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**Growth Accounting, Productivity Analysis,  
and Purchasing Power Parity in Korea  
(1984-2000)**

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# **Growth Accounting, Productivity Analysis, and Purchasing Power Parity in Korea (1984-2000)\***

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## **1.Introduction**

In recent years, both growth accounting and productivity analysis by sector have attracted renewed attention on a global scale. The decomposition of inputs into capital (K), labor(L), energy(E) and intermediate materials(M) for detailed industry-level analysis of productivity growth was first applied to the post-war US Economy by Jorgenson, Gollop, and Fraumeni(1987). The basic KLEM-methodology has been extended to cover eight European countries by the European KLEM project as explained in Timmer(2000) and Canada-Japan-USA database(see e.g. Lee and Tang(1999)). In addition, the number of decomposed inputs has increased to include imported goods (I) and services (S) forming the framework of KLEMS methodology as done by Forsgerau and Sorenson (1999).

Earlier studies along the line of the KLEM approach in Korea include Pyo(1984), Kwon(1986), Kwon and Yuhn(1990), and Pyo and Kwon(1991). But their main interests were limited to estimating elasticity of substitution and productivity growth, using data in manufacturing sector only (Pyo(1984) and Kwon(1990), Kwon and Yuhn(1990)) or value-added accounting (Pyo and Kwon(1991)). More recent empirical works such as Kim and Hong (1997), Pyo(2000), Timmer and van Ark(2000), Rhee(2001) also gross output accounting. The earlier exception was Kim and Park (1988) but it was also limited to manufacturing sector. Therefore, it would be desirable for us to attempt a growth accounting of gross output in a consistent framework of the KLEM approach. In addition to growth accounting, the international comparison of productivity among countries require a consistent database for purchasing power parity (PPP) at industrial level by each country.

The purpose of this paper is to discuss the application of the KLEM-methodology to the Korean database and present the result of gross output growth accounting. After a review of availability of data, I conclude that the detailed consistent output and inputs data for the Korean economy exist for the period of 1984-2000 except estimates of PPP. But there has been progress made in estimating PPP by Izumi(2002) and ESCAP(2002). The data in constant prices are available with 1995 as the base year and the decomposition of data is as detailed as specified by the summary of the first ICPA project by Kuroda (2001) and quite comparable to the Japanese database. In what follows in section 2, a review of KLEM framework is presented. Section 3 examines data on gross output and value-added from national accounts and Input-Output Tables, the measurement of factor inputs and purchasing power parity. Section 4 presents the result of growth accounting and productivity analysis. The last section concludes the

paper.

## 2. Framework of KLEM Model

Following Jorgenson, Golop and Fraumeni (1987) and Jorgenson and Stiroh(1999) and Kuroda(2001), Suppose that an industry with a state of technology,  $T(t)$ , at the period  $t$  is described by a linear homogeneous production function with  $n$  inputs,

$$Z^j = f^j(X_1^j, X_2^j, \dots, X_n^j, T(t)), \quad (1)$$

where the function is twice-differentiable, concave and monotonic. Under competitive market condition, the producer's behavior is alternatively described by a price possibility frontier dual to (1):

$$q^j = g^j(p_1^j, p_2^j, \dots, p_n^j, T(t)), \quad (2)$$

where  $q^j$  and  $Z^j$  stand for the vector of prices and quantities of outputs of the  $j$ -th sector and  $p_i^j$  and  $X_i^j$  represent the prices and quantities of inputs of the  $j$ -th sector, respectively.

Assumption of the producer's behavior in the competitive market is a sort of working hypothesis in our analysis. Changes of the relative factor prices had an impact on the shifts of resources among factors and the allocations of those among sectors seriously. From equations (1) and (2), the growth rate in technical efficiency in the production function and the growth rate of output price reduction derived from technical change are defined respectively as follows:

$$\frac{\partial \ln Z^j}{\partial T} \cdot \frac{dT}{dt} = \frac{d \ln Z^j}{dt} - \sum_{i=1}^n \left( \frac{\partial \ln Z^j}{\partial \ln X_i^j} \right) \cdot \left( \frac{d \ln X_i^j}{dt} \right), \quad (3)$$

and

$$-\frac{\partial \ln q^j}{\partial T} \cdot \frac{dT}{dt} = \sum_{i=1}^n \left( \frac{\partial \ln q^j}{\partial \ln p_i^j} \right) \cdot \left( \frac{d \ln p_i^j}{dt} \right) - \frac{d \ln q^j}{dt}. \quad (4)$$

Using the Konus-Byushgen' lemma under the condition of producers' equilibrium in competitive market, we obtain:

$$\frac{\partial \ln Z^j}{\partial \ln X_i^j} = \frac{(\partial Z^j / \partial X_i^j) X_i^j}{\sum_{i=1}^n (\partial Z^j / \partial X_i^j) X_i^j} = \frac{p_i^j X_i^j}{\sum_{i=1}^n p_i^j X_i^j} = v_i^j. \quad (5)$$

Symmetrically applying the Shephard's lemma to the dual price possibility frontier function, we obtain:

$$\frac{\partial \ln q^j}{\partial \ln p_i^j} = \frac{p_i^j X_i^j}{\sum_{i=1}^n p_i^j X_i^j} = v_i^j \quad (6)$$

Inserting (5) and (6) into (3) and (4) respectively we obtain:

$$\frac{\dot{\varphi}^j}{\varphi} = \frac{\partial \ln Z^j}{\partial T} \cdot \frac{dT}{dt} = - \frac{\partial \ln q^j}{\partial T} \cdot \frac{dT}{dt}. \quad (7)$$

On the other hand, as a definition of the accounting balance in the j-th sector, the following equation can be introduced:

$$q^j Z^j = P^j X^j, \quad (8)$$

where  $P^j$  and  $Z^j$  stand for the vectors of prices and quantities of inputs. Differentiating by time,

$$\frac{\dot{q}^j}{q^j} + \frac{\dot{Z}^j}{Z^j} = \frac{\dot{P}^j}{P^j} + \frac{\dot{X}^j}{X^j}. \quad (9)$$

We can deduce the TFP growth rate of the j-th sector from equation (9) as follows:

$$\frac{\dot{\varphi}^j}{\varphi^j} = \frac{\dot{Z}^j}{Z^j} - \frac{\dot{X}^j}{X^j} = \frac{\dot{P}^j}{P^j} - \frac{\dot{q}^j}{q^j}, \quad (10)$$

where  $\varphi^j$  is  $Z^j / X^j$ , that is, an index of TFP Equation (10) implies that the TFP growth rate as an integrated measure of the efficiency of production can be defined as the difference of the growth rates between output and inputs. Under the condition of producer's equilibrium in a competitive market, it is completely corresponding to the formulation of the rate of technical change of (7).

The necessary conditions for producer equilibrium are combined with growth rates of inputs and output in each sector to provide the index of sectoral technical change that depends only on prices and quantities of the sector's inputs and output. Considering data for the  $j$ -th industrial sector at any two discrete points of time, the average rate of TFP change in that sectoral can be expressed as the difference between successive logarithms of output less a weighted average of the differences between successive logarithms of capital(K), Labor(L), energy(E), and intermediate inputs (M) :

$$\begin{aligned} \ln Z^j(t) - \ln Z^j(t-1) = & \{v_K^{-j} [\ln K^j(t) - \ln K^j(t-1)] + v_L^{-j} [\ln L^j(t) - \ln L^j(t-1)] \\ & + v_E^{-j} [\ln E^j(t) - \ln E^j(t-1)] + v_M^{-j} [\ln M^j(t) - \ln M^j(t-1)] \\ & + v_T^{-j}\}, \quad (j = 1, \dots, J). \end{aligned} \quad (11)$$

The weights are given by the average shares of capital, labor, energy, intermediate inputs in the value of output:

$$v_K^{-j} = \frac{1}{2} [v_K^j(t) + v_K^j(t-1)]$$

$$v_L^{-j} = \frac{1}{2} [v_L^j(t) + v_L^j(t-1)]$$

$$v_E^{-j} = \frac{1}{2} [v_E^j(t) + v_E^j(t-1)]$$

$$v_M^{-j} = \frac{1}{2} [v_M^j(t) + v_M^j(t-1)]$$

and:

$$\bar{v}_T^j = \frac{1}{2} [v_T^j(t) + v_T^j(t-1)]$$

Two components of this index taking account of technical change, the translog quantity indices of change in sectoral labor input and in sectoral capital input, will discuss in detail later respectively. Indices are based on translog aggregator functions, defining sectoral labor input and capital input over each input's individual components. Likewise, the translog specification for the aggregator function of intermediate input can be written as:

$$X^j = \exp \left[ \sum_i^J \alpha_i^j \ln X_i^j + \frac{1}{2} \sum_i^J \sum_h^J \beta_{ih}^j \ln X_i^j \ln X_h^j \right], \quad (j = 1, 2, \dots, J) \quad (12)$$

Considering data for the  $j$ -th sector at any two discrete points of time, the quantity index of change in sectoral energy and intermediate inputs can be written as the weighted average of the differences in logarithms of individual inputs:

$$\begin{aligned} \ln E^j(t) - \ln E^j(t-1) &= \sum_i \bar{v}_{Ei}^j [\ln E_i^j(t) - \ln E_i^j(t-1)] \\ \ln M^j(t) - \ln M^j(t-1) &= \sum_i \bar{v}_{Mi}^j [\ln M_i^j(t) - \ln M_i^j(t-1)] \end{aligned} \quad (13)$$

where the weights are given by the average value shares of the  $j$ -th industry's total intermediate input outlay accruing to respective types of intermediate material ( $X = M$ ) and energy ( $X = E$ ) inputs:

$$\bar{v}_{Xi}^j = \frac{1}{2} [v_{Xi}^j(t) + v_{Xi}^j(t-1)],$$

and where the value shares of each intermediate input is:

$$v_{Xi}^j = \frac{P_{Xi}^j X_i^j}{\sum_i P_{Xi}^j X_i^j}$$

### **3. Database for Korea (1984-2000)**

#### **3.1 Gross Output Data from National Accounts and Input-Output Table**

National accounts by the Bank of Korea (1999) (2002) reports annual series (1970-2000) of gross output, intermediate consumption, GDP, indirect taxes, consumption of fixed capital, domestic factor income, compensation of employees, and operating surplus of 21 industries including 9 manufacturing industries and 3 sub-sectors of government services in current prices following 1993 UN System of National Accounts.

The Bank of Korea has also published Input-Output Tables since 1960. Its most recent 2000 Input-Output Table is the 19<sup>th</sup> Table. The detailed description of Input-Output Tables during 1970-2000 is summarized in Table 1. The 1995 Table has 77 industrial sectors and 28 larger classification. Therefore, the estimation of time series Input-Output Tables following those methods described in Kuroda(2001) would be required if we have to estimate KLEM model with more than 21 industrial classifications since Input-Output Tables are available only in selected years.

For the present study, we have generated gross output and value-added by 33 industries through RAS method. The generated annual data of both gross output and value-added have been adjusted to match against National Income Accounts. Since RAS method is sensitive to the initial value of the I/O coefficients, we have used the I/O Table in the closest year as initial value.

We have used V-Table to generate commodity prices by 33 sector and then used the generated commodity prices to estimate output prices by 33 sector. The resulting estimates of output and value-added are presented in Appendix Table A-3 and Table A-4. The respective price indices of output and commodities are presented in Table 8 and Table 9.

#### **3.2 Measurement of Capital Stocks**

The success of late industrialization by newly industrializing economies could not have been made possible if both the rapid accumulation of capital and its changing distribution among sectors were not realized in their development process. However, it is difficult to identify these factors empirically because the time series data of capital stocks in fast-developing economies by both types of assets and by industries are not readily available. The lack of investment data for a sufficiently long period of time to apply the perpetual inventory estimation method was the main cause of the problem. However, the National Statistical Office of the Republic of Korea has conducted nation-



wide national wealth survey four times since 1968. Korea is one of fewer countries which have conducted economy-wide national wealth surveys at a regular interval. Since the first National Wealth Survey(NWS) was conducted in 1968, the subsequent surveys were made in every ten years in 1977, 1987, and 1997, respectively. Since such regular surveys with nation-wide converge are very rare in both developed and developing countries, an analysis on the dynamic profile of national wealth seems warranted to examine how national wealth in a fast growing economy is accumulated and distributed among different sectors. The estimation of national wealth by types of assets and by industries was made by Pyo (1998) and updated in Pyo(2002) by modified perpetual inventory method and polynomial benchmark-year estimation method using four benchmark-year estimates. The latter study modifies and extends the earlier one in two respects. First, the result of 1997 NWS has been released in 1999 so that we can make use of additional benchmark-year estimates. Second re-basing the estimates of capital stocks from 1990 prices to 1995 prices seems inevitable because Bank of Korea has re-based their national accounts accordingly

### 1) National Wealth Survey in Korea

In National Wealth Survey (NWS), the gross capital stock (GK) was evaluated by multiplying the purchase price of the fixed tangible asset by the appropriate price index by types of assets which have been compiled and prepared by the Bank of Korea dating back to the year 1910 as follows :

$$GK_i = P_i^t \times PI_i^t$$

where  $GK$  is the value of gross capital stock of asset  $i$  evaluated at a certain benchmark year  $m$  ( $m > t$ ),  $P$  is the purchase price of the asset  $i$  in year  $t$ , and  $PI$  is the price index to reflect the value of the asset  $i$ . In other words, the gross capital stock is supposed to reflect the repurchase value or reacquisition value of the fixed tangible asset.

Second, the net capital stock ( $NK$ ) was deduced by multiplying the gross capital stock by the residual cost ratio as follows:

$$NK_i = GK_i \times (S/P_i^t)^{n/N} = P_i^t \times PI_i^t \times (S/P_i^t)^{n/N}$$

**Table 1. Input-Output Tables in Korea (1970-1998)**

## 1. Transaction Tables at Producers' Prices

| Year  | (number of sector classification) |       |        |       |
|-------|-----------------------------------|-------|--------|-------|
|       | basic                             | small | medium | large |
| 1970  |                                   | 153   | 56     |       |
| 1973* |                                   | 153   | 56     |       |
| 1975  | 392                               | 164   | 60     |       |
| 1978* |                                   | 164   | 60     |       |
| 1980  | 396                               | 162   | 64     | 19    |
| 1983* | 396                               | 162   | 64     | 19    |
| 1985  | 402                               | 161   | 65     | 20    |
| 1986* |                                   | 161   | 65     | 20    |
| 1987* |                                   | 161   | 65     | 20    |
| 1988* |                                   | 161   | 65     | 20    |
| 1990  | 405                               | 163   | 75     | 26    |
| 1993* |                                   | 163   | 75     | 26    |
| 1995  | 402                               | 168   | 77     | 28    |
| 1998* |                                   | 168   | 77     | 28    |
| 2000  |                                   |       | 77     | 28    |

\* Extended I-O tables with sector classification of the preceding main I-O tables.

## 2. Linked Input-Output Tables

| Year       | (number of sector classification) |        |       |
|------------|-----------------------------------|--------|-------|
|            | small                             | median | large |
| 1975-80-85 | 161                               | 65     | 20    |
| 1980-85-90 | 161                               | 75     |       |

## 3. Supporting Tables

(1) Employment Table: 1980 1983 1985 1986 1990\* 1995\* 1997\*

(\*including employment matrix)

(2) Fixed Capital Formation Table: 1990 1995

## 4. U-Table and V-Table (22 industries including 9 Manufacturing industries)

Annual U-Table at 1995 constant prices and annual V-Table in both current and constant prices for 1990-1997 are available in 1999 National Accounts.

Sources: The Bank of Korea Input-Output Tables(1970-1995) CD-ROM and Monthly Bulletin (May 2001)

where  $S$  is the value of survived assets,  $N$  is average service life of the asset and  $n$  is the number of years elapsed. In other words, a proportional depreciation method is adopted. The value of survived assets is assumed to be 10 percent of the purchase value when it reaches the assumed average service life and 1 percent of the purchase value when it reaches double the assumed average service life.

