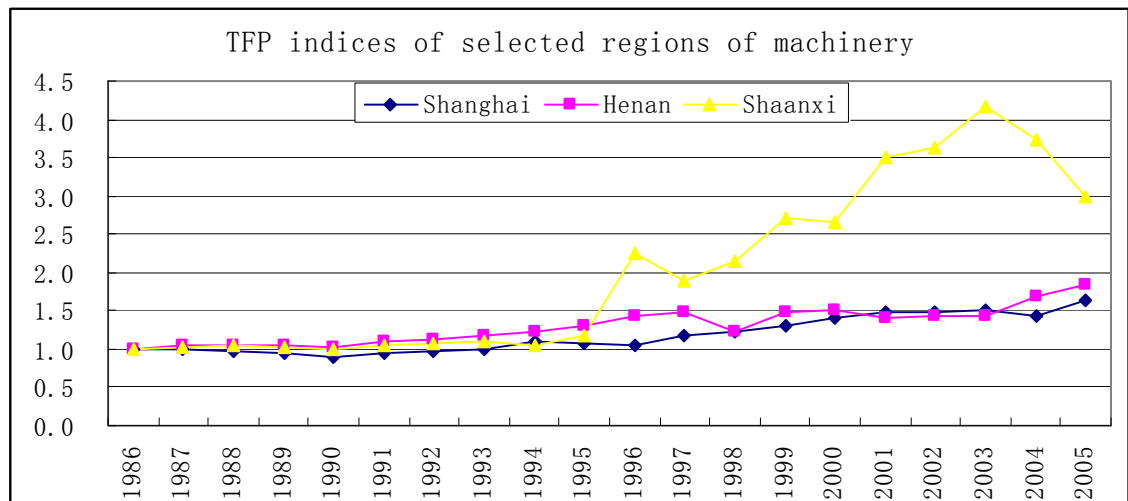
## **7.5 TFP performance by region in selected manufacturing sectors**

Since manufacturing is very important in China's industrial economy, it is necessary to discuss in detail. In this part, manufacturing sectors will be grouped into capital goods and consumer goods.

### **7.5.1 TFP performance of capital goods sectors**

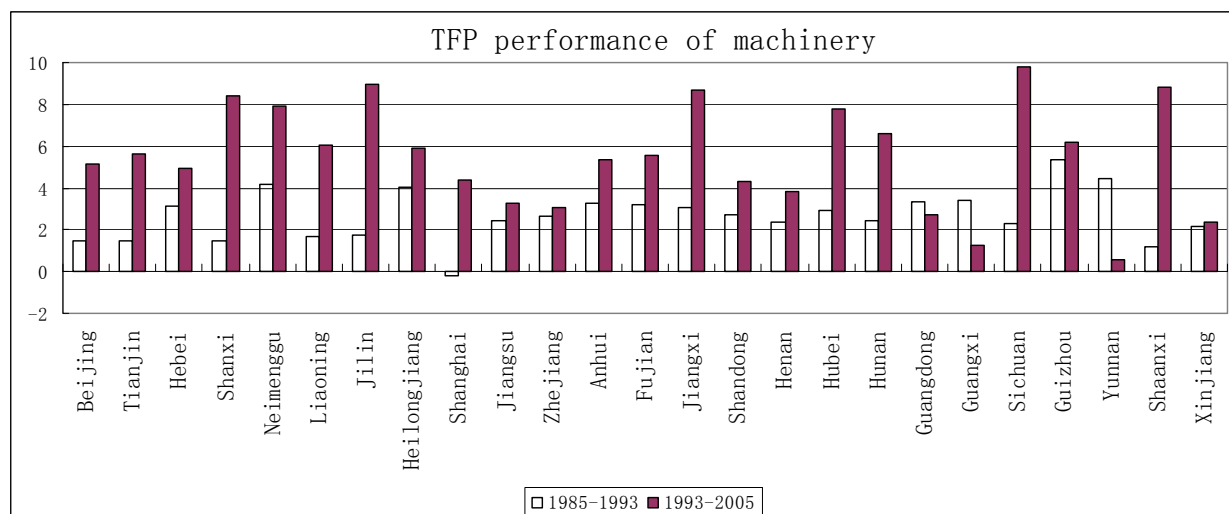
For capital goods, comparative advantages include endowment of natural resources, sufficient skilled labour, and better infrastructure for heavy industry. Taking machinery as an example, we can choose three regions with highest share of machinery in the east, middle and west of China respectively, their indices of TFP are presented in chart 7-7.

CHART 7-7: TFP INDICES OF SELECTED REGIONS OF MACHINERY



Shown by the chart, Shanghai experienced stable TFP growth during the period and significant growth during 1997-2000. For Henan, it is in the middle of China, with high share of machinery. However, even with very low level of labour productivity in 1985, Henan's TFP growth was still slow, which means that the reform was not helpful for Henan in developing machinery. In contrast, Shaanxi is one important industrial province in the west of China, also with low level of labour productivity in 1985, only accounting for 50% of Shanghai. Since 1996, TFP growth of Shaanxi became very quick. With almost the same labour productivity with Henan in 1985, Shaanxi's performance was much better after 1995. Comparing growth rate of all studied regions during two sub-periods after 1985, we come up with the following results as shown in Table 7-8.

CHART 7-8: ANNUAL COMPOUND GROWTH RATE OF TFP OF MACHINERY DURING TWO PERIODS (%)



From the result, it can be found that since the 1993's industrial reform, most regions' performance in TFP became better than pre-reform period, except Guangdong, Guangxi and Yunnan. Sichuan's performance was the best during 1993-2005. In contrast, Yunnan's TFP growth was the slowest. Most east rich regions with more FDI inflow achieved quick TFP growth in machinery, except Jiangsu and Zhejiang. These two provinces' labour productivity was very close to Shanghai, which means that they are very close to the frontier of China's productivity in machinery. So, it is difficult for them to achieve quick TFP growth continuously. For middle and west regions, their level of productivity was comparatively low and catch-up effect is expected. However, from the result, it can be found that only those regions enjoying comparative advantages can achieve fast growth of TFP, such as Sichuan, Jiangxi and Shaanxi.

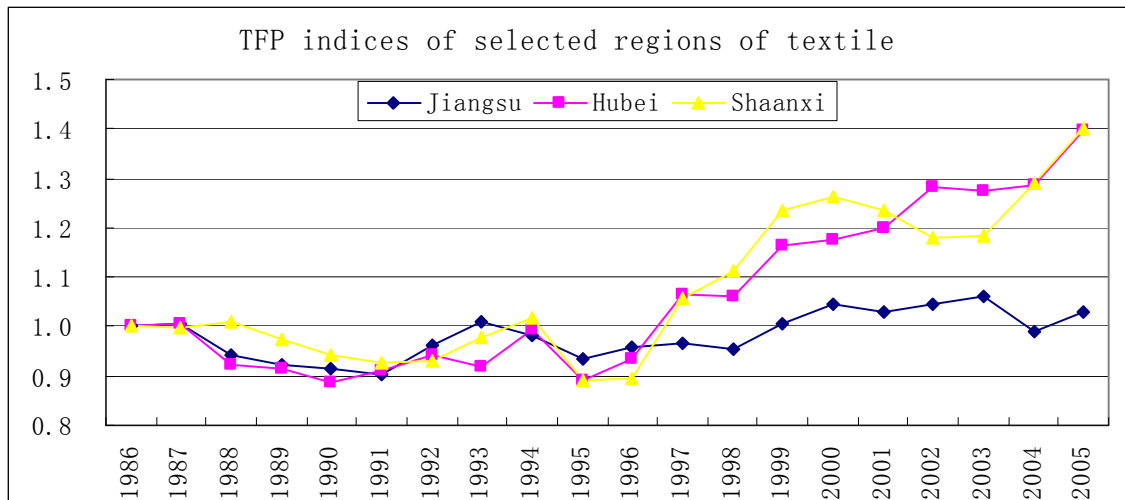
### 7.5.2 TFP performance of consumer goods sectors

For consumer goods sectors, they depend more on low labour cost and efficient market situation. Different from capital goods sectors, FDI is not expected to bring significant TFP growth. Instead, remove of price distortion and

establishment of market-supporting institutions are more helpful to efficiency improvement.

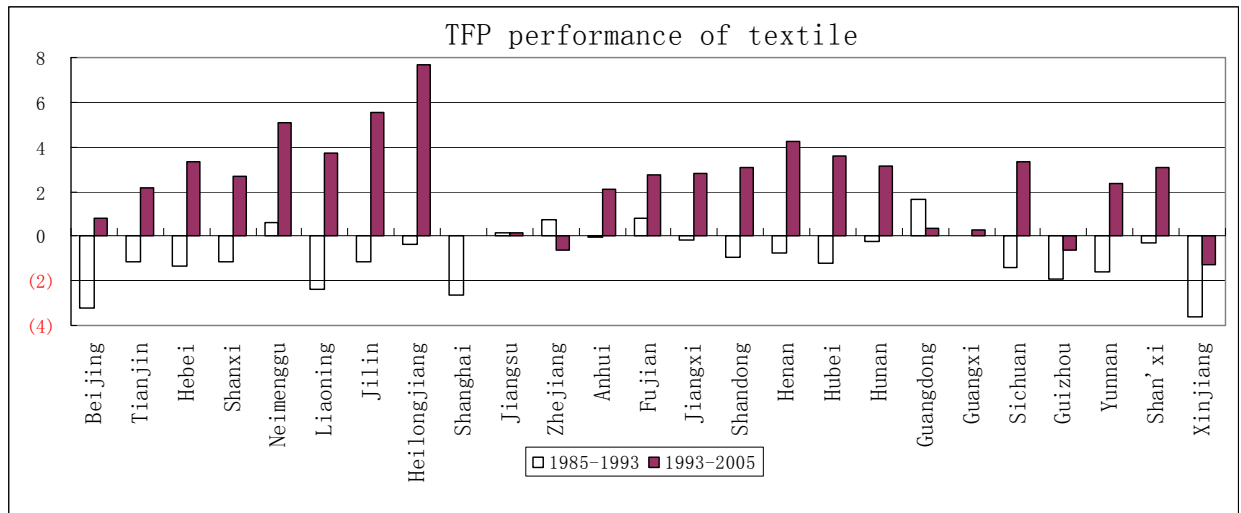
Taking textile as example, we can select Jiangsu, Hubei and Shaanxi to represent the east, middle and west zones of China, since their shares of textile are highest in the three zones.

CHART 7-9: TFP INDICES OF SELECTED REGIONS OF TEXTILE



Shown by chart 7-9, TPF performance of textile was clearly not as good as machinery. There was even no significant improvement for Jiangsu province during the period of 1986-2005. Situation of Hubei and Shaanxi were very close, both having experienced quick growth since 1997. Being close to the east, Hubei and Shaanxi can benefit more from market orientation by learning. For all studied regions, their TFP performance during the two sub-periods is as follows,

CHART 7-10: ANNUAL COMPOUND GROWTH RATE OF TFP OF TEXTILE DURING TWO PERIODS (%)

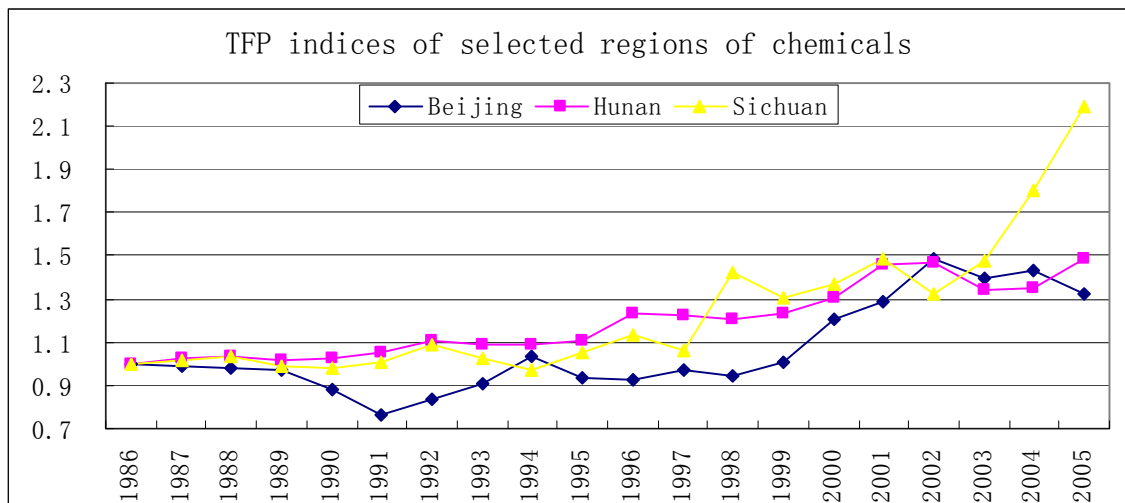


From Chart 7-10, it is obvious that most regions' TFP performance was better-off after the 1993's industrial reform. Performance of regions in the middle and northeast of China were better than the others except Zhejiang and Guangdong. With more complete market establishment and sufficient labour supply, the three provinces in northeast China were designed as base of heavy industry during central planning period. Light industries in these three provinces were left behind by other east regions. After the reform, they experienced strong catch-up of TFP in textile. For middle regions and some west regions, like Sichuan and Shaanxi, their market situation was also significantly improved during the post-reform period. Together by learning effect from the east, these regions achieved fast growth in TFP. In contrast, regions with highest level of labour productivity in textile, like Shanghai, Jiangsu and Zhejiang got little growth in TFP. This means that productivity frontier of China in textile did not expand during the twenty years. Improvement was only through catch-up effect of those less-developed regions.

### 7.5.3 TFP performance of material sectors

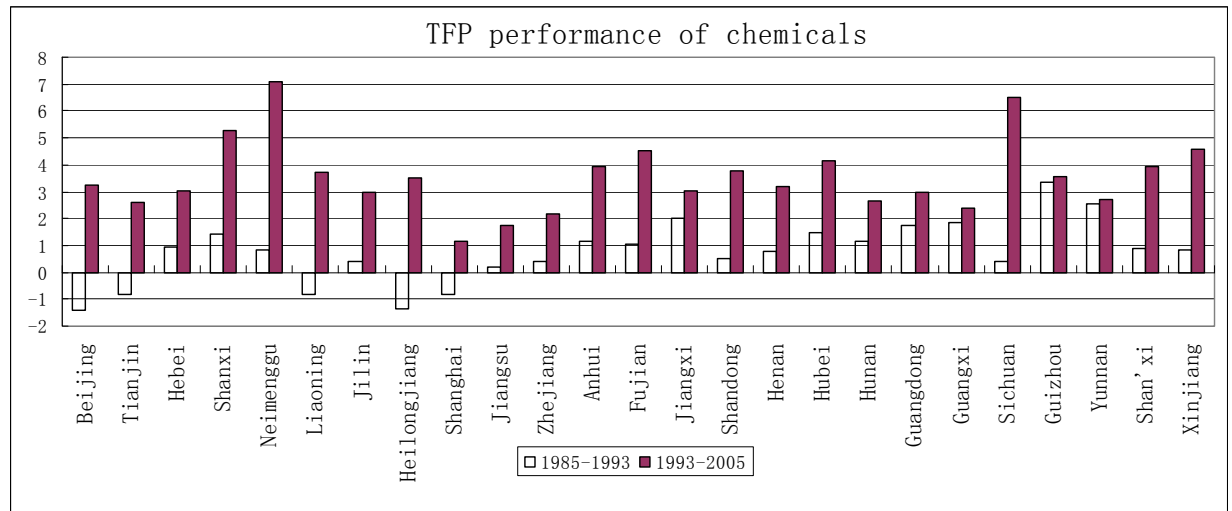
As the third type of manufacturing, material sectors experienced fast growth in China. As requirement by both capital goods and consumer goods sectors, demand of material was kept strong. For comparative advantage, material sectors require abundant supply of energy and resources, and low pollution cost. Taking chemicals as example of material sectors, we can pick up three regions which have highest share of chemicals in the three zones of China. Their indices of TFP of chemicals are presented in chart 7-11.

CHART 7-11: TFP INDICES OF SELECTED REGIONS OF CHEMICALS



Shown by Chart 7-11, TFP growth of these three regions in chemicals is comparatively stable. Only Sichuan experienced quick growth during 2003-2005. However, refer to their level of labour productivity in 1985, Sichuan and Hunan were much lower than Beijing, which means that catch-up effect was not significant for lagged regions. Comparing the two sub-periods during 1985-2005, regional annual compound growth rates of TFP is as following,

CHART 7-12: ANNUAL COMPOUND GROWTH RATE OF TFP OF CHEMICALS DURING TWO PERIODS (%)



From chart 7-12, every region was better-off after the 1993's industrial reform in TFP growth. Inner Mongolia, Sichuan and Shanxi achieved fastest growth. These three regions are all endowed with abundant natural resources, like oil and coal. Another important reason is that they are in lower level of economic development status than east region, which means that pollution costs are lower in these regions. In contrast, Shanghai, Jiangsu and Zhejiang are slowest in TFP growth of chemicals. There are two reasons behind this. First, the same as situation in other sectors, these three regions are in the productivity frontier of China, which means that it is more difficult for them to achieve quick growth. Second, with high level of economic development, pollution cost became higher in these regions.

To sum up the findings of this part, major sectors experienced faster improvement of TFP after 1993's industrial reform in most regions. With released control of the factor prices and SOEs, market was taking the role of resources allocation. Results have shown that with different resources endowment, regional performance became more diversified in different sectors.

On the other hand, sectors can perform better in the regions that they can enjoy comparative advantage. Furthermore, we can find significant catch-up effect across regions. Middle and west regions obviously improved more through learning from the east. In contrast, representing production frontier of Chinese industry, Shanghai and other east regions' TFP growth was much slower and more stable.

## 7.6 Convergence test of regional labour productivity

To know whether poor regions were catching up with rich ones or left further behind in productivity growth during post-reform period, we can test the convergence of different regions' labour productivity with Barro and Sala-i-Martin (1995)'s framework. There are two types of convergence in the literature, respectively sigma convergence and beta convergence. We can say that there is sigma convergence if cross sectional standard deviation of labour productivity or capital labour ratio is falling over time. There is beta convergence if poor regions grow faster than rich ones. According to Barro and Sla-i-Martin's work, beta convergence is a necessary but not a sufficient condition of sigma convergence and it can be estimated by the following formula,

$$(60) \quad \log Y_{iT} - \log Y_{i0} = A - (1 - e^{-\beta T}) \log Y_{i0} + \varepsilon_i$$

where  $Y_{i0}$  is the initial labour productivity,  $Y_{iT}$  is the labour productivity at the end of the period considered,  $T$  stands for the length of the period,  $\beta$  stands for the annual convergence rate,  $A$  is the intercept and  $\varepsilon_i$  is the error term.



Three time intervals were tried in estimating beta convergence. Shown from the results, for each period, convergence is significant within different regions. The regional dummy variable is significant for most periods and industries, except utilities in 1985-1993. During 1985-1993, the trend of convergence is quite weak for every major industry. Comparatively, convergence is strong in 1994-2005.

