

Regional Economic Development and Structural Changes

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REGIONAL ECONOMIC DEVELOPMENT AND STRUCTURAL CHANGES

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China, while maintaining tight political control, has been pursuing to establish a market led liberal economy since its open door policy and economic reforms started in late 1970s. Reform policies encouraging multilateral trade, foreign investment and free market development have resulted in continuous high rate economic growth for the past one and a half decade.

Economic reforms bear the first fruits in eastern China, particularly the southeast coastal region the ultra economic success of which has created serious disparity with inland China. In this paper, we shall divide China into three major economic zones, namely, the eastern region, the central region and the western region. By examining statistical data of 1985 and 1995, comparing regional development pattern for the eastern and the central regions, we shall try to discuss to the current situation as well as limits and prospects of economic development for the central region.

I. Change of Regional Economic Construction

(1) Rapid Economic Growth in the Eastern Region

In 1985, the eastern, central and the western regions had 41%, 36% and 23% of the total population (year end) respectively and the percentage did not change much until 1995. However, contrastive to the population proportion is the economic indicators that has shown a widening gap between the east and other regions in terms of economic significance in the national economy. The so-called "expansion of the East" can be manifested in the following data: for the gross output value of agriculture and industry and the nominal GDP, the eastern region got 43%, 60% and 51% respectively in 1985, but the share jumped to 46%, 63% and 60% in 1990, and 49%, 66% and 58% in 1995; for total value of exports and foreign direct investment actually used, the eastern region got 84% and 90% respectively in 1985, and 85% and 88% in 1995 (Table 1).

Given the stable and almost constant population since 1985, the eastern region has improved its productivity effectively, outrunning other regions. Per capita GDP for the three regions in 1985 read 1,020Rmb in the east, 701Rmb in the central and 571Rmb in the west. Thus, the central had 69% of the east. Despite a drop in percentage to 63% in 1990 because of rapid inflation effect in the east, per capita GDP for the three regions saw wider disparity that the figure was 6,777Rmb, 3,691Rmb and 2,945Rmb respectively in 1995. Thus, people in the central earned only 54% of those in the east.

Table 1
**Changes in share of population, per-capita GDP, and
export by regions: 1985, 1995**

| | 1985 | | | | | 1995 | | | | |
|-------------------|-------|---------|-----------|------|-------|-------|---------|-----------|-------|-------|
| | East | Central | Central 6 | West | Total | East | Central | Central 6 | West | Total |
| Population | 41.6 | 35.5 | 28.2 | 22.9 | 100.0 | 41.2 | 35.7 | 28.6 | 23.0 | 100.0 |
| Per-capita GDP | 1,020 | 701 | 654 | 571 | - | 6,777 | 3,691 | 3,455 | 2,945 | - |
| FDI actually used | 90.4 | 5.3 | 4.4 | 4.3 | 100.0 | 87.7 | 9.2 | 6.6 | 3.1 | 100.0 |
| Export | 83.7 | 12.5 | 8.5 | 3.8 | 100.0 | 85.2 | 9.8 | 7.1 | 4.9 | 100.0 |

(% RMB)

Source: *Statistical Yearbook of China*, 1986, 1996 and *Almanac of China's
Foreign Economic Relations and Trade*, 1986, 1996

(2) *GBP Construction*

The east occupied 58% of total GDP in 1995 with an average annual growth rate at 22% since 1985. It had been a major manufacturing area before the opening. Its secondary industry occupied 51% of GDP in 1985 and slightly dropped to 49% in 1995, but the proportion of primary industry was down from 26% to 17% in the same period while that of tertiary industry increased from 23% to 34%. The average annual growth rate of each sector was 17%, 22% and 27% respectively. Though secondary industry still plays important role in output value, tertiary industry has become the leading force of economic growth for the eastern region.

The share of the central region in total GDP fell from 31% in 1985 to 28% in 1995, though its average annual growth rate was 20%. Sectorwise shares in GDP were 35%, 43% and 22% in 1985 with the primary as well as the secondary sector led the economy, but secondary industry increased its share to 44% while tertiary industry 29% in 1995 that it has been the secondary and the tertiary sectors leading economic growth for the central region.

(3) *Exports and Foreign Direct Investment*

The economic growth of the east can be characterized as one of export led growth. In 1979, the first four Special Economic Zones (SEZs) were established in Guangdong and Fujian. The SEZs were privileged to attract foreign direct investment and export was greatly encouraged. In 1984, fourteen more coastal cities together with the Hainan Island were opened to foreign investors. Despite the recent nationwide opening, the east still accounted for 88% in total foreign direct investment in 1995, down from 90% in 1985 but its share in total export value was up from 84% in 1985 to 85% in 1995.

The central has suffered from both policy discrimination and geographical inwardness to attract foreign investment and to develop foreign trade. The share in total export value saw a drop from 13% in 1985 to 10% in 1995 despite a rise in foreign direct investment from 5% in 1985 to 9% in 1995 (Table 2).