Suppose for example, the average service life of a certain asset such as personal computer is 5 years and it was purchased three years ago at the price of 3,000 dollars. In addition, assume that the inflation rate of the computer price since the purchase year is 20 percent. Then the following calculations can be made:

$$GK = 3,000 \times 1.2 = 3,600$$

$$NK = 3,000 \times 1.2 \times \left(\frac{300}{3,000}\right)^{\frac{3}{5}}$$

Korea's NWS assumes shorter average lives than OECD(1996) and BEA(1993). For example, the OECD average asset life for buildings and structures is 48 years and BEA's are 32-80 years for residential structure and 31-48 years for nonresidential structure while Korea's NWS assumes average service life of 23-60 years for residential buildings and 8-60 years for nonresidential buildings. For automobiles, Korea's assumed average life (4-5 years) is shorter than BEA's (10 years). The shorter average life and, therefore, higher depreciation rate are typical in the process of late industrialization.

## 2) Estimation of Net and Gross Capital Stock

### (1) Estimating Method for 1977-97

In principle the existence of four benchmark year estimates of gross and net capital stocks makes it possible for us to apply the polynomial benchmark year estimation method. In my earlier studies (Pyo 1988, 1992, and 1997), I estimated proportional retirement rates and depreciation rates both by types of assets and by industries based on the polynomial equations.

When we applied the polynomial benchmark year equation to estimate the proportional retirement rates for the sub-periods of 1977-87 and 1987-97, most of estimates became negative including the average economy-wide retirement rates (-3.0% for 1977-87 and -3.1% for 1987-97) except other Construction(0.6%) and Transport Equipment(3.4%) in 1977-87 and Nonresidential Building(0.9%) in 1987-97. Therefore,

following Pyo(1997), we have applied the polynomial benchmark year estimation method to estimating depreciation by types of assets only. Thus we have generated net stocks by types of assets first for the period of 1977-87 and then, distributed them over different sectors of industries by using interpolated industrial weights between the respective benchmark years.

We have decided to estimate net capital stock first and then to estimate gross capital stock by using interpolated net-gross conversion ratios for the following two reasons. The first reason is due to the fact that the margin of prediction error from the polynomial benchmark year equation turns out to be larger with gross capital stock than with net capital stock as had been observed in Pyo(1992).

## (2) Estimating Method for 1953-1967

Since we have decided to use estimates of 1968 NWS as the first benchmark year estimates, we have to estimate capital stocks for the period of 1953-76 using the perpetual inventory equation backward. We first deflated the net stock data of 1968 NWS in current prices into those in 1995 prices using implicit GDP deflator of capital formation. Then, we have estimated capital-output coefficients by industries by regressing net capital stock in 1995 constant prices on real GDP by industries and a linear time trend variable during the period of 1968-87 in order to generate estimates of net stocks by industries during 1953-67 in 1995 prices. We have also used the 1968 NWS weights of different types of assets for the period of 1953-1968.

In order to estimate net stocks by industries for the period of 1968-76, we have used both 1968 NWS and 1977 NWS to estimate interpolated industrial weights by each type of assets. Then, for the period of 1953-67, we have used both cumulated weights of capital formation by industries from old National Income Accounting by the Bank of Korea (1984) and industrial weights of 1968 NWS.

## (3) Estimating Method after 1997

National Statistical Office of Korea has decided to terminate National Wealth Survey by 1997 and to switch from direct estimation to indirect estimation of national wealth following the method of BEA and OECD. The cost of such direct national wealth survey has increased significantly as the size of national economy has expanded considerably. In addition, some of the participating institutions such as Citizens Bank for unincorporated business enterprises have been privatized so that National Statistical Office alone can no longer afford national wealth survey. Japan had terminated its

National Wealth Census in 1977 for almost the same reasons.

Therefore, for the period after 1997 which is the last national wealth survey, we have to estimate capital stocks by a modified perpetual inventory method using 1997 NWS as benchmark estimates. First, we estimate net stocks by type of assets in constant prices by using the depreciation rates estimated from the period of 1987-1977 and distribute them across industries using both industrial weights in 1997 NWS and those in subsequent Mining & Manufacturing Census and Surveys and Wholesale and Retail Surveys. In the long run, the estimated depreciation rates by type of assets may need to be updated and revised by the micro data-based studies. Second the generated net stocks by type of assets and by industries have to be converted into gross stock by using the net-gross conversion ratio of 1997 NWS for the time being. But ultimately we may need further studies on the trend of net-gross conversion ratio by type of assets and by industries and the average asset life.

### 3) Reconciliation with Database of Pyo(2002)

Since the database of Pyo (2002) covers 10 broad categories of industrial sector together with 28 sub-sectors of Manufacturing, it can be reclassified and reconciled with 33-sector classification for the ICPA project. We attach the capital stocks in 33 sectors in Appendix Table A-5.

### 4) Measurement of Capital Price

Following Jorgenson, et.al (1987) and Timmer(2001), the aggregate index of capital services over the different types of assets in j-sector(  $K_i(t)$  ) can be assumed as a translog function of the services of individual assets (  $K_i^j(t)$  ) as follows:

$$\ln K^j(t) - \ln K^j(t-1) = \sum_i \bar{v}_i \left[ \ln K_i^j(t) - \ln K_i^j(t-1) \right]$$

where weights are given by the average shares of each type of capital in the value of property compensation,  $\bar{v}_i = \frac{1}{2} [v_i(t) + v_i(t-1)]$  and  $\bar{v}_i(t) = \frac{p_i(t)K_i(t)}{\sum_i p_i(t)K_i(t)}$  with

$P_i(t)$  the rental price of capital services from asset type  $i$ .

In order to apply the above aggregation formula, it is necessary to impute the rental prices of capital services. In the absence of taxation, Jorgenson, Golop and

Fraumeni(1987) and Jorgenson and Yun(1991) have derived the following formula for imputing the rental price of capital services from asset type  $i$ .

$$P_i(t) = \{[r(t) - \Pi_i(t)] + [1 + \Pi_i(t)\delta_i]\}q_i(t-1)$$

where  $r(t)$  is the rate of return,  $q_i(t)$  is the acquisition price of investment good  $i$  with  $\Pi_i(t) = \frac{[q_i(t) - q_i(t-1)]}{q_i(t-1)}$  which is the rate of inflation in the price of investment good  $i$ . The nominal rate of return after tax is usually assumed the same for all assets in an industry so that  $r(t)$  does not have subscript  $i$ .

The application of the above formula requires data on the rate of return, the acquisition price of investment good, and the rate of depreciation of asset  $i$  in each industry  $j$ . Even though we may assume that the nominal rate of return after tax is the same for all assets in each industry, we do not have data for the nominal rate of return for each industry. We may end up using nation-wide ex-ante corporate bonds rate across all industries. In addition, the acquisition prices of each asset in different industries are not usually available and, therefore, investment deflators are frequently used as substitutes for the acquisition prices. But investment deflators in National Accounts are available either by types of assets or by industries not by both. Estimates of depreciation rates in Pyo(2002) are also available either by types of assets or by industries not by both. As a consequence, the likely outcome of the application of the formula could be the same estimates of rental price of capital for each type of asset across all industries.

In case of Korea, there have been studies by Yun and Kim(1997) and Won and Hyun(2000) on the estimation of effective marginal tax rates following methods developed by King and Fullerton(1984) and Jorgenson and Landau(1993). Since they have used the above formula for cost of capital, they must have generated imputed cost of capital. But their estimates are based on all industries not for each industry and even those estimates are not available. Faced with lack of data and consistent estimates for the variables to impute rental price of capital in each industry, we have adopted the following approach.

The following approach can be defined as an indirect method of imputing rental price of capital in j-sector from the annualized I/O Table. Since we have the data of total compensation to capital in j-sector in current prices( $P_K^j K^j$ ) from the annualized I/O Table, we impute the implicit price of capital in j-sector( $P_K^j$ ) by dividing the total compensation to capital by our estimates of capital stock in j-sector in constant

prices( $K^j$ ):

$$P_K^j = P_K^j K^j / K^j$$

The resulting estimates by 33 industries are presented in Table A-12.

### 3. 3 Measurement of Labor Input

In order to measure labor input for KLEM model, we have to obtain both quantity data of labor input such as employment by industries and hours worked and quality factors such as sex, education and age. Both availability and reliability of labor statistics in Korea have improved since 1980. But the measurement of labor input by industries cannot be readily made because the statistics of employment by industries are not detailed enough to cover 33 sectors.

Following the characteristics of labor input described in Kuroda (2001), the sources of labor statistics are presented in Table 2. Economically Active Population Yearbook by National Statistical Office reports number of employed, unemployed, not-economically-active population and economically active population by 10 categories of age group (15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, and 60- over 60). Employment by industries is available in 7 broad categories of industries:(1) Agriculture, Forestry and Fishing (2) Mining (3) Manufacturing (4) Construction (5) Wholesale, Retail, Restaurants and Hotel (6) Electricity and Gas, and (7) Transportation, Storage and Finance. More detailed classifications of employment will have to rely on Employment Table, which is published as a supporting table to Input-Output Table. But it is available only every five year when main Input-Output Tables are published. Mining and Manufacturing Census and Survey by National Statistical Office also report employment statistics but it is limited to mining and manufacturing only. Unemployed persons by gender and educational attainment are also available from the same source.

Report on Monthly Labor Survey by Ministry of Labor publishes monthly earnings and working days of regular employees by 12 broad categories of industries. Survey Report on Wage Structure by the same ministry reports wages by 6 categories of occupational classification in old series (1980-1992) and now reports 9 new categories in new series (1993-1999): (1) Senior Officials and Managers (2) Professionals (3) Technicians (4) Clerks (5) Service and Sales Workers (6) Skilled Agriculture and Fishery Workers (7) Craftmen and Assembler (8) Plant and Machine Operator and (9)

Other Laborer. Nominal and real wage index are also available from Report on Monthly Labor Survey by Ministry of Labor.

For the present study, we have obtained the raw data file of Survey Report on Wage Structure from the Ministry of Labor for the period of 1983-2000. The data are classified by two types of gender (Male and Female), three types of age(16-34old, 35-54old, and 55 above old), and three types of education(middle school, high school, and college school) and, therefore, there is a total of 18 categories of labor.

The raw-data file of Survey Report on Wage Structure contains 3-digit industrial classification but we have adjusted them into 33 industry classification. Since Survey Report on Wage Structure does not include Agriculture and Government sector, we had to use Economically Active Population Statistics for these two sectors. In addition, sample sizes in Survey Report on Wage Structure seem to have varied every year so that we have made proportional adjustment based on total employment data of Economically Active Population Statistics.

In order to make quality adjustment to the employment data, we have taken the follow steps;

1) Defining  $P_{Li}^j$  as wage rate for  $j$ -sector and  $l$ -type category of labor, the share of labor income by  $l$ -type category of labor in  $j$ -sector can be expressed as;

$$v_{Li}^j = \frac{P_{Li}^j L_i^j}{\sum P_{Li}^j L_i^j}$$

and, the average weight of  $j$ -sector and  $l$ -type labor income during the period of  $(t-1)$  and  $t$  can be generated as;

$$\bar{v}_{Li}^j = \frac{1}{2} [v_{Li}^j(t) + v_{Li}^j(t-1)]$$

2) In order to make quality adjustment to labor input data, we have further decomposed labor input of  $j$ -sector and  $l$ -type as follows;

$$L_i^j(t) = d_i^j(t) M_i^j(t) H_i^j(t)$$

where  $d_i^j$  denotes relative weight of working hours by  $l$ -type labor in  $j$ -sector. In other words,  $L_i^j(t)$  measures labor input as a weighted average of working hours by different types of labor where weights are relative share of each type of labor in total  $j$ -sector



employment.

3) Finally, the growth rate of  $j$ -sector labor input has been computed as follows:

$$\ln L^j(t) - \ln L^j(t-1) = [\ln M^j(t) - \ln M^j(t-1)] + [\ln H^j(t) - \ln H^j(t-1)] \\ + \sum_l \bar{v}_{Ll}^j [\ln d^j(t) - \ln d^j(t-1)] \quad j = 1, 2, \dots, J$$

where the first bracket on the right hand side measures change in employment, the second bracket measures change in average working hours, and the third bracket measures the change in quality of labor through change in weighted working hours.

For the present study, we have obtained from National Statistical Office the raw data file of Economically Active Population Survey for the period of 1983-2000. We have reclassified the survey file into 33 industrial sectors. But since the sample sizes were different every year, we have adjusted the raw data based on total number of employment reported in annual Economically Active Population Statistics by National Statistical Office. A more detailed description of labor statistics in Korea is attached in Appendix.

### **3.4 Measurement of Energy Input and Material Input**

In order to separate energy input from material input, we have to decompose intermediate inputs into these two input categories. For this purpose, we have used IO Tables and identified 5 sectors (sector 2, 4, 14, 28 and 29) as energy input sector and the remaining 28 sectors as material input sector. For the years when IO Tables are not available, we have used the straight-line interpolation method to measure energy inputs and material inputs into 33 sectors.

**Table 2. Characteristics of Korean Database for KLEM Model**

|  |   |
|--|---|
| <p><b>Gross output</b><br/> National Accounts<br/> Input-Output Table (1980,1985,1990,1995)<br/> U-Table and V-Table      Annual tables (1990-1997)</p>  | <p>Number of Sectors<br/> 21<br/> 64-77 or 20-28<br/> 22</p>                          |
| <p><b>Capital stock (capital services)</b><br/> Gross and Net Stock data: National Wealth Survey (1987)(1997)<br/> Capital Formation data: National Accounts(1999)<br/> Annual Gross and Net Stock by Industries and by Types of Assets and Estimated Depreciation Rates are available in Pyo (2001)<br/> Net stock and Investment data: Mining and Manufacturing Census Mining and Manufacturing Survey<br/> - Types of assets: residential building, nonresidential building, other construction, transport equipment, machinery equipment</p> | <p>5 types of assets and 10 large industries with 28 sub-manufacturing industries</p> |
| <p><b>Labor input (days worked)</b><br/> Report of Monthly Labor Survey (NSO)<br/> Survey Report on Wage Structure (Ministry of Labor)<br/> <br/> -<i>sex</i> (male/female)<br/> -<i>educational attainment</i><br/> (middle school graduates, high school graduates and college above)<br/> -<i>age classes</i><br/> (16~34, 35~54, and 55 above)</p>   | <p>18 types<br/> <br/> 2 types<br/> 3 types<br/> <br/> 3 types</p>                    |
| <p><b>Intermediate inputs</b><br/> National Accounts<br/> Input-Output Table(1980, 1985, 1990, 1995)<br/> U-Table and V-Table Annual Tables(1990-1997)<br/> Energy Input; sectors 2, 4, 14, 28, and 29</p>   |   |
| <p><b>PPP</b><br/> -prices of outputs of each industry in both Korea and the reference economy and exchange rate</p>   | <p>21 sector by V-Table</p>   |

### **3.5 Deflators for Gross Output and Inputs**

The 21-sector gross output data by Bank of Korea's national accounts are available only in current prices. For the period after 1985, we have used V Table in both constant and current prices to generate implicit gross output deflators by sector. For the period before 1985, we have used Linked IO Table in constant prices to generate implicit gross output deflators by sector for 1985 and interpolated the data for 1984. For the deflators of energy input and material input, we have used the same sources of data; V Table for the period after 1985 and Linked IO Table before 1985. The basic characteristics of KLEM database in Korea(1984-2000) in 1995 prices is presented in Table 3. During the period of 1984-2000, Korea's gross output and GDP have grown at the average annual rate of 8.51 percent and 7.76 percent respectively. Four inputs have grown at the rate of 9.96%(K), 2.49%(L), 6.05%(E), and 8.12%(M) respectively.

### **3.6 Input Shares**

Regarding shares of inputs, we have used Compensation of Employees in Gross Domestic Product and Factor Income by kind of Economic Activity in national accounts and Operating Surplus to generate relative share of labor input and capital input respectively in total value-added and then adjusted them into shares in total gross output. We have divided the amount of energy input and material input by gross output to generate shares of energy input and material input respectively. Estimated average shares of inputs are attached in Appendix as Table A-9.