TABLE 7-7:  $\beta$ -CONVERGENCE ESTIMATED

Sector	Period	Without dummies	With dummies
All	1985-2005	1.85	0.99
	1985-1993	0.46	0.26
	1994-2005	3.21	1.62
Mining	1985-2005	1.68	1.38
	1985-1993	0.45	0.37
	1994-2005	2.86	2.30
Manufacturing	1985-2005	2.74	2.89
	1985-1993	0.45	0.63
	1994-2005	2.86	5.69
Utility	1985-2005	1.16	0.76
	1985-1993	0.29	0.25
	1994-2005	1.92	1.18

Note: all estimated  $\beta$  are significant at the level of 1%

Some conclusions can be drawn from the convergence test. Firstly, the economic reform did decrease the productivity disparity between regions. Poor regions were catching up with rich ones. Secondly, during the first stage of reform, the trend of convergence is comparatively weaker than the second stage. Marketization made capital and labour flow more freely, so poor regions were able to make use of local comparative advantages. Thirdly, for the three major industries, convergence is the fastest in manufacturing, then mining. Since utilities were still controlled by the government, convergence of utilities is the slowest.

TABLE 7-8: SECTORAL SHARES OF OUTPUT, NET CAPITAL STOCK AND CAPITAL INPUT

		Beijing									Tianjin								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.08	0.08	0.05	0.05	0.07	0.04	0.05	0.07	0.09	0.05	0.08	0.07	0.04	0.06	0.04	0.05	0.05	0.06
2	TOB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	TEX	0.09	0.04	0.01	0.05	0.04	0.00	0.08	0.04	0.03	0.15	0.05	0.02	0.10	0.05	0.02	0.13	0.09	0.04
4	WEA	0.04	0.03	0.01	0.01	0.01	0.00	0.06	0.03	0.07	0.03	0.03	0.02	0.01	0.01	0.01	0.05	0.03	0.08
5	LEA	0.01	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.02
6	WDF	0.02	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.02
7	PAP	0.04	0.02	0.01	0.04	0.03	0.03	0.05	0.05	0.03	0.03	0.02	0.01	0.02	0.03	0.02	0.04	0.04	0.04
8	PET	0.01	0.06	0.03	0.01	0.09	0.04	0.01	0.03	0.02	0.03	0.03	0.03	0.02	0.05	0.07	0.01	0.02	0.01
9	CHE	0.17	0.09	0.05	0.18	0.06	0.03	0.07	0.08	0.07	0.14	0.10	0.07	0.21	0.08	0.06	0.09	0.09	0.10
10	RBP	0.04	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.03	0.05	0.03	0.02	0.02	0.02	0.02	0.04	0.04	0.05
11	SCG	0.04	0.03	0.02	0.07	0.04	0.03	0.08	0.06	0.06	0.03	0.02	0.02	0.04	0.03	0.02	0.06	0.04	0.02
12	PEM	0.09	0.12	0.05	0.12	0.22	0.05	0.06	0.14	0.07	0.08	0.11	0.07	0.08	0.15	0.09	0.04	0.06	0.08
13	MET	0.03	0.03	0.02	0.02	0.01	0.01	0.04	0.03	0.04	0.05	0.04	0.03	0.04	0.03	0.01	0.07	0.06	0.06
14	MCH	0.11	0.08	0.07	0.13	0.06	0.04	0.17	0.12	0.11	0.13	0.08	0.07	0.12	0.06	0.04	0.18	0.13	0.08
15	TRS	0.07	0.13	0.12	0.05	0.06	0.05	0.07	0.10	0.09	0.04	0.12	0.20	0.04	0.04	0.06	0.05	0.08	0.08
16	ELE	0.05	0.03	0.04	0.02	0.02	0.01	0.05	0.05	0.04	0.05	0.04	0.05	0.03	0.03	0.04	0.06	0.05	0.05
17	ICT	0.06	0.17	0.45	0.04	0.06	0.13	0.06	0.06	0.11	0.06	0.18	0.28	0.03	0.06	0.11	0.05	0.05	0.11
18	INS	0.01	0.02	0.03	0.02	0.01	0.01	0.03	0.03	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.04	0.02
	<i>Utilities</i>	0.01	0.01	0.01	0.03	0.01	0.00	0.04	0.03	0.02	0.03	0.02	0.02	0.09	0.15	0.21	0.03	0.06	0.05
	<i>Mining</i>	0.96	0.97	0.97	0.87	0.82	0.50	0.95	0.93	0.92	0.95	0.96	0.98	0.82	0.71	0.61	0.96	0.91	0.92
	<i>Manufacturing</i>	0.03	0.02	0.03	0.10	0.17	0.49	0.02	0.03	0.06	0.02	0.02	0.00	0.10	0.13	0.18	0.01	0.03	0.03

TABLE 7-8, CONT'D

		Hebei									Shanxi								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.07	0.08	0.09	0.04	0.05	0.04	0.05	0.06	0.07	0.06	0.05	0.04	0.02	0.03	0.02	0.04	0.03	0.03
2	TOB	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	TEX	0.20	0.10	0.05	0.07	0.07	0.03	0.11	0.09	0.07	0.07	0.04	0.01	0.03	0.02	0.00	0.06	0.04	0.02
4	WEA	0.03	0.02	0.01	0.01	0.01	0.00	0.03	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
5	LEA	0.01	0.02	0.02	0.00	0.01	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	WDF	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
7	PAP	0.03	0.04	0.04	0.02	0.02	0.03	0.03	0.04	0.05	0.02	0.02	0.01	0.01	0.01	0.00	0.03	0.02	0.01
8	PET	0.02	0.02	0.02	0.02	0.02	0.03	0.01	0.01	0.01	0.01	0.04	0.11	0.01	0.02	0.10	0.00	0.02	0.07
9	CHE	0.09	0.14	0.11	0.09	0.09	0.06	0.07	0.09	0.09	0.10	0.12	0.10	0.10	0.07	0.06	0.08	0.08	0.07
10	RBP	0.03	0.04	0.03	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.02	0.01	0.01
11	SCG	0.07	0.08	0.05	0.08	0.08	0.06	0.14	0.10	0.09	0.03	0.04	0.03	0.04	0.04	0.03	0.07	0.06	0.05
12	PEM	0.07	0.13	0.26	0.08	0.12	0.22	0.05	0.10	0.15	0.13	0.17	0.29	0.11	0.15	0.18	0.08	0.11	0.13
13	MET	0.03	0.04	0.04	0.01	0.02	0.01	0.04	0.03	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.03	0.04	0.01
14	MCH	0.11	0.09	0.07	0.11	0.06	0.03	0.15	0.12	0.08	0.12	0.09	0.09	0.12	0.08	0.03	0.15	0.11	0.06
15	TRS	0.03	0.04	0.05	0.03	0.03	0.02	0.04	0.04	0.03	0.02	0.03	0.02	0.02	0.02	0.01	0.03	0.03	0.02
16	ELE	0.02	0.04	0.04	0.01	0.02	0.01	0.02	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.00	0.02	0.02	0.01
17	ICT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00
18	INS	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<i>Utilities</i>	0.11	0.06	0.03	0.21	0.16	0.13	0.18	0.15	0.15	0.24	0.24	0.18	0.29	0.31	0.27	0.32	0.35	0.45
	<i>Mining</i>	0.83	0.90	0.92	0.61	0.63	0.58	0.80	0.80	0.79	0.69	0.68	0.74	0.52	0.47	0.44	0.65	0.61	0.50
	<i>Manufacturing</i>	0.06	0.04	0.04	0.17	0.21	0.29	0.03	0.05	0.06	0.07	0.07	0.08	0.19	0.22	0.29	0.03	0.04	0.05

TABLE 7-8, CONT'D

		Inner Mongolia									Liaoning								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.16	0.12	0.22	0.07	0.08	0.05	0.09	0.10	0.12	0.05	0.06	0.08	0.03	0.04	0.04	0.04	0.05	0.07
2	TOB	0.01	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	TEX	0.09	0.10	0.07	0.03	0.05	0.01	0.06	0.06	0.06	0.09	0.04	0.02	0.05	0.04	0.01	0.07	0.05	0.03
4	WEA	0.02	0.01	0.00	0.00	0.01	0.00	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.00	0.03	0.03	0.04
5	LEA	0.02	0.01	0.00	0.01	0.01	0.00	0.03	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
6	WDF	0.02	0.01	0.01	0.01	0.01	0.00	0.05	0.06	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.02
7	PAP	0.03	0.02	0.02	0.02	0.02	0.01	0.03	0.04	0.03	0.03	0.02	0.01	0.02	0.02	0.02	0.03	0.04	0.03
8	PET	0.00	0.01	0.01	0.00	0.02	0.01	0.00	0.00	0.02	0.09	0.06	0.05	0.04	0.07	0.05	0.01	0.02	0.02
9	CHE	0.06	0.09	0.08	0.04	0.05	0.04	0.05	0.07	0.08	0.10	0.11	0.08	0.13	0.10	0.07	0.06	0.08	0.07
10	RBP	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03
11	SCG	0.05	0.06	0.03	0.05	0.05	0.03	0.10	0.07	0.05	0.04	0.05	0.04	0.06	0.05	0.04	0.10	0.08	0.06
12	PEM	0.14	0.16	0.19	0.20	0.19	0.12	0.09	0.11	0.16	0.16	0.16	0.14	0.19	0.18	0.20	0.11	0.11	0.14
13	MET	0.03	0.02	0.00	0.01	0.01	0.00	0.04	0.03	0.01	0.03	0.04	0.02	0.02	0.01	0.01	0.04	0.04	0.02
14	MCH	0.13	0.11	0.05	0.08	0.07	0.02	0.13	0.11	0.07	0.13	0.12	0.11	0.11	0.09	0.05	0.19	0.16	0.12
15	TRS	0.01	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.05	0.06	0.11	0.04	0.04	0.05	0.06	0.06	0.07
16	ELE	0.02	0.02	0.00	0.01	0.01	0.00	0.02	0.01	0.01	0.05	0.06	0.05	0.02	0.04	0.02	0.04	0.04	0.04
17	ICT	0.02	0.02	0.11	0.00	0.01	0.00	0.01	0.01	0.01	0.02	0.05	0.15	0.01	0.03	0.02	0.02	0.02	0.03
18	INS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.02	0.01
	<i>Utilities</i>	0.10	0.11	0.08	0.20	0.17	0.10	0.20	0.20	0.25	0.05	0.06	0.02	0.13	0.13	0.14	0.11	0.12	0.14
	<i>Mining</i>	0.83	0.82	0.83	0.55	0.58	0.32	0.76	0.73	0.65	0.92	0.91	0.93	0.76	0.74	0.62	0.87	0.84	0.79
	<i>Manufacturing</i>	0.07	0.07	0.09	0.25	0.26	0.58	0.04	0.07	0.11	0.04	0.03	0.05	0.11	0.13	0.24	0.02	0.03	0.07

TABLE 7-8, CONT'D

		Jilin									Heilongjiang								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.11	0.09	0.10	0.06	0.08	0.08	0.07	0.08	0.09	0.00	0.00	0.00	0.10	0.10	0.09	0.09	0.10	0.11
2	TOB	0.02	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01
3	TEX	0.06	0.03	0.01	0.04	0.03	0.00	0.05	0.04	0.02	0.13	0.14	0.14	0.05	0.05	0.01	0.06	0.05	0.03
4	WEA	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.02	0.01	0.00
5	LEA	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.06	0.03	0.01	0.00	0.00	0.00	0.01	0.01	0.00
6	WDF	0.02	0.02	0.02	0.02	0.02	0.01	0.07	0.06	0.08	0.02	0.01	0.00	0.04	0.03	0.01	0.07	0.08	0.03
7	PAP	0.05	0.03	0.01	0.03	0.03	0.01	0.05	0.06	0.03	0.01	0.01	0.00	0.04	0.02	0.03	0.04	0.04	0.04
8	PET	0.02	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.03	0.04	0.01	0.04	0.10	0.13	0.01	0.02	0.04
9	CHE	0.16	0.19	0.19	0.20	0.16	0.15	0.08	0.12	0.13	0.03	0.03	0.03	0.04	0.06	0.06	0.03	0.05	0.06
10	RBP	0.04	0.02	0.01	0.02	0.01	0.00	0.03	0.03	0.01	0.07	0.08	0.10	0.02	0.02	0.00	0.02	0.02	0.01
11	SCG	0.05	0.05	0.02	0.06	0.06	0.04	0.11	0.07	0.05	0.05	0.08	0.13	0.07	0.05	0.03	0.11	0.06	0.04
12	PEM	0.05	0.06	0.04	0.03	0.06	0.04	0.03	0.05	0.04	0.03	0.03	0.01	0.04	0.03	0.02	0.02	0.03	0.03
13	MET	0.03	0.02	0.00	0.02	0.01	0.00	0.04	0.03	0.01	0.04	0.04	0.01	0.01	0.02	0.01	0.04	0.03	0.01
14	MCH	0.10	0.05	0.02	0.09	0.04	0.01	0.12	0.10	0.05	0.03	0.04	0.03	0.14	0.09	0.03	0.16	0.15	0.09
15	TRS	0.13	0.27	0.45	0.05	0.09	0.17	0.08	0.11	0.18	0.03	0.03	0.00	0.04	0.04	0.04	0.04	0.04	0.05
16	ELE	0.02	0.02	0.01	0.01	0.01	0.00	0.02	0.02	0.01	0.12	0.09	0.16	0.02	0.02	0.01	0.04	0.03	0.02
17	ICT	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.06	0.17	0.00	0.01	0.01	0.01	0.01	0.00
18	INS	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.04	0.03	0.04	0.01	0.00	0.00	0.01	0.01	0.01
	<i>Utilities</i>	0.05	0.04	0.02	0.14	0.12	0.19	0.14	0.13	0.16	0.26	0.22	0.14	0.18	0.16	0.10	0.18	0.20	0.25
	<i>Mining</i>	0.90	0.91	0.94	0.67	0.64	0.54	0.83	0.83	0.73	0.74	0.77	0.85	0.68	0.65	0.50	0.79	0.76	0.59
	<i>Manufacturing</i>	0.05	0.05	0.04	0.20	0.24	0.27	0.02	0.04	0.11	0.01	0.01	0.01	0.14	0.20	0.40	0.03	0.04	0.16

TABLE 7-8, CONT'D

		Shanghai									Jiangsu								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.04	0.04	0.03	0.03	0.03	0.02	0.03	0.04	0.04	0.09	0.05	0.04	0.06	0.05	0.02	0.05	0.07	0.04
2	TOB	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	TEX	0.18	0.07	0.01	0.10	0.06	0.01	0.16	0.10	0.05	0.24	0.16	0.08	0.16	0.15	0.08	0.16	0.14	0.13
4	WEA	0.03	0.04	0.02	0.01	0.02	0.01	0.05	0.06	0.09	0.02	0.04	0.03	0.01	0.02	0.02	0.04	0.04	0.09
5	LEA	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.03	0.01	0.02	0.01	0.01	0.01	0.00	0.02	0.01	0.02
6	WDF	0.01	0.01	0.02	0.01	0.00	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
7	PAP	0.02	0.02	0.01	0.02	0.02	0.02	0.03	0.04	0.03	0.02	0.02	0.04	0.02	0.02	0.07	0.03	0.03	0.03
8	PET	0.02	0.01	0.01	0.02	0.02	0.05	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00
9	CHE	0.13	0.13	0.08	0.18	0.12	0.08	0.07	0.09	0.07	0.11	0.14	0.13	0.12	0.16	0.12	0.07	0.11	0.09
10	RBP	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.06	0.04	0.04	0.03	0.03	0.03	0.02	0.04	0.03	0.04
11	SCG	0.02	0.02	0.02	0.03	0.03	0.03	0.05	0.04	0.03	0.06	0.05	0.03	0.08	0.06	0.04	0.16	0.06	0.04
12	PEM	0.11	0.12	0.07	0.19	0.27	0.16	0.07	0.07	0.04	0.04	0.06	0.05	0.04	0.05	0.08	0.03	0.04	0.05
13	MET	0.04	0.04	0.03	0.03	0.02	0.02	0.06	0.06	0.07	0.03	0.04	0.03	0.03	0.03	0.02	0.04	0.03	0.05
14	MCH	0.14	0.10	0.11	0.15	0.07	0.06	0.21	0.16	0.13	0.12	0.12	0.10	0.13	0.09	0.06	0.15	0.15	0.12
15	TRS	0.03	0.13	0.12	0.05	0.06	0.07	0.05	0.08	0.07	0.03	0.06	0.05	0.04	0.04	0.04	0.03	0.06	0.05
16	ELE	0.06	0.08	0.09	0.03	0.04	0.03	0.06	0.07	0.08	0.05	0.08	0.07	0.03	0.04	0.04	0.04	0.04	0.06
17	ICT	0.06	0.10	0.27	0.04	0.04	0.18	0.05	0.04	0.11	0.06	0.06	0.23	0.05	0.04	0.15	0.04	0.05	0.13
18	INS	0.02	0.02	0.03	0.01	0.01	0.00	0.03	0.04	0.03	0.01	0.01	0.03	0.01	0.01	0.01	0.02	0.02	0.02
	<i>Utilities</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.06	0.03	0.01	0.05	0.06	0.02
	<i>Mining</i>	0.98	0.98	0.98	0.94	0.86	0.79	0.99	0.98	0.98	0.97	0.98	0.98	0.84	0.84	0.79	0.93	0.90	0.95
	<i>Manufacturing</i>	0.02	0.02	0.02	0.06	0.14	0.21	0.01	0.02	0.02	0.02	0.01	0.01	0.10	0.13	0.20	0.01	0.03	0.02