Table 2

Changes in share of GDP by regions and sectors in each region: 1985, 1995

| | East | Central | Central 6 | West | East | Central | Central 6 | West | Total |
|-------------|-------|---------|-----------|-------|------|---------|-----------|------|-------|
| 1985 | | | | | | | | | |
| Nominal GDP | 100.0 | 100.0 | 100.0 | 100.0 | 52.8 | 30.9 | 22.9 | 16.3 | 100.0 |
| Primary | 25.6 | 35.3 | 40.5 | 40.3 | 44.7 | 36.1 | 28.7 | 19.3 | 100.0 |
| Secondary | 51.0 | 43.3 | 21.5 | 23.8 | 57.5 | 28.5 | 19.8 | 14.0 | 100.0 |
| Tertiary | 23.4 | 21.4 | 38.0 | 35.9 | 54.1 | 29.0 | 21.6 | 16.9 | 100.0 |
| 1995 | | | | | | | | | |
| Nominal GDP | 100.0 | 100.0 | 100.0 | 100.0 | 58.3 | 27.5 | 20.6 | 14.1 | 100.0 |
| Primary | 16.7 | 26.1 | 26.8 | 26.9 | 47.0 | 34.7 | 26.7 | 18.4 | 100.0 |
| Secondary | 49.2 | 44.4 | 43.7 | 41.1 | 61.3 | 26.1 | 19.3 | 12.5 | 100.0 |
| Tertiary | 34.1 | 29.4 | 29.4 | 31.6 | 61.2 | 25.0 | 18.7 | 13.8 | 100.0 |

Source: *China's Provincial Statistics, 1949-1989* and *Statistical Yearbook* of each province, 1996.

(4) *Output Value of Agriculture*

The east is not only the center of manufacturing industry but also an agricultural region. It produced 43% of gross output value of agriculture in 1985 and occupied 75% of total fishery. Rapid growth in the agricultural sector goes side by side with its economic development. The share of the eastern region in total agricultural output went up from 43% to 49% from 1985 to 1995 while that in output of industry went from 60% to 66%. Industrialization also improved agricultural output efficiently. The average annual growth rate of agriculture was 23% in the same period. However, the agricultural central has a slower growth of agricultural output and has suffered a decrease in its total share from 37% to 33% with an average annual growth rate of only 20% (Table 3).

Table 3

Changes in share of output of agriculture by regions and firm products in each region: 1985, 1995

| | East | Central | Central 6 | West | East | Central | Central 6 | West | Total |
|-----------------------|-------|---------|-----------|-------|------|---------|-----------|------|-------|
| 1985 | | | | | | | | | |
| Output of Agriculture | 100.0 | 100.0 | 100.0 | 100.0 | 43.3 | 36.5 | 28.3 | 20.2 | 100.0 |
| Farming | 64.3 | 70.5 | 70.7 | 62.8 | 42.1 | 38.8 | 30.2 | 19.1 | 100.0 |
| Forestry | 4.5 | 4.5 | 4.1 | 7.0 | 38.8 | 33.1 | 22.9 | 28.2 | 100.0 |
| Animal husbandry | 19.0 | 17.6 | 17.4 | 23.0 | 42.7 | 33.2 | 25.5 | 24.0 | 100.0 |
| Fishery | 4.1 | 1.3 | 1.6 | 0.5 | 75.2 | 20.8 | 19.9 | 4.0 | 100.0 |
| Others | 8.1 | 6.1 | 6.2 | 6.8 | 49.6 | 31.2 | 24.6 | 19.2 | 100.0 |
| 1995 | | | | | | | | | |
| Output of Agriculture | 100.0 | 100.0 | 100.0 | 100.0 | 49.1 | 33.4 | 25.8 | 17.6 | 100.0 |
| Farming | 53.9 | 62.3 | 61.5 | 63.7 | 45.3 | 35.6 | 27.2 | 19.1 | 100.0 |
| Forestry | 3.4 | 3.5 | 3.9 | 3.7 | 47.7 | 33.6 | 28.7 | 18.7 | 100.0 |
| Animal husbandry | 28.8 | 30.2 | 29.8 | 31.3 | 47.6 | 33.9 | 25.9 | 18.5 | 100.0 |
| Fishery | 13.8 | 4.0 | 4.8 | 1.3 | 81.2 | 16.1 | 14.7 | 2.7 | 100.0 |
| Others | - | - | - | - | - | - | - | - | - |

Source: *Statistical Yearbook of China, 1986, 1991, 1996.*

The general pattern of economic growth has been experienced in the eastern region of China in which productivity in the primary sector grew first at the initiation of economic development. Surplus labor from the primary sector moved to the secondary sector providing cheap labor force which has fueled industrialization and a faster economic growth.

(5) *Investment in Fixed Assets and Output of Industry*

The east realized high investment and high growth rate of industrial production. The ratio of total investment in fixed assets went up from 53% in 1985 to 66% in 1995 with a growth rate at 26%. The ratio of total investment in fixed assets to nominal GDP was up from 29% in 1985 to 26% in 1990 and 38% in 1995. Continuous active investment has resulted in a growth in industrial production which can be revealed in the rise of its share in gross output value of industry from 60% in 1985 to 66% in 1995 with an average annual growth rate of 27%.

The ratio of total investment in fixed assets for the central region was 31% in 1985 and 22% in 1995 with their volume accounted for 29% and 27% of GDP respectively. Though the ratio to GDP was about the same as that of the east in 1985, it did not increase in 1995. The average annual growth rate of total investment in fixed assets was 19%. Moreover, the central's share to gross output value of industry declined from 27% to 24% with an average annual growth rate of 19% from 1985 to 1990, and 29% from 1990 to 1995. Despite a rapid improvement in industrial production, its growth is still lagged behind that in the east (Table 4 & 5).