**Table 3. Characteristics of KLEM Database in Korea(1984-2000)**

(in 1995 prices)

| year        | Gross Output<br>billion Won | K<br>billion Won | L<br>10000 hour | E<br>billion Won | M<br>billion Won |
|-------------|-----------------------------|------------------|-----------------|------------------|------------------|
| 1984        | 278148                      | 533761           | 109794          | 25227            | 139325           |
| 1985        | 294601                      | 593025           | 109870          | 24318            | 149136           |
| 1986        | 344750                      | 658641           | 114382          | 21288            | 175803           |
| 1987        | 399397                      | 734392           | 132499          | 23769            | 204804           |
| 1988        | 456631                      | 816559           | 136940          | 23647            | 232905           |
| 1989        | 496413                      | 911981           | 132431          | 24647            | 251339           |
| 1990        | 556380                      | 1030335          | 134602          | 26872            | 281359           |
| 1991        | 615542                      | 1165511          | 126097          | 31615            | 305115           |
| 1992        | 657531                      | 1305141          | 134962          | 34963            | 323404           |
| 1993        | 703166                      | 1456944          | 139271          | 40015            | 336708           |
| 1994        | 766040                      | 1626579          | 141029          | 39728            | 368744           |
| 1995        | 839337                      | 1817780          | 147609          | 40070            | 405804           |
| 1996        | 907542                      | 2027206          | 144852          | 50394            | 434832           |
| 1997        | 963556                      | 2242411          | 142013          | 54722            | 463201           |
| 1998        | 956724                      | 2353239          | 132303          | 63595            | 454926           |
| 1999        | 984104                      | 2468150          | 154855          | 68706            | 474948           |
| 2000        | 1049237                     | 2596497          | 159016          | 76255            | 512637           |
| Average     | 8.32                        | 9.96             | 2.49            | 6.05             | 8.21             |
| growth rate |                             |                  |                 |                  |                  |

### 3.7 Measurement of Purchasing Power Parity

So far there was no systematic efforts to measure PPP by sector in Korea except the aggregate estimates being used in the estimation of real interest rates by Lee(1997), ESCAP, OECD(2002), and Izumi(2002) which estimated PPP between Japan and Korea. The estimates by Izumi(2002) are shown in Table 4. But the Bank of Korea has just started a project for estimating PPP with OECD. Therefore, we may be able to use their estimates at the later stage of ICPA project.

OECD(2002) reports estimates of PPP for 1999 benchmark year as shown in Table

5 for selected countries. The unsuitability of using indices of nominal GDP to make international volume comparisons is even more apparent when the per capita indices of nominal and real GDP are considered. For example, when ranked by their indices of nominal and real GDP per head, Japan is 3, the United States is 5, Sweden is 8 and Canada is 17. However, when the price level effect is removed and countries are ranked by their indices of real GDP per head, the United States is 2, Canada is 8, Japan is 11 and Sweden is 16. Generally indices of real GDP per head narrow the gap between high income countries and low income countries.

The Bank of Korea(2000) reports the estimates of Purchasing Power Parity (PPP) exchange rates among 14 member countries by UN ESCAP. UN had initiated International Comparison Program (ICP) since 1968 and its sixth program was conducted during 1993-1997 (1993 as baseyear) with the participation of 123 countries (14 countries in ESCAP region). Under the sixth ICP ESCAP had adopted 1993 as baseyear and Hongkong dollar as benchmark currency for the ESCAP region. The program proceeded by the following three steps;

- (1) GDP (expenditure side) data from each country was readjusted following ICP classification (a total of 142 items including 120 items of household consumption expenditure, 3 items of public consumption expenditure, and 19 items of capital formation). Then price data of ICP core commodity list were collected and readjusted accordingly.
- (2) Price indices by items were computed by making use of price matrix table.
- (3) To make international comparison possible, price indices by items were averaged and converted into HongKong dollar..

As shown in Table 6, the estimated PPP exchange rates in 1993 in the ESCAP region except Japan were lower than the market exchange rates indicating that the purchasing power of ESCAP member countries' currencies except Yen were undervalued. Yen was overvalued by 71.8 percent while Korean Won, for example, was undervalued by 20.1 percent.

While Japan's PPP-adjusted per capita GDP in 1993 was 154,663 HK\$, its per capita GDP evaluated by market average exchange rate was 265,638 HK\$, Korea's corresponding figures were 73,235 HK\$ and 58,474 HK\$ respectively. According to the Bank of Korea(2000), the gap between PPP-adjusted per capita GDP in US\$ and per capita GDP evaluated by market average exchange rate in US\$ had peaked in 1975 by the ratio of 2.55 to 1 but has declined over time to reach to the ratio of 1.31 to 1 in 1993.

The ESCAP report also presents an interesting relative price indices by major expenditure categories of member countries. In general, countries with higher per capita income have maintained relatively higher prices of government consumption goods and relatively lower prices of investment goods. For example, compared with 1993 GDP deflator index of 100, Japan's relative price indices of government consumption goods and investment goods were 150 and 92 respectively. Korea's corresponding indices were estimated to be 158 and 78 respectively.

The relative price structure by commodity groups reveals that the relative price of priced-services and non-tradable goods tend to be higher as per capita income grows. This pattern of relative price structure indicates that higher-income economies tend to have higher productivity in producing commodities and lower productivity in producing services due to relatively higher wage costs in service sector.

In case of Japan., the relative price indices of priced services and all services were 2.532 and 2.516 respectively and those of tradable goods and non-tradable goods were 0.642 and 1.618 respectively. In case of Korea, the corresponding price indices of services were 4.368 and 0.806 respectively, while the corresponding price indices of tradable goods and non-tradable goods were 1.225 and 0.864 respectively.

In order to prepare for the measurement of purchasing power parity for the ICPA project by 33 sectors, we have generated implicit gross output deflators by 33 sectors as attached in Appendix Table A-17. The only available data source for both gross output and GDP deflators for the period of 1985-1997 was V-Table (Make Matrix) published by Bank of Korea(1994)(1999) as attached Appendix Table A-18. Since it covers only 21 sectors, we have assumed that the implicit deflators would be equal among subsectors. For the year 1984, we have used linked IO Tables of 1980 and 1985 in both current and constant prices and interpolated the implicit deflators.

During the period of 1984-2000, the gross output deflator of total industries has grown at an average annual rate of 3.70 percent.

Lastly, the relative price structure of gross output deflators and GDP deflators could be generated and attached in Appendix Table A-19.

## 4. Growth Accounting and Productivity Analysis

We have conducted a preliminary growth accounting and productivity analysis for Korea (1984-2000). It is preliminary in the sense that we have not quality-adjusted the input data but used quantity-based data. In other words, we have not used education, sex, and age data for labor input because employment data needs further scrutiny; some data were based on too small sample size, for example.

### 4.1 Gross Output Growth Accounting

In Table 8, we present average growth rates of gross output and four inputs in 1995 constant won with average input shares during the period of 1984-2000 in Appendix as Table A-9, A-10, A-11 and A-12. The gross output (YO) of all industries has grown at the average annual rate of 8.32 percent while capital (K), labor (L), energy (E), and material input (M) have grown at the rate of 10.0 percent, 2.5 percent, 6.1 percent, and 8.2 percent respectively during the period. The average estimated shares of four inputs were  $0.21(V_K)$ ,  $0.20(V_L)$ ,  $0.08(V_E)$  and  $0.51(V_M)$  respectively.

The economy-wide growth rate of total factor productivity(TFP) is estimated to be 1.04 percent. Therefore, the relative contribution of TFP to output growth is estimated to be 12.5 percent, which is of rather significant magnitude. The total factor productivity growth in gross output growth is lower than the one without quality adjustment in input data. However, it is still quite significant magnitude rejecting the Krugman's(1994) proposition and earlier empirical findings by Young(1994) and Lau and Kim(1994).

### 4.2 Productivity Trend and Capital-Output Coefficients

We have generated a series of labor productivity; gross output per employee( $YO/L$ ). During the period of 1984-2000, the growth rates of economy-wide output labor productivities were 5.98 percent. The trends in labor productivity are shown in Figure 1.

We have also generated a series of capital-output coefficients; capital-gross output coefficients ( $K/Y_0$ ) as shown in Table 9. The economy-wide capital-output coefficient has grown at average.

**Table 4 Korea /Japan Purchasing Power Parities**

1990 official Rate : 4.89 won per yen

1995 official Rate : 8.20 won per yen

| Industrial Classification                      | 1995         |              |                   | 1990         |              |                   |
|--|--------------|--------------|-------------------|--------------|--------------|-------------------|
|  | Korea Weight | Japan Weight | Geometric average | Korea Weight | Japan Weight | Geometric average |
| 001 Paddy                                      | 4.771        | 4.810        | 4.790             | 3.426        | 3.535        | 3.408             |
| 002 Other agricultural Products                | 4.316        | 4.290        | 4.303             | 2.977        | 3.113        | 3.044             |
| 003 Livestock                                  | 4.170        | 4.528        | 4.345             | 4.163        | 4.083        | 4.123             |
| 004 Forestry                                   | 3.401        | 3.401        | 3.401             | 1.579        | 1.57         | 1.579             |
| 005 Fishery                                    | 4.770        | 4.707        | 4.738             | 3.013        | 3.261        | 3.134             |
| 006 Crude petroleum and natural gas*           | 6.401        | 6.064        | 6.231             | 4.863        | 5.933        | 5.371             |
| 007 Other mining                               | 6.401        | 6.064        | 6.231             | 4.863        | 5.933        | 5.371             |
| 008 Food, beverage and tobacco                 | 4.499        | 4.913        | 4.702             | 2.536        | 3.261        | 2.876             |
| 009 Textile, leather, and the products thereof | 4.472        | 5.084        | 4.768             | 1.974        | 2.297        | 2.130             |
| 010 Timber and wooden products                 | 1.819        | 1.819        | 1.819             | 2.401        | 2.401        | 2.401             |
| 011 Pulp, paper and printing**                 | 3.406        | 5.053        | 4.149             | 2.924        | 4.528        | 3.639             |
| 012 Chemical products                          | 3.469        | 2.183        | 2.752             | 3.106        | 3.581        | 3.335             |
| 013 Petroleum and petro products               | 2.322        | 1.967        | 2.138             | 3.349        | 3.795        | 3.565             |
| 014 Rubber products                            | 4.464        | 4.081        | 4.268             | 5.138        | 5.201        | 5.169             |
| 015 Non-metallic mineral products              | 5.077        | 7.006        | 5.964             | 2.652        | 3.653        | 3.113             |
| 016 Metal products                             | 1.781        | 4.872        | 2.945             | 2.646        | 3.686        | 3.123             |
| 017 Machinery                                  | 6.048        | 6.289        | 6.167             | 3.647        | 5.272        | 4.385             |
| 018 Transport equipment                        | 3.897        | 5.524        | 4.640             | 5.011        | 5.882        | 5.429             |
| 019 Other manufacturing products**             | 3.406        | 5.053        | 4.149             | 2.924        | 2.858        | 2.826             |
| 020 Electricity, gas, and water supply         | 2.940        | 2.937        | 2.944             | 2.794        | 2.858        | 2.826             |
| 021 Construction                               | 3.705        | 3.705        | 3.705             | 1.942        | 2.078        | 2.009             |
| 022 Trade and transport                        | 4.016        | 4.038        | 4.027             | 2.079        | 2.208        | 2.142             |
| 023 Services                                   | 3.203        | 2.994        | 3.097             | 1.867        | 1.879        | 1.873             |
| 024 Public administration                      | 3.459        | 3.459        | 3.459             | 1.582        | 1.582        | 1.582             |
| All Industries average                         | 3.464        | 3.994        | 3.720             | 2.408        | 3.020        | 2.697             |

Sources : Izumi (2002)



**Table 5. Exchange rates, PPPs, comparative price levels and indices of nominal and real final expenditure on GDP, 1999 in Selected Countries**

| Country        | Exchange Rates | PPPs  | Comparative price levels | Nominal GDP | Real GDP | Nominal GDP per head | Real GDP per head |
|----------------|----------------|-------|--------------------------|-------------|----------|----------------------|-------------------|
| France         | 0.938          | 0.973 | 104                      | 5.73        | 5.48     | 106                  | 102               |
| Germany        | 0.938          | 0.978 | 105                      | 8.38        | 7.98     | 114                  | 109               |
| Italy          | 0.938          | 0.803 | 86                       | 4.70        | 5.45     | 91                   | 106               |
| United Kingdom | 0.618          | 0.650 | 106                      | 5.81        | 5.48     | 109                  | 103               |
| Japan          | 114            | 162   | 143                      | 17.92       | 12.50    | 158                  | 110               |
| Korea          | 1187           | 755   | 64                       | 1.62        | 2.53     | 39                   | 60                |
| Mexico         | 9.55           | 5.63  | 59                       | 1.91        | 3.22     | 22                   | 37                |
| United States  | 1.00           | 1.00  | 101                      | 36.66       | 36.38    | 150                  | 149               |
| Euro 12        | 0.938          | 0.894 | 96                       | 26.55       | 27.64    | 98                   | 102               |
| Eu15           | .....          | 0.918 | 99                       | 34.02       | 34.53    | 101                  | 102               |
| OECD 30        | .....          | ..... | 100                      | 100         | 100      | 100                  | 100               |

Sources : OECD(2002) Table J

**Table 6 International Comparison of Purchasing Power Parity in Selected Counties (1993)**

|   |                                 | <b>Hong Kong</b> | <b>Japan</b> | <b>Korea</b> |
|---|---------------------------------|------------------|--------------|--------------|
| <b>1. PPP adjusted Exchange Rate and Market Exchange Rate</b>         |                                 |                  |              |              |
| PPP-adjusted Exchange Rate (A)  |                                 | 1.00             | 24.68        | 82.80        |
| Market Exchange Rate (B)  |                                 | 1.00             | 14.37        | 103.70       |
| A/B(%)  |                                 | 100.00           | 171.75       | 79.85        |
| <b>2. Comparison of GDP and Per Capita GDP in the ESCAP Region</b>    |                                 |                  |              |              |
| GDP<br>(HK\$<br>Million)  | PPP Exchange rate(A)            | 894,734          | 19,332,901   | 3,226,430    |
|   | Market Average Exchange rate(B) | 894,734          | 33,204,751   | 2,576,143    |
|   | A/B(%)                          | 100.0            | 58.2         | 125.2        |
| Per<br>Capita<br>GDP<br>(HK \$)                                       | PPP Exchange rate(A)            | 151,624          | 154,663      | 73,235       |
|   | Market Average Exchange rate(B) | 151,624          | 265,638      | 58,474       |
|   | A/B(%)                          | 100.0            | 58.2         | 125.2        |
| <b>3. Composition of Per Capita Expenditure (ESCAP AVERAGE = 100)</b> |                                 |                  |              |              |
| GDP   |                                 | 372.5            | 380.0        | 179.9        |
| Consumer Expenditure  |                                 | 401.1            | 368.9        | 142.5        |
| Government Expenditure  |                                 | 148.2            | 197.4        | 141.3        |
| Capital Formation   |                                 | 367.8            | 438.8        | 256.3        |
| <b>4. Relative Price by the types of Goods</b>                        |                                 |                  |              |              |
| Priced Services   |                                 | 2.620            | 2.532        | 4.368        |
| All Services  |                                 | 2.232            | 2.516        | 0.806        |
| Commodities   |                                 | 0.745            | 0.723        | 1.115        |
| Traded Goods  |                                 | 0.666            | 0.642        | 1.225        |
| Non-Traded Goods  |                                 | 1.659            | 1.618        | 0.864        |

Source: Bank of Korea (2000)