TABLE 7-8, CONT'D

		Zhejiang									Anhui								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.11	0.06	0.05	0.09	0.07	0.03	0.08	0.10	0.03	0.16	0.13	0.07	0.06	0.08	0.06	0.09	0.10	0.10
2	TOB	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.06	0.03	0.02	0.01	0.02	0.02	0.01	0.01	0.01
3	TEX	0.23	0.19	0.13	0.14	0.17	0.13	0.18	0.13	0.14	0.13	0.09	0.04	0.07	0.07	0.03	0.10	0.10	0.07
4	WEA	0.03	0.06	0.04	0.01	0.03	0.03	0.05	0.04	0.10	0.02	0.02	0.01	0.00	0.01	0.00	0.02	0.02	0.03
5	LEA	0.01	0.03	0.03	0.01	0.01	0.01	0.02	0.03	0.08	0.01	0.02	0.01	0.00	0.01	0.00	0.01	0.01	0.02
6	WDF	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.03	0.01	0.02	0.02	0.01	0.01	0.01	0.03	0.02	0.02
7	PAP	0.03	0.03	0.05	0.03	0.03	0.07	0.03	0.04	0.05	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04	0.03
8	PET	0.02	0.01	0.01	0.05	0.02	0.01	0.00	0.00	0.00	0.03	0.02	0.02	0.04	0.03	0.02	0.01	0.01	0.00
9	CHE	0.08	0.11	0.19	0.09	0.10	0.09	0.05	0.10	0.06	0.08	0.10	0.11	0.09	0.08	0.06	0.06	0.08	0.08
10	RBP	0.06	0.06	0.05	0.04	0.04	0.04	0.05	0.04	0.05	0.04	0.05	0.07	0.02	0.02	0.04	0.03	0.03	0.03
11	SCG	0.05	0.05	0.04	0.08	0.07	0.05	0.13	0.06	0.03	0.06	0.08	0.04	0.07	0.08	0.08	0.17	0.16	0.06
12	PEM	0.03	0.04	0.05	0.03	0.03	0.03	0.02	0.03	0.02	0.09	0.06	0.11	0.14	0.11	0.15	0.07	0.05	0.07
13	MET	0.03	0.04	0.02	0.02	0.02	0.02	0.04	0.04	0.05	0.02	0.03	0.01	0.01	0.01	0.01	0.03	0.03	0.02
14	MCH	0.11	0.10	0.06	0.11	0.08	0.06	0.14	0.14	0.12	0.08	0.10	0.06	0.07	0.06	0.03	0.11	0.09	0.07
15	TRS	0.03	0.04	0.04	0.03	0.03	0.04	0.03	0.04	0.06	0.03	0.04	0.09	0.03	0.02	0.06	0.03	0.03	0.05
16	ELE	0.08	0.08	0.08	0.03	0.04	0.05	0.06	0.06	0.08	0.03	0.07	0.14	0.01	0.03	0.03	0.02	0.03	0.05
17	ICT	0.03	0.05	0.09	0.02	0.02	0.05	0.02	0.03	0.04	0.01	0.02	0.07	0.01	0.01	0.01	0.01	0.01	0.02
18	INS	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
	<i>Utilities</i>	0.01	0.01	0.00	0.03	0.01	0.00	0.04	0.03	0.01	0.05	0.05	0.02	0.16	0.14	0.13	0.14	0.15	0.23
	<i>Mining</i>	0.97	0.98	0.95	0.79	0.79	0.73	0.95	0.93	0.97	0.91	0.92	0.93	0.67	0.69	0.64	0.84	0.83	0.72
	<i>Manufacturing</i>	0.02	0.02	0.04	0.19	0.20	0.27	0.02	0.04	0.02	0.05	0.03	0.05	0.17	0.17	0.23	0.02	0.03	0.05

TABLE 7-8, CONT'D

		Fujian									Jiangxi								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.18	0.14	0.07	0.15	0.10	0.06	0.13	0.11	0.07	0.13	0.09	0.06	0.07	0.07	0.04	0.07	0.08	0.06
2	TOB	0.03	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.01	0.02	0.00	0.00	0.01
3	TEX	0.09	0.06	0.06	0.05	0.05	0.07	0.07	0.05	0.06	0.10	0.07	0.06	0.05	0.06	0.02	0.07	0.07	0.06
4	WEA	0.03	0.06	0.05	0.01	0.03	0.02	0.05	0.07	0.11	0.02	0.01	0.03	0.00	0.00	0.01	0.02	0.01	0.05
5	LEA	0.01	0.08	0.05	0.00	0.03	0.02	0.02	0.10	0.18	0.01	0.02	0.01	0.00	0.01	0.00	0.01	0.02	0.02
6	WDF	0.03	0.03	0.02	0.02	0.02	0.01	0.07	0.06	0.04	0.02	0.03	0.02	0.02	0.02	0.01	0.04	0.04	0.03
7	PAP	0.06	0.05	0.05	0.07	0.06	0.08	0.07	0.07	0.05	0.03	0.04	0.03	0.03	0.04	0.04	0.04	0.05	0.03
8	PET	0.00	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.00	0.01
9	CHE	0.11	0.08	0.07	0.12	0.10	0.07	0.08	0.07	0.03	0.08	0.12	0.14	0.08	0.10	0.08	0.06	0.07	0.11
10	RBP	0.06	0.07	0.05	0.03	0.04	0.03	0.05	0.04	0.06	0.03	0.02	0.01	0.01	0.02	0.01	0.02	0.02	0.02
11	SCG	0.04	0.06	0.06	0.07	0.09	0.07	0.09	0.09	0.08	0.07	0.08	0.06	0.07	0.09	0.08	0.14	0.14	0.09
12	PEM	0.03	0.03	0.04	0.04	0.03	0.05	0.03	0.03	0.02	0.08	0.10	0.23	0.07	0.09	0.18	0.05	0.06	0.09
13	MET	0.02	0.03	0.02	0.01	0.02	0.01	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.01
14	MCH	0.09	0.05	0.04	0.07	0.03	0.02	0.11	0.07	0.03	0.10	0.08	0.02	0.09	0.06	0.01	0.12	0.09	0.04
15	TRS	0.02	0.03	0.04	0.02	0.02	0.03	0.03	0.03	0.02	0.06	0.09	0.10	0.06	0.04	0.06	0.06	0.06	0.05
16	ELE	0.04	0.04	0.05	0.02	0.03	0.02	0.03	0.03	0.04	0.03	0.04	0.06	0.02	0.03	0.01	0.03	0.03	0.03
17	ICT	0.08	0.11	0.28	0.02	0.03	0.07	0.02	0.03	0.07	0.04	0.04	0.06	0.02	0.02	0.02	0.02	0.02	0.03
18	INS	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
	<i>Utilities</i>	0.02	0.02	0.01	0.05	0.02	0.01	0.07	0.05	0.03	0.08	0.07	0.04	0.17	0.12	0.05	0.18	0.15	0.12
	<i>Mining</i>	0.94	0.95	0.97	0.72	0.72	0.66	0.89	0.90	0.94	0.87	0.89	0.93	0.63	0.68	0.63	0.79	0.80	0.78
	<i>Manufacturing</i>	0.04	0.03	0.02	0.24	0.27	0.33	0.04	0.05	0.04	0.04	0.04	0.03	0.20	0.20	0.33	0.04	0.05	0.10



TABLE 7-8, CONT'D

		Shandong									Henan								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.10	0.13	0.12	0.07	0.09	0.08	0.07	0.09	0.13	0.09	0.13	0.22	0.04	0.07	0.07	0.06	0.08	0.12
2	TOB	0.03	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.07	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.01
3	TEX	0.22	0.10	0.08	0.10	0.09	0.07	0.14	0.12	0.11	0.14	0.07	0.10	0.06	0.06	0.03	0.11	0.08	0.06
4	WEA	0.02	0.02	0.02	0.01	0.01	0.01	0.03	0.03	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.01
5	LEA	0.01	0.02	0.01	0.01	0.01	0.00	0.02	0.03	0.02	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.02	0.01
6	WDF	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
7	PAP	0.03	0.03	0.07	0.03	0.03	0.08	0.04	0.04	0.07	0.03	0.03	0.04	0.02	0.02	0.04	0.04	0.05	0.06
8	PET	0.04	0.04	0.02	0.03	0.05	0.02	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.00	0.01	0.01
9	CHE	0.07	0.10	0.12	0.07	0.09	0.10	0.06	0.08	0.09	0.09	0.13	0.09	0.09	0.09	0.07	0.07	0.09	0.08
10	RBP	0.04	0.05	0.03	0.03	0.03	0.01	0.03	0.03	0.03	0.03	0.03	0.00	0.01	0.01	0.01	0.02	0.02	0.02
11	SCG	0.04	0.08	0.07	0.07	0.07	0.06	0.12	0.06	0.07	0.05	0.09	0.09	0.06	0.08	0.06	0.11	0.12	0.10
12	PEM	0.03	0.04	0.06	0.04	0.04	0.10	0.03	0.04	0.04	0.06	0.06	0.10	0.07	0.07	0.11	0.04	0.05	0.06
13	MET	0.03	0.03	0.02	0.02	0.02	0.01	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.03	0.02	0.01
14	MCH	0.11	0.11	0.10	0.10	0.06	0.05	0.15	0.11	0.10	0.14	0.12	0.07	0.14	0.08	0.04	0.17	0.14	0.09
15	TRS	0.03	0.05	0.05	0.03	0.03	0.02	0.04	0.04	0.04	0.02	0.04	0.02	0.02	0.02	0.01	0.03	0.03	0.03
16	ELE	0.03	0.05	0.08	0.01	0.02	0.03	0.02	0.03	0.04	0.04	0.04	0.01	0.02	0.02	0.02	0.03	0.03	0.02
17	ICT	0.02	0.03	0.09	0.01	0.01	0.02	0.01	0.02	0.03	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01
18	INS	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01
	<i>Utilities</i>	0.10	0.06	0.03	0.23	0.20	0.14	0.16	0.17	0.10	0.10	0.07	0.10	0.25	0.20	0.12	0.18	0.17	0.21
	<i>Mining</i>	0.86	0.91	0.95	0.64	0.67	0.68	0.82	0.79	0.86	0.85	0.88	0.81	0.58	0.62	0.52	0.79	0.79	0.72
	<i>Manufacturing</i>	0.04	0.02	0.02	0.13	0.13	0.17	0.02	0.04	0.04	0.06	0.05	0.09	0.17	0.18	0.36	0.03	0.04	0.07

TABLE 7-8, CONT'D

		Hubei									Hunan								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.09	0.08	0.10	0.04	0.05	0.03	0.06	0.07	0.08	0.11	0.09	0.09	0.06	0.05	0.04	0.06	0.05	0.08
2	TOB	0.02	0.03	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.04	0.07	0.03	0.01	0.04	0.03	0.01	0.01	0.01
3	TEX	0.18	0.11	0.07	0.09	0.08	0.02	0.14	0.12	0.11	0.10	0.05	0.03	0.07	0.05	0.02	0.07	0.06	0.05
4	WEA	0.03	0.04	0.03	0.01	0.01	0.00	0.04	0.03	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.02	0.01	0.01
5	LEA	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.02	0.01	0.01	0.01	0.00	0.02	0.02	0.01
6	WDF	0.01	0.01	0.02	0.01	0.01	0.00	0.02	0.02	0.01	0.01	0.02	0.03	0.01	0.01	0.00	0.02	0.02	0.02
7	PAP	0.03	0.03	0.03	0.02	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.03	0.06	0.04	0.05	0.06
8	PET	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.04	0.04	0.03	0.01	0.05	0.02	0.01	0.01	0.01
9	CHE	0.07	0.11	0.12	0.07	0.07	0.06	0.06	0.08	0.11	0.12	0.12	0.10	0.13	0.09	0.08	0.08	0.09	0.14
10	RBP	0.03	0.03	0.02	0.02	0.02	0.01	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.00	0.02	0.02	0.01
11	SCG	0.05	0.07	0.08	0.06	0.06	0.04	0.13	0.11	0.07	0.06	0.09	0.11	0.08	0.09	0.04	0.13	0.14	0.11
12	PEM	0.12	0.10	0.07	0.21	0.18	0.11	0.08	0.08	0.10	0.09	0.09	0.11	0.08	0.09	0.13	0.05	0.07	0.10
13	MET	0.03	0.04	0.03	0.01	0.02	0.01	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.03	0.02	0.02
14	MCH	0.08	0.07	0.07	0.09	0.06	0.02	0.13	0.11	0.07	0.10	0.09	0.06	0.11	0.08	0.05	0.14	0.12	0.08
15	TRS	0.11	0.14	0.15	0.09	0.10	0.09	0.08	0.10	0.12	0.05	0.07	0.05	0.04	0.04	0.03	0.05	0.05	0.05
16	ELE	0.03	0.03	0.03	0.01	0.02	0.01	0.03	0.03	0.02	0.04	0.05	0.04	0.02	0.03	0.02	0.04	0.04	0.03
17	ICT	0.02	0.02	0.04	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.04	0.02	0.01	0.04	0.02	0.01	0.01
18	INS	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01
	<i>Utilities</i>	0.02	0.03	0.04	0.04	0.05	0.03	0.05	0.06	0.06	0.05	0.05	0.09	0.10	0.06	0.03	0.16	0.14	0.13
	<i>Mining</i>	0.94	0.94	0.93	0.76	0.75	0.47	0.93	0.90	0.87	0.91	0.91	0.86	0.73	0.73	0.59	0.81	0.82	0.80
	<i>Manufacturing</i>	0.04	0.03	0.04	0.19	0.20	0.49	0.03	0.04	0.07	0.04	0.04	0.05	0.17	0.21	0.38	0.03	0.04	0.07

TABLE 7-8, CONT'D

		Guangdong									Guangxi								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.12	0.08	0.02	0.13	0.08	0.04	0.09	0.09	0.03	0.19	0.18	0.17	0.14	0.16	0.12	0.14	0.13	0.14
2	TOB	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.03	0.02	0.01	0.01	0.02	0.01	0.01	0.00
3	TEX	0.10	0.06	0.02	0.07	0.06	0.04	0.10	0.05	0.05	0.12	0.04	0.02	0.05	0.04	0.01	0.08	0.05	0.04
4	WEA	0.03	0.05	0.02	0.02	0.03	0.02	0.06	0.09	0.08	0.02	0.01	0.00	0.00	0.01	0.00	0.02	0.02	0.00
5	LEA	0.01	0.04	0.01	0.01	0.02	0.01	0.02	0.06	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
6	WDF	0.02	0.02	0.01	0.01	0.01	0.01	0.04	0.02	0.03	0.01	0.02	0.02	0.01	0.01	0.01	0.03	0.03	0.03
7	PAP	0.03	0.03	0.03	0.04	0.03	0.06	0.04	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.07	0.04	0.06	0.07
8	PET	0.05	0.01	0.01	0.05	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
9	CHE	0.09	0.09	0.05	0.07	0.07	0.05	0.06	0.07	0.03	0.10	0.11	0.11	0.11	0.08	0.07	0.08	0.09	0.12
10	RBP	0.06	0.05	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.04	0.03	0.01	0.02	0.02	0.00	0.02	0.02	0.02
11	SCG	0.04	0.06	0.03	0.08	0.10	0.04	0.10	0.08	0.04	0.05	0.10	0.06	0.07	0.13	0.06	0.11	0.16	0.13
12	PEM	0.04	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.02	0.04	0.08	0.13	0.05	0.12	0.14	0.04	0.07	0.11
13	MET	0.04	0.05	0.04	0.02	0.03	0.03	0.06	0.04	0.06	0.02	0.03	0.01	0.01	0.01	0.00	0.03	0.02	0.01
14	MCH	0.08	0.03	0.02	0.07	0.03	0.03	0.12	0.06	0.04	0.10	0.09	0.07	0.08	0.06	0.01	0.12	0.09	0.05
15	TRS	0.03	0.05	0.04	0.04	0.03	0.03	0.04	0.04	0.02	0.04	0.08	0.20	0.03	0.04	0.05	0.04	0.04	0.06
16	ELE	0.10	0.10	0.12	0.03	0.05	0.07	0.06	0.07	0.13	0.06	0.03	0.03	0.02	0.02	0.01	0.03	0.03	0.02
17	ICT	0.08	0.18	0.49	0.04	0.06	0.16	0.03	0.09	0.20	0.02	0.02	0.04	0.01	0.01	0.01	0.02	0.01	0.01
18	INS	0.01	0.02	0.02	0.00	0.01	0.02	0.01	0.02	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
	<i>Utilities</i>	0.02	0.01	0.00	0.07	0.01	0.00	0.06	0.03	0.00	0.04	0.06	0.02	0.10	0.05	0.02	0.12	0.11	0.06
	<i>Mining</i>	0.95	0.97	0.98	0.76	0.69	0.69	0.91	0.91	0.98	0.90	0.91	0.93	0.65	0.75	0.57	0.84	0.84	0.84
	<i>Manufacturing</i>	0.03	0.02	0.02	0.17	0.29	0.31	0.03	0.05	0.02	0.06	0.04	0.05	0.25	0.20	0.41	0.04	0.05	0.10

TABLE 7-8, CONT'D

		Sichuan									Guizhou								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.13	0.11	0.10	0.06	0.07	0.07	0.09	0.07	0.09	0.07	0.06	0.04	0.04	0.06	0.03	0.06	0.07	0.06
2	TOB	0.01	0.02	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.14	0.15	0.11	0.01	0.05	0.03	0.02	0.02	0.02
3	TEX	0.09	0.06	0.03	0.05	0.06	0.01	0.08	0.08	0.04	0.04	0.02	0.01	0.02	0.02	0.00	0.04	0.03	0.01
4	WEA	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00
5	LEA	0.01	0.01	0.01	0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
6	WDF	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.01
7	PAP	0.04	0.03	0.03	0.03	0.03	0.02	0.04	0.05	0.04	0.02	0.03	0.02	0.01	0.02	0.00	0.03	0.04	0.01
8	PET	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	CHE	0.10	0.13	0.12	0.12	0.10	0.08	0.07	0.10	0.11	0.07	0.11	0.20	0.08	0.07	0.11	0.05	0.08	0.13
10	RBP	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.04	0.06	0.06	0.01	0.02	0.02	0.02	0.03	0.03
11	SCG	0.05	0.07	0.06	0.06	0.07	0.05	0.10	0.06	0.09	0.04	0.05	0.04	0.05	0.06	0.03	0.09	0.08	0.08
12	PEM	0.11	0.10	0.08	0.15	0.14	0.10	0.07	0.11	0.09	0.10	0.15	0.14	0.21	0.16	0.12	0.10	0.12	0.16
13	MET	0.02	0.03	0.01	0.01	0.01	0.00	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.03	0.03	0.02
14	MCH	0.13	0.09	0.08	0.14	0.10	0.03	0.15	0.14	0.08	0.11	0.05	0.04	0.10	0.03	0.01	0.13	0.08	0.04
15	TRS	0.06	0.09	0.21	0.05	0.05	0.07	0.05	0.07	0.12	0.10	0.11	0.06	0.09	0.08	0.03	0.10	0.12	0.07
16	ELE	0.04	0.04	0.04	0.02	0.02	0.01	0.03	0.03	0.02	0.03	0.02	0.02	0.01	0.02	0.01	0.02	0.03	0.02
17	ICT	0.03	0.08	0.11	0.02	0.03	0.02	0.02	0.04	0.04	0.05	0.03	0.04	0.04	0.02	0.01	0.03	0.04	0.02
18	INS	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.01
	<i>Utilities</i>	0.06	0.05	0.02	0.12	0.10	0.13	0.15	0.12	0.14	0.05	0.06	0.07	0.12	0.09	0.07	0.17	0.14	0.21
	<i>Mining</i>	0.91	0.92	0.94	0.75	0.72	0.51	0.82	0.83	0.78	0.88	0.87	0.80	0.70	0.62	0.42	0.79	0.80	0.67
	<i>Manufacturing</i>	0.04	0.03	0.04	0.13	0.17	0.36	0.03	0.05	0.07	0.07	0.07	0.13	0.18	0.29	0.51	0.03	0.06	0.12