Table 4

**Changes in share of output of industry by regions and
ownerships in each region: 1985, 1995**

| | East | Central | Central 6 | West | East | Central | Central 6 | West | Total |
|--------------------|-------|---------|-----------|-------|------|---------|-----------|------|-------|
| | 1985 | | | | | | | | |
| Output of industry | 100.0 | 100.0 | 100.0 | 100.0 | 60.3 | 26.9 | 18.9 | 12.7 | 100.0 |
| State owned | 59.3 | 72.3 | 69.9 | 76.4 | 55.1 | 30.0 | 20.4 | 15.0 | 100.0 |
| Collective owned | 34.3 | 25.8 | 28.3 | 18.1 | 69.2 | 23.1 | 17.9 | 7.7 | 100.0 |
| Individual owned | - | - | - | - | - | - | - | - | - |
| Other | 6.4 | 1.9 | 1.8 | 5.4 | 76.1 | 10.2 | 6.6 | 13.7 | 100.0 |
| Light Industry | 51.8 | 56.8 | 54.0 | 58.1 | 57.6 | 28.8 | 19.5 | 13.6 | 100.0 |
| Heavy Industry | 48.2 | 43.2 | 46.0 | 41.9 | 62.8 | 25.7 | 19.5 | 11.5 | 100.0 |
| | 1995 | | | | | | | | |
| Output of industry | 100.0 | 100.0 | 100.0 | 100.0 | 66.0 | 23.8 | 19.0 | 10.2 | 100.0 |
| State owned | 27.3 | 43.5 | 38.2 | 54.7 | 53.1 | 30.5 | 21.4 | 16.4 | 100.0 |
| Collective owned | 39.5 | 33.2 | 36.9 | 25.4 | 71.3 | 21.6 | 19.2 | 7.1 | 100.0 |
| Individual owned | 11.7 | 16.2 | 18.3 | 12.2 | 60.3 | 30.1 | 27.0 | 9.7 | 100.0 |
| Other | 21.4 | 7.0 | 6.7 | 7.6 | 85.2 | 10.1 | 7.7 | 4.7 | 100.0 |
| Light Industry | 50.4 | 39.9 | 42.6 | 40.2 | 71.0 | 20.0 | 16.9 | 9.0 | 100.0 |
| Heavy Industry | 49.6 | 60.1 | 57.4 | 59.8 | 61.6 | 26.6 | 20.1 | 11.9 | 100.0 |

Source: *China's Provincial Statistics, 1949-1989 and Statistical Yearbook of each province, 1996.*

Table 5

**Changes in share of investment in fixed asset by regions and ownerships
in each region: 1985, 1995**

| | East | Central | Central 6 | West | East | Central | Central 6 | West | Total |
|---------------------------|-------|---------|-----------|-------|------|---------|-----------|------|-------|
| 1985 | | | | | | | | | |
| Investment in fixed asset | 100.0 | 100.0 | 100.0 | 100.0 | 52.7 | 30.9 | 21.6 | 16.4 | 100.0 |
| State owned | 63.8 | 61.8 | 56.9 | 70.9 | 52.3 | 29.7 | 19.1 | 18.1 | 100.0 |
| Collective owned | 15.6 | 10.8 | 13.0 | 12.1 | 60.8 | 24.6 | 20.7 | 14.7 | 100.0 |
| Individual owned | 20.6 | 27.5 | 30.1 | 17.0 | 49.1 | 38.3 | 29.3 | 12.6 | 100.0 |
| 1995 | | | | | | | | | |
| Investment in fixed asset | 100.0 | 100.0 | 100.0 | 100.0 | 65.9 | 21.7 | 16.1 | 12.3 | 100.0 |
| State owned | 47.3 | 62.8 | 59.7 | 65.7 | 58.9 | 25.8 | 18.2 | 15.3 | 100.0 |
| Collective owned | 21.3 | 8.2 | 9.6 | 9.5 | 82.6 | 10.5 | 9.1 | 6.9 | 100.0 |
| Individual owned | 11.3 | 17.1 | 18.9 | 15.5 | 56.4 | 29.2 | 23.1 | 14.4 | 100.0 |
| Foreign funded | 10.1 | 4.7 | 4.7 | 2.9 | 82.9 | 12.7 | 9.4 | 4.4 | 100.0 |
| Overseas Chinese funded | 4.3 | 2.2 | 2.6 | 1.4 | 81.3 | 13.7 | 12.2 | 5.0 | 100.0 |
| Others | 5.8 | 4.4 | 4.5 | 5.1 | - | - | - | - | - |

Source: *Statistical Yearbook of China*, 1986, 1991, 1996.

(6) Growth of Non-state-owned Units

State-owned units accounted for 59% of gross output value of industry in 1985 and the rate declined from 48% in 1990 to 27% in 1995 while on the contrary the percentage of collective-owned units was up from 34% in 1985, to 41% in 1990 and 40% in 1995. The percentage for individual-owned units was 5% in 1990 and 12% in 1995 while other non-state-owned units were up from 7% in 1990 to 21% in 1995. Therefore, non-state-owned units have taken over from state-owned units as the locomotive of economic growth.

In 1985, 52% of gross output value of industry was light industry in the eastern region. Only in the eastern region had China had the ratio of light industry above 50%. Heavy industry has always been in the hand of state-owned companies. Since the southern provinces such as Guangdong and Fujian did not have many state-owned companies, economic development had to rely on non-state-owned sectors. As deficits of state-owned enterprises became severe, the dependence on non-state-owned sectors to lead economic development has become an advantage for the eastern region.

State-owned units in the central region have also experienced a decline in its share in gross output value of industry from 72% in 1985 down to 65% in 1990 and 44% in 1995 although it still plays a significant role in the economy. The percentage for collective-owned units grew from 28% to 33% while individual-owned units from 6% to 16% from 1985 to 1995. The average annual growth rate for state-owned units was 18% and for collective-owned units was 27%. For total investment in fixed assets, however, state-owned units were still important that they invested 62% of total investment in 1985 and 63% in 1995.