**Table 7 Relative Price Structure in Selected ESCAP Countries(1993)**

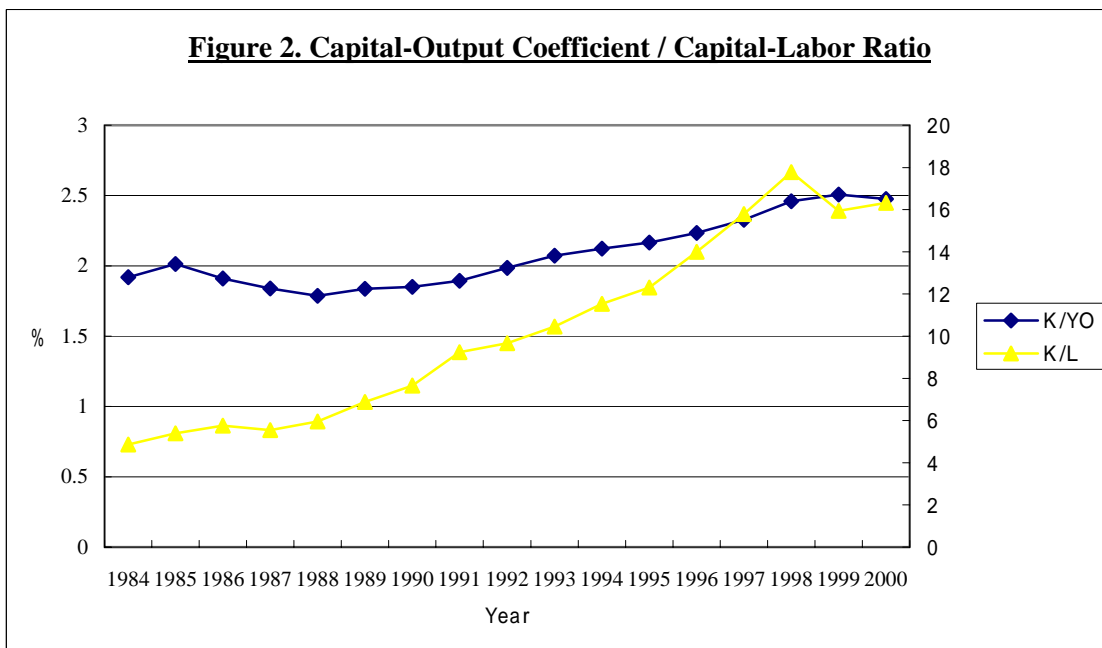
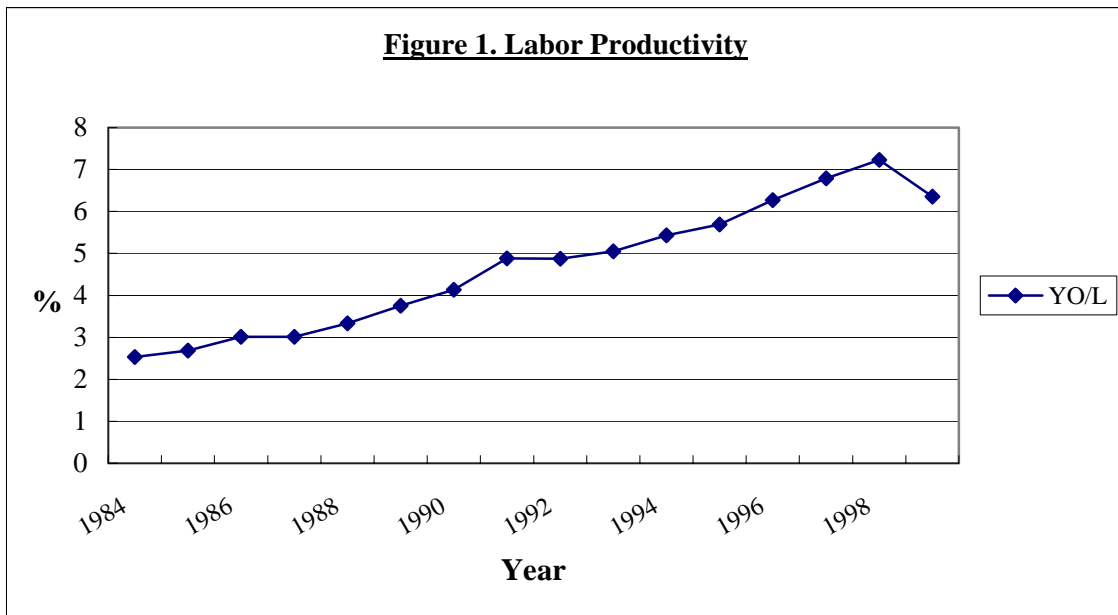
|   | Per Capita Expenditure<br>(ESCAP Average = 100) |       |       | Relative Price<br>(GDP = 100) |       |       | Composition of Per<br>Capita<br>Expenditure(GDP = 100) |       |       |
|---|---|-------|-------|-------------------------------|-------|-------|--|-------|-------|
|   | HK  | Japan | Korea | HK                            | Japan | Korea | HK   | Japan | Korea |
| <b>Consumer Expenditure</b>             | 418.3   | 327.3 | 134.3 | 93                            | 102   | 115   | 64.7   | 58.3  | 47.6  |
| <b>Food, Beverage, Tobacco</b>          | 176.4   | 198.2 | 140.3 | 72                            | 109   | 112   | 8.5  | 11.0  | 15.5  |
| Bakery, cereal                          | 59.6  | 170.4 | 76.0  | 68                            | 118   | 151   | 0.8  | 2.7   | 2.4   |
| Meat                                    | 484.3   | 149.0 | 156.4 | 56                            | 109   | 119   | 2.5  | 0.9   | 1.9   |
| Fishery                                 | 314.1   | 231.0 | 143.1 | 77                            | 142   | 123   | 1.6  | 1.3   | 1.6   |
| Dairy Products                          | 80.4  | 161.9 | 121.6 | 79                            | 76    | 93    | 0.3  | 0.6   | 0.9   |
| Fruits, Vegetables                      | 113.0   | 160.5 | 156.8 | 81                            | 119   | 129   | 0.9  | 1.5   | 2.9   |
| Beverage                                | 168.1   | 400.7 | 226.6 | 111                           | 96    | 97    | 0.6  | 1.7   | 2.0   |
| Tobacco                                 | 56.7  | 222.5 | 227.5 | 234                           | 92    | 76    | 0.2  | 0.8   | 1.6   |
| <b>Clothing, Footwear</b>               | 1320.4  | 343.8 | 76.5  | 63                            | 98    | 137   | 13.7   | 4.1   | 1.8   |
| <b>Housing, water, electricity, gas</b> | 134.5   | 421.0 | 65.6  | 218                           | 92    | 173   | 3.8  | 13.8  | 4.3   |
| <b>Furnishings, Household Equipment</b> | 342.6   | 333.6 | 148.2 | 96                            | 94    | 126   | 3.2  | 3.6   | 3.2   |
| <b>Health</b>                           | 411.7   | 323.5 | 165.0 | 118                           | 123   | 122   | 3.5  | 3.2   | 3.2   |
| <b>Transport</b>                        | 400.1   | 322.9 | 213.5 | 97                            | 109   | 64    | 5.7  | 5.3   | 7.0   |
| <b>Education, Recreation</b>            | 683.0   | 421.8 | 201.4 | 94                            | 107   | 111   | 13.5   | 9.6   | 9.2   |
| Recreation                              | 1180.2  | 500.2 | 166.9 | 75                            | 96    | 117   | 11.8   | 5.8   | 3.8   |
| Education                               | 179.3   | 342.2 | 236.3 | 217                           | 124   | 107   | 1.8  | 3.9   | 5.3   |
| <b>Others</b>                           | 808.7   | 426.4 | 97.5  | 93                            | 97    | 142   | 12.7   | 7.7   | 3.5   |
| <b>Government Expenditure</b>           | 147.6   | 167.3 | 127.2 | 237                           | 150   | 158   | 2.8  | 3.6   | 5.5   |
| <b>Capital Formulation</b>              | 402.3   | 408.3 | 253.4 | 101                           | 92    | 78    | 32.5   | 38.0  | 46.9  |
| <b>Equipment</b>                        | 516.3   | 439.8 | 254.2 | 72                            | 82    | 78    | 15.0   | 14.7  | 16.9  |
| <b>Construction</b>                     | 314.1   | 381.3 | 293.4 | 116                           | 100   | 80    | 14.1   | 19.8  | 30.2  |
| <b>GDP</b>                              | 393.2   | 341.2 | 171.4 | 100                           | 100   | 100   | 100.0  | 100.0 | 100.0 |

**Table 8 Gross Output Growth Accounting for Korea (1984-1997)**

|                               | Growth output | Capital Input | Labor Input | Energy Input | Material Input | TFP         |
|-------------------------------|---------------|---------------|-------------|--------------|----------------|-------------|
| 1 Agriculture                 | 1.66          | 7.10          | -2.43       | 4.70         | 2.07           | -2.85       |
| 2 coal mining                 | -10.37        | -2.46         | -11.90      | -9.66        | -7.81          | -0.86       |
| 3 Metal non-metal             | 3.75          | -15.95        | -5.90       | 5.11         | 4.12           | 10.76       |
| 4 Oil and gas                 | 0.00          | -0.85         | 0.00        | 0.00         | 0.00           | 0.02        |
| 5 Construction                | 5.40          | 13.08         | 7.01        | -3.53        | 5.18           | -1.55       |
| 6 Food                        | 3.07          | 7.73          | 0.90        | 3.06         | 2.75           | -0.52       |
| 7 Textile                     | 2.30          | 5.19          | -5.08       | 2.70         | 1.01           | 1.52        |
| 8 Apparels                    | 3.54          | 4.10          | -6.98       | 3.45         | 3.60           | 1.72        |
| 9 lumber and wood             | 6.70          | 4.63          | -5.22       | 5.65         | 5.56           | 2.62        |
| 10 Furniture                  | 9.49          | 10.28         | -2.21       | 8.02         | 9.02           | 2.16        |
| 11 paper allied               | 6.84          | 13.06         | 0.50        | 6.38         | 6.33           | 0.19        |
| 12 printing,publishing,allied | 7.88          | 8.09          | 2.22        | 5.83         | 8.16           | 1.32        |
| 13 Chemicals                  | 7.94          | 11.48         | -0.01       | 9.94         | 7.46           | 0.25        |
| 14 petroleum products         | 6.04          | 11.79         | -0.01       | 3.76         | 6.12           | 0.31        |
| 15 Leather                    | 0.38          | 0.70          | -20.38      | 1.19         | -0.37          | 4.07        |
| 16 stone,clay,glass           | 6.48          | 9.14          | -2.27       | 3.59         | 6.54           | 1.27        |
| 17 primary metal              | 7.29          | 9.10          | 3.33        | 5.24         | 6.84           | 0.51        |
| 18 fabricated metal           | 7.38          | 11.96         | 0.09        | 5.86         | 6.32           | 1.36        |
| 19 Machinery                  | 10.60         | 7.58          | 5.67        | 8.02         | 10.59          | 1.39        |
| 20 electrical machinery       | 14.24         | 14.40         | -1.99       | 9.66         | 14.13          | 2.13        |
| 21 Motor                      | 14.39         | 12.05         | 5.08        | 7.16         | 15.22          | 1.12        |
| 22 transportation equip.      | 3.05          | 21.29         | 5.08        | -10.88       | 3.66           | -2.66       |
| 23 Instrument                 | 10.87         | 11.01         | 0.80        | 7.67         | 11.05          | 1.64        |
| 24 Rubber                     | 11.39         | 12.07         | -4.76       | 11.85        | 11.19          | 2.89        |
| 25 misc.manufacturing         | 1.53          | 23.95         | -5.59       | 1.74         | 1.02           | -2.20       |
| 26 transportation             | 6.66          | 7.12          | 2.55        | 4.79         | 8.59           | 0.68        |
| 27 communication              | 13.66         | 12.29         | 2.54        | 10.13        | 17.67          | 3.41        |
| 28 electric utility           | 6.65          | 8.28          | 7.07        | 2.93         | 8.53           | -0.02       |
| 29 gas utility                | 17.44         | 17.90         | 7.06        | 19.63        | 10.49          | 1.22        |
| 30 Trade                      | 8.19          | 12.16         | 11.37       | 6.18         | 10.00          | -2.93       |
| 31 Finance and real estate    | 13.54         | 8.09          | 9.07        | 13.74        | 14.07          | 3.55        |
| 32 other private service      | 8.85          | 11.86         | 9.91        | 8.73         | 9.12           | -1.17       |
| 33 Public service             | 7.46          | 11.36         | 1.81        | 0.35         | 2.06           | 5.41        |
| <b>Total</b>                  | <b>8.32</b>   | <b>9.96</b>   | <b>2.49</b> | <b>6.05</b>  | <b>8.21</b>    | <b>1.04</b> |

**Table 9. Trends in Productivity and Capital-Output Coefficients in Korea(1984-2000)**

| Year           | YO/L | K /YO | K/L   |
|----------------|------|-------|-------|
| 1984           | 2.53 | 1.92  | 4.86  |
| 1985           | 2.68 | 2.01  | 5.40  |
| 1986           | 3.01 | 1.91  | 5.76  |
| 1987           | 3.01 | 1.84  | 5.54  |
| 1988           | 3.33 | 1.79  | 5.96  |
| 1989           | 3.75 | 1.84  | 6.89  |
| 1990           | 4.13 | 1.85  | 7.65  |
| 1991           | 4.88 | 1.89  | 9.24  |
| 1992           | 4.87 | 1.98  | 9.67  |
| 1993           | 5.05 | 2.07  | 10.46 |
| 1994           | 5.43 | 2.12  | 11.53 |
| 1995           | 5.69 | 2.17  | 12.31 |
| 1996           | 6.27 | 2.23  | 14.00 |
| 1997           | 6.78 | 2.33  | 15.79 |
| 1998           | 7.23 | 2.46  | 17.79 |
| 1999           | 6.36 | 2.51  | 15.94 |
| 2000           | 6.60 | 2.47  | 16.33 |
| Average        | 5.98 | 1.59  | 7.57  |
| Growth Rate(%) |      |       |       |



rate of 1.59 percent. The economy-wide capital-labor ratio has grown at 7.57 percent. Capital-gross output coefficient started to fall after 1998 implying a structural change

after the financial crisis in 1997

## **5. Conclusion**

In the present paper, we have constructed a Korean database of gross output, GDP, and four input series for the period of 1984-2000 in the framework of KLEM Model. However, due to lack of sufficiently large sample employment survey, we have not adjusted labor input data by age, sex, and education yet. Therefore, our results of growth accounting and productivity estimation are a preliminary one.

According to a gross-output growth accounting, the Korean economy has recorded a significant growth of total factor productivity during the period of 1984-2000. It is a contrary finding to earlier empirical results based upon value-added growth accounting. We also have noted that there was a discernable structural turning point after the 1997 economic crisis in Korea: both capital-gross output coefficient and capital-value-added coefficient started to fall after 1997.

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## Appendix

### Labor Statistics in Korea

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## Labor statistics in Korea

### . Introduction

In order to measure labor input for growth accounting and Total Factor Productivity(TFP), we have to obtain both quantity data of labor input such as employment and hours worked by industries and quality factors such as sex, education and age. Both availability and reliability of labor statistics in Korea have been improved since 1980.

The labor statistics which are available for TFP in Korea are such as;

- (1) Report on the Economically Active Population Survey(經濟活動人口調查)
- (2) Report on Mining and Manufacturing Survey(鑛工業統計調查)
- (3) Report on Industrial Census(産業總調查)
- (4) Survey Report on Wage Structure(賃金構造基本統計調查)
- (5) Report on Monthly Labor Survey(每月勞動統計調查)
- (6) Input-Output Tables(産業聯關表)

Each statistic has its own purpose of survey, and has been conducted periodically (monthly, yearly and per 3-5 years) by household survey or establishment survey. And most of labor statistics are designed by KSIC (Korean Standard Industrial Classification) except I-O Tables. But KSIC has been revised 8 times since 1965. So, industrial classifications should be matched before and after a revision for consistency of time series data.