TABLE 7-8, CONT'D

		Yunnan									Shaanxi								
		1985			1995			2005			1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	0.12	0.08	0.08	0.09	0.08	0.04	0.09	0.09	0.09	0.07	0.06	0.07	0.03	0.05	0.03	0.04	0.05	0.06
2	TOB	0.15	0.29	0.13	0.02	0.13	0.13	0.02	0.04	0.04	0.02	0.05	0.02	0.00	0.02	0.01	0.01	0.01	0.01
3	TEX	0.06	0.02	0.01	0.02	0.02	0.00	0.04	0.04	0.02	0.19	0.08	0.03	0.07	0.07	0.01	0.10	0.09	0.06
4	WEA	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.00
5	LEA	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
6	WDF	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.03	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.02	0.01	0.00
7	PAP	0.03	0.04	0.04	0.02	0.04	0.03	0.03	0.05	0.04	0.02	0.04	0.02	0.02	0.03	0.01	0.03	0.04	0.04
8	PET	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.03	0.00	0.01	0.03	0.00	0.01	0.02
9	CHE	0.10	0.12	0.15	0.15	0.11	0.09	0.08	0.11	0.13	0.07	0.09	0.10	0.08	0.07	0.05	0.06	0.06	0.09
10	RBP	0.03	0.02	0.02	0.01	0.01	0.00	0.02	0.02	0.01	0.02	0.02	0.00	0.01	0.01	0.00	0.02	0.01	0.00
11	SCG	0.04	0.04	0.05	0.06	0.06	0.05	0.09	0.07	0.08	0.05	0.04	0.03	0.05	0.06	0.03	0.10	0.06	0.05
12	PEM	0.14	0.13	0.28	0.12	0.12	0.14	0.12	0.14	0.20	0.03	0.05	0.07	0.04	0.05	0.03	0.03	0.05	0.05
13	MET	0.03	0.01	0.01	0.01	0.01	0.00	0.03	0.02	0.01	0.03	0.02	0.01	0.02	0.01	0.00	0.03	0.03	0.01
14	MCH	0.08	0.05	0.03	0.09	0.04	0.01	0.13	0.10	0.04	0.15	0.09	0.11	0.16	0.11	0.03	0.19	0.18	0.10
15	TRS	0.02	0.03	0.01	0.01	0.02	0.01	0.03	0.03	0.03	0.07	0.10	0.15	0.12	0.08	0.05	0.10	0.10	0.11
16	ELE	0.03	0.02	0.02	0.01	0.01	0.00	0.02	0.02	0.01	0.05	0.08	0.07	0.03	0.03	0.02	0.04	0.04	0.04
17	ICT	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.07	0.13	0.12	0.07	0.06	0.03	0.04	0.05	0.05
18	INS	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.00	0.02	0.02	0.02
	<i>Utilities</i>	0.07	0.05	0.07	0.13	0.06	0.05	0.17	0.13	0.15	0.05	0.06	0.10	0.12	0.10	0.40	0.12	0.13	0.19
	<i>Mining</i>	0.88	0.90	0.87	0.66	0.67	0.55	0.78	0.80	0.74	0.91	0.90	0.84	0.73	0.70	0.34	0.86	0.83	0.72
	<i>Manufacturing</i>	0.05	0.04	0.07	0.21	0.26	0.40	0.04	0.07	0.11	0.05	0.04	0.05	0.14	0.21	0.26	0.02	0.04	0.09

TABLE 7-8, CONT'D

		Xinjiang								
		1985			1995			2005		
		Y	K	L	Y	K	L	Y	K	L
1	FDB	0.14	0.12	0.11	0.08	0.07	0.04	0.09	0.10	0.09
2	TOB	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
3	TEX	0.16	0.16	0.06	0.07	0.07	0.02	0.11	0.13	0.10
4	WEA	0.02	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.00
5	LEA	0.02	0.01	0.01	0.01	0.00	0.00	0.03	0.02	0.00
6	WDF	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01
7	PAP	0.02	0.02	0.03	0.02	0.01	0.01	0.03	0.04	0.04
8	PET	0.06	0.07	0.19	0.10	0.07	0.09	0.01	0.02	0.04
9	CHE	0.04	0.05	0.08	0.04	0.03	0.02	0.05	0.06	0.06
10	RBP	0.02	0.04	0.04	0.01	0.01	0.02	0.01	0.02	0.03
11	SCG	0.04	0.04	0.04	0.07	0.05	0.03	0.11	0.09	0.07
12	PEM	0.04	0.07	0.11	0.05	0.05	0.03	0.06	0.06	0.06
13	MET	0.01	0.01	0.02	0.01	0.01	0.00	0.02	0.02	0.01
14	MCH	0.06	0.04	0.01	0.06	0.01	0.00	0.09	0.05	0.02
15	TRS	0.03	0.01	0.01	0.02	0.01	0.00	0.05	0.02	0.01
16	ELE	0.01	0.02	0.04	0.01	0.01	0.00	0.01	0.01	0.01
17	ICT	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
18	INS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<i>Utilities</i>	0.27	0.28	0.17	0.30	0.48	0.50	0.24	0.26	0.31
	<i>Mining</i>	0.70	0.68	0.77	0.56	0.40	0.30	0.72	0.67	0.57
	<i>Manufacturing</i>	0.04	0.04	0.06	0.14	0.12	0.20	0.04	0.06	0.12

TABLE 7-9: ANNUAL COMPOUND GROWTH RATE IN PERCENTAGE

		Beijing						Tianjin						Hebei					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	15.25	16.85	5.74	13.11	7.35	1.68	15.06	14.47	7.63	18.77	11.01	-1.42	19.26	18.93	9.87	18.21	8.08	0.53
2	TOB	13.01	24.56	-0.10	8.17	3.32	-2.00	5.10	28.39	-0.06	-13.10	8.18	-9.16	23.91	30.47	5.88	2.88	5.38	-0.39
3	TEX	10.38	10.02	1.86	1.31	-6.95	-9.09	6.56	6.57	0.56	1.93	1.17	-7.74	9.71	16.35	6.47	9.36	0.82	-3.93
4	WEA	15.08	15.45	4.42	5.67	0.63	0.09	15.81	19.05	2.12	10.72	5.15	4.88	16.17	16.95	4.94	8.73	0.82	-0.29
5	LEA	12.13	10.88	2.76	-0.08	-23.99	-7.69	17.30	14.43	4.16	13.15	1.56	-0.76	20.86	14.69	6.76	22.98	6.34	2.56
6	WDF	13.13	9.15	1.35	10.85	5.50	0.21	19.87	11.74	1.39	12.84	5.96	3.15	16.88	12.71	2.91	18.96	7.92	-0.90
7	PAP	13.35	16.83	-0.47	8.51	5.63	-3.55	11.74	11.80	8.64	11.91	10.35	-3.79	21.80	18.02	11.12	16.95	9.90	-0.21
8	PET	44.92	42.44	14.95	10.67	5.85	-0.94	16.42	32.06	14.04	15.30	13.46	-1.59	20.96	18.60	11.92	17.05	12.38	2.69
9	CHE	7.65	-0.94	5.61	12.36	6.01	-1.96	13.15	4.32	7.02	10.51	6.37	-1.56	22.90	15.44	8.69	14.58	6.22	0.47
10	RBP	8.58	3.35	0.07	12.83	6.15	1.52	12.49	12.58	2.33	7.74	11.76	2.21	22.18	18.44	8.50	13.42	6.63	-0.89
11	SCG	14.59	5.69	3.02	13.10	8.20	-3.88	14.71	5.82	0.14	14.22	10.85	-5.75	22.93	12.61	4.87	11.03	7.82	-3.14
12	PEM	18.71	14.69	6.09	9.50	3.38	-2.99	18.68	7.55	7.33	12.61	16.85	2.88	27.64	18.20	12.77	23.64	18.04	4.63
13	MET	19.27	10.52	4.66	11.61	9.67	-2.44	17.53	10.64	4.03	8.08	4.10	-1.74	24.96	19.69	9.42	15.64	6.90	-2.48
14	MCH	13.32	11.56	-0.69	15.11	2.16	-2.56	14.06	5.98	0.69	11.15	5.74	-4.89	16.79	6.67	3.30	12.56	2.81	-3.38
15	TRS	23.48	15.79	5.95	18.18	9.21	-1.44	35.26	15.37	10.41	19.74	14.65	-0.51	23.24	10.48	5.97	16.87	7.75	-0.38
16	ELE	13.02	12.53	3.11	16.86	5.49	-2.63	13.84	15.68	4.36	16.17	13.87	-2.59	28.33	22.46	8.95	15.46	7.88	-2.06
17	ICT	18.50	13.55	0.08	37.04	21.93	4.98	20.08	19.66	1.56	28.91	20.06	8.04	20.03	22.46	6.95	18.23	9.02	-0.63
18	INS	14.61	7.32	0.56	25.67	9.11	3.01	20.78	16.42	13.13	13.69	2.47	-6.57	23.60	12.32	7.58	9.88	1.96	-4.07
	<i>Utilities</i>	16.08	5.00	2.57	13.69	-2.17	-4.66	13.41	21.23	10.74	12.89	15.17	0.18	13.04	12.25	4.36	8.74	6.83	-0.03
	<i>Mining</i>	15.42	11.81	2.95	18.37	7.36	-1.41	15.82	10.26	4.13	15.86	11.15	-1.21	19.76	15.05	7.05	16.05	9.33	-0.74
	<i>Manufacturing</i>	14.44	34.18	13.23	18.67	13.16	3.13	13.08	17.50	13.05	3.60	14.56	0.37	15.09	16.71	12.55	14.39	13.56	3.31
	<i>All</i>	15.40	15.93	3.17	18.34	9.65	-1.30	15.70	12.36	4.53	15.67	12.41	-1.10	18.90	14.80	6.78	15.59	9.95	-0.44

TABLE 7-9, CONT'D

		Shanxi						Inner Mongolia						Liaoning					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	13.36	11.81	4.91	9.50	6.77	-1.22	13.53	11.28	6.95	21.52	10.18	-0.67	15.63	14.55	3.68	15.12	7.85	-0.04
2	TOB	18.18	25.44	4.94	6.77	2.81	-3.71	23.71	26.62	7.56	6.42	9.04	-0.47	12.82	19.07	4.96	9.54	5.79	-6.67
3	TEX	9.27	7.49	3.74	-0.19	-4.56	-8.36	19.41	10.87	6.78	12.60	5.87	-3.30	7.34	8.35	2.99	3.51	-4.26	-10.72
4	WEA	5.21	8.04	0.15	-0.22	-2.29	-8.88	8.37	20.38	2.35	5.60	-6.00	-6.78	15.56	14.55	2.95	8.07	2.41	-1.28
5	LEA							10.48	6.39	2.17	-1.18	-3.81	-20.81	12.81	9.02	1.00	16.28	-0.09	-4.12
6	WDF	12.35	5.16	0.06	-5.87	-2.45	-18.60	15.27	11.05	8.06	9.30	1.96	-15.64	16.27	8.15	0.21	18.26	15.74	0.14
7	PAP	12.94	6.20	5.09	4.21	-2.78	-10.03	16.04	13.22	-0.39	13.67	4.67	-0.37	11.96	8.86	5.85	8.10	7.38	-7.37
8	PET	42.73	22.81	22.71	26.34	27.50	13.91	51.59	41.26	16.61	11.71	9.99	10.58	10.65	13.51	3.50	8.43	9.32	-2.20
9	CHE	17.52	3.18	6.69	11.47	10.78	-1.17	20.91	10.20	6.44	17.22	13.44	1.36	15.17	8.99	7.14	9.54	3.76	-4.97
10	RBP	16.63	7.55	3.12	6.62	-1.07	-7.10	15.82	12.95	5.37	1.74	-4.84	-15.47	14.44	11.88	2.90	11.68	9.53	-4.37
11	SCG	20.64	9.49	4.40	8.85	8.97	-0.85	21.04	9.35	4.58	9.62	9.89	-6.81	19.52	11.14	1.86	7.80	3.77	-6.66
12	PEM	18.41	7.38	7.86	18.67	17.12	3.55	20.38	5.87	6.73	16.73	12.38	1.52	16.69	15.09	4.17	9.41	5.34	-2.54
13	MET	17.78	9.41	6.65	5.39	-6.69	-8.02	15.54	8.26	2.03	-1.53	-7.72	-12.94	17.90	11.63	3.09	7.43	-0.33	-8.45
14	MCH	10.45	1.00	3.59	13.77	4.33	-5.26	20.85	2.96	-4.07	5.01	7.53	-1.72	14.75	7.85	1.84	10.54	2.82	-7.01
15	TRS	16.06	9.24	4.24	10.05	0.78	-3.42	19.17	5.52	2.02	21.12	14.47	-5.88	16.19	9.68	3.51	17.31	10.71	-2.72
16	ELE	16.57	9.85	4.15	0.83	-1.74	-7.08	17.79	19.46	4.34	1.69	-6.15	-8.89	16.47	18.95	4.63	12.04	3.50	-5.74
17	ICT	10.15	-2.73	0.48	11.79	8.89	-3.70	20.01	19.44	6.85	31.24	6.72	0.52	19.47	18.92	2.08	27.96	5.75	-0.24
18	INS	16.96	5.03	8.47	17.04	9.32	-3.39							16.78	13.74	5.77	10.84	0.58	-7.21
	<i>Utilities</i>	17.38	12.94	7.38	8.99	8.49	2.21	18.91	9.14	6.60	13.18	8.33	-1.30	17.33	14.00	5.77	4.08	6.27	-3.27
	<i>Mining</i>	15.60	6.23	5.14	13.63	12.00	-1.32	18.51	8.84	4.13	15.26	9.78	-2.75	14.90	11.98	3.36	12.04	5.25	-4.81
	<i>Manufacturing</i>	17.02	14.88	9.04	13.22	11.88	3.22	20.03	10.86	12.68	16.55	21.81	2.30	12.35	15.63	10.00	15.67	12.00	3.65
	<i>All</i>	16.15	10.28	6.03	12.56	10.86	0.29	18.66	9.42	5.06	15.16	14.49	-1.99	14.93	12.70	3.79	11.86	6.62	-4.23



TABLE 7-9, CONT'D

		Jilin						Heilongjiang						Shanghai					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	14.60	14.68	7.16	14.55	8.82	-4.60	13.75	8.04	4.65	8.70	5.92	-5.14	14.02	17.06	3.51	12.54	9.43	-0.06
2	TOB	20.05	21.83	6.67	7.61	7.49	-3.23	19.23	18.57	7.02	4.54	4.47	-2.57	15.56	34.03	1.16	6.73	17.41	0.43
3	TEX	7.23	7.43	3.76	2.49	-11.31	-12.13	10.21	8.73	4.16	8.60	-10.75	-11.27	6.49	9.86	1.17	-4.41	-2.11	-7.73
4	WEA	9.38	13.26	2.85	4.00	4.16	-10.20	20.76	9.53	-0.34	5.35	-6.29	-19.73	14.13	22.15	3.25	9.18	8.32	5.72
5	LEA	10.71	8.61	1.86	-5.46	-18.74	-21.61	8.57	6.94	2.01	-5.09	-14.99	-23.93	22.14	18.34	8.80	6.69	5.64	2.68
6	WDF	15.94	6.39	2.52	13.09	8.04	-3.01	2.88	6.39	6.38	-19.56	-6.96	-12.26	10.96	14.00	-0.50	25.95	15.44	8.00
7	PAP	12.87	9.94	6.47	4.62	1.67	-11.86	7.94	4.37	5.72	-19.03	6.57	-5.73	11.34	13.42	3.36	11.76	14.82	-0.08
8	PET	14.77	13.39	4.65	3.60	-1.98	-5.19	12.27	23.37	12.77	-4.43	7.91	-1.16	9.48	13.20	0.68	13.58	20.06	3.15
9	CHE	16.01	8.09	7.56	15.62	8.13	-3.08	12.94	15.73	9.64	5.19	4.91	-4.03	13.37	12.07	5.46	10.40	6.52	-1.67
10	RBP	13.07	8.97	4.43	3.61	-4.36	-11.73	16.96	13.20	3.59	7.68	-8.57	-9.31	11.73	12.32	2.15	14.42	16.21	4.38
11	SCG	16.90	10.46	2.84	7.06	4.10	-10.21	18.29	3.10	0.89	11.19	1.20	-11.58	13.05	15.04	-0.04	14.18	10.91	-1.58
12	PEM	22.02	26.95	13.64	9.52	1.12	-6.29	12.66	8.09	7.81	-2.54	2.21	-4.53	19.57	20.70	3.47	6.90	6.91	-5.43
13	MET	12.05	6.94	2.17	-0.52	-8.83	-16.50	15.59	7.78	3.44	-2.40	0.86	-13.20	14.47	11.05	2.03	12.73	10.01	1.37
14	MCH	10.69	2.00	1.69	4.17	-6.31	-10.45	18.46	3.62	1.88	1.72	-4.10	-8.85	10.01	5.85	-0.72	15.05	9.85	-1.70
15	TRS	25.05	20.09	6.39	20.52	13.79	0.22	14.23	7.61	3.90	-9.27	7.56	-4.54	32.82	17.51	6.87	15.36	15.08	-0.35
16	ELE	17.27	16.76	6.12	3.53	-6.73	-11.37	10.80	3.89	1.51	10.73	4.49	-7.87	16.93	16.09	3.80	16.44	11.24	0.95
17	ICT	12.00	8.20	1.95	17.44	6.18	-7.13	13.61	8.08	0.90	21.03	16.03	-12.27	16.39	15.21	-0.07	28.58	28.23	8.33
18	INS	13.31	11.16	6.33	0.21	7.09	-15.08	7.01	7.10	2.89	9.13	3.01	-7.16	16.29	17.95	7.88	17.66	1.47	-3.24
	<i>Utilities</i>	15.68	11.53	3.72	5.80	11.48	-3.82	13.19	7.50	6.13	1.46	2.22	-4.15						
	<i>Mining</i>	16.48	11.56	4.86	14.23	6.49	-6.26	12.90	8.80	3.91	7.92	3.48	-7.84	14.45	14.47	2.37	14.30	11.22	-0.06
	<i>Manufacturing</i>	15.17	13.30	8.59	12.57	9.97	4.97	10.47	12.75	8.61	4.95	13.04	6.77	14.43	24.31	8.74	14.15	17.90	-0.78
	<i>All</i>	16.38	11.91	4.81	13.90	8.11	-5.24	12.96	9.23	4.47	6.60	5.97	-5.86	14.45	15.31	2.47	14.30	12.27	-0.08