State-owned units tend to invest in infrastructure which does not have direct impact on productivity. Judging from the larger share for state-owned units in

investment to industrial output, it is suggested that the efficiency of state-owned units' investment has been low. As the share of heavy industry in total output value accounted for 43% in 1985 and 60% in 1994, it is certain that both the state-owned units and collective-owned units have been oriented to heavy industry.

(7) *Employees by Type of Industry*

In 1985, primary industry occupied 56.7% of total employees in the eastern region. The percentage went down to 53.4% in 1990 and 45.9% in 1995. The average annual growth rate was -4.3%. On the contrary, secondary industry and tertiary industry increased their shares from 26.9% to 30.6% and 16.4% to 23.5% respectively from 1985 to 1995. In the 1990s, the growth of tertiary industry has been active. The shift of industrial structure from primary dominated to tertiary has led to the increase in production of more high value-added commodities.

The central has experienced similar shift of industrial structure though at a less dramatic rate. In 1985, 64.4% of total employment was under primary industry. It decreased to 54.7% in 1995. Worth noted is that the migration of labor moved more to the tertiary sector than to the secondary. The rate for secondary industry went up from 20.4% in 1985 to 20.7% in 1990 and 23.2% in 1995 but that for tertiary grew from 15.2% to 17.0% to 22.1%. Therefore, the volume of labor force in secondary industry is almost the same as that in tertiary (Table 6).

Table 6

Changes in share of employee by regions and sectors in each region: 1985, 1995

| | East | Central | Central 6 | West | East | Central | Central 6 | West | Total |
|----------------|-------|---------|-----------|-------|------|---------|-----------|------|-------|
| 1985 | | | | | | | | | |
| Total employee | 100.0 | 100.0 | 100.0 | 100.0 | 42.9 | 33.7 | 27.5 | 23.4 | 100.0 |
| Primary | 56.7 | 64.4 | 68.0 | 73.3 | 38.5 | 34.4 | 29.7 | 27.2 | 100.0 |
| Secondary | 26.9 | 20.4 | 18.3 | 14.3 | 52.9 | 31.7 | 23.2 | 15.4 | 100.0 |
| Tertiary | 16.4 | 15.2 | 13.6 | 12.4 | 46.7 | 34.0 | 24.9 | 19.3 | 100.0 |
| 1995 | | | | | | | | | |
| Total employee | 100.0 | 100.0 | 100.0 | 100.0 | 41.8 | 34.2 | 28.0 | 23.9 | 100.0 |
| Primary | 45.9 | 54.7 | 57.1 | 64.7 | 36.0 | 35.0 | 29.9 | 29.0 | 100.0 |
| Secondary | 30.6 | 23.2 | 22.1 | 17.4 | 51.4 | 31.9 | 24.8 | 16.7 | 100.0 |
| Tertiary | 23.5 | 22.1 | 20.8 | 17.9 | 45.3 | 34.9 | 26.9 | 19.8 | 100.0 |

Source: *China's Provincial Statistics, 1949-1989 and Statistical Yearbook of each province, 1996.*

The eastern region has its secondary industry occupying 30.6% of total employees and being a main contributor to GDP. In the central region, however, tertiary industry occupied only 29.4% of nominal GDP whereas secondary only 44.4%. Though the speed of labor from primary industry to tertiary has been rapid, it has never been a result of effective economic development. One could say that the productivity of tertiary industry in the central region is low.

(8) *Economic Growth Pattern: From 1985 to 1995*

A summary of China's economic development from 1985 to 1995 shall help to understand the pattern of growth. The eastern region first obtained sufficient capital from foreign direct investment and trade surplus. Then the capital was invested in the industrial sector in an economically effective manner first by state-owned units which was followed by collective-owned units. The investment yielded positive results and has improved productivity both to state-owned units and to collective-owned units as well as individual-owned units. At the same time, surplus labor in the primary sector was able to be absorbed by the secondary and the tertiary sectors. The high growth of the agricultural sector also helped to make the movement of labor easier.

Since the later opening up of the central region to foreign investment, its economic growth had been led by state-owned units which were also predominantly important in investment as mentioned above. Although collective-owned and individual-owned units had developed to a certain extent, their importance had been far less than their counterpart in the eastern region. The interesting phenomenon has been a frequent flow of labor from the primary sector to the tertiary. However, the excessive volume of labor force in tertiary industry and the low productivity per employee have revealed some problems which together with the under-representation of collective-owned and individual-owned units in investment and the low marginal efficiency of state-owned units' investments shall be the problem we are going to examine in the following section.

II. The Problems that the Central Region is Facing

(1) *Labor Productivity*

Table 7 shows a comparison of labor productivity by sectors in terms of nominal GDP per employee in Shanghai, Jiangsu and Guangdong, representative of the eastern region, and in the central region. In 1985, there were little difference between the places in concern that GDP per employee was 6,113Rmb in Shanghai, 1,997Rmb in Jiangsu, 2,025Rmb in Guangdong and 1,557Rmb in the central. The ratio of Guangdong to the central was 1.3:1.0. However, the ratio changed to 1.7:1.0 in 1990 and 2.0:1.0 in 1995.

The employment share by sector had labor productivity of secondary industry the highest and primary industry the lowest for every province in 1985. The only exception was Shanghai which had the share of primary industry over 50% of total employment. Therefore the labor structure for both Guangdong and the central was similar and the labor productivity for Jiangsu, Guangdong and the central were low.