### . Characteristics of Labor Statistics

#### (1) Report on the Economically Active Population Survey(經濟活動人口調查)

NSO(National Statistical Office) has monthly surveyed 「 Report on the Economically Active Population 」 by household sample survey. The industrial classification is decomposed into 2 digits by KSIC. The scope of survey is the entire industries, and covers all persons over 15 years old. The primary purpose of the survey is to collect up-to-date information on the economic status of the population and on changes in the activity pattern of the labor force. The report has been surveyed since 1962. The main contents of survey are as follows:

- Sex: (i) men, (ii) women
- Education: (i) under elementary school (ii) elementary school (iii) middle school  
(iv) high school (v) college (vi) university (vii) graduate school
- Status of worker: (i) regular employees (ii) temporary employees (iii) daily workers

(iv) Self-employed (v) unpaid family workers

- Age
- Weekly hours worked

**(2) Report on Mining and Manufacturing Survey(鑛工業統計調査)**

NSO has also surveyed every year 「Report on Mining and Manufacturing」 on the establishment with 5 persons over. The industrial classification is decomposed to 5 digits by KSIC, and the scope of survey includes (i) mining and (ii) manufacturing. The purpose of the survey is to provide statistics for the structure and production activities of mining and manufacturing sectors such as gross output, added value, capital and labor input etc. The report has been surveyed since 1969. The main contents of survey are as follows:

- Gross Output
- Value Added
- Employment
- Wage
- Production cost
- Tangible assets

**(3) Report on Industrial Census(産業總調査)**

「Report on Industrial Census」 has been surveyed on the establishment with one person over every 5 year by NSO. The industrial classification is planned to 5 digits by KSIC, and the scope of survey is (i) mining, (ii) manufacturing and (iii) electricity, gas and water supply. The purpose of the survey is firstly to provide the information on industrial structure of mining, manufacturing and electricity, gas and water supply, and secondly to supply the population statistics for sample survey. The report has been surveyed since 1955. The main contents of survey are identical with the 「Report on Mining and Manufacturing Survey(鑛工業統計調査)」

**(4) Survey Report on Wage Structure(賃金構造基本統計調査)**

Ministry of Labor has conducted yearly survey 「Survey Report on Wage Structure」 by sample survey on the establishments of 10 persons over until 1998, and on the establishments of 5 persons over since 1999. The industrial classification is decomposed to 2 digits by KSIC, and the scope of survey covers entire industries. The purpose of the survey is to collect information on the working conditions of labor such as wage, hours worked etc. The report has been

surveyed since 1968. The main contents of survey are as follows:

- Sex
- Age
- Education
- Duration and Career
- Skill
- Wage
- Hours worked
- Employment

**(5) Report on Monthly Labor Survey(每月勞動統計調查)**

Ministry of Labor has also surveyed 「Report on Monthly Labor Survey」 by sample survey on the establishments of 10 persons over until 1998, and on the establishments of 5 persons over since 1999. The industrial classification is decomposed to 2 digits by KSIC, and the scope of survey covers entire industries. The purpose of the survey is to collect monthly data on employment, wages and hours of work. The report has been surveyed since 1970. The main factors of survey are as follows:

- Sex
- Employment (regular worker)
- Wage
- Hours worked

**(6) Input-Output Tables(産業聯關表)**

Bank of Korea has released 「Input-Output Tables」 per 3-5 years since 1963. The sector is classified into 28 sector(大分類) - 77 sectors(中分類) - 128 sectors(小分類) - 402 sectors(基本部門) in 1998 I-O Tables. The main variables of I-O Tables are such as;

- Gross Output
- Value Added
- Intermediate Input
- Employment
- Compensation cost

## . Composition of labor statistics for growth accounting

### 1. Employment

- (1) Report on the Economically Active Population Survey(經濟活動人口調查)
- (2) Report on Mining and Manufacturing Survey(鑛工業統計調查)
- (3) Report on Industrial Census(産業總調查)
- (4) Input-Output Tables(産業聯關表)

### 2. Shares of Labor

- (1) Survey Report on Wage Structure(賃金構造基本統計調查)
- (2) Report on Monthly Labor Survey(每月勞動統計調查)
- (3) Input-Output Tables(産業聯關表)

### 3. Hours worked

- (1) Survey Report on Wage Structure(賃金構造基本統計調查)
- (2) Report on Monthly Labor Survey(每月勞動統計調查)

### 4. Wage

- (1) Survey Report on Wage Structure(賃金構造基本統計調查)
- (2) Report on Monthly Labor Survey(每月勞動統計調查)

### [Labor statistics in Korea]

| Labor Statistics                                 | Org | Industrial classification | Scope      | Survey Period | Survey Method    | Data Availability | Main Factors   |
|--|-----|---------------------------|------------|---------------|------------------|-------------------|--|
| (1) Report on the Economically Active Population | NSO | KSIC (2digits)            | -Whole Ind | monthly       | Household Survey | 1985              | -sex<br>-education<br>-age<br>-status<br>-weekly hours |

| Labor Statistics                       | Org | Industrial classification | Scope   | Survey Period    | Survey Method                               | Data Availability | Main Factors  |
|--|-----|---------------------------|---|------------------|---|-------------------|---|
| (2) Report on Mining and Manufacturing | NSO | KSIC (5digits)            | -Mining<br>-Manufacturing                             | yearly           | 5 persons over/ establishment survey        | 1980              | -gross output<br>-value added<br>-employment<br>-wage<br>-production cost<br>-tangible assets |
| (3) Report on Industrial Census        | NSO | KSIC (5digits)            | -Mining<br>-Manufacturing<br>-Electricity, gas, water | per 5 years      | 1 person over/ establishment survey         | 1983              | -gross output<br>-value added<br>-employment<br>-wage<br>-production cost<br>-tangible assets |
| (4) Report on Wage Structure           | MOL | KSIC (2-3digits)          | -Whole Ind  | yearly           | 5 persons over/ establishment sample survey | 1980              | -sex<br>-age<br>-education<br>-duration/career<br>-skill<br>-wage<br>-hour<br>-employment     |
| (5) Report on Monthly Labor Survey     | MOL | KSIC (2digits)            | -Whole Ind  | monthly          | 5 persons over/ establishment sample survey | 1983              | -sex<br>-employment<br>-wage<br>-hour   |
| (6) Input-Output Tables                | BOK | 28-402 sectors            | -Whole Ind  | per 3 or 5 years |   | 1970              | -gross output<br>-value added<br>-intermediate<br>-employment<br>-compensation cost           |



**Table A-1. Reclassification of IO Tables into 33 sectors**

(\*small-sized classification)

| 33 Sectors                       | Classification in IO Table(1980/1983) | Classification in IO Table(1985-1988) |
|----------------------------------|---------------------------------------|---------------------------------------|
| 1. Agriculture                   | 0001~0006                             | 0001~0005                             |
| 2. Coal Mining                   | 0007                                  | 0006                                  |
| 3. Metal and Mon-metal           | 0008~0009                             | 0007~0008                             |
| 4. Oil and Gas                   | 0024*                                 | 0017*                                 |
| 5. Construction                  | 0046~0047                             | 0049~0050                             |
| 6. Food                          | 0010~0018                             | 0009~0017                             |
| 7. Textile                       | 0019~0020, 0054~0055,0057*            | 0018~0029                             |
| 8. Apparels                      | 0056*                                 | 0021                                  |
| 9. Lumber and Wood               | 0060~0062*                            | 0057~0058, 0060*                      |
| 10. Furniture                    | 0062~0064*                            | 0059*                                 |
| 11. Paper allied                 | 0024                                  | 0024                                  |
| 12. Printing, Publishing, allied | 0025                                  | 0025                                  |
| 13. Chemicals                    | 0026~0031                             | 0026~0031                             |
| 14. Petroleum products           | 0032~0033                             | 0032~0033                             |
| 15. Leather                      | 0022                                  | 0022                                  |
| 16. Stone, Clay, Glass           | 0035                                  | 0035                                  |
| 17. Primary metal                | 0036~0038                             | 0036~0038                             |
| 18. Fabricated machinery         | 0039                                  | 0039                                  |
| 19. Machinery                    | 0040                                  | 0040                                  |
| 20. Electrical machinery         | 0041~0042                             | 0041~0042                             |
| 21. Motor                        | 0118*                                 | 0116*                                 |
| 22. Transportation equip.        | 0115~0117, 0119~0120*                 | 0114~0115, 0117~0118*                 |
| 23. Instrument                   | 0044                                  | 0044                                  |
| 24. Rubber and Misc. Plastic     | 0034                                  | 0034                                  |
| 25. Misc. manufacturing          | 0045                                  | 0045                                  |
| 26. Transportation               | 00053                                 | 0053                                  |
| 27. Communication                | 0054                                  | 0054                                  |
| 28. Electric utility             | 0048                                  | 0046                                  |
| 29. Gas and water utility        | 0049~0050                             | 0047~0048                             |
| 30. Trade                        | 0051~0052                             | 0051~0052                             |
| 31. Finance                      | 0055~0056                             | 0055~0057                             |
| 32. Other Private service        | 0058~0061                             | 0059~0062                             |
| 33.Public service                | 0057                                  | 0058                                  |

| <b>33 Sectors</b>                       | <b>Classification in IO Table(1990/1993)</b> | <b>Classification in IO Table(1995/1998)</b> |
|---|--|--|
| <b>1. Agriculture</b>                   | 0001-0005                                    | 0001~0004                                    |
| <b>2. Coal Mining</b>                   | 0006   | 0005   |
| <b>3. Metal and Mon-metal</b>           | 0008-0009                                    | 0007~0008                                    |
| <b>4. Oil and Gas</b>                   | 0007   | 0006   |
| <b>5. Construction</b>                  | 0059-0060                                    | 0061~0062                                    |
| <b>6. Food</b>                          | 0010-0017                                    | 0010-0018                                    |
| <b>7. Textile</b>                       | 0018-0020                                    | 0019~0020,0022                               |
| <b>8. Apparels</b>                      | 0021   | 0021   |
| <b>9. Lumber and Wood</b>               | 0023   | 0024   |
| <b>10. Furniture</b>                    | 0024   | 0057   |
| <b>11. Paper allied</b>                 | 0025   | 0025   |
| <b>12. Printing, Publishing, allied</b> | 0026   | 0026   |
| <b>13. Chemicals</b>                    | 0027-0033                                    | 0029~0035                                    |
| <b>14. Petroleum products</b>           | 0034-0035                                    | 0027~0028                                    |
| <b>15. Leather</b>                      | 0022   | 0023   |
| <b>16. Stone, Clay, Glass</b>           | 0038-0040                                    | 0038~0041                                    |
| <b>17. Primary metal</b>                | 0041-0043                                    | 0042~0044                                    |
| <b>18. Fabricated machinery</b>         | 0044   | 0045   |
| <b>19. Machinery</b>                    | 0045-0046                                    | 0046~0047                                    |
| <b>20. Electrical machinery</b>         | 0047-0051                                    | 0048~0052                                    |
| <b>21. Motor</b>                        | 0053   | 0054   |
| <b>22. Transportation equip.</b>        | 0054   | 0055~0056                                    |
| <b>23. Instrument</b>                   | 0052   | 0053   |
| <b>24. Rubber and Misc. Plastic</b>     | 0036-0037                                    | 0036~0037                                    |
| <b>25. Misc. manufacturing</b>          | 0055   | 0058   |
| <b>26. Transportation</b>               | 0063   | 0065   |
| <b>27. Communication</b>                | 0064   | 0066   |
| <b>28. Electric utility</b>             | 0056   | 0059   |
| <b>29. Gas and water utility</b>        | 0057-0058                                    | 0060   |
| <b>30. Trade</b>                        | 0061-0062                                    | 0063~0064                                    |
| <b>31. Finance</b>                      | 0065-0067                                    | 0067~0069                                    |
| <b>32. Other Private service</b>        | 0069-0072                                    | 0071~0072                                    |
| <b>33.Public service</b>                | 0068   | 0070   |

(\*small-sized classification)

**Table A-2. Reclassification of National Account into 33 Sectors**

| <b>Classification in National Account</b>                  | <b>Reclassification into 33 Sectors</b>                                    |
|--|--|
| 1. Agriculture, Forestry and fishing                       | 1. Agriculture   |
| 2. Mining and Quarrying                                    | 2. Coal Mining<br>3. Metal and Non-metal<br>4. Oil and Gas                 |
| 3. Food, Beverage and Tobacco                              | 6. Food  |
| 4. Textile and Leather                                     | 7. Textile<br>8. Apparels<br>15. Leather                                   |
| 5. Wood, Paper, Publishing and Printing                    | 9. Lumber and Wood<br>11. Paper allied<br>12. Printing, Publishing, allied |
| 6. Petroleum, Coal, and Chemicals                          | 13. Chemicals<br>14. Petroleum products<br>24. Rubber and Misc. Plastic    |
| 7. Non-Metallic Mineral Products except Petroleum and Coal | 16. Stone, Clay, Glass   |
| 8. Metal, Fabricated Metal Products                        | 17. Primary metal<br>18. Fabricated machinery                              |
| 9; Machinery and Equipment                                 | 19. Machinery<br>20. Electrical machinery<br>23. Instrument                |
| 10. Transport Equipment                                    | 21. Motor<br>22. Transportation equip                                      |
| 11. Furniture and Other Manufacturing Industries           | 10. Furniture<br>25. Misc. manufacturing                                   |
| 12. Electricity, Gas and Water                             | 28. Electric utility<br>29. Gas and water utility                          |
| 13. Construction   | 5. Construction  |
| 14. Wholesale and Retail Trade, Restaurants and Hotels     | 30. Trade  |
| 15. Transport, Storage and Communication                   | 26. Transportation<br>27. Communication                                    |
| 16. Finance, Insurance, Real Estate and Business Services  | 31. Finance  |
| 17. Community, Social and Personal Services                | 32. Other Private service  |
| 18. Producers of Government Services                       | 33. Public service   |

**Table A-3. Gross Output in 33 Sectors**

| Gross Output at 1995 Price    | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   | 1992   |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1Agriculture                  | 22709  | 23514  | 25657  | 26369  | 29913  | 28450  | 28202  | 29198  | 31200  |
| 2Coal Mining                  | 904    | 971    | 1096   | 1172   | 1381   | 1142   | 937    | 768    | 740    |
| 3Metal and Non-Metal          | 912    | 1015   | 1084   | 1135   | 1259   | 1640   | 2028   | 2480   | 2719   |
| 4Oil and gas                  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 5Construction                 | 16364  | 12125  | 13395  | 15257  | 15955  | 37969  | 59386  | 64715  | 68960  |
| 6Food                         | 30216  | 31653  | 35624  | 36690  | 40647  | 38812  | 38285  | 40420  | 43649  |
| 7Textile                      | 14885  | 16418  | 20045  | 24295  | 25289  | 23576  | 23129  | 23782  | 24693  |
| 8Apparels                     | 5244   | 6282   | 7231   | 9106   | 9507   | 7517   | 6059   | 5998   | 6064   |
| 9Lumber and Wood              | 1164   | 1649   | 1656   | 1867   | 2281   | 2400   | 2596   | 3032   | 3349   |
| 10Furniture                   | 734    | 829    | 949    | 1041   | 1532   | 1819   | 2201   | 2604   | 2845   |
| 11Paper Allied                | 3414   | 3590   | 4524   | 5825   | 6735   | 6697   | 7045   | 7403   | 7690   |
| 12Printing,Publishing,Allied  | 2015   | 2197   | 2353   | 2813   | 3324   | 3793   | 4447   | 4771   | 4977   |
| 13Chemicals                   | 13685  | 15022  | 18140  | 22220  | 26508  | 25569  | 25775  | 28678  | 31122  |
| 14Petroleum Products          | 13928  | 13226  | 11464  | 11878  | 11317  | 10647  | 10565  | 13301  | 15237  |
| 15Leather                     | 2319   | 1931   | 2595   | 3046   | 3352   | 7306   | 12270  | 10916  | 10800  |
| 16Stone,Clay,Glass            | 4657   | 4916   | 5626   | 6467   | 7600   | 8497   | 9561   | 10687  | 11647  |
| 17Primary Metal               | 14080  | 15107  | 17073  | 21351  | 24449  | 26065  | 29745  | 32947  | 34860  |
| 18Fabricated Metal            | 5000   | 5322   | 6532   | 7402   | 9425   | 9680   | 10672  | 12408  | 13261  |
| 19Machinery                   | 6219   | 6782   | 9454   | 11340  | 13506  | 15709  | 18824  | 21567  | 23052  |
| 20Electrical Machinery        | 12889  | 15251  | 22365  | 28156  | 36392  | 36263  | 38300  | 42543  | 45254  |
| 21Motor                       | 3967   | 4811   | 6988   | 10450  | 12916  | 13620  | 12748  | 14492  | 15951  |
| 22Transportation Equipment    | 4858   | 5062   | 4222   | 3562   | 3953   | 8322   | 13551  | 16017  | 17526  |
| 23Instrument                  | 1070   | 1242   | 1589   | 1971   | 2508   | 2419   | 2480   | 2742   | 2913   |
| 24Rubber                      | 3033   | 3530   | 4725   | 5789   | 6843   | 8041   | 9150   | 10170  | 11032  |
| 25Miscellaneous Manufacturing | 3060   | 3400   | 4555   | 5720   | 5860   | 5075   | 4563   | 4589   | 4751   |
| 26Transportation              | 12996  | 13248  | 15359  | 16786  | 18913  | 19204  | 20845  | 23689  | 25704  |
| 27Communication               | 2886   | 3290   | 3787   | 4652   | 5424   | 5600   | 6160   | 7071   | 7547   |
| 28Electric Utility            | 5310   | 5725   | 6633   | 7517   | 8208   | 7790   | 7640   | 8720   | 9375   |
| 29Gas and Water Utility       | 499    | 544    | 608    | 710    | 885    | 1316   | 1788   | 2393   | 2691   |
| 30Trade                       | 22243  | 24153  | 29142  | 35210  | 39418  | 40900  | 43682  | 45939  | 47764  |
| 31Finance and Real Estate     | 20785  | 25250  | 29282  | 34481  | 40556  | 48676  | 56771  | 67648  | 72253  |
| 32Ether Private Service       | 16910  | 17005  | 19485  | 22219  | 25565  | 26932  | 29375  | 34156  | 36730  |
| 33Public Service              | 9196   | 9545   | 11515  | 12902  | 15208  | 14970  | 17602  | 19699  | 21174  |
| Total                         | 278148 | 294602 | 344750 | 399397 | 456632 | 496413 | 556380 | 615542 | 657531 |