TABLE 7-9, CONT'D

		Jiangsu						Zhejiang						Anhui					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	15.16	13.64	4.16	11.54	6.62	-1.82	17.44	12.51	2.24	11.14	8.28	-0.48	16.76	16.16	7.80	5.95	6.61	-2.88
2	TOB	11.01	27.80	6.11	9.11	16.36	1.91	12.53	29.70	3.95	4.81	15.87	-1.82	14.67	21.00	4.35	5.03	11.37	-2.35
3	TEX	21.68	16.84	6.44	5.30	8.09	-1.24	26.42	21.42	6.73	7.21	13.48	2.37	17.96	14.95	8.91	1.03	1.39	-7.15
4	WEA	31.56	23.38	4.31	11.79	13.00	7.76	36.85	31.10	7.93	10.26	17.26	10.37	20.71	20.43	7.09	1.85	1.63	-1.35
5	LEA	31.40	23.79	7.02	8.12	-0.07	2.03	37.36	25.11	11.16	13.95	16.44	14.79	30.29	20.50	10.54	6.35	-2.84	-1.95
6	WDF	20.51	17.14	1.46	19.27	12.61	6.71	22.54	14.70	3.05	17.47	20.27	9.85	21.26	12.47	3.61	13.61	6.09	-1.50
7	PAP	22.40	14.50	7.34	23.12	28.38	1.07	21.48	16.75	6.76	19.82	25.30	8.32	21.71	14.96	8.80	10.99	9.03	-5.15
8	PET	16.52	25.66	3.29	7.72	7.86	-2.43	20.22	7.52	-0.71	14.50	11.23	1.08	11.86	4.29	2.46	10.65	7.93	-5.62
9	CHE	27.46	21.98	9.68	13.25	10.65	1.10	25.91	16.92	8.07	21.34	17.43	5.16	22.24	12.61	9.58	12.24	4.84	-2.50
10	RBP	22.81	16.85	3.83	11.08	10.22	1.76	23.73	17.47	4.15	13.92	16.40	6.06	21.29	17.22	6.96	17.11	12.80	-1.61
11	SCG	21.01	11.65	-0.10	9.59	10.18	-6.61	21.66	13.13	2.23	12.60	13.75	-4.18	23.91	12.10	5.00	5.69	9.80	-10.66
12	PEM	32.13	21.32	8.45	11.37	19.27	4.21	27.06	17.97	8.20	16.04	17.12	6.53	18.47	8.75	6.01	13.60	12.06	-2.10
13	MET	29.54	17.78	4.85	11.26	10.68	1.88	27.66	18.49	7.04	9.23	13.92	7.06	21.89	11.19	3.91	5.62	6.30	-5.25
14	MCH	23.45	12.21	4.16	11.39	9.05	-0.51	22.94	13.10	3.95	8.47	13.40	5.22	20.96	9.70	5.59	7.32	3.77	-5.53
15	TRS	31.99	16.94	7.32	12.84	13.59	2.42	30.32	16.53	6.13	14.08	20.20	10.30	26.80	11.32	6.32	17.89	17.18	0.51
16	ELE	26.61	21.82	6.90	15.26	14.50	2.93	22.73	20.93	4.66	14.87	18.22	9.63	31.41	23.57	10.86	19.21	11.97	0.29
17	ICT	22.37	14.70	4.14	27.98	27.40	11.95	23.54	18.56	6.30	24.50	27.19	10.47	25.01	15.09	4.96	23.93	8.51	1.20
18	INS	26.78	12.84	5.67	20.10	11.86	2.14	21.35	13.51	4.23	14.80	17.13	10.32	19.76	10.76	6.98	9.45	8.97	-4.99
	<i>Utilities</i>	15.25	5.95	2.94	6.73	6.39	-3.82	21.55	8.94	0.75	6.28	4.41	-5.77	20.27	9.94	7.21	4.53	8.61	0.81
	<i>Mining</i>	24.03	17.03	4.97	13.60	13.38	1.47	24.73	16.75	5.29	13.56	16.03	5.95	20.27	12.52	6.84	11.11	8.49	-4.24
	<i>Manufacturing</i>	18.75	21.60	10.00	14.86	17.55	2.94	18.99	16.92	8.83	22.97	20.33	4.37	20.88	13.34	14.01	11.16	11.44	0.70
	<i>All</i>	23.83	17.07	4.94	13.58	13.93	1.31	24.59	16.61	5.22	13.76	16.89	5.75	20.30	12.27	7.08	10.89	9.11	-3.12

TABLE 7-9, CONT'D

		Fujian						Jiangxi						Shandong					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	19.85	11.37	4.20	15.86	9.15	2.52	13.93	9.43	5.13	7.11	3.21	-3.76	27.20	20.26	10.19	19.01	12.78	8.31
2	TOB	23.46	24.34	8.27	5.17	12.96	-3.07	21.14	27.13	15.63	9.79	15.33	2.90	12.61	22.13	1.11	5.62	6.37	-4.06
3	TEX	17.24	16.21	4.77	22.80	18.32	7.70	13.31	11.10	6.59	9.58	-0.90	-3.98	14.95	18.42	7.50	14.74	9.09	2.33
4	WEA	36.43	34.94	9.74	21.26	14.38	12.88	8.24	14.33	0.00	21.64	13.28	10.03	24.23	20.14	6.56	17.58	13.79	9.72
5	LEA	57.29	42.42	27.29	17.45	13.88	15.49	38.64	23.58	13.36	6.43	0.85	-1.04	31.23	18.47	10.18	13.60	2.06	5.64
6	WDF	27.22	18.67	5.91	16.26	6.67	2.37	21.23	7.84	2.88	6.91	6.85	-4.30	29.30	16.38	7.14	16.06	6.57	4.58
7	PAP	22.91	11.65	6.88	20.15	19.15	4.73	19.67	10.97	7.90	8.74	11.47	-5.77	27.32	18.98	10.42	25.53	23.00	8.08
8	PET	92.08	46.01	27.38	10.65	31.35	2.98	22.89	8.04	6.69	8.62	12.83	1.88	24.37	27.78	12.22	12.02	4.74	0.45
9	CHE	22.50	14.69	6.01	19.29	11.11	-0.60	24.02	15.20	8.67	12.85	5.64	0.43	28.99	21.29	10.01	21.46	12.93	6.10
10	RBP	25.03	22.61	6.87	18.22	9.90	9.00	15.20	13.30	4.89	2.23	6.83	-5.39	27.02	16.04	8.78	13.60	1.04	3.29
11	SCG	30.36	20.20	5.67	23.03	13.02	6.24	20.50	13.29	4.66	9.06	7.55	-5.40	33.90	17.16	5.11	17.09	12.31	1.58
12	PEM	28.94	17.33	7.91	22.00	16.96	3.35	21.32	13.36	12.65	19.67	15.51	-1.29	26.45	17.26	7.94	24.77	21.16	6.91
13	MET	28.62	21.03	3.73	18.97	9.14	5.38	22.31	13.13	5.43	8.19	6.66	-6.62	29.70	16.79	7.17	13.89	8.88	1.43
14	MCH	19.00	6.01	0.99	17.36	11.13	0.03	15.04	1.67	2.99	0.86	-2.14	-9.52	23.41	9.90	4.05	18.34	10.95	3.01
15	TRS	34.65	17.10	6.13	21.72	18.30	4.96	24.67	6.14	3.64	12.04	11.29	-2.78	29.20	15.12	6.96	20.84	12.73	4.61
16	ELE	29.16	21.64	6.28	20.54	11.65	8.95	22.12	15.26	5.08	15.06	5.11	-1.00	31.40	23.62	9.17	25.47	14.78	6.55
17	ICT	32.58	18.51	8.69	29.34	22.85	15.14	18.19	7.23	2.41	15.00	8.97	0.80	26.79	17.25	4.90	34.54	22.22	13.10
18	INS	28.92	10.84	4.70	29.08	25.43	18.38	11.37	6.43	3.82	15.44	4.37	1.17	25.31	21.78	10.64	18.66	6.56	2.09
	<i>Utilities</i>	22.33	6.63	3.52	12.34	6.82	0.35	15.81	7.64	3.18	6.29	-0.90	-4.40	19.85	18.22	7.75	10.04	7.81	0.75
	<i>Mining</i>	26.14	16.13	6.31	21.31	14.10	7.33	19.02	10.63	5.64	11.71	8.28	-3.07	24.72	18.18	7.33	19.55	12.84	4.86
	<i>Manufacturing</i>	20.97	15.25	8.57	18.39	18.52	4.39	16.01	6.13	6.96	8.97	15.90	4.83	17.31	17.62	12.14	18.15	15.25	6.16
	<i>All</i>	25.88	15.58	6.23	21.13	15.19	6.91	18.66	9.32	5.28	11.33	9.19	-2.75	24.05	18.12	7.51	19.03	12.25	4.36

TABLE 7-9, CONT'D

		Henan						Hubei						Hunan					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	22.63	17.27	8.87	20.79	10.90	5.52	12.70	12.53	5.22	16.88	6.08	-1.35	11.61	8.46	5.59	13.84	6.71	-0.74
2	TOB	13.20	23.61	4.50	2.39	6.36	-2.18	20.75	24.59	6.14	10.65	7.68	-2.50	22.62	25.14	9.13	6.22	11.38	-5.20
3	TEX	15.34	14.93	5.65	13.70	2.26	-2.71	9.34	8.37	3.90	9.53	-1.85	-5.49	9.80	8.57	6.37	5.31	-3.11	-5.95
4	WEA	11.18	12.29	1.24	2.07	1.56	-2.18	17.20	18.10	2.53	11.10	1.10	-0.85	9.19	7.61	4.49	9.77	-0.17	-6.91
5	LEA	26.01	15.98	8.77	11.16	1.48	-4.20	18.25	21.24	4.73	7.76	-28.44	-12.32	15.35	11.18	7.99	6.75	-6.79	-8.63
6	WDF	17.28	13.18	4.09	17.39	8.36	2.34	12.46	7.63	0.45	17.23	5.50	-6.78	21.10	11.63	4.86	18.41	-0.23	-2.00
7	PAP	21.73	16.51	8.76	16.08	15.23	3.48	16.03	12.11	6.06	15.87	8.42	-3.15	17.70	9.24	9.59	17.47	13.04	-2.59
8	PET	25.26	21.74	14.83	10.75	9.83	-0.20	8.71	4.80	2.84	11.37	10.20	-3.80	10.80	16.31	7.43	15.17	10.00	2.79
9	CHE	23.21	12.61	9.49	12.24	7.97	1.10	18.70	8.50	7.69	16.86	9.88	-0.30	17.80	7.75	8.61	9.82	5.50	0.15
10	RBP	20.02	15.61	5.63	-7.89	2.95	-0.24	15.03	10.11	4.04	9.86	-0.65	-6.02	14.22	8.69	6.28	6.64	-1.76	-7.81
11	SCG	26.43	16.34	5.40	14.72	8.75	1.17	18.47	6.39	1.61	16.28	7.94	-6.38	21.63	11.37	8.08	13.92	1.90	-5.25
12	PEM	22.28	10.50	7.40	17.86	15.48	4.71	16.39	8.40	3.36	8.39	5.32	-1.28	19.06	11.48	8.78	13.00	12.39	0.91
13	MET	20.93	10.44	4.89	9.11	6.20	-3.66	19.24	13.12	4.55	14.21	1.78	-6.43	20.21	12.77	8.28	10.05	3.21	-8.09
14	MCH	17.80	5.62	5.18	9.67	3.94	-2.73	13.60	1.55	1.94	13.67	-0.19	-6.96	17.28	5.33	5.58	7.55	3.44	-7.48
15	TRS	27.03	13.38	7.09	10.05	6.36	0.90	19.96	8.95	8.17	13.68	10.14	-1.88	22.23	9.80	12.43	8.79	4.95	-7.35
16	ELE	20.82	13.32	4.93	2.67	9.06	-0.35	17.56	15.03	5.44	12.26	6.30	-6.57	19.77	14.89	8.57	9.33	5.14	-6.25
17	ICT	22.71	22.64	4.47	6.82	10.54	-0.51	10.81	5.00	2.52	23.98	18.99	-0.04	16.62	3.74	8.77	18.93	18.82	-5.30
18	INS	21.09	7.10	6.80	3.87	7.67	1.46	15.36	6.77	5.40	13.36	4.09	-4.67	13.53	-3.93	7.57	6.86	6.51	-6.20
	<i>Utilities</i>	16.81	12.36	6.45	16.28	3.73	2.48	18.82	12.92	6.10	16.34	4.65	-2.80	16.67	3.72	4.43	17.36	1.72	-3.58
	<i>Mining</i>	20.28	12.94	6.38	13.50	8.91	0.62	15.37	8.55	4.12	13.50	6.28	-3.71	17.06	9.41	7.69	11.29	6.82	-4.00
	<i>Manufacturing</i>	17.09	11.48	11.41	20.71	17.90	5.70	14.33	10.43	7.40	14.22	18.25	3.71	15.19	15.85	8.40	15.72	11.74	2.94
	<i>All</i>	19.81	12.56	6.57	14.21	10.16	1.25	15.42	9.15	4.32	13.62	10.18	-3.30	16.97	10.24	7.23	11.88	8.09	-3.63

TABLE 7-9, CONT'D

		Guangdong						Guangxi						Sichuan					
		1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005		
		Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L
1	FDB	27.47	18.92	4.82	9.06	4.12	1.74	24.36	14.92	6.28	9.12	6.43	-1.35	15.23	11.78	8.19	13.90	9.52	-4.41
2	TOB	22.83	31.76	5.23	7.71	8.41	-3.90	24.43	28.32	9.56	6.57	9.77	-8.10	25.55	23.44	9.89	7.98	13.30	-2.91
3	TEX	25.36	25.92	5.43	11.64	7.44	5.04	11.87	10.95	4.91	1.01	-8.43	-6.19	16.90	15.09	10.37	4.15	-7.56	-9.83
4	WEA	41.83	35.56	16.87	14.31	7.57	6.90	17.60	12.74	4.01	-8.88	-6.23	-11.81	4.63	8.88	-2.34	3.93	1.41	-12.08
5	LEA	50.75	42.46	25.20	15.64	9.35	13.17	23.55	17.47	8.20	9.72	-5.16	-1.08	21.01	14.05	4.55	10.68	-3.62	-3.85
6	WDF	25.89	25.78	2.65	19.91	10.72	12.96	22.71	14.09	5.58	13.32	4.09	-0.07	17.27	11.09	2.17	11.63	3.74	-4.69
7	PAP	29.39	23.05	7.94	24.66	18.08	11.19	21.49	15.71	9.65	12.03	15.56	0.27	15.79	13.18	7.52	11.68	4.78	-4.09
8	PET	13.83	12.24	3.39	18.30	11.16	-1.75	36.61	56.79	24.38	16.24	10.46	3.51	11.17	1.37	-3.89	27.72	28.32	7.87
9	CHE	31.36	26.21	7.56	19.17	7.55	4.37	22.98	8.17	6.66	11.85	6.88	1.58	19.61	9.08	11.08	14.96	7.34	-1.88
10	RBP	28.16	26.68	7.55	18.74	11.32	11.58	18.66	16.06	5.24	1.24	-9.37	-4.24	14.62	10.97	5.19	13.67	8.81	-3.23
11	SCG	34.33	25.31	6.67	20.34	5.58	3.54	29.53	18.78	8.76	8.88	2.87	-1.27	23.14	11.20	7.30	13.30	8.77	-4.10
12	PEM	27.91	20.51	10.14	26.94	13.56	4.32	29.13	13.95	12.02	19.23	17.29	4.96	20.43	11.97	9.58	10.81	4.96	-2.72
13	MET	30.98	27.02	4.70	24.90	12.34	13.46	22.78	8.15	1.09	-0.83	-11.29	-7.09	22.23	13.02	6.05	5.58	-0.10	-7.43
14	MCH	19.42	10.99	1.10	18.98	14.04	5.86	21.61	7.49	3.47	7.74	-3.83	-6.05	13.90	3.19	1.09	12.66	1.75	-5.12
15	TRS	37.58	19.86	6.74	23.79	12.10	6.10	33.90	12.85	6.43	20.23	13.83	1.59	24.37	11.21	8.01	22.99	12.93	2.79
16	ELE	30.27	34.12	11.01	27.09	15.21	14.79	14.62	14.80	4.91	9.30	-0.22	-6.37	18.30	12.88	13.79	15.10	4.78	-8.57
17	ICT	35.78	31.52	22.90	42.03	23.29	17.74	18.99	11.41	2.20	18.36	4.53	-2.69	26.33	11.72	6.59	22.17	7.10	0.45
18	INS	51.77	38.02	25.14	27.06	19.06	15.49	26.53	11.40	3.46	7.84	-0.49	-0.13	14.40	7.72	5.19	13.98	-2.40	-3.26
	<i>Utilities</i>	21.95	6.82	2.05	3.11	-4.26	-7.80	25.12	5.74	5.67	1.37	0.37	-6.43	16.15	10.74	4.91	6.13	10.06	-2.48
	<i>Mining</i>	29.95	24.08	8.89	26.24	12.11	10.03	22.65	13.31	6.31	11.55	7.34	-1.28	18.50	10.34	7.14	14.56	6.24	-3.74
	<i>Manufacturing</i>	24.76	25.49	13.46	22.36	17.46	4.04	15.55	8.12	8.03	15.45	16.73	5.02	16.35	14.22	14.25	17.21	16.52	0.82
	<i>All</i>	29.68	23.62	8.68	26.03	13.26	9.55	22.45	11.53	6.31	11.39	9.71	-1.30	18.30	10.96	7.07	14.38	9.25	-3.31