The parenthesized figures are the ratio of each sector to the average. The figures read 0.3:1.2:1.0 in Shanghai, 0.6:1.6:1.4 in Jiangsu, 0.5:1.9:1.5 in Guangdong and 0.5:2.1:1.4 in the central. Labor productivity differentials between secondary and tertiary industry was small in Shanghai, revealing a mature economic structure of the city prior to the open door policy. The figures of secondary industry were

highest in almost every region with Guangdong and the central being most outstanding. There were also huge labor surplus in the primary sector in these regions. The percentage of primary industry for Guangdong got down to 53.0% (7.1 percentage point down) in 1990 while at the same time the percentage of secondary industry went 6.1 percentage point up. In contrast, the percentage of secondary industry in the central was up only for 0.3 percentage point despite a down of primary industry at 2.2%. Unlike Guangdong where surplus labor from primary industry has been successfully absorbed by secondary industry resulting in a narrow labor productivity differentials between the two sectors, the central region has not have the same successful absorption of primary sector labor surplus.

Table 7

Changes in labour productivity and share of employment by sectors by
Shanghai, Jiansu, Guangdong, and central region: 1985, 1990, 1995

(RMB, %)

| | | Shanghai | | | | Jiansu | | | |
|------|---------------|-----------|-----------|----------|--------|---------|-----------|----------|--------|
| | | Primary | Secondary | Tertiary | | Primary | Secondary | Tertiary | |
| 1985 | GDP | 1,541 | 7,363 | 6,251 | 6,113 | 1,122 | 3,128 | 2,696 | 1,997 |
| | | (0.3) | (1.2) | (1.0) | (1.0) | (0.6) | (1.6) | (1.4) | (1.0) |
| | Employment(%) | 16.6 | 57.9 | 25.5 | | 53.4 | 32.8 | 13.8 | |
| 1990 | GDP | 3,736 | 10,334 | 10,333 | 9,603 | 2,035 | 5,733 | 5,986 | 3,969 |
| | | (0.4) | (1.1) | (1.1) | (1.0) | (0.5) | (1.4) | (1.5) | (1.0) |
| | Employment(%) | 11.1 | 59.3 | 29.6 | | 48.9 | 33.8 | 17.3 | |
| 1995 | GDP | 7,882 | 32,592 | 34,973 | 31,007 | 5,422 | 21,351 | 19,571 | 14,125 |
| | | (0.3) | (1.1) | (1.1) | (1.0) | (0.4) | (1.5) | (1.4) | (1.0) |
| | Employment(%) | 9.9 | 54.5 | 35.7 | | 42.9 | 32.2 | 24.9 | |
| | | Guangdong | | | | Central | | | |
| | | Primary | Secondary | Tertiary | | Primary | Secondary | Tertiary | |
| 1985 | GDP | 1,046 | 3,905 | 3,045 | 2,025 | 854 | 3,298 | 2,104 | 1,557 |
| | | (0.5) | (1.9) | (1.5) | (1.0) | (0.5) | (2.1) | (1.4) | (1.0) |
| | Employment(%) | 60.1 | 21.1 | 18.7 | | 64.4 | 20.4 | 15.2 | |
| 1990 | GDP | 2,328 | 6,920 | 8,094 | 4,720 | 1,503 | 5,369 | 4,729 | 2,854 |
| | | (0.5) | (1.5) | (1.7) | (1.0) | (0.5) | (1.9) | (1.7) | (1.0) |
| | Employment(%) | 53.0 | 27.2 | 19.8 | | 62.2 | 20.7 | 17.0 | |
| 1995 | GDP | 5,897 | 23,236 | 19,653 | 15,155 | 3,585 | 14,354 | 10,002 | 7,504 |
| | | (0.4) | (1.5) | (1.3) | (1.0) | (0.5) | (1.9) | (1.3) | (1.0) |
| | Employment(%) | 41.3 | 33.8 | 24.7 | | 54.7 | 23.2 | 22.1 | |

Source: *China's Provincial Statistics, 1949-1989 and Statistical Yearbook of each province, 1996.*

Guangdong's secondary industry has developed vigorously from 1990 to 1995 and the percentage of secondary and tertiary industry have 6.6 and 4.9 percentage point up respectively. Other regions have also experienced an increasing flow of labor to the tertiary sector. The percentage of tertiary industry was 6.1 percentage point up in Shanghai while in Jiansu and the central they were 7.6 and 5.1 respectively. In Shanghai, the inflow of labor to the tertiary sector has greatly improved the sector's productivity but it was an opposite picture in the central. Labor productivity of tertiary industry was down comparing with that of secondary and the productivity differentials were widened. The ratio of each sector's productivity to the average changed from 1.9:1.7 in 1990 to 1.9:1.3 in 1995. As a result, tertiary industry in the central was shock absorber of surplus labor and the

industry now has its own problem of excess labor. This situation may have been caused by its traditional capital intensive heavy industry led economic structure.

Lastly, it is worth noted that although labor structure had little change in the period from 1985 to 1990 when the percentage of change in each sector was -2.2%, 0.3% and 1.8% for primary, secondary, and tertiary industries respectively, the figures have shown a dramatic change from 1990 to 1995 that they were 7.5%, 2.5% and 5.1% respectively. The reason was that vitality of the economy in the region had been re-instigated which led to faster development of secondary industry and therefore allowing it to be able to absorb more primary sector surplus labor. Other sectors also had large amount of labor flowing in who was desperately looking for better lives and opportunities.