| Gross Output at 1995 Price    | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000    | Average Growth |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|----------------|
|                               |        |        |        |        |        |        |        |         | Rate(%)        |
| 1Agriculture                  | 30358  | 31193  | 33065  | 33008  | 34172  | 30531  | 29103  | 28918   | 1.66           |
| 2Coal Mining                  | 446    | 357    | 283    | 265    | 267    | 212    | 196    | 189     | -10.37         |
| 3Metal and Non-Metal          | 3192   | 3074   | 3012   | 2749   | 2718   | 2038   | 1850   | 1714    | 3.75           |
| 4Oil and gas                  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0       | 0.00           |
| 5Construction                 | 74974  | 79904  | 85282  | 90069  | 95777  | 92205  | 83639  | 78904   | 5.40           |
| 6Food                         | 43124  | 41910  | 43312  | 46718  | 50711  | 51119  | 48632  | 48376   | 3.07           |
| 7Textile                      | 23846  | 20664  | 18343  | 20755  | 22088  | 23021  | 21241  | 20372   | 2.30           |
| 8Apparels                     | 5589   | 8624   | 11417  | 12101  | 12803  | 12513  | 10727  | 9520    | 3.54           |
| 9Lumber and Wood              | 3636   | 3573   | 3612   | 3363   | 3454   | 2704   | 2613   | 2611    | 6.70           |
| 10Furniture                   | 3181   | 3596   | 3910   | 3595   | 3638   | 2802   | 3167   | 3637    | 9.49           |
| 11Paper Allied                | 7626   | 8757   | 9897   | 10381  | 11090  | 10630  | 10267  | 10345   | 6.84           |
| 12Printing,Publishing,Allied  | 5079   | 6422   | 7704   | 7615   | 7970   | 6958   | 7028   | 7393    | 7.88           |
| 13Chemicals                   | 33346  | 37976  | 41764  | 46612  | 48402  | 48841  | 47354  | 47736   | 7.94           |
| 14Petroleum Products          | 18991  | 18123  | 18289  | 24878  | 28237  | 35274  | 39591  | 45368   | 6.04           |
| 15Leather                     | 8299   | 6804   | 5678   | 5483   | 5620   | 4786   | 4397   | 4196    | 0.38           |
| 16Stone,Clay,Glass            | 13103  | 14649  | 16341  | 16648  | 17264  | 15602  | 14136  | 13323   | 6.48           |
| 17Primary Metal               | 36497  | 39769  | 43328  | 47869  | 50767  | 51228  | 47138  | 45204   | 7.29           |
| 18Fabricated Metal            | 14618  | 15645  | 16793  | 17692  | 18690  | 17684  | 16753  | 16545   | 7.38           |
| 19Machinery                   | 25235  | 27948  | 30777  | 30714  | 32503  | 28132  | 31430  | 35841   | 10.60          |
| 20Electrical Machinery        | 48735  | 58801  | 68463  | 78876  | 87950  | 93797  | 105986 | 121776  | 14.24          |
| 21Motor                       | 17349  | 29216  | 40285  | 38594  | 39297  | 32515  | 39230  | 47305   | 14.39          |
| 22Transportation Equipment    | 19947  | 14905  | 10298  | 11881  | 13037  | 14023  | 13082  | 12627   | 3.05           |
| 23Instrument                  | 3139   | 3862   | 4559   | 4652   | 4927   | 4573   | 4970   | 5589    | 10.87          |
| 24Rubber                      | 11932  | 13407  | 14607  | 15482  | 15969  | 15152  | 15803  | 16982   | 11.39          |
| 25Miscellaneous Manufacturing | 4577   | 4333   | 4176   | 4179   | 4323   | 3842   | 3765   | 3866    | 1.53           |
| 26Transportation              | 28211  | 31234  | 34243  | 38181  | 40213  | 41393  | 39212  | 38880   | 6.66           |
| 27Communication               | 8307   | 10119  | 12046  | 14651  | 16077  | 18366  | 21363  | 25171   | 13.66          |
| 28Electric Utility            | 10318  | 11062  | 11924  | 13362  | 14061  | 14685  | 14914  | 15601   | 6.65           |
| 29Gas and Water Utility       | 3408   | 3502   | 3712   | 5052   | 5664   | 7130   | 7882   | 8955    | 17.44          |
| 30Trade                       | 48323  | 52050  | 57068  | 57923  | 59772  | 54500  | 67186  | 82434   | 8.19           |
| 31Finance and Real Estate     | 83948  | 94284  | 106245 | 116929 | 123571 | 126450 | 133520 | 144576  | 13.54          |
| 32Ether Private Service       | 41120  | 47528  | 53908  | 59722  | 63130  | 64428  | 67674  | 73320   | 8.85           |
| 33Public Service              | 22713  | 22750  | 24997  | 27545  | 29395  | 29591  | 30254  | 31963   | 7.46           |
| Total                         | 703167 | 766040 | 839337 | 907543 | 963556 | 956725 | 984105 | 1049238 | 8.32           |

**Table A-4 GDP in 33 sectors**

| At 1995 constant price               | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>1 agriculture</b>                 | 15891  | 15776  | 16829  | 17807  | 20630  | 19998  | 18803  | 19607  |
| <b>2 coal mining</b>                 | 570    | 583    | 658    | 734    | 953    | 799    | 612    | 504    |
| <b>3 Metal non-metal</b>             | 684    | 669    | 715    | 748    | 828    | 1105   | 1429   | 1736   |
| <b>4 Oil and gas</b>                 | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| <b>5 construction</b>                | 7040   | 5066   | 5496   | 6408   | 6926   | 16652  | 27773  | 30350  |
| <b>6 food</b>                        | 7637   | 7708   | 8750   | 9193   | 10362  | 10508  | 9431   | 10346  |
| <b>7 textile</b>                     | 3427   | 3697   | 4977   | 6249   | 6614   | 6319   | 5373   | 5768   |
| <b>8 apparels</b>                    | 1281   | 1394   | 1628   | 2189   | 2446   | 1990   | 1346   | 1404   |
| <b>9 lumber and wood</b>             | 189    | 298    | 312    | 377    | 478    | 530    | 565    | 680    |
| <b>10 Furniture</b>                  | 211    | 212    | 244    | 293    | 418    | 487    | 709    | 825    |
| <b>11 paper allied</b>               | 784    | 905    | 1141   | 1457   | 1677   | 1725   | 1964   | 2136   |
| <b>12 printing,publishing,allied</b> | 736    | 834    | 870    | 1000   | 1208   | 1423   | 1746   | 1928   |
| <b>13 chemicals</b>                  | 3556   | 3948   | 5027   | 6113   | 7372   | 7471   | 7143   | 8100   |
| <b>14 petroleum products</b>         | 2305   | 2166   | 3676   | 3125   | 3572   | 2980   | 1749   | 2631   |
| <b>15 leather</b>                    | 424    | 442    | 500    | 658    | 664    | 1599   | 3371   | 3076   |
| <b>16 stone,clay,glass</b>           | 1457   | 1659   | 2006   | 2293   | 2779   | 3147   | 3882   | 4413   |
| <b>17 primary metal</b>              | 2133   | 2566   | 2973   | 3746   | 4490   | 4877   | 5982   | 6875   |
| <b>18 fabricated metal</b>           | 1252   | 1625   | 2014   | 2200   | 2849   | 2989   | 3497   | 4169   |
| <b>19 Machinery</b>                  | 1898   | 2128   | 3107   | 3850   | 4582   | 5310   | 6534   | 7583   |
| <b>20 electrical machinery</b>       | 3277   | 4387   | 6578   | 8323   | 10361  | 10756  | 10813  | 12269  |
| <b>21 Motor</b>                      | 1369   | 1497   | 2120   | 2965   | 3758   | 4153   | 4516   | 5085   |
| <b>22 transportation equip.</b>      | 1644   | 1509   | 1152   | 528    | 764    | 1283   | 4040   | 4823   |
| <b>23 instrument</b>                 | 278    | 405    | 489    | 636    | 810    | 797    | 789    | 889    |
| <b>24 rubber</b>                     | 959    | 1148   | 1565   | 1985   | 2388   | 2816   | 2832   | 3230   |
| <b>25 misc.manufacturing</b>         | 993    | 1120   | 1563   | 1966   | 2005   | 1776   | 1651   | 1687   |
| <b>26 transportation</b>             | 6842   | 6308   | 7789   | 8027   | 9500   | 9437   | 11093  | 12511  |
| <b>27 communication</b>              | 2405   | 2816   | 3275   | 3995   | 4666   | 4845   | 5258   | 6032   |
| <b>28 electric utility</b>           | 2531   | 3589   | 4636   | 5309   | 5522   | 5174   | 4400   | 5065   |
| <b>29 gas utility</b>                | 176    | 200    | 247    | 267    | 336    | 486    | 627    | 878    |
| <b>30 trade</b>                      | 15125  | 17070  | 21264  | 25133  | 28243  | 29346  | 30927  | 32381  |
| <b>31 Finance and real estate</b>    | 15879  | 17986  | 20920  | 24995  | 29304  | 34970  | 40160  | 47658  |
| <b>32 other private service</b>      | 11970  | 12712  | 14702  | 16696  | 19442  | 20695  | 21989  | 25608  |
| <b>33 Public service</b>             | 5004   | 5372   | 5940   | 6833   | 8223   | 7318   | 10255  | 11534  |
| <b>Total</b>                         | 119927 | 127794 | 153164 | 176096 | 204171 | 223760 | 251259 | 281779 |

| 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | Average rate |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|
| 20995  | 19921  | 20710  | 21933  | 21809  | 22550  | 17546  | 15324  | 18307  | 1.23         |
| 486    | 277    | 229    | 137    | 125    | 125    | 67     | 60     | 84     | -10.69       |
| 1900   | 2270   | 2220   | 2197   | 1994   | 1969   | 1468   | 1315   | 1166   | 4.18         |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | -3.81        |
| 32366  | 34807  | 37110  | 35660  | 37662  | 40054  | 44405  | 39365  | 35190  | 8.11         |
| 11299  | 11969  | 12016  | 12561  | 13457  | 14576  | 14641  | 11920  | 13216  | 3.70         |
| 6065   | 6185   | 5787   | 5283   | 5967   | 6346   | 7877   | 6754   | 6785   | 4.86         |
| 1441   | 1547   | 2689   | 4015   | 4342   | 4622   | 4423   | 3471   | 2442   | 5.32         |
| 757    | 850    | 884    | 1018   | 954    | 982    | 718    | 654    | 730    | 11.07        |
| 898    | 1040   | 1213   | 1459   | 1357   | 1378   | 945    | 1029   | 1309   | 11.07        |
| 2241   | 2186   | 2505   | 3016   | 3202   | 3434   | 3006   | 2783   | 2766   | 8.07         |
| 2027   | 2101   | 2647   | 3271   | 3248   | 3404   | 2707   | 2653   | 2397   | 7.59         |
| 8838   | 9511   | 10837  | 12448  | 13733  | 14211  | 12803  | 11683  | 10967  | 7.42         |
| 3136   | 6282   | 5775   | 6698   | 8808   | 9911   | 12346  | 12999  | 14948  | 11.18        |
| 3067   | 2260   | 1911   | 1664   | 1627   | 1674   | 1482   | 1171   | 1153   | 4.98         |
| 4830   | 5120   | 5821   | 6145   | 6251   | 6480   | 5842   | 5222   | 4624   | 7.46         |
| 7349   | 7841   | 8301   | 9669   | 10886  | 11614  | 11169  | 9983   | 9632   | 9.66         |
| 4487   | 4985   | 5264   | 5685   | 6032   | 6388   | 6540   | 5970   | 5843   | 9.79         |
| 8133   | 8655   | 9587   | 10675  | 10766  | 11432  | 9035   | 9617   | 11197  | 11.22        |
| 13128  | 15608  | 18878  | 23289  | 26230  | 29051  | 26163  | 28079  | 33558  | 14.78        |
| 5582   | 5372   | 11995  | 12082  | 11641  | 11877  | 8088   | 9078   | 10736  | 13.37        |
| 5291   | 5887   | 4911   | 3191   | 3733   | 4115   | 5545   | 4903   | 3742   | 5.29         |
| 949    | 940    | 1184   | 1523   | 1521   | 1601   | 1419   | 1467   | 1454   | 10.81        |
| 3529   | 3829   | 4326   | 4722   | 4987   | 5139   | 4417   | 4332   | 5223   | 11.43        |
| 1754   | 1744   | 1687   | 1644   | 1652   | 1712   | 1599   | 1500   | 1319   | 2.29         |
| 13548  | 14328  | 16674  | 17630  | 19210  | 20092  | 19711  | 18249  | 16518  | 5.71         |
| 6437   | 6947   | 8365   | 9912   | 11980  | 13121  | 14407  | 16558  | 15792  | 12.12        |
| 5453   | 5425   | 5934   | 6445   | 6997   | 7297   | 7758   | 8056   | 8556   | 7.79         |
| 996    | 1100   | 1141   | 1202   | 1558   | 1723   | 2287   | 2382   | 2604   | 16.95        |
| 33629  | 33011  | 35316  | 38128  | 38284  | 39377  | 34733  | 42276  | 46201  | 7.32         |
| 50845  | 60874  | 67106  | 74366  | 81355  | 85822  | 92021  | 97647  | 104562 | 13.42        |
| 27550  | 30524  | 35155  | 39652  | 43494  | 45833  | 45911  | 47556  | 47943  | 8.52         |
| 12414  | 14120  | 9673   | 16141  | 17686  | 18839  | 18853  | 19048  | 23258  | 9.58         |
| 301420 | 327517 | 357854 | 393462 | 422547 | 446751 | 439932 | 443105 | 464223 | 8.63         |