TABLE 7-9, CONT'D

	Guizhou						Yunnan						Shaanxi						
	1985-1993			1993-2005			1985-1993			1993-2005			1985-1993			1993-2005			
	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	Y	K	L	
1	FDB	16.82	17.77	4.36	7.39	3.22	-1.87	16.22	8.35	3.57	7.35	3.93	-1.63	14.61	13.52	7.78	13.34	8.54	-1.01
2	TOB	14.93	24.00	5.08	11.08	6.95	-1.91	28.47	30.49	11.95	3.41	13.26	0.76	26.81	24.23	10.37	3.28	6.32	-6.28
3	TEX	8.43	7.60	3.57	0.28	-14.86	-13.63	9.41	8.73	5.27	-1.94	-4.52	-9.42	8.66	10.75	2.39	0.31	-4.36	-5.53
4	WEA	3.19	4.98	-3.08	5.05	-2.01	-7.94	3.50	12.63	-0.46	-11.83	-4.39	-22.33	6.41	5.39	-1.16	-4.28	-3.91	-13.29
5	LEA	4.34	5.32	-1.61	-6.94	-13.28	-27.78	14.20	8.82	6.21	-16.48	-8.35	-18.61	11.55	4.99	2.74	-8.85	-8.13	-19.11
6	WDF	18.00	6.47	1.25	11.17	3.88	-4.61	14.78	12.11	3.75	16.56	5.59	-4.26	18.16	4.39	2.82	-6.02	-15.28	-16.69
7	PAP	16.83	11.83	7.76	8.39	-5.98	-9.11	21.93	15.64	8.94	11.18	9.93	-2.65	21.05	13.70	9.78	6.45	0.39	-4.12
8	PET							28.96	71.52	6.25	43.84	13.41	24.60	35.11	27.47	11.69	20.87	17.33	6.26
9	CHE	22.53	4.77	6.93	19.05	15.89	4.48	19.81	4.37	7.08	13.38	8.41	0.99	19.05	6.80	7.85	13.05	8.86	-0.84
10	RBP	26.20	20.61	8.07	10.87	8.40	-1.03	16.67	10.32	5.82	7.67	-0.38	-5.82	11.84	6.84	3.77	0.10	-3.90	-11.33
11	SCG	19.92	7.36	3.42	9.93	6.13	-1.49	19.30	9.94	3.18	12.28	8.16	-2.34	17.22	8.49	3.24	5.76	6.47	-6.14
12	PEM	22.59	4.08	7.42	11.33	7.91	0.88	19.15	8.04	5.49	16.58	12.04	2.13	22.99	12.71	11.29	14.37	6.66	-1.02
13	MET	13.26	6.81	1.31	12.83	2.30	-1.93	13.55	5.92	1.80	2.84	-10.81	-10.20	14.80	3.88	2.09	1.25	-0.41	-8.86
14	MCH	11.02	-3.72	-1.57	5.78	-3.42	-7.66	13.96	-1.73	-1.35	3.64	-5.21	-6.60	10.43	0.60	2.42	12.58	2.91	-5.60
15	TRS	19.31	5.81	4.61	6.28	2.54	-4.39	29.26	15.37	8.96	-3.31	3.97	-5.62	20.55	2.89	3.00	15.61	7.20	-0.40
16	ELE	18.38	11.17	3.36	7.38	1.91	-2.38	18.06	11.62	4.50	8.54	1.90	-5.15	16.58	11.28	8.07	13.75	7.85	-4.09
17	ICT	7.82	-6.06	2.63	16.89	9.88	-6.06	18.91	5.37	0.34	-1.12	4.42	-8.77	23.80	8.46	5.00	12.10	4.59	0.30
18	INS	9.16	-0.46	2.86	5.92	-1.40	-6.48	19.37	1.35	4.69	13.51	-1.98	-3.64	16.00	10.53	7.32	8.01	-2.03	-4.53
	<i>Utilities</i>	18.88	2.45	0.37	13.66	8.98	3.08	17.50	5.00	4.18	10.44	5.16	-2.90	19.68	6.08	5.96	17.10	25.07	1.07
	<i>Mining</i>	17.15	6.04	3.79	11.09	6.72	-2.20	19.93	8.88	4.32	9.20	8.37	-2.10	16.11	7.42	4.54	11.04	5.47	-3.61
	<i>Manufacturing</i>	14.58	11.25	7.74	20.65	17.74	7.01	17.89	15.67	7.53	12.78	11.52	3.65	14.72	11.68	7.14	13.68	15.19	6.99
	<i>All</i>	17.09	6.77	3.42	12.08	10.91	-0.62	19.67	10.16	4.46	9.47	9.24	-1.78	16.23	7.96	4.78	11.63	12.13	-2.34

TABLE 7-9, CONT'D

		Xinjiang					
		1985-1993			1993-2005		
		Y	K	L	Y	K	L
1	FDB	18.03	16.15	7.34	7.54	4.57	-3.07
2	TOB	20.58	30.12	4.48	3.84	12.64	-2.87
3	TEX	17.33	18.13	10.30	1.82	-2.39	-5.66
4	WEA	4.16	12.10	0.32	-9.29	-5.90	-17.03
5	LEA	10.75	9.82	2.47	7.49	-8.28	-20.29
6	WDF	10.53	8.05	1.60	14.21	6.92	-0.17
7	PAP	20.25	17.71	9.16	10.37	7.43	-1.66
8	PET	20.18	2.34	10.07	18.26	19.04	4.68
9	CHE	20.60	9.46	6.76	14.63	5.81	-1.07
10	RBP	26.64	18.76	11.84	11.78	14.10	0.19
11	SCG	19.77	9.84	4.43	7.94	8.11	-5.35
12	PEM	25.22	12.76	7.10	15.13	9.57	-2.38
13	MET	22.10	18.28	9.32	6.99	-0.11	-8.18
14	MCH	11.96	-1.99	-0.72	-0.09	-5.98	-10.70
15	TRS	14.63	4.57	0.86	-2.67	-5.94	-10.78
16	ELE	19.63	16.76	6.97	18.76	7.65	-3.07
17	ICT	12.30	5.31	-1.21	16.21	31.54	7.55
18	INS	17.42	13.81	15.08	23.52	8.01	-3.56
	<i>Utilities</i>	19.14	27.57	8.49	4.73	8.25	-1.71
	<i>Mining</i>	18.20	11.08	6.02	10.09	7.73	-4.20
	<i>Manufacturing</i>	18.43	16.45	12.02	13.55	13.85	3.23
	<i>All</i>	18.46	18.41	6.94	9.02	8.96	-2.84

TABLE 7-10: ANNUAL COMPOUND GROWTH RATE OF Y/L, K/L AND TFP (%)

		Beijing						Tianjin						Hebei					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	13.72	10.35	-3.73	13.93	7.74	0.57	10.84	4.96	-2.39	23.80	15.31	2.97	14.47	8.87	-1.07	19.29	8.65	2.59
2	TOB	24.14	33.95	-12.11	14.35	7.46	6.84	6.69	7.45	-6.50	1.87	39.19	-5.80	18.19	24.88	-5.84	32.26	37.25	-0.81
3	TEX	11.59	8.54	-3.23	13.12	4.68	0.77	9.69	7.47	-1.17	13.32	11.33	2.14	6.98	6.61	-1.31	14.41	5.78	3.32
4	WEA	13.18	9.76	-0.73	10.03	4.25	-2.48	16.23	19.86	0.41	8.78	2.70	0.00	13.60	11.46	1.87	10.45	2.82	1.70
5	LEA	11.40	8.87	-1.82	12.47	-188.36	-4.31	14.05	9.36	0.09	17.04	5.42	1.27	17.33	6.59	2.19	22.69	10.04	4.16
6	WDF	14.75	6.28	0.41	18.56	8.62	0.76	26.83	13.89	2.21	11.43	5.07	1.32	15.89	13.07	1.75	22.42	10.85	5.64
7	PAP	18.92	25.19	-0.50	17.16	14.80	2.47	6.36	3.39	-1.96	19.05	22.02	6.02	12.85	7.14	0.67	17.68	10.76	5.74
8	PET	87.95	35.20	-0.67	16.50	15.32	1.09	10.06	26.01	-1.50	38.55	34.18	-0.38	8.93	12.71	-3.20	50.67	13.36	1.19
9	CHE	3.05	1.73	-1.44	17.98	13.88	3.22	8.87	-2.07	-0.84	13.72	11.65	2.60	16.07	6.06	0.94	14.65	6.07	3.01
10	RBP	11.76	2.42	-0.42	13.82	7.54	0.52	11.54	9.10	-0.82	7.12	12.23	0.88	15.41	7.04	1.35	14.78	8.17	4.55
11	SCG	14.99	3.12	0.12	20.21	15.54	1.19	22.27	5.14	0.55	22.68	21.52	2.39	20.85	9.71	1.59	15.65	12.73	2.02
12	PEM	22.85	12.08	-3.35	18.08	8.28	0.40	17.77	1.64	-0.25	11.57	24.74	2.47	20.68	10.36	-0.45	18.59	13.30	2.20
13	MET	17.00	3.90	1.14	19.83	13.99	0.84	18.53	8.91	1.15	11.25	7.33	1.50	15.92	8.91	2.08	19.91	10.53	4.00
14	MCH	18.09	19.24	1.43	20.42	6.44	5.18	17.40	6.09	1.43	18.09	12.40	5.64	16.03	3.13	3.15	17.10	7.25	4.95
15	TRS	21.14	9.24	1.52	23.33	11.81	2.18	30.60	5.75	3.13	21.56	19.51	3.63	23.85	3.45	4.81	18.06	8.97	4.16
16	ELE	12.36	8.07	-1.96	22.75	9.83	5.16	11.72	14.22	-1.06	20.81	18.96	3.47	20.57	11.06	3.31	18.36	10.77	3.23
17	ICT	23.17	12.03	4.22	32.98	18.59	2.25	23.33	20.01	1.86	21.27	13.11	2.07	15.04	8.04	1.97	20.66	19.70	3.33
18	INS	20.58	7.22	3.01	22.97	7.69	5.03	10.64	17.16	5.08	24.10	13.36	5.32	16.30	2.15	1.97	17.05	7.90	5.10
	<i>Utilities</i>	19.93	3.64	1.95	32.80	3.97	5.89	6.36	11.64	-8.67	13.50	21.64	1.88	12.53	8.09	-4.28	10.36	9.21	1.94
	<i>Mining</i>	15.52	9.12	-1.02	20.84	9.65	1.71	14.44	6.25	-0.16	17.83	14.04	2.61	15.71	7.64	0.62	17.10	10.35	3.48
	<i>Manufacturing</i>	8.99	21.82	-4.75	27.49	14.97	2.76	3.71	8.42	-6.21	8.72	16.72	-0.30	4.51	4.01	-3.55	13.45	11.09	2.37
	<i>All</i>	15.34	14.35	-1.55	20.76	12.12	1.70	13.84	8.05	-0.97	17.43	14.79	2.59	15.06	7.93	-0.66	16.23	10.62	3.56



TABLE 7-10, CONT'D

		Shanxi						Inner Mongolia						Liaoning					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	13.40	5.25	-2.39	11.36	8.40	1.74	6.84	4.13	-2.26	24.05	11.42	6.79	17.11	16.03	-3.20	15.47	8.65	2.44
2	TOB	14.00	19.42	-8.25	11.85	10.49	3.14	16.85	27.13	-8.14	10.54	13.44	3.28	36.02	13.44	-5.79	31.65	22.19	5.63
3	TEX	10.48	3.33	-1.12	9.37	5.60	2.70	18.14	2.76	0.60	84.96	10.70	5.10	5.82	4.21	-2.40	16.88	9.00	3.74
4	WEA	6.24	7.41	-0.83	11.03	11.78	5.63	10.21	18.18	-0.37	99.22	5.48	5.68	13.74	11.28	-0.13	11.12	5.57	0.83
5	LEA							11.15	3.92	-0.10	58.74	44.81	12.46	14.85	7.69	0.52	29.61	5.82	1.98
6	WDF	12.54	6.65	1.27	19.43	24.83	8.80	7.98	7.60	-1.95	97.78	80.56	35.37	19.62	10.71	2.53	25.83	19.28	1.44
7	PAP	11.23	-3.09	2.61	16.94	9.91	10.94	22.38	21.72	1.15	19.16	9.07	2.82	8.34	2.15	-1.11	18.10	19.43	7.65
8	PET	22.76	1.78	3.28	11.95	12.55	15.11	55.05	36.65	3.62	247.79	1.46	2.63	13.65	13.15	-2.59	12.64	13.74	-0.31
9	CHE	13.21	-3.32	1.45	12.91	12.87	5.26	17.64	5.13	0.85	16.14	13.82	7.09	8.42	1.74	-0.82	15.77	10.23	3.70
10	RBP	16.13	3.27	1.37	19.23	10.12	6.64	14.56	4.89	1.57	30.80	19.57	7.99	13.71	9.59	-0.56	20.55	16.62	2.24
11	SCG	21.78	5.78	1.69	10.29	11.03	1.88	18.47	4.26	0.72	59.03	28.58	5.76	22.29	9.48	0.50	16.91	12.42	2.14
12	PEM	15.82	4.66	-0.75	15.00	15.16	4.22	15.73	0.12	0.17	15.61	12.85	3.67	16.75	11.10	-4.12	12.92	8.35	2.51
13	MET	13.27	2.46	2.09	16.50	5.16	0.57	16.25	8.60	2.18	15.13	9.30	6.67	15.83	7.40	1.77	19.53	17.40	2.54
14	MCH	10.17	-2.60	1.49	22.36	20.49	8.43	42.52	10.71	4.14	9.89	14.65	7.91	15.15	5.85	1.67	19.55	11.89	6.03
15	TRS	19.79	8.90	3.56	15.14	4.75	3.34	25.71	6.08	5.66	31.70	23.41	8.16	16.92	5.31	1.70	22.06	15.02	5.13
16	ELE	14.16	6.19	1.66	10.65	8.44	6.72	17.38	17.48	1.16	13.57	7.54	2.07	11.95	11.68	-0.25	20.41	11.86	3.70
17	ICT	18.04	0.16	5.97	20.58	16.59	11.72	27.90	10.87	1.74	54.08	9.23	12.12	3.24	1.60	2.51	31.42	8.42	5.21
18	INS	11.79	2.57	4.73	80.93	18.33	9.43							10.63	8.32	1.59	30.82	12.40	4.00
	<i>Utilities</i>	13.12	5.73	-2.02	6.97	7.27	3.54	16.51	2.52	0.03	16.42	11.18	9.73	16.68	8.84	-3.01	8.78	11.69	1.07
	<i>Mining</i>	13.98	0.76	0.64	15.27	14.22	6.29	17.93	4.88	0.55	18.95	13.89	5.97	13.52	8.34	-1.26	18.20	11.22	3.30
	<i>Manufacturing</i>	11.01	8.22	-3.63	10.80	8.87	3.92	10.24	-0.53	-0.65	15.91	22.41	5.62	6.46	5.15	-3.09	16.38	8.67	1.74
	<i>All</i>	13.49	4.36	-0.92	12.34	10.68	5.10	17.06	4.65	0.24	17.82	18.09	6.56	13.31	8.65	-1.55	17.13	11.89	3.26

TABLE 7-10, CONT'D

		Jilin						Heilongjiang						Shanghai					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	9.12	7.45	-2.30	20.73	14.74	4.52	22.96	3.52	-0.02	16.03	16.56	2.80	14.15	12.79	-2.89	14.24	10.62	1.45
2	TOB	16.03	15.90	-6.08	12.09	13.20	5.24	10.61	10.08	-1.65	12.14	9.02	0.16	19.66	36.00	-17.45	7.37	21.10	-2.99
3	TEX	5.00	4.41	-1.14	17.47	4.03	5.53	9.43	4.67	-0.36	26.09	4.74	7.70	10.58	8.02	-2.61	4.67	7.96	-0.01
4	WEA	6.19	7.89	-0.18	18.72	18.38	7.79	26.27	12.38	7.62	61.33	42.25	14.15	16.91	16.96	-0.67	4.94	3.60	0.37
5	LEA	10.67	7.64	-0.07	30.36	9.61	6.11	7.47	6.07	0.20	33.77	23.84	13.01	14.00	8.20	0.24	4.53	4.92	0.72
6	WDF	15.31	3.90	2.36	19.54	16.50	10.35	0.01	4.54	-1.41	27.50	13.56	0.75	15.21	16.21	0.05	17.89	9.04	2.44
7	PAP	8.27	4.13	-0.95	19.96	18.03	11.14	2.03	0.00	-0.71	17.81	15.65	-1.07	10.98	8.31	-1.76	13.10	15.99	1.50
8	PET	12.76	12.63	-2.85	10.48	7.11	0.16	3.90	22.67	-3.31	11.55	12.87	-3.26	13.80	17.19	-2.66	14.28	17.43	0.14
9	CHE	9.03	0.85	0.41	19.67	12.00	2.98	6.46	7.16	-1.37	11.05	10.67	3.52	10.31	5.57	-0.84	13.69	9.99	1.16
10	RBP	11.09	5.30	-0.05	21.20	16.86	3.87	16.62	7.65	1.60	23.52	16.56	3.61	12.53	8.89	-1.31	10.90	12.75	0.43
11	SCG	17.94	8.31	0.80	20.69	19.47	4.15	22.66	5.73	3.64	29.83	21.33	6.35	17.28	16.61	-2.37	17.03	13.46	0.68
12	PEM	12.68	10.84	-0.99	17.87	9.83	-0.02	9.67	2.18	-0.90	10.01	16.96	0.59	21.52	6.47	-1.68	14.84	15.09	1.10
13	MET	9.50	5.12	0.98	20.19	13.20	7.42	16.95	4.72	3.63	22.02	21.88	9.44	19.44	8.79	0.59	13.24	10.96	0.94
14	MCH	10.74	1.04	1.76	17.56	10.00	8.96	20.96	2.23	4.01	14.59	10.40	5.94	13.74	7.10	-0.22	17.49	12.38	4.37
15	TRS	26.83	11.68	3.41	21.25	14.69	3.31	10.23	3.72	1.20	16.01	14.27	-0.75	29.70	9.02	4.24	18.10	16.51	0.84
16	ELE	10.30	7.81	0.24	19.32	8.31	6.65	13.04	2.91	2.16	51.39	36.79	7.01	16.21	10.41	-0.04	16.53	12.14	1.94
17	ICT	14.75	5.75	1.40	33.16	25.10	5.69	16.86	6.68	3.62	45.86	37.15	5.33	18.68	16.92	0.96	20.75	19.48	-0.48
18	INS	6.99	4.53	0.14	28.26	38.20	15.87	4.95	4.32	0.88	41.20	17.71	13.39	11.72	10.37	1.55	23.07	10.29	2.21
	<i>Utilities</i>	16.82	8.04	-0.06	11.20	17.21	6.12	13.74	1.08	-8.92	6.68	7.27	7.94						
	<i>Mining</i>	13.56	6.71	0.55	22.38	14.03	4.52	11.88	5.79	0.87	17.80	13.64	4.14	15.59	8.56	-0.96	15.19	12.09	1.20
	<i>Manufacturing</i>	7.26	5.67	-2.48	9.35	5.61	2.72	5.17	5.22	-0.07	29.16	6.88	-0.40	7.18	15.65	-4.08	16.12	20.41	-0.07
	<i>All</i>	13.47	7.29	0.12	20.59	14.37	4.44	11.98	5.42	-3.94	13.59	13.52	5.11	15.43	9.63	-1.14	15.18	13.09	1.02