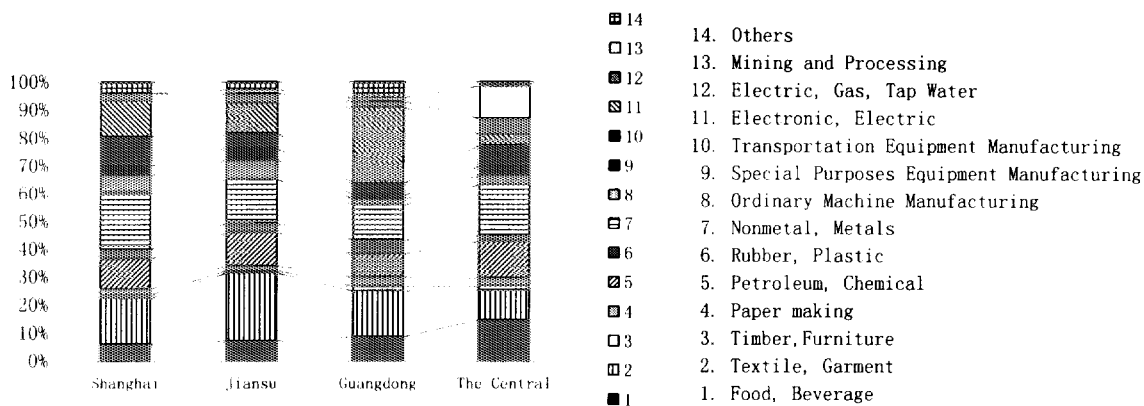
(2) *Secondary Industry: Output Value Structure*

Owing to limited data, we shall focus on the output value data for secondary industry and labor force data for tertiary industry. Figure 1 shows the gross output value of secondary industry for Shanghai, Jiangsu, Guangdong and the central region in 1995. One of the conspicuous characteristics of the central region is a big presence of mining and processing as well as food and beverage industries. These industries are essential to economic development in the area because of the abundant relevant natural resources the area possesses. However, these industries do not produce high value added commodities and their capacity of labor absorption is low. High value added electronics and electric industries have only a small representation of 6% of total output value in the area which is contrastive to Guangdong. The percentage of other machinery industries such as ordinary machine manufacturing, special purpose equipment manufacturing, and transportation equipment manufacturing is almost the same across the country. It means that the central has standard manufacturing technology but does not have that for high value added industry. Moreover, the percentage of the labor intensive textile and garment industry is comparatively low in the region that contributes to its low capacity to absorb surplus primary sector labor.

Table 8 shows the share of production of durable consumer goods of the same areas taken as in Figure 1 for the period 1985 to 1995. Manufacturing in Guangdong expanded drastically with the share of lower value added products falling from 1993 and 1995. It means that other regions could replace Guangdong in producing low valud added goods. The central could expand its share in the production of goods like household refrigerators and washing machines and it should encourage more labor intensive industries.

Figure 1

Composition of gross output of industry by Shanghai, Jiansu, Guangdong, and Central Region: 1995



NOTES

Jiansu, Guangdong, Inner Mongoria, Jilin, Heilongjan, Henan, Hubei, Hunan : At township and above level
 Guangdong, Inner Mongolia : at 1990 price
 Source : Same as Table 2

Source: *China's Provincial Statistics, 1949-1989* and *Statistical Yearbook* of each province, 1996.

(3) Tertiary Industry: Structure of Labor Force

Figure 2 shows that there were little difference in the structure of labor force for the four aforementioned regions under examination. However, the percentage for government agencies, party agencies and social organizations is comparatively high at 7% comparing with 5% for the other regions. Transport, communication, wholesale and retailing industries occupied 42% in Shanghai and Jiansu, 38% in Guangdong and 43% in the central. Considering low commercial activities in the region, this figure should be regarded as high. The percentage of "others" went up from 14.8% in 1990 to 28.9% in 1995 in a rapid speed for the central. Though the content of "others" is not able to be determined, we suppose it and the other industries mentioned to be shock absorbers of labor from the primary sector.

Shanghai has a special element in its labor structure that the share for real estate activities and social services was big at 14% comparing to only 6% in Guangdong while that for scientific research and polytechnical service was 4% against 1% in Guangdong. The two elements are supposed to have contributed to Shanghai's high labor productivity.

Table 8

**Changes in share of production of durable consumer goods in China by
Shanghai, Jiansu, Guangdong, and Central Region: 1985-1995**