**Table A-5. Capital Stocks in 33 Sectors**

| Capital Input at 1995 Price   | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990    | 1991    | 1992    |
|-------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 1Agriculture                  | 33100  | 38153  | 43308  | 49915  | 53877  | 58615  | 63843   | 68374   | 72234   |
| 2Coal Mining                  | 664    | 829    | 1229   | 1216   | 1443   | 1773   | 1035    | 919     | 828     |
| 3Metal and Non-Metal          | 3104   | 3440   | 3593   | 4187   | 4206   | 4078   | 1697    | 1750    | 1781    |
| 4Oil and gas                  | 0      | 0      | 0      | 0      | 0      | 0      | 3307    | 3413    | 3476    |
| 5Construction                 | 10839  | 11949  | 13249  | 14546  | 17150  | 20177  | 24058   | 28695   | 34153   |
| 6Food                         | 12672  | 14362  | 16501  | 18461  | 19797  | 20990  | 22530   | 23952   | 25824   |
| 7Textile                      | 22322  | 25039  | 28457  | 31472  | 32929  | 34006  | 35483   | 36581   | 38139   |
| 8Apparels                     | 2684   | 2923   | 3215   | 3432   | 3586   | 3697   | 3848    | 3955    | 4106    |
| 9Lumber and Wood              | 1843   | 1831   | 1799   | 1661   | 1784   | 1896   | 2045    | 2188    | 2379    |
| 10Furniture                   | 1861   | 2134   | 2482   | 2810   | 3105   | 3396   | 3766    | 4144    | 4634    |
| 11Paper Allied                | 3220   | 3707   | 4326   | 4916   | 5727   | 6592   | 7680    | 8864    | 10382   |
| 12Printing,Publishing,Allied  | 2490   | 2654   | 2850   | 2958   | 3246   | 3527   | 3887    | 4251    | 4725    |
| 13Chemicals                   | 13861  | 16028  | 18793  | 21459  | 24090  | 26783  | 30203   | 33802   | 38451   |
| 14Petroleum Products          | 4376   | 4848   | 5436   | 5922   | 6849   | 7831   | 9068    | 10406   | 12121   |
| 15Leather                     | 2910   | 3520   | 4306   | 5118   | 5208   | 5206   | 5227    | 5146    | 5071    |
| 16Stone,Clay,Glass            | 14058  | 16773  | 20260  | 23802  | 25492  | 27020  | 29026   | 30919   | 33448   |
| 17Primary Metal               | 20179  | 22500  | 25416  | 27935  | 30558  | 33103  | 36371   | 39658   | 43950   |
| 18Fabricated Metal            | 4045   | 4618   | 5346   | 6024   | 6888   | 7790   | 8926    | 10139   | 11695   |
| 19Machinery                   | 15368  | 18515  | 22570  | 26743  | 28207  | 29385  | 30957   | 32257   | 34033   |
| 20Electrical Machinery        | 7889   | 9622   | 11860  | 14195  | 16580  | 19129  | 22333   | 25821   | 30286   |
| 21Motor                       | 8100   | 9480   | 11244  | 12983  | 14676  | 16423  | 18633   | 20973   | 23986   |
| 22Transportation Equipment    | 3990   | 4669   | 5538   | 6395   | 10749  | 15836  | 22148   | 29488   | 38782   |
| 23Instrument                  | 615    | 739    | 899    | 1064   | 1169   | 1273   | 1404    | 1538    | 1711    |
| 24Rubber                      | 3114   | 3477   | 3931   | 4323   | 5008   | 5734   | 6649    | 7640    | 8910    |
| 25Miscellaneous Manufacturing | 7663   | 8813   | 10275  | 11667  | 12929  | 14190  | 15799   | 17459   | 19612   |
| 26Transportation              | 42505  | 47695  | 51901  | 58106  | 63893  | 70906  | 77410   | 81964   | 87869   |
| 27Communication               | 8191   | 10015  | 11390  | 14035  | 16240  | 18323  | 20260   | 22130   | 24275   |
| 28Electric Utility            | 20320  | 23130  | 26717  | 30097  | 32977  | 34438  | 36785   | 39387   | 42828   |
| 29Gas and Water Utility       | 2094   | 2542   | 2992   | 3444   | 4099   | 6474   | 8988    | 11190   | 13434   |
| 30Trade                       | 29323  | 32117  | 34986  | 38724  | 46061  | 54848  | 65269   | 76425   | 89315   |
| 31Finance and Real Estate     | 158685 | 169225 | 180432 | 196540 | 212784 | 233685 | 262395  | 306121  | 339655  |
| 32Ether Private Service       | 24874  | 28139  | 31897  | 36394  | 42007  | 48708  | 57067   | 66380   | 76130   |
| 33Public Service              | 54464  | 58351  | 61719  | 65516  | 76159  | 90303  | 107975  | 126953  | 146408  |
| Total                         | 533761 | 593025 | 658641 | 734392 | 816559 | 911981 | 1030335 | 1165511 | 1305141 |



| Capital Input at 1995 Price   | 1993    | 1994    | 1995    | 1996    | 1997    | 1998    | 1999    | 2000    | Average<br>Growth Rate(%) |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------|
| 1Agriculture                  | 75630   | 79071   | 82683   | 85552   | 87101   | 90140   | 93726   | 97963   | 7.29                      |
| 2Coal Mining                  | 744     | 684     | 605     | 536     | 422     | 449     | 477     | 510     | -0.14                     |
| 3Metal and Non-Metal          | 1773    | 1662    | 1499    | 1071    | 716     | 671     | 644     | 632     | -8.85                     |
| 4Oil and gas                  | 3462    | 3351    | 3109    | 2903    | 2353    | 2555    | 2760    | 2983    | -0.61                     |
| 5Construction                 | 40415   | 47617   | 56021   | 65920   | 76679   | 82387   | 87004   | 91894   | 13.08                     |
| 6Food                         | 28089   | 30195   | 32234   | 34154   | 35952   | 37518   | 39364   | 41602   | 7.61                      |
| 7Textile                      | 39976   | 41235   | 42014   | 42205   | 41753   | 43571   | 45715   | 48314   | 5.10                      |
| 8Apparels                     | 4282    | 4387    | 4432    | 4402    | 4289    | 4476    | 4697    | 4964    | 4.01                      |
| 9Lumber and Wood              | 2617    | 2852    | 3095    | 3347    | 3608    | 3765    | 3951    | 4175    | 4.76                      |
| 10Furniture                   | 5239    | 5867    | 6544    | 7266    | 8045    | 8395    | 8808    | 9309    | 10.15                     |
| 11Paper Allied                | 12277   | 14368   | 16727   | 19372   | 22350   | 23323   | 24470   | 25862   | 12.96                     |
| 12Printing,Publishing,Allied  | 5311    | 5916    | 6564    | 7252    | 7990    | 8338    | 8748    | 9246    | 8.00                      |
| 13Chemicals                   | 44236   | 50434   | 57276   | 64785   | 73083   | 76265   | 80018   | 84567   | 11.37                     |
| 14Petroleum Products          | 14261   | 16608   | 19246   | 22191   | 25495   | 26605   | 27914   | 29501   | 11.71                     |
| 15Leather                     | 4954    | 4667    | 4210    | 3556    | 2682    | 2799    | 2936    | 3103    | 1.39                      |
| 16Stone,Clay,Glass            | 36559   | 39560   | 42594   | 45622   | 48674   | 50794   | 53293   | 56323   | 9.09                      |
| 17Primary Metal               | 49256   | 54702   | 60509   | 66658   | 73230   | 76418   | 80179   | 84737   | 8.96                      |
| 18Fabricated Metal            | 13629   | 15727   | 18063   | 20645   | 23517   | 24540   | 25748   | 27212   | 11.87                     |
| 19Machinery                   | 36154   | 37870   | 39281   | 40300   | 40895   | 42676   | 44776   | 47321   | 7.60                      |
| 20Electrical Machinery        | 35864   | 42018   | 48964   | 56752   | 65520   | 68373   | 71738   | 75816   | 14.38                     |
| 21Motor                       | 27735   | 31770   | 36240   | 41161   | 46612   | 48642   | 51035   | 53937   | 11.96                     |
| 22Transportation Equipment    | 50519   | 64189   | 80232   | 98880   | 120534  | 125783  | 131972  | 139475  | 21.71                     |
| 23Instrument                  | 1925    | 2146    | 2382    | 2632    | 2900    | 3027    | 3176    | 3356    | 10.96                     |
| 24Rubber                      | 10495   | 12237   | 14197   | 16386   | 18846   | 19666   | 20634   | 21807   | 11.98                     |
| 25Miscellaneous Manufacturing | 22283   | 25092   | 28148   | 31451   | 35051   | 36578   | 38377   | 40559   | 9.77                      |
| 26Transportation              | 94122   | 98768   | 103428  | 108167  | 111719  | 117035  | 122803  | 129813  | 7.23                      |
| 27Communication               | 26463   | 30802   | 34431   | 39295   | 43273   | 47617   | 51948   | 56678   | 12.68                     |
| 28Electric Utility            | 46757   | 52059   | 57895   | 60864   | 64266   | 67794   | 70176   | 73070   | 8.21                      |
| 29Gas and Water Utility       | 15736   | 16824   | 18110   | 22920   | 27457   | 31759   | 35274   | 38835   | 18.33                     |
| 30Trade                       | 104976  | 123174  | 143770  | 166879  | 192146  | 196291  | 204764  | 215627  | 12.37                     |
| 31Finance and Real Estate     | 370194  | 406971  | 448515  | 492469  | 533132  | 547639  | 570543  | 592954  | 8.29                      |
| 32Ether Private Service       | 87218   | 100000  | 115264  | 131755  | 149862  | 154560  | 160281  | 167107  | 12.03                     |
| 33Public Service              | 165910  | 188632  | 217374  | 250969  | 286889  | 318932  | 338121  | 357320  | 11.60                     |
| Total                         | 1456944 | 1626579 | 1817780 | 2027206 | 2242411 | 2353239 | 2468150 | 2596497 | 9.96                      |

**Table A-6. Labor Input in 33 Sectors**

|                                | 1984           | 1985           | 1986           | 1987           | 1988           | 1989           | 1990           | 1991           | 1992           |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 Agriculture                  | 10654          | 10015          | 9345           | 9603           | 10582          | 10877          | 10749          | 10075          | 9463           |
| 2 Coal Mining                  | 13348          | 13072          | 13148          | 11687          | 13144          | 10135          | 9837           | 6537           | 6019           |
| 3 Metal and Non-Metal          | 3959           | 3893           | 3463           | 3949           | 3785           | 3211           | 2732           | 2860           | 2046           |
| 4 Oil and gas                  | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 5 Construction                 | 26634          | 31755          | 30731          | 28557          | 28700          | 30976          | 34412          | 37921          | 62338          |
| 6 Food                         | 35237          | 34004          | 33822          | 41833          | 45225          | 38227          | 43559          | 42026          | 42375          |
| 7 Textile                      | 116868         | 109747         | 106790         | 123607         | 123953         | 113812         | 96754          | 81719          | 77997          |
| 8 Apparels                     | 71792          | 79176          | 68427          | 78344          | 69709          | 61360          | 61021          | 50274          | 43360          |
| 9 Lumber and Wood              | 10386          | 7936           | 7184           | 8416           | 8758           | 9065           | 8119           | 6252           | 7845           |
| 10 Furniture                   | 6925           | 6646           | 6702           | 5615           | 6790           | 6897           | 7712           | 7295           | 6949           |
| 11 Paper Allied                | 11667          | 11605          | 12183          | 14183          | 15110          | 14276          | 14637          | 13487          | 15330          |
| 12 Printing,Publishing,Allied  | 12337          | 11476          | 11228          | 13305          | 15096          | 16055          | 16610          | 14927          | 16162          |
| 13 Chemicals                   | 32147          | 27608          | 30474          | 32580          | 35411          | 31552          | 34371          | 34795          | 36966          |
| 14 Petroleum Products          | 1765           | 1517           | 1674           | 1789           | 1944           | 1733           | 1887           | 1910           | 2029           |
| 15 Leather                     | 39609          | 28670          | 33311          | 50627          | 55737          | 46209          | 47737          | 41780          | 38563          |
| 16 Stone,Clay,Glass            | 24252          | 24641          | 25268          | 26804          | 29779          | 27635          | 30082          | 28565          | 32371          |
| 17 Primary Metal               | 19335          | 17756          | 18700          | 17226          | 20798          | 22279          | 22642          | 21285          | 28604          |
| 18 Fabricated Metal            | 38946          | 47846          | 49425          | 51131          | 50707          | 51019          | 56724          | 45572          | 44676          |
| 19 Machinery                   | 31317          | 31454          | 33181          | 45674          | 51097          | 56764          | 54904          | 58754          | 58607          |
| 20 Electrical Machinery        | 78013          | 72664          | 87102          | 130010         | 140838         | 123163         | 117247         | 105186         | 102758         |
| 21 Motor                       | 30264          | 26835          | 30816          | 40888          | 45060          | 42593          | 45020          | 40816          | 47640          |
| 22 Transportation Equipment    | 10684          | 9474           | 10879          | 14434          | 15906          | 15035          | 15892          | 14408          | 16817          |
| 23 Instrument                  | 7358           | 7004           | 7079           | 10949          | 7808           | 10060          | 9352           | 7073           | 9197           |
| 24 Rubber                      | 34794          | 43173          | 45356          | 46917          | 48134          | 36108          | 41732          | 30841          | 31359          |
| 25 Miscellaneous Manufacturing | 22313          | 23600          | 24543          | 31334          | 29264          | 25057          | 21710          | 16597          | 15722          |
| 26 Transportation              | 98859          | 99349          | 108202         | 110647         | 105927         | 114419         | 113024         | 107413         | 94300          |
| 27 Communication               | 986            | 991            | 1079           | 1103           | 1056           | 1141           | 1127           | 1071           | 941            |
| 28 Electric Utility            | 4201           | 4500           | 4906           | 4734           | 5949           | 6664           | 6120           | 5270           | 6170           |
| 29 Gas and Water Utility       | 1991           | 2133           | 2326           | 2244           | 2820           | 3158           | 2901           | 2498           | 2924           |
| 30 Trade                       | 26572          | 27242          | 27657          | 42434          | 50338          | 52941          | 51230          | 52151          | 70479          |
| 31 Finance and Real Estate     | 42789          | 37622          | 37204          | 52548          | 49064          | 54527          | 62522          | 64427          | 95898          |
| 32 Ether Private Service       | 82786          | 89693          | 103195         | 119837         | 131758         | 131760         | 145627         | 148360         | 163270         |
| 33 Public Service              | 149159         | 155609         | 158431         | 151981         | 149159         | 155609         | 158027         | 158834         | 160446         |
| <b>Total</b>                   | <b>1097946</b> | <b>1098708</b> | <b>1143829</b> | <b>1324993</b> | <b>1369407</b> | <b>1324317</b> | <b>1346020</b> | <b>1260980</b> | <b>1349620</b> |