TABLE 7-10, CONT'D

		Jiangsu						Zhejiang						Anhui					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	17.29	11.94	-1.21	15.57	9.05	2.34	19.62	9.88	-0.52	17.48	10.99	1.32	14.20	5.47	0.01	10.17	10.25	0.98
2	TOB	6.81	27.45	-13.51	9.90	18.39	0.86	10.44	28.51	-16.82	12.29	22.15	-2.22	12.90	15.95	-7.58	8.02	15.42	-1.10
3	TEX	15.92	7.97	0.13	7.74	10.37	0.17	21.53	14.01	0.72	8.05	13.39	-0.65	10.88	4.79	-0.04	9.27	9.94	2.11
4	WEA	27.55	17.28	3.19	5.14	6.93	0.70	29.55	19.11	3.28	3.81	9.09	-2.50	14.69	14.08	1.71	5.57	5.06	-1.47
5	LEA	26.18	17.06	2.45	8.21	0.92	1.58	27.55	13.23	2.51	3.26	2.77	-0.68	24.54	26.83	2.39	9.49	2.02	1.15
6	WDF	26.18	20.52	1.40	14.70	9.93	1.66	20.74	11.57	2.19	10.68	10.65	0.53	19.90	17.70	3.73	16.37	9.53	2.70
7	PAP	16.68	7.10	1.06	25.28	29.22	4.47	16.41	9.35	0.56	13.73	18.10	1.97	14.83	6.31	1.37	20.08	16.37	5.41
8	PET	21.64	29.50	-1.89	11.87	13.07	0.73	27.33	14.07	0.71	16.28	11.65	0.42	13.88	2.98	0.24	20.54	17.54	0.97
9	CHE	17.76	11.31	0.18	12.66	9.80	1.76	18.63	9.02	0.43	18.32	12.43	2.19	14.84	3.17	1.16	15.29	8.09	3.96
10	RBP	19.87	10.85	1.17	10.70	9.83	0.57	21.32	12.13	1.32	10.51	11.16	0.15	16.06	8.65	1.41	20.11	16.32	3.09
11	SCG	27.71	14.57	2.08	21.94	25.02	0.96	23.88	10.61	1.23	24.82	26.19	-0.15	21.24	5.46	3.07	18.71	26.43	3.58
12	PEM	33.04	17.14	0.77	7.16	15.28	-0.76	22.60	8.88	0.38	11.03	10.97	-0.10	17.72	3.59	0.13	16.60	16.48	1.21
13	MET	27.37	12.16	3.15	11.05	11.80	0.53	20.22	9.98	1.99	4.94	7.72	-0.15	17.95	5.80	3.00	15.29	16.22	1.30
14	MCH	21.98	7.95	2.44	12.58	9.84	3.27	21.96	9.43	2.66	5.48	11.56	3.08	17.40	3.76	3.27	14.46	10.85	5.33
15	TRS	30.26	9.53	3.90	11.10	11.49	1.30	29.88	13.49	3.72	5.83	9.53	-0.21	28.29	4.76	5.33	19.25	17.19	3.25
16	ELE	18.88	10.53	1.48	13.59	12.32	1.50	21.14	14.63	1.19	7.58	13.94	-1.06	20.66	11.11	2.65	19.97	14.16	3.99
17	ICT	16.32	5.69	2.44	16.26	14.97	1.23	21.26	8.22	3.12	15.73	34.21	0.98	22.72	7.28	3.63	30.42	8.44	5.10
18	INS	25.75	4.49	4.86	22.09	10.11	2.66	20.11	8.46	3.88	6.32	7.15	0.66	14.28	2.03	4.36	19.42	16.73	4.12
	<i>Utilities</i>	18.53	6.39	1.27	19.32	16.86	6.19	23.86	9.89	2.27	15.14	12.52	4.71	17.55	3.40	1.02	5.37	8.49	3.32
	<i>Mining</i>	21.32	11.36	1.01	12.46	12.18	1.27	21.45	11.08	1.13	9.76	10.31	0.31	16.09	5.10	1.00	16.16	14.00	3.15
	<i>Manufacturing</i>	9.79	11.91	-2.04	14.05	16.25	0.12	11.19	9.45	-0.42	20.77	18.15	3.54	8.90	-0.11	-4.71	13.83	12.47	1.43
	<i>All</i>	21.28	11.75	0.95	12.61	12.81	1.26	21.35	11.44	1.18	10.03	11.27	0.35	15.96	4.92	0.64	14.60	13.42	3.18

TABLE 7-10, CONT'D

		Fujian						Jiangxi						Shandong					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	19.50	8.06	0.59	13.29	6.99	2.45	12.23	6.02	-1.55	11.81	8.12	1.77	19.24	8.75	-0.12	10.26	4.82	2.61
2	TOB	13.86	15.96	-4.83	9.03	19.22	-2.17	8.82	27.51	-5.70	8.18	17.86	2.52	18.20	20.28	-5.05	11.80	15.07	2.49
3	TEX	17.24	10.54	0.77	14.60	11.28	2.78	10.64	4.53	-0.18	14.53	5.00	2.78	11.31	9.98	-0.95	12.80	7.29	3.04
4	WEA	29.19	22.62	3.54	8.19	2.20	1.64	10.36	11.75	-3.96	14.04	6.25	0.97	18.41	11.00	1.90	8.43	4.82	2.28
5	LEA	29.31	17.37	2.48	3.46	2.05	2.49	26.76	8.47	9.57	10.88	3.64	-5.73	21.59	6.59	1.95	7.82	-2.17	2.11
6	WDF	20.31	7.93	3.83	15.58	5.44	3.60	17.70	5.52	3.82	13.09	13.25	3.62	23.39	9.55	2.22	12.31	5.49	3.76
7	PAP	16.78	5.49	1.10	15.12	16.95	3.89	13.06	3.31	0.81	15.85	20.22	8.30	18.23	6.93	1.30	16.67	14.41	5.64
8	PET	283.99	59.49	3.35	12.01	168.58	-4.79	12.06	3.58	-0.16	8.60	15.31	-0.54	17.33	30.78	-1.59	16.45	11.87	3.02
9	CHE	16.80	6.91	1.04	20.46	13.20	4.53	16.84	6.56	1.99	12.52	6.51	3.01	20.59	11.30	0.52	14.83	6.74	3.78
10	RBP	20.96	14.13	1.19	9.13	2.01	1.85	14.89	7.79	0.82	10.05	15.78	2.76	19.67	6.42	1.51	10.17	-0.34	1.99
11	SCG	24.62	15.64	1.75	15.99	7.71	2.16	16.85	7.55	0.66	16.09	14.65	4.36	30.83	12.06	3.12	17.53	15.93	2.50
12	PEM	22.06	8.00	0.54	19.02	14.78	2.09	8.10	-6.40	-1.06	22.20	19.06	4.90	24.26	9.54	0.59	17.60	14.54	2.58
13	MET	27.33	17.58	3.66	13.52	9.33	1.77	16.53	9.31	2.78	16.88	16.19	3.64	22.29	7.90	2.20	12.91	9.72	3.05
14	MCH	23.20	6.25	3.20	17.72	11.98	5.59	16.69	-1.10	3.08	12.61	9.51	8.65	22.03	5.43	2.70	15.00	8.47	4.29
15	TRS	34.56	11.41	4.11	18.67	15.24	3.70	28.08	2.20	5.06	15.96	15.37	3.44	26.87	7.57	4.24	16.43	8.49	3.13
16	ELE	26.71	13.03	3.56	10.98	3.82	2.20	20.90	10.70	2.87	5251.16	9.29	1.42	21.79	10.65	2.22	18.58	8.36	3.36
17	ICT	43.25	7.49	5.23	14.03	8.23	1.74	33.10	4.28	7.82	15.63	10.94	1.95	27.94	10.99	4.43	20.02	9.68	3.55
18	INS	35.76	3.74	13.23	10.40	8.73	1.17	13.98	4.40	4.22	37.45	8.58	6.90	14.87	10.97	2.37	19.05	7.54	3.47
	<i>Utilities</i>	18.87	4.09	1.44	12.88	6.95	5.03	13.96	4.78	-0.02	12.48	5.45	3.25	17.28	7.99	-4.56	10.21	8.28	1.33
	<i>Mining</i>	22.11	9.08	1.75	13.28	7.19	2.54	15.28	3.77	1.10	15.44	12.26	3.80	19.88	10.24	0.85	14.13	8.01	3.24
	<i>Manufacturing</i>	11.78	6.97	0.42	14.67	14.30	1.47	10.89	-0.12	0.83	4.64	11.25	0.40	6.21	6.90	-3.02	15.18	9.16	3.02
	<i>All</i>	21.71	9.00	1.67	13.51	8.62	2.36	15.21	3.42	0.90	14.66	12.85	4.09	19.01	9.64	-0.36	14.25	7.79	3.15

TABLE 7-10, CONT'D

		Henan						Hubei						Hunan					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	15.23	7.90	-0.20	17.44	5.46	2.68	11.62	9.38	-2.17	19.14	8.18	3.04	13.19	7.74	-0.71	15.00	9.19	2.54
2	TOB	13.39	17.15	-5.73	8.84	9.87	2.57	20.07	19.80	-3.95	15.05	11.13	4.84	19.75	18.89	-3.43	13.65	20.00	3.70
3	TEX	9.87	8.60	-0.75	21.43	5.95	4.23	7.53	5.36	-1.23	16.62	4.50	3.58	9.56	3.99	-0.26	12.38	5.20	3.16
4	WEA	13.14	11.16	-0.02	14.29	5.50	1.39	60.58	52.87	3.61	13.23	5.31	-2.57	8.52	0.39	0.12	22.29	12.65	5.76
5	LEA	17.66	7.18	1.43	20.43	6.73	3.02	64.22	73.13	3.97	25.34	-147.67	2.25	8.75	1.59	-0.45	20.71	5.65	3.88
6	WDF	13.36	12.87	2.10	17.58	8.18	3.46	39.14	30.67	2.77	29.17	15.15	4.44	13.15	2.46	1.88	28.02	8.69	5.07
7	PAP	14.59	7.18	0.96	17.92	12.44	4.59	14.17	8.12	1.25	20.07	13.32	5.56	9.99	-0.36	0.40	21.59	18.35	7.93
8	PET	9.19	8.46	-2.86	21.07	15.34	2.46	10.55	5.82	-1.27	19.59	17.67	1.17	14.99	19.51	-3.91	15.10	8.95	3.42
9	CHE	15.22	4.41	0.80	14.17	7.23	3.19	12.38	0.09	1.50	18.03	11.11	4.17	13.18	1.36	1.16	10.21	6.70	2.64
10	RBP	16.61	8.73	0.37	-2.74	3.84	-2.20	19.70	12.38	1.69	17.62	7.97	4.24	9.71	1.58	0.38	16.21	10.18	4.47
11	SCG	23.08	10.73	2.61	16.00	8.29	2.33	26.45	9.70	3.56	24.90	16.47	5.39	11.80	-1.34	0.88	20.84	14.12	4.76
12	PEM	18.24	1.82	2.38	16.77	10.72	0.98	17.37	7.98	0.67	13.40	8.32	1.85	14.82	5.83	-0.24	13.26	12.21	1.39
13	MET	17.81	5.34	2.02	16.10	13.15	3.29	38.22	32.68	2.30	23.62	12.11	4.59	11.83	2.10	1.65	22.74	13.89	4.91
14	MCH	15.69	2.08	2.39	16.43	7.46	3.80	14.29	0.18	2.92	23.99	8.91	7.78	15.23	0.17	2.44	18.69	13.55	6.60
15	TRS	26.11	6.49	4.44	16.77	6.34	2.03	16.49	2.08	2.89	17.29	12.85	3.12	16.81	0.06	2.02	19.34	16.12	4.88
16	ELE	19.27	8.57	1.87	14.68	10.34	0.83	12.70	9.47	1.37	20.71	19.07	4.58	15.98	5.87	1.62	17.06	14.07	4.45
17	ICT	25.37	24.16	1.95	11.68	14.27	0.48	13.74	5.69	2.06	28.80	67.24	4.99	3.32	-13.58	0.57	27.33	29.79	6.72
18	INS	19.26	4.19	3.20	106.61	11.46	1.06	18.14	1.24	3.72	32.53	-61.41	5.13	14.43	4.45	-0.60	128.53	26.51	4.65
	<i>Utilities</i>	13.17	5.41	-1.23	16.84	1.83	5.54	15.45	8.71	-2.46	20.71	9.16	2.00	13.11	-2.03	-0.03	22.03	6.46	7.70
	<i>Mining</i>	15.90	6.69	0.79	15.77	8.53	3.30	13.85	4.96	1.11	18.53	11.00	3.91	11.90	1.91	0.57	16.27	12.37	4.61
	<i>Manufacturing</i>	8.73	-1.06	0.94	16.94	12.10	2.79	12.51	7.43	1.77	20.69	17.04	0.48	12.09	11.09	-2.10	14.05	8.90	5.15
	<i>All</i>	15.25	5.59	0.55	15.75	9.03	3.57	13.71	5.42	1.04	18.18	14.78	3.54	12.06	3.09	0.33	16.41	12.98	5.22

TABLE 7-10, CONT'D

		Guangdong						Guangxi						Sichuan					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	28.37	13.86	1.99	8.64	3.26	0.68	19.90	9.63	0.45	11.82	8.52	1.47	7.09	3.00	-4.62	22.51	17.95	2.78
2	TOB	23.94	23.21	-2.05	13.51	14.13	0.96	15.64	21.21	-5.12	18.72	24.83	0.55	15.01	13.50	-6.92	15.67	20.82	2.76
3	TEX	26.21	18.73	1.64	7.75	3.68	0.35	14.36	6.25	0.04	8.29	-0.53	0.30	9.83	3.55	-1.41	21.92	8.77	3.32
4	WEA	25.50	15.73	5.08	8.29	1.36	-0.04	20.15	8.13	5.47	5.28	10.45	-2.06	14.93	9.43	0.44	26.04	17.34	9.79
5	LEA	23.99	14.44	3.58	3.44	-2.35	-0.02	18.19	9.26	1.42	11.76	0.82	2.21	20.54	9.32	1.99	19.10	3.63	2.98
6	WDF	27.98	25.23	3.87	7.04	-1.00	0.08	17.16	10.60	1.58	14.90	10.95	4.75	16.10	8.24	0.70	22.82	11.27	4.92
7	PAP	24.45	15.07	2.83	12.68	6.63	1.39	14.25	4.82	0.76	11.96	16.75	3.30	11.32	5.75	-0.34	20.60	12.74	8.34
8	PET	14.87	10.54	-1.31	25.44	20.14	2.46	8.48	26.67	0.76	17.37	8.21	5.87	17.10	7.51	-4.86	39.87	44.40	13.55
9	CHE	26.32	17.40	1.74	14.96	3.72	3.00	16.50	1.98	1.83	10.27	5.82	2.38	12.01	-1.39	0.41	23.81	13.35	6.50
10	RBP	23.49	15.75	2.19	7.08	0.37	0.69	19.09	11.70	1.29	6.17	-3.74	-0.62	14.91	4.58	0.76	24.09	21.49	4.92
11	SCG	31.71	19.41	3.82	17.19	3.17	2.56	20.30	10.69	1.14	10.65	5.36	1.29	17.86	2.64	1.34	24.40	23.33	3.75
12	PEM	28.27	14.62	2.07	24.45	10.53	4.21	15.18	2.71	-0.07	13.90	15.07	3.25	10.49	2.31	-1.86	18.67	10.77	5.30
13	MET	28.70	20.29	4.35	10.63	0.28	0.96	23.19	7.29	4.16	12.67	2.57	-2.15	17.32	5.66	1.46	19.40	12.70	4.38
14	MCH	24.10	9.71	3.31	13.03	9.83	2.74	21.55	4.39	3.43	16.36	4.31	1.24	18.39	2.69	2.33	23.17	11.34	9.77
15	TRS	37.37	14.32	5.52	17.38	6.55	2.34	34.07	7.05	4.01	18.97	13.46	2.61	25.86	3.29	4.72	33.17	14.74	5.63
16	ELE	22.23	18.54	1.94	11.07	1.33	1.53	13.94	10.12	1.16	22.45	8.92	4.31	9.01	-0.27	-0.88	47.94	35.00	8.52
17	ICT	23.65	6.82	3.68	22.40	5.60	2.91	31.49	10.27	5.78	23.29	10.17	5.83	28.03	3.55	6.28	25.21	8.74	4.78
18	INS	31.05	10.44	11.69	12.10	5.82	-2.95	25.72	4.77	4.16	9.44	2.40	3.97	15.94	2.40	2.41	53.81	6.48	7.57
	<i>Utilities</i>	24.79	6.08	4.08	15.05	4.70	1.85	21.36	4.45	1.43	9.90	8.24	2.27	9.65	5.73	-1.94	14.43	19.35	8.62
	<i>Mining</i>	23.94	13.92	2.42	14.97	2.37	1.63	18.56	7.40	1.32	13.24	9.39	2.47	13.59	2.86	-0.44	22.90	13.88	5.40
	<i>Manufacturing</i>	18.14	15.33	1.16	20.31	14.99	1.39	11.29	0.66	4.50	12.29	11.85	1.81	4.41	0.89	-6.03	24.66	19.03	8.53
	<i>All</i>	24.06	13.97	2.44	15.29	4.04	1.59	18.25	6.00	1.69	13.07	11.74	2.74	13.06	3.68	-0.90	21.53	15.34	6.13

TABLE 7-10, CONT'D

		Guizhou						Yunnan						Shaanxi					
		1987-1993			1993-2005			1987-1993			1993-2005			1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	30.85	12.18	-6.37	13.61	6.11	1.82	30.41	4.98	-0.22	9.24	6.11	-0.01	5.90	5.67	-2.94	14.64	10.45	3.62
2	TOB	16.63	19.44	-6.49	19.96	10.77	3.65	21.49	10.48	-3.15	4.55	15.47	-5.48	16.92	12.51	-1.83	11.50	14.55	2.78
3	TEX	5.69	4.31	-1.95	21.06	0.86	-0.64	7.38	3.51	-1.61	9.54	7.23	2.35	10.84	8.53	-0.32	6.78	2.65	3.04
4	WEA	7.21	10.03	-1.01	17.42	8.35	4.26	9.13	11.16	7.12	19.99	31.08	11.06	12.28	6.04	0.99	12.66	11.99	5.31
5	LEA	6.44	6.82	-1.02	165.64	28.10	8.97	10.99	1.98	-0.13	80.44	15.42	0.78	10.14	2.65	-0.11	16.20	16.50	3.12
6	WDF	23.18	5.78	4.45	25.42	15.12	3.54	39.73	9.99	0.23	23.53	11.84	7.34	15.59	2.13	3.36	15.27	10.09	1.06
7	PAP	9.62	3.88	0.28	23.13	5.49	6.50	15.15	5.61	0.24	14.97	14.16	4.09	11.22	3.09	0.24	12.55	8.57	4.01
8	PET							28.45	108.13	-13.98	19.69	-7.94	-0.61	17.96	18.90	-1.09	15.49	13.06	1.73
9	CHE	17.83	-2.35	3.34	19.33	12.61	3.56	19.35	-2.06	2.54	13.45	10.26	2.73	11.59	-0.36	0.91	14.36	11.93	3.96
10	RBP	21.15	12.38	2.05	18.21	11.74	0.61	14.52	3.27	1.17	16.04	8.04	1.30	11.84	2.98	1.14	15.76	15.21	4.63
11	SCG	20.35	3.34	2.28	15.70	8.59	2.45	26.07	9.07	1.62	15.94	12.37	1.79	14.09	4.86	0.77	13.35	17.17	3.22
12	PEM	20.82	-1.57	1.85	15.60	7.77	1.40	21.09	3.00	0.97	15.11	10.66	1.97	10.77	0.34	-0.52	16.26	8.73	3.73
13	MET	23.30	7.47	3.74	21.31	11.16	3.43	14.60	3.34	2.25	17.85	1.87	0.34	13.83	2.01	2.25	11.70	10.10	5.11
14	MCH	25.58	2.05	5.33	20.23	5.04	6.18	23.45	0.53	4.43	11.58	2.86	0.58	10.11	-1.53	1.21	20.36	11.29	8.82
15	TRS	26.01	2.04	4.96	14.71	7.36	4.34	23.95	4.77	2.61	6.64	11.39	1.81	21.78	-0.42	3.89	16.81	8.40	5.22
16	ELE	34.84	6.34	3.79	16.41	7.65	2.40	18.27	5.37	1.09	14.93	8.64	3.55	9.64	2.58	0.71	21.68	15.49	5.20
17	ICT	2.02	-12.15	1.38	29.59	20.27	8.74	36.54	5.56	4.24	11.28	33.61	0.22	27.72	6.17	5.21	13.31	5.09	2.53
18	INS	6.51	-6.75	1.81	24.39	10.70	4.99	22.80	-3.84	5.66	21.74	5.68	2.76	12.81	2.83	3.48	14.10	4.66	1.55
	<i>Utilities</i>	20.67	1.74	1.06	15.62	8.81	8.13	19.15	3.38	0.58	14.39	12.78	7.80	16.15	0.18	0.84	16.76	26.63	5.56
	<i>Mining</i>	16.03	2.62	1.62	17.95	9.43	3.55	21.72	4.64	2.55	11.75	11.19	1.48	13.64	2.84	1.12	15.41	10.09	4.52
	<i>Manufacturing</i>	9.29	5.79	-0.01	18.34	11.38	0.49	14.03	9.64	-1.31	10.58	8.78	0.76	8.69	6.82	-4.92	9.30	8.89	2.60
	<i>All</i>	16.26	3.71	1.31	17.12	11.84	3.54	21.32	6.56	1.75	11.63	11.52	1.55	13.36	3.15	0.57	14.44	15.29	5.35