| | | (%) | | | |
|-----------|----------------------------|------|------|------|------|
| | | 1985 | 1990 | 1993 | 1995 |
| Shanghai | Chemical Fibers | 23.7 | 15.6 | 11.7 | 10.7 |
| | Watches | 21.4 | 17.8 | 8.1 | 3.8 |
| | Household refrigerators | 14.1 | 11.5 | 16.0 | 14.0 |
| | Electric fans | 9.6 | 4.9 | 1.4 | 1.5 |
| | Household washing machines | 12.8 | 15.3 | 13.3 | 15.2 |
| | Radio | 27.8 | 12.7 | 4.1 | 1.9 |
| | Recorders | 16.4 | 6.9 | 3.4 | 2.1 |
| | Color TV | 16.5 | 7.9 | 6.8 | 5.4 |
| | Camera | 29.9 | 9.7 | 5.3 | 4.6 |
| Jiansu | Chemical Fibers | 13.2 | 24.6 | 27.9 | 29.0 |
| | Watches | 8.2 | 4.9 | 2.3 | 1.0 |
| | Household refrigerators | 10.3 | 7.9 | 3.0 | 1.2 |
| | Electric fans | 14.6 | 16.7 | 14.5 | 16.1 |
| | Household washing machines | 8.5 | 13. | 6.1 | 9.5 |
| | Radio | 35.0 | 33.4 | 16.8 | 3.8 |
| | Recorders | 15.4 | 16.0 | 13.2 | 5.4 |
| | Color TV | 5.9 | 8.1 | 11.8 | 12.2 |
| | Camera | 20.0 | 8.8 | 2.0 | 1.0 |
| Guangdong | Chemical Fibers | 3.3 | 7.0 | 10.6 | 9.6 |
| | Watches | 16.1 | 32.4 | 51.9 | 79.9 |
| | Household refrigerators | 16.6 | 22.8 | 20.7 | 23.2 |
| | Electric fans | 41.3 | 56.3 | 70.7 | 61.7 |
| | Household washing machines | 8.8 | 21.6 | 28.0 | 19.7 |
| | Radio | 7.4 | 26.1 | 72.6 | 89.5 |
| | Recorders | 36.6 | 53.8 | 74.4 | 85.8 |
| | Color TV | 23.2 | 25.4 | 31.2 | 37.1 |
| | Camera | 10.4 | 46.6 | 82.4 | 82 |
| Central | Chemical Fibers | 18.8 | 18.7 | 16.5 | 14.6 |
| | Watches | 17.6 | 9.2 | 3.6 | 1.7 |
| | Household refrigerators | 11.8 | 22.5 | 32.3 | 30.3 |
| | Electric fans | 7.8 | 5.8 | 2.0 | 2.5 |
| | Household washing machines | 15.4 | 17.5 | 14.5 | 19.0 |
| | Radio | 9.6 | 6.6 | 1.4 | 0.5 |
| | Recorders | 7.7 | 5.3 | 2.1 | 1.1 |
| | Color TV | 7.6 | 7.7 | 7.2 | 6.0 |
| | Camera | 11.4 | 6.9 | 1.4 | 0.7 |

Source: *Statistical Yearbook of China* and each Province, various issues.

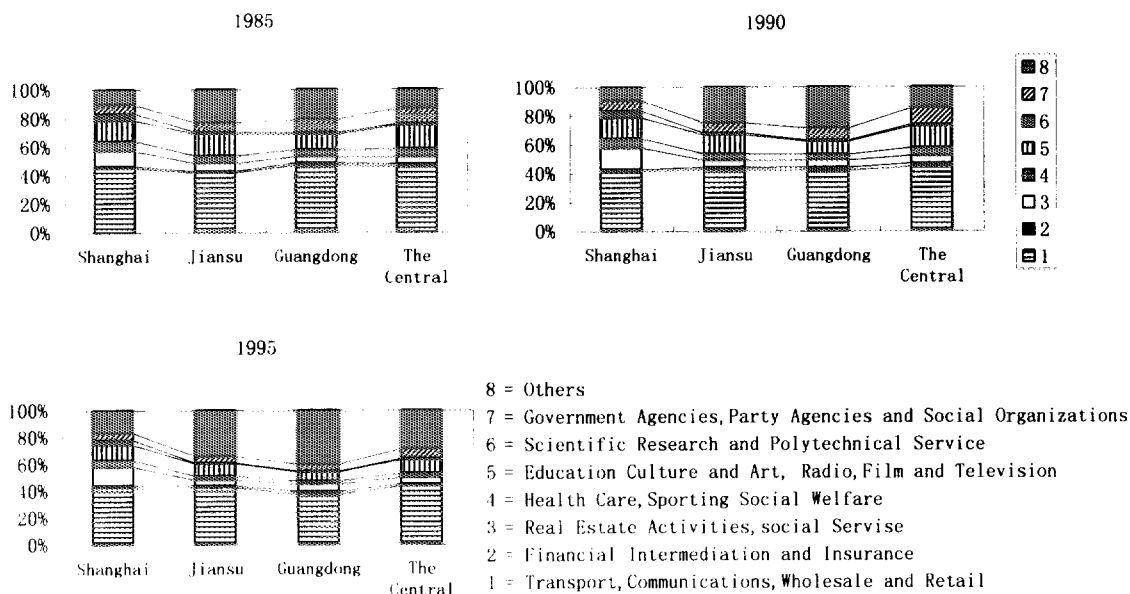
III. Investment to Inner China

(1) *Growth of Investment to Inner China*

Economic discrepancy has been deepened between the prosperous east and inner China since the open door policy. In order to bridge the gap, the central government has shifted emphasis to the inland and encouraged coastal cities as well as foreign investors to invest in inner China. As a result, Shanghai, for example, plans to invest 30 billion Rmb to inner areas from 1996 to 2000. Besides the inclination of government policies toward inland, the rise of labor cost and land price have also driven many industries to move from the coast to inland China.

Figure 2

Changes in composition of tertiary industry's employment by Shanghai, Jiansu, Guangdong, and central region: 1985, 1990, 1995



Source: *Statistical Yearbook* of each province, various issues.

(2) Domestic Investment to the Central

Table 9 shows the investment from Shenzhen, an SEZ of Guangdong, to other regions and domestic investment to Hunan, Hubei and Sichuan, a province in the western region. Shenzhen, being the biggest SEZ in China, has anticipated the problems of rising labor and land cost and has invested increasingly in Hunan, Hubei and Sichuan where geographical vicinity has proved to be an advantage of absorbing Shenzhen's investment.