TABLE 7-10, CONT'D

		Xinjiang					
		1987-1993			1993-2005		
		Y/L	K/L	TFP	Y/L	K/L	TFP
1	FDB	12.93	9.30	-2.54	11.63	8.82	1.52
2	TOB	18.52	28.58	-7.26	8.84	19.97	-1.95
3	TEX	9.87	7.50	-3.60	9.29	5.65	-1.28
4	WEA	5.36	12.65	-0.32	10.12	16.40	1.97
5	LEA	10.37	5.97	0.25	56.12	23.95	6.04
6	WDF	6.37	6.59	-2.22	18.30	14.91	6.39
7	PAP	12.89	9.99	-0.45	13.02	10.41	4.12
8	PET	11.94	-6.55	2.18	16.31	17.70	-0.84
9	CHE	14.29	5.72	0.85	16.35	8.35	4.59
10	RBP	18.09	6.62	1.45	14.61	63.74	0.45
11	SCG	14.37	3.65	-2.76	15.24	20.47	2.51
12	PEM	19.86	7.13	-0.40	20.32	40.27	3.05
13	MET	8.99	5.24	0.29	21.73	16.59	2.72
14	MCH	15.77	-1.23	2.15	13.37	7.77	2.36
15	TRS	19.45	5.35	1.98	13.44	7.42	3.27
16	ELE	15.06	11.20	1.22	24.92	23.98	5.46
17	ICT	18.33	7.39	1.21	54.06	45.17	12.86
18	INS	7.78	11.75	5.09	53.52	26.97	7.95
	<i>Utilities</i>	14.21	18.27	-4.71	9.07	12.63	-0.50
	<i>Mining</i>	13.15	5.13	-0.74	15.56	13.83	2.25
	<i>Manufacturing</i>	9.85	6.19	-4.58	10.59	11.15	5.86
	<i>All</i>	13.01	11.55	-2.44	12.52	12.30	1.93



# Chapter 8 Conclusion, Contribution and Implication

Based on official statistics, input and output data for 24 industries in 25 Chinese provinces for the period 1985-2005 are constructed for the first time. Tremendous efforts are made to fill data gaps and solve many other data problems to ensure that our data work is in accordance with the modern theory of production function. We then apply Jorgenson's translog production function to this newly constructed dataset to examine industry-level productivity performance across regions. In this conclusion chapter, the researcher first summarizes the data work for major indicators and discusses remaining data problems, and then concludes the TFP results estimated using the data and likely biases because of existing data deficiencies, which will lead to suggestions for future work in this area.

## 8.1 Major findings

Major findings by this study are as follows. First, shares of different sectors in most regions became more diversified after 1993. This means that under market situation, sectors can expand more quickly if they have comparative advantages in one region, and vice versa. Before market orientation, structures of most local economies were very close to the nation as designed by the government. This kind of structure could be stable at that time since local

markets were protected and segmented. Defective SOEs will not break since they can get loans with the help from local governments.

Second, economic growth of China's industry was mainly investment-driven. Capital intensity was greatly increased, which was the major cause of labour productivity growth. Welfare was quickly improved but failed to be sustainable. This is evidenced by the slowing-down of labour productivity growth caused by stagnant net capital stock growth after the Asian financial crisis. Since the beginning of the 21<sup>st</sup> century, China's entering into WTO has played an important role in attracting FDI, and partly caused remarkable growth in recent years. However, to keep the effects of WTO accession and current fast growth, pace of domestic reform should not be slowed down.

Third, in 1985, labour productivity was diversified across regions. Gaps between east rich regions and west poor regions were very large. During 1985-2005, labour productivity substantially increased for all the regions. From results of convergence test, there is significant catch-up effect in less-developed regions. East more-developed regions were much slower in improving TFP since they are in the frontier of China's productivity.

Fourth, most regions experienced significant TFP growth within 1985-2005. Before 1993, TFP performance was very mixed across industries. Without the establishment of whole set of market mechanism, efficiency improvement was only found in those competitive sectors. During 1993-2005, most sectors achieved quick growth in TFP except oil extraction and petroleum industry

which are monopolized by SOEs. If we decompose manufacturing into capital goods, consumer goods and materials, performance of capital goods was the best, then materials. Output growth of consumer goods depended more on increase of capital intensity. Enjoying China's comparative advantage of low labour cost, firms got less incentive to improve productivity.

Fifth, through convergence test on regional labour productivity by sectors, we can find that the economic reform did decrease the productivity disparity between regions. Poor regions were catching up with rich ones. During the first stage of reform, the trend of convergence was comparatively weaker than that at the second stage. Since 1993, marketization has made flow of capital and labour more freely, so poor regions were able to made use of local comparative advantages. For the three major industries, convergence is the fastest in manufacturing, then mining.

## **8.2 Contributions**

The present study has made the following contributions. First, it is the first time to study China's industrial productivity on regional level and lower level of sectors. In previous studies, there are some regional TFP studies of China, but not cross-classified by detailed sectors, such as Zheng & Hu (2006), Hsueh et al (1993). There are more TFP studies on national level, like Wu (2007), Zheng & Bigsten (2006), Y. Wu (2004), Ho & Jorgenson (2001), and Madisson (1998). In this work, major efforts were made in the construction of regional panel data, including time-series of gross value of output in current and constant prices,

gross value-added in current prices, net capital stock, capital input, number of workers and employees, total working hours and labour input.

Second, efforts have been made in improving quality of measurement, such as reconciliation of data coverage, industrial classification and removing residential structure. It has been discussed in Chapter One that there are different coverage in the China's official statistics by different departments of the NBS. Mixed use of data from different departments will make the time-series inconsistent. In this work, all raw data is limited to DITS coverage of the NBS. On the other hand, there are several coverage changes during the period of 1985-2005. Detailed changes and possible influences to results have been discussed in chapter one. Within 1985-2005, there are mainly three sets of industrial classifications started in 1985 and 1993 respectively. It is necessary to reconcile these ICs for sectoral TFP exercise. Adopting Wu & Yue (2007)'s method, this study regrouped the industrial branches into 25 sectors, and then dropped "others manufacturing" and "lumbering". Details of the "others manufacturing" are often unclear and sometimes the industry is used as residual in the data work. Besides, lumbering should be included in agriculture instead of industry. As for the problem of residential structure, it is caused by a large amount of investment by SOEs in nonproductive fixed assets, such as hospitals and schools. Therefore, residential structure should be excluded from capital input when assessing TFP performance. Otherwise, capital input would be over-estimated and TFP under-estimated.

Third, in this study, efforts were made to derive various regional indicators, such as PPI, depreciation rate and deflator of structure. In official statistics, there is no detailed regional indicator that is cross-classified by industrial sectors although there are significant differences among regions. Fortunately, information is normally available on regional total. Derivation of regional indicators is based on national data, and then adjusted by the ratio of regional level over the national level. With this approach, it is actually assumed that the regional difference has the same influence on each sector.

Fourth, this study adopts Jorgenson's framework to analyze the case of China. Following Ho & Jorgenson (2001)'s work of China at national level, we extend their research to the regional level. In the measurement, nominal rate of return of capital input was estimated using IO tables, and intermediate input in constant prices was derived following Jorgenson's concept as discussed in Chapter Five.

### **8.3 Limitations and suggestions for further research**

Due to limited data sources and poor data quality, there are still some remaining data problems in this study, such as employment of single deflation of GVA, aggregation of ownership types, and no exclusion of scraping of fixed assets. If with more released information, this study can be further improved in the following aspects. First, energy consumption can be separated from other intermediate inputs to investigate improvement of China's performance in energy usage efficiency. Second, ICT and transportation assets can be separated from other types of capital assets as a standard treatment of

Jorgenson's approach. Third, current work can be extended by including ownership types, not only SOEs vs non-SOEs, but also domestic vs FDI, to better understand regional TFP performance. In the reform period, enterprises of different ownership are facing different market situation and government policies. Behavior and performance of SOEs are expected to be significantly different from enterprises of other ownership types. In this study, effort has been made in measuring net capital stock by ownership types. However, quality of raw data is very poor, which may bias the results. Fourth, for a similar purpose, we can also extend the work to include openness at industry level (export share of output). During the reform period, export-driven sectors are one major engine of China's economic growth. Such sectors are very important in contemporary China, but not well studied by past literatures due to data limitation.

## References

- [1] Bai, Chong En; Lu, Jianguo, and Tao, Zhigang, 2006, "The Multitask Theory of State Enterprise Reform: Empirical Evidence from China", *American Economic Review*, May 2006, v. 96, iss. 2, pp. 353
- [2] Bai, Chong En; Hsieh, Chang-Tai and Qian, Yingyi, 2006, "The Return to Capital in China", *Brookings Papers on Economic Activity*, 2006, iss. 2, pp. 61-88
- [3] Bai, Chong En; Du, Yingjuan; Tao, Zhigang; Tong and Sarah Y., 2004, "Local Protectionism and Regional Specialization: Evidence from China's Industries", *Journal of International Economics*, July 2004, v. 63, iss. 2, pp. 397-417
- [4] Bai, Chong En; Li, David and Wang, Yijiang, 1997, "Why Is the Productivity Analysis Misleading for Gauging State Enterprise Performance?", *Boston College Department of Economics, Boston College Working Papers in Economics*: 344
- [5] Barro, Robert J. and Xavier Sala-i-Martin, 1995. *Economic Growth*, McGraw Hill, Boston, MA
- [6] Chow, Gregory C, 2006, "New capital estimates for China: Comments", *China Economic Review*, v.17, iss. 2, pp. 186-92
- [7] Denison, Edward F. 1962, *the Source of Economic Growth in the United States and the Alternatives before Us*, Committee for Economic Development, New York

- [8] Denison, Edward F. 1972. Classification of sources of growth, *Review of Income and Wealth*, 18(1): 1-25
- [9] Ezaki, Mitsuo and Sun, Lin, 1999, Growth Accounting in China for National, Regional, and Provincial Economies: 1981-1995, *Asian Economic Journal*, 13(1), pp.39-71
- [10] Measuring Capital – OCDE Manual, 2000. Organization for Economic Co-operation and Development
- [11] Measuring Productivity – OCDE Manual, 2001. Organization for Economic Co-operation and Development
- [12] Fraumeni, Barbara M. 1997, “The measurement of depreciation in the US National Income and Product Accounts”, *Survey of Current Business*, July 1997
- [13] Ho, Mun S. and Dale W. Jorgenson, 2001, Productivity Growth in China, 1981-95, mimeo, Kennedy School of Government, Harvard University, Cambridge, MA
- [14] Huang, Yongfeng; Ren Ruoen and Liu Xiaosheng, 2002, “Capital Stock Estimates in Chinese Manufacturing by Perpetual Inventory Approach”, *China Economics quarterly*, Vol. 1 (2), 377-396
- [15] Hulten, Charles R. 1990, *The Measurement of Capital, Fifty Years of Economic Measurement: The Jubilee*, NBER, Studies in income and Wealth, No. 54, University of Chicago Press, 1990
- [16] Hulten, Charles R. (2000), ‘Total Factor Productivity: A Short Biography’, NBER Working Paper #7471, Cambridge, MA
- [17] Hulten, Charles R and Frank C. Wykoff, 1981, “The measurement of economic depreciation” The Urban Institute Press, Washington D. C.



- [18] Hulten, Charles R and Frank C. Wykoff, 1981, "The measurement of economic depreciation using vintage asset prices" The Urban Institute Press, Washington D. C.
- [19] Hsueh Tien-tung, Qiang Li and Shucheng Liu, eds, 1993, China's Provincial Statistics: 1949-1989, Boulder: Westview Press
- [20] Jefferson, Gary H.; Inderjit Singh; Junling Xing and Zhang Shouqing, 1999, "China's industrial performance: a review of recent findings", Chapter 6 in Jefferson, Gary H. and Inderjit Singh (eds.), Enterprises Reform in China: Ownership, Transition, and Performance, New York: Oxford University Press
- [21] Jefferson, Gary H.; Rawski, Thomas G.; Wang Li and Zheng Yuxin, 2000, "Ownership, Productivity Change, and Financial Performance in Chinese Industry", Journal of Comparative Economics 28, pp786–813
- [22] Jorgenson, Dale W., 1995, Productivity. Volume 1, Postwar U.S. economic growth, Cambridge and London: MIT Press
- [23] Jorgenson, Dale W., 1990, Productivity and Economic Growth, Fifty Years of Economic Measurement: The Jubilee, NBER, Studies in income and Wealth, No. 54, University of Chicago Press
- [24] Jorgenson, Dale W., and Zvi Griliches, 1967, "The Explanation of Productivity Change," Review of Economic Studies, 34, July 1967, 349-83
- [25] Krugman, Paul, 1994. "The Myth of Asia's Miracle", Foreign Affairs, vol. 73, no. 6, p. 62-78
- [26] Li, Jingwen, Dale W. Jorgenson, Zheng Youjing and Masahiro Kuroda, 1993, Productivity and Economic Growth in China, USA and Japan, China Social Science Publishing House, Beijing

- [27] Li, Jingwen et al, 1992, "Productivity and China's Economic Growth", *The Economic Studies Quarterly*, 43 (4): 337-350
- [28] Maddison, Angus, 1998, *Chinese Economic Performance in the Long Run*, OECD Development Centre, Paris
- [29] Meng, Xin, 2004, "Economic Restructuring and Income Inequality in Urban China", *Review of Income and Wealth*, 50 (3)
- [30] National Bureau of Statistics of China, Official Website: <http://www.stats.gov.cn/>
- [31] Rawski, Thomas, 1993, "How fast has the Chinese industry grown?", Policy Research Working Paper, WPS 1194, Policy Research Department, World Bank, Washington D.C.
- [32] Ren, Rouen (1997) *China's Economic Performance in an International Perspective*, OECD Development Centre Studies
- [33] Sachs, Jeffrey D.; Woo, Wing Thye, "China's Economic Growth after WTO Membership", *Journal of Chinese Economic and Business Studies*, January 2003, v. 1, iss. 1, pp. 1-31
- [34] Sachs, Jeffrey D.; Woo, Wing Thye, "Understanding China's Economic Performance", *Journal of Policy Reform*, 2000, v. 4, iss. 1, pp. 1-50
- [35] State Statistical Bureau (Annual), (*Zhongguo Tongji Nianjian*) China Statistical Yearbook, China Statistical Publishing House, Beijing
- [36] Sylvie, Démurger; Jeffrey, D. Sachs; Woo, Wing Thye; Bao, Shuming; Chang, Gene and Andrew Mellinger, 2002, "Geography, economic policy, and regional development in China", NBER Working Paper #8897, Cambridge, MA

- [37] Woo, Wing Thye, 1998 "Chinese Economic Growth: Sources and Prospects", in M. Fouquin and F. Lemoine (eds.) *The Chinese Economy*, Economica, London
- [38] Wu, Harry X., 2000, China's GDP level and growth performance: Alternate estimates and the implications, *Review of Income and Wealth*, 46 (4): 475-499
- [39] Wu, Harry X. and Esther Y. P. Shea 2002, what can we learn from productivity analysis of the Chinese economy, mimeo, The Hong Kong Polytechnic University, Hong Kong
- [40] Wu, Harry X., 2002a, "How Fast Has Chinese Industry Grown? – Measuring the Real Output of Chinese Industry", *Review of Income and Wealth*, 48 (2)
- [41] Wu, Harry X., 2002b, "Measuring the Capital Stock in Chinese Industry – Conceptual Issues and Preliminary Results", mimeo, the Hong Kong Polytechnic University, Hong Kong
- [42] Wu, Harry X. and Yue Ximing, 2007, Source of quality change in the labour input of Chinese industry 1949-2005, mimeo, the Hong Kong Polytechnic University, Hong Kong
- [43] Wu, Harry X., 2007, "The Chinese Economic Growth Rate Puzzle: How Fast Has the Chinese Economy Been Growing?" *Asian Economic Papers*, vol. 6, no. 1, pp. 1–23.
- [44] Wu, Yanrui, 2004, *China's Economic Growth: A Miracle with Chinese Characteristics*, Routledge Curzon, New York
- [45] Xinhua Net, website: <http://www.xinhuanet.com>

- [46] Xu, Xianchun, 1999, on Reform and Development of the Chinese System of National Economic Accounting, Economic Science Press (in Chinese)
- [47] Xu, Xianchun, 2004, "China's gross domestic product estimation", *China Economic Review*, v. 15 pp. 302-322
- [48] Young, Alwyn, 2003, "Gold into Base Metals: Productivity Growth in the People's Republic of China during the Reform Period", *Journal of Political Economy*, 2003, vol. 111, no. 6
- [49] Young, Alwyn, 2000b, "The Razor's Edge: Distortions and Incremental Reform in the People's Republic of China." *The Quarterly Journal of Economics* CXV, no. 4: 1091-1135
- [50] Lin, Justin Yifu, 2005, "Viability, Economic Transition and Reflection on Neoclassical Economics", *Kyklos*, 2005, v. 58, iss. 2, pp. 239-64
- [51] Zhang, Jun, Wu, Guiying and Zhang, Jipeng, 2007, "Compilation of China's Provincial Capital Stock Series Using Perpetual Inventory Method", paper prepared for the the International Workshop on Productivity in China held at Tsinghua University in Beijing
- [52] Zheng, Jinghai and Hu, Angang, 2006, "An empirical analysis of provincial productivity in China, 1979-2001", *Journal of Chinese Economic and Business Studies*, November 2006, v. 4, iss. 3, pp. 221-39
- [53] Zheng, Jinghai; Liu, Xiaoxuan and Bigsten, Arne, 2003, "Efficiency, Technical Progress, and Best Practice in Chinese State Enterprises (1980-1994)", *Journal of Comparative Economics*, March 2003, v. 31, iss. 1, pp. 134-52

- [54] Zheng, Jinghai, 2001, "A Comparative Study of Employment Adjustment in Chinese Enterprises (1986-1990)", *Economics of Planning*, 2001, v. 34, iss. 1-2, pp. 73-88