Investment from Shenzhen on itself and to other areas has been increasing since 1992. Investment to inland China amounted to 250 million Rmb in 1991 and 3,790 million in 1992, mostly in real estate and financial sectors. Investment was curbed in 1993 due to tight economic control but resumed and jumped to 8,390 million Rmb from 1994 to 1995. Joint venture companies have moved production lines to inland China to exploit the cheap labor and the closeness to the huge inland market, and to sell products first to the Shenzhen then to foreign countries. It has proved to be profitable for both Shenzhen and inner regions of China.

For the receivers of investment from Shenzhen, Hunan, for example, received 1,050 million Rmb in 1992 and 2,830 million Rmb in 1993 and has

continued to have 1,500 million Rmb per year. Sichuan, a western province, got 260 million Rmb in 1989, 860 million Rmb in 1993 and 2,860 million in 1995.

Table 9

Changes in investment from Shenzhen to inland and domestic investment to Hunan, Hubei and Sichuan: 1989-1995

| Year | From Shenzhen | To Hunan | To Hubei | To Sichou (%) |
|------|---------------|----------|----------|---------------|
| 1989 | | | 3.8 | 2.6 (8.5) |
| 1990 | 4.7 | - | 4.8 | * (7.1) |
| 1991 | 2.5 | - | - | *(11.0) |
| 1992 | 37.9 | 10.5 | - | *(21.1) |
| 1993 | 11.0 | 28.3 | - | 8.6 |
| 1994 | } | 15.0 | 13.0 | 21.4 |
| 1995 | } 83.9 | 16.1 | - | 28.6 |

Note: figures in parentheses are total investment of joint venture.

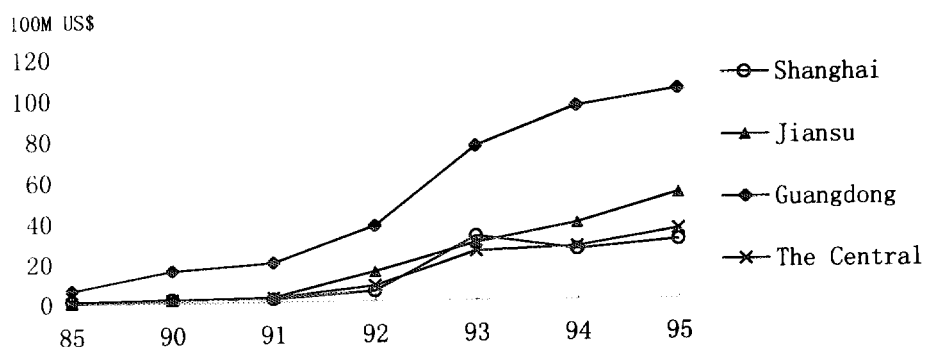
Source: *Yearbook of Shenzhen Special Economic Zone, Hunan, Hubei, and Sichuan*, various issues.

(3) *Foreign Direct Investment to the Central Region*

Figure 3 is about foreign direct investment actually used which shows the trend of foreign investment in China. In the first decade of open door policy, Guangdong, with 4 SEZs, almost monopolized foreign direct investment. The situation has changed with the opening up of whole China and the rise of labor and land cost in Guangdong. The figures show low growth rate in 1994 and 1995 for Guangdong which has been replaced by Jiangsu and Shanghai, representatives of the Yangtze Delta region. The central region also has an increase in foreign direct investment.

Figure 3

Trends of direct foreign investment by Shanghai, Jiansu, Guangdong, and central region: 1985-1995



Source: *Statistical Yearbook of China*, various issues.

IV. Conclusion: Strategy for Economic Development

(1) *Labor Flow to the East and the Improvement of Investment Environment*

We have already mentioned that the central region has a low GDP per employee in tertiary industry despite a continuous flow of labor from the primary sector indicating an excess labor force in the tertiary sector whereas Guangdong has been experiencing shortage of labor though labor productivity in both the secondary and tertiary sectors have been high. Restrictions on inter-provincial flow of labor should be lifted and coordination should be made between the eastern and central regions to regulate economically effective labor movements to create a beneficial cycle in which the decrease of surplus labor in one region may improve GDP per employee whereas improvement of GDP per employee may raise individual dispensable income which in turn shall boost consumption and increase corporate profits and investment in manufacturing facilities.

In order to improve the performance of secondary industry, the central should improve investment environment to attract inland investment encouraged by the central government. To do this means an improvement both in hardware and software. Industrial infrastructure should be consolidated as soon as possible to allow easier transportation of parts badly needed in production from the eastern region. Other environment such as non-market rules of business which foreign countries are not familiar with, arbitrary and inconsistent enforcement and interpretation of law should be improved in order to attract investment from Chinese coastal cities against other Asean countries.

(2) *Cooperation with the Eastern and the Central Region*

Support of the eastern region is essential to the central. The eastern region has utilized foreign investment to develop its export led economy and the trade surplus has been used to re-invest in upgrading industries. Geographically, the central region could not export directly to foreign markets, it has to go through the eastern region. Therefore closer cooperation between the two regions should be established that the eastern region invest in the central as what foreign investors did to it whereas the central region export products to the markets in the eastern region. Since foreign countries are not familiar with inner China and do not realize the potential of inland market, the eastern region should pioneer in investing in the inner regions so as foreign investors would be more confident to follow.

On the other hand, supporting the central region would also be beneficial to the eastern region. The rise of labor and land cost have made the eastern region losing its competitiveness. While moving onto develop high-end industries, the eastern region should move its labor intensive industries to the central region to enjoy cheaper production cost so as to maintain its competitive position in international markets. When the market of the central region became bigger under economic growth, the eastern region can diversify its market to the growing central region. Therefore the growth in the central region will lead to further growth of the east. The remaining question will be to bring the two regions to a harmonious economic cooperation that benefits both.