|                                       | 1993    | 1994    | 1995    | 1996    | 1997    | 1998    | 1999    | 2000    |
|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>1 Agriculture</b>                  | 8914    | 8827    | 8922    | 9043    | 8956    | 8967    | 8415    | 7586    |
| <b>2 Coal Mining</b>                  | 4857    | 4192    | 3597    | 2988    | 2303    | 1980    | 2178    | 2288    |
| <b>3 Metal and Non-Metal</b>          | 3259    | 2820    | 2956    | 2968    | 2750    | 1985    | 2917    | 2490    |
| <b>4 Oil and gas</b>                  | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| <b>5 Construction</b>                 | 62431   | 66908   | 67104   | 68997   | 67746   | 61339   | 66959   | 69396   |
| <b>6 Food</b>                         | 44074   | 41658   | 43151   | 39647   | 36058   | 31628   | 41381   | 39164   |
| <b>7 Textile</b>                      | 61894   | 70250   | 66980   | 55882   | 46911   | 40347   | 51260   | 54260   |
| <b>8 Apparels</b>                     | 41341   | 36515   | 37615   | 32058   | 28248   | 21563   | 27216   | 28051   |
| <b>9 Lumber and Wood</b>              | 7454    | 6602    | 6985    | 6177    | 5550    | 3421    | 13801   | 13118   |
| <b>10 Furniture</b>                   | 7517    | 6167    | 8413    | 8805    | 6993    | 5194    | 5006    | 5507    |
| <b>11 Paper Allied</b>                | 15135   | 15218   | 13600   | 14255   | 12945   | 9994    | 13801   | 13118   |
| <b>12 Printing,Publishing,Allied</b>  | 18144   | 18806   | 19982   | 18834   | 18041   | 13979   | 15045   | 17539   |
| <b>13 Chemicals</b>                   | 49202   | 40415   | 41100   | 40095   | 39220   | 36557   | 40451   | 36320   |
| <b>14 Petroleum Products</b>          | 2700    | 2219    | 2256    | 2201    | 2153    | 2007    | 2221    | 1994    |
| <b>15 Leather</b>                     | 29842   | 21212   | 17809   | 13945   | 11431   | 8758    | 10587   | 10911   |
| <b>16 Stone,Clay,Glass</b>            | 33637   | 33237   | 32586   | 30867   | 28961   | 20548   | 22373   | 24803   |
| <b>17 Primary Metal</b>               | 27086   | 26983   | 27565   | 26093   | 24199   | 21564   | 25740   | 27732   |
| <b>18 Fabricated Metal</b>            | 38318   | 44238   | 46104   | 40699   | 38238   | 29633   | 37444   | 38674   |
| <b>19 Machinery</b>                   | 65811   | 69523   | 69620   | 63967   | 59183   | 51147   | 64554   | 68336   |
| <b>20 Electrical Machinery</b>        | 97088   | 93684   | 108617  | 104195  | 97967   | 82403   | 104003  | 110096  |
| <b>21 Motor</b>                       | 49560   | 46662   | 53877   | 59759   | 60103   | 48233   | 49522   | 56389   |
| <b>22 Transportation Equipment</b>    | 17494   | 16472   | 19018   | 21094   | 21216   | 17026   | 17481   | 19905   |
| <b>23 Instrument</b>                  | 8517    | 9363    | 9735    | 8919    | 8194    | 7665    | 9674    | 10241   |
| <b>24 Rubber</b>                      | 30947   | 32861   | 33058   | 31838   | 29153   | 24261   | 25740   | 27732   |
| <b>25 Miscellaneous Manufacturing</b> | 14560   | 15860   | 11595   | 8202    | 8960    | 7223    | 11241   | 12366   |
| <b>26 Transportation</b>              | 128339  | 128444  | 131887  | 130808  | 135437  | 128253  | 125491  | 123753  |
| <b>27 Communication</b>               | 1279    | 1280    | 1314    | 1303    | 1349    | 1278    | 1251    | 1233    |
| <b>28 Electric Utility</b>            | 6703    | 5922    | 7355    | 7554    | 7881    | 8214    | 8547    | 8880    |
| <b>29 Gas and Water Utility</b>       | 3177    | 2807    | 3486    | 3580    | 3735    | 3893    | 4050    | 4208    |
| <b>30 Trade</b>                       | 88442   | 87705   | 98183   | 98589   | 99429   | 81591   | 134983  | 146762  |
| <b>31 Finance and Real Estate</b>     | 102615  | 105683  | 112297  | 115178  | 118698  | 114779  | 141204  | 139253  |
| <b>32 Ether Private Service</b>       | 159914  | 164747  | 187519  | 202604  | 216794  | 227252  | 260840  | 265322  |
| <b>33 Public Service</b>              | 162462  | 183022  | 181812  | 177378  | 171331  | 200356  | 203178  | 202736  |
| <b>Total</b>                          | 1392712 | 1410299 | 1476098 | 1448521 | 1420133 | 1323038 | 1548556 | 1590161 |

**Table A-7. Energy Input in 33 Sectors**

| Energy Input at 1995 Price    | 1984         | 1985         | 1986         | 1987         | 1988         | 1989         | 1990         | 1991         | 1992         |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1Agriculture                  | 360          | 444          | 534          | 499          | 468          | 454          | 575          | 628          | 681          |
| 2Coal Mining                  | 71           | 70           | 73           | 72           | 68           | 53           | 46           | 39           | 37           |
| 3Metal and Non-Metal          | 74           | 105          | 106          | 109          | 109          | 135          | 123          | 158          | 175          |
| 4Oil and gas                  | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 5Construction                 | 324          | 378          | 371          | 422          | 385          | 894          | 963          | 1132         | 1254         |
| 6Food                         | 426          | 409          | 430          | 447          | 458          | 483          | 415          | 475          | 511          |
| 7Textile                      | 452          | 548          | 611          | 764          | 815          | 752          | 620          | 701          | 747          |
| 8Apparels                     | 63           | 58           | 60           | 74           | 75           | 59           | 47           | 53           | 56           |
| 9Lumber and Wood              | 46           | 34           | 30           | 39           | 49           | 54           | 54           | 66           | 73           |
| 10Furniture                   | 17           | 13           | 14           | 15           | 22           | 25           | 30           | 37           | 40           |
| 11Paper Allied                | 172          | 198          | 241          | 270          | 278          | 274          | 241          | 277          | 298          |
| 12Printing,Publishing,Allied  | 36           | 24           | 24           | 30           | 33           | 38           | 36           | 41           | 45           |
| 13Chemicals                   | 1453         | 1633         | 1671         | 1895         | 1929         | 1872         | 2204         | 2612         | 2880         |
| 14Petroleum Products          | 11009        | 10387        | 6934         | 7770         | 6620         | 6725         | 7725         | 9056         | 10234        |
| 15Leather                     | 26           | 24           | 30           | 34           | 34           | 81           | 103          | 99           | 100          |
| 16Stone,Clay,Glass            | 876          | 813          | 802          | 930          | 981          | 1057         | 912          | 1021         | 1111         |
| 17Primary Metal               | 1166         | 1117         | 1254         | 1340         | 1561         | 1642         | 1796         | 2150         | 2366         |
| 18Fabricated Metal            | 171          | 156          | 180          | 214          | 247          | 252          | 187          | 232          | 254          |
| 19Machinery                   | 154          | 121          | 164          | 174          | 192          | 217          | 225          | 276          | 302          |
| 20Electrical Machinery        | 219          | 211          | 285          | 326          | 408          | 419          | 341          | 413          | 450          |
| 21Motor                       | 102          | 72           | 98           | 167          | 203          | 211          | 112          | 130          | 140          |
| 22Transportation Equipment    | 109          | 61           | 43           | 53           | 51           | 89           | 168          | 209          | 230          |
| 23Instrument                  | 19           | 23           | 27           | 33           | 40           | 39           | 28           | 34           | 37           |
| 24Rubber                      | 92           | 91           | 114          | 133          | 142          | 161          | 210          | 252          | 273          |
| 25Miscellaneous Manufacturing | 71           | 62           | 78           | 100          | 98           | 87           | 65           | 71           | 75           |
| 26Transportation              | 2734         | 2919         | 2788         | 3027         | 3041         | 2926         | 3036         | 3591         | 4001         |
| 27Communication               | 60           | 68           | 81           | 98           | 110          | 111          | 81           | 98           | 107          |
| 28Electric Utility            | 2175         | 1534         | 1231         | 1172         | 1441         | 1433         | 1967         | 2242         | 2427         |
| 29Gas and Water Utility       | 196          | 229          | 252          | 305          | 369          | 574          | 880          | 1133         | 1269         |
| 30Trade                       | 1138         | 984          | 1084         | 1373         | 1393         | 1427         | 1486         | 1668         | 1800         |
| 31Finance and Real Estate     | 303          | 458          | 501          | 543          | 591          | 717          | 946          | 1218         | 1342         |
| 32Ether Private Service       | 518          | 558          | 604          | 676          | 700          | 721          | 720          | 879          | 962          |
| 33Public Service              | 595          | 518          | 573          | 664          | 735          | 662          | 532          | 623          | 685          |
| <b>Total</b>                  | <b>25227</b> | <b>24319</b> | <b>21289</b> | <b>23770</b> | <b>23647</b> | <b>24647</b> | <b>26873</b> | <b>31616</b> | <b>34963</b> |

| Energy Input at 1995 Price    | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | Average<br>Growth Rate(%) |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------|
| 1Agriculture                  | 717   | 669   | 636   | 716   | 733   | 887   | 843   | 888   | 4.70                      |
| 2Coal Mining                  | 27    | 21    | 19    | 19    | 19    | 16    | 16    | 15    | -9.66                     |
| 3Metal and Non-Metal          | 201   | 183   | 197   | 195   | 194   | 175   | 168   | 183   | 5.11                      |
| 4Oil and gas                  | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0.00                      |
| 5Construction                 | 1642  | 1502  | 652   | 779   | 817   | 850   | 816   | 979   | -3.53                     |
| 6Food                         | 554   | 533   | 604   | 702   | 738   | 820   | 700   | 761   | 3.06                      |
| 7Textile                      | 800   | 723   | 619   | 774   | 833   | 956   | 863   | 780   | 2.70                      |
| 8Apparels                     | 44    | 74    | 144   | 179   | 190   | 242   | 205   | 155   | 3.45                      |
| 9Lumber and Wood              | 100   | 99    | 82    | 84    | 84    | 96    | 92    | 101   | 5.65                      |
| 10Furniture                   | 50    | 53    | 51    | 54    | 54    | 57    | 67    | 81    | 8.02                      |
| 11Paper Allied                | 320   | 356   | 368   | 418   | 438   | 539   | 528   | 528   | 6.38                      |
| 12Printing,Publishing,Allied  | 50    | 58    | 93    | 102   | 105   | 107   | 112   | 126   | 5.83                      |
| 13Chemicals                   | 3495  | 3564  | 4047  | 4943  | 5234  | 6663  | 6673  | 7918  | 9.94                      |
| 14Petroleum Products          | 10975 | 10693 | 10409 | 14568 | 16663 | 20929 | 24451 | 28252 | 3.76                      |
| 15Leather                     | 76    | 60    | 61    | 66    | 68    | 74    | 62    | 64    | 1.19                      |
| 16Stone,Clay,Glass            | 1234  | 1259  | 1262  | 1399  | 1455  | 1717  | 1603  | 1629  | 3.59                      |
| 17Primary Metal               | 2391  | 2364  | 2750  | 3322  | 3526  | 3814  | 3639  | 2973  | 5.24                      |
| 18Fabricated Metal            | 308   | 307   | 400   | 455   | 476   | 516   | 497   | 528   | 5.86                      |
| 19Machinery                   | 387   | 403   | 386   | 415   | 426   | 588   | 661   | 672   | 8.02                      |
| 20Electrical Machinery        | 516   | 598   | 595   | 698   | 741   | 968   | 1074  | 1154  | 9.66                      |
| 21Motor                       | 138   | 273   | 419   | 430   | 436   | 520   | 616   | 741   | 7.16                      |
| 22Transportation Equipment    | 275   | 205   | 83    | 105   | 113   | 131   | 123   | 147   | -10.88                    |
| 23Instrument                  | 46    | 56    | 59    | 63    | 65    | 65    | 70    | 75    | 7.67                      |
| 24Rubber                      | 336   | 348   | 376   | 424   | 443   | 513   | 539   | 618   | 11.85                     |
| 25Miscellaneous Manufacturing | 82    | 73    | 94    | 103   | 106   | 101   | 100   | 112   | 1.74                      |
| 26Transportation              | 4531  | 4528  | 4191  | 5257  | 5557  | 5405  | 5532  | 6706  | 4.79                      |
| 27Communication               | 138   | 163   | 183   | 232   | 252   | 277   | 335   | 359   | 10.13                     |
| 28Electric Utility            | 3178  | 3268  | 3476  | 4182  | 4475  | 4525  | 4412  | 4473  | 2.93                      |
| 29Gas and Water Utility       | 1801  | 1831  | 1997  | 2836  | 3218  | 4225  | 4848  | 5549  | 19.63                     |
| 30Trade                       | 2220  | 2187  | 2157  | 2426  | 2509  | 2189  | 2860  | 3555  | 6.18                      |
| 31Finance and Real Estate     | 1496  | 1593  | 1677  | 1997  | 2125  | 2205  | 2464  | 2524  | 13.74                     |
| 32Ether Private Service       | 1237  | 1287  | 1193  | 1472  | 1577  | 2099  | 2317  | 2534  | 8.73                      |
| 33Public Service              | 650   | 401   | 795   | 983   | 1050  | 1326  | 1421  | 1076  | 0.35                      |
| Total                         | 40015 | 39728 | 40070 | 50394 | 54722 | 63595 | 68707 | 76256 | 6.05                      |

**Table A-8. Material Input in 33 Sectors**

| Material Input at 1995 Price  | 1984          | 1985          | 1986          | 1987          | 1988          | 1989          | 1990          | 1991          | 1992          |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1Agriculture                  | 6763          | 7648          | 8584          | 8262          | 8957          | 8111          | 8917          | 9030          | 9575          |
| 2Coal Mining                  | 292           | 349           | 393           | 389           | 375           | 297           | 284           | 227           | 219           |
| 3Metal and Non-Metal          | 173           | 271           | 287           | 299           | 340           | 413           | 488           | 596           | 651           |
| 4Oil and gas                  | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| 5Construction                 | 9308          | 6977          | 7785          | 8666          | 8818          | 20708         | 31107         | 33847         | 35860         |
| 6Food                         | 22736         | 24156         | 27038         | 27431         | 30087         | 28006         | 28618         | 29752         | 31972         |
| 7Textile                      | 11766         | 12997         | 15018         | 17784         | 18202         | 16719         | 17317         | 17440         | 17949         |
| 8Apparels                     | 3981          | 4904          | 5596          | 6892          | 7022          | 5488          | 4690          | 4566          | 4585          |
| 9Lumber and Wood              | 979           | 1355          | 1342          | 1475          | 1770          | 1826          | 1985          | 2292          | 2523          |
| 10Furniture                   | 525           | 626           | 708           | 749           | 1108          | 1319          | 1474          | 1756          | 1920          |
| 11Paper Allied                | 2558          | 2594          | 3237          | 4202          | 4859          | 4746          | 4883          | 5027          | 5178          |
| 12Printing,Publishing,Allied  | 1285          | 1386          | 1492          | 1819          | 2110          | 2350          | 2683          | 2816          | 2914          |
| 13Chemicals                   | 9111          | 9903          | 11793         | 14581         | 17485         | 16391         | 16537         | 18060         | 19474         |
| 14Petroleum Products          | 703           | 745           | 905           | 1042          | 1180          | 985           | 1132          | 1675          | 1912          |
| 15Leather                     | 1943          | 1532          | 2129          | 2405          | 2702          | 5731          | 8942          | 7844          | 7696          |
| 16Stone,Clay,Glass            | 2473          | 2573          | 2931          | 3362          | 3938          | 4370          | 4844          | 5349          | 5786          |
| 17Primary Metal               | 11081         | 11703         | 13066         | 16481         | 18558         | 19656         | 22071         | 24043         | 25229         |
| 18Fabricated Metal            | 3672          | 3634          | 4420          | 5066          | 6397          | 6482          | 7019          | 8038          | 8546          |
| 19Machinery                   | 4268          | 4629          | 6276          | 7420          | 8825          | 10253         | 12135         | 13780         | 14677         |
| 20Electrical Machinery        | 9640          | 10903         | 15747         | 19779         | 25866         | 25250         | 27354         | 30130         | 31915         |
| 21Motor                       | 2614          | 3373          | 4936          | 7590          | 9259          | 9455          | 8407          | 9496          | 10375         |
| 22Transportation Equipment    | 3211          | 3623          | 3124          | 3074          | 3227          | 7214          | 9582          | 11208         | 12164         |
| 23Instrument                  | 793           | 844           | 1097          | 1327          | 1680          | 1597          | 1680          | 1840          | 1945          |
| 24Rubber                      | 2110          | 2438          | 3160          | 3776          | 4392          | 5132          | 6160          | 6752          | 7286          |
| 25Miscellaneous Manufacturing | 2118          | 2329          | 3002          | 3743          | 3820          | 3254          | 2882          | 2868          | 2949          |
| 26Transportation              | 3774          | 4386          | 5062          | 6033          | 6628          | 7060          | 6871          | 7711          | 8238          |
| 27Communication               | 443           | 431           | 451           | 581           | 664           | 654           | 827           | 944           | 1006          |
| 28Electric Utility            | 716           | 696           | 831           | 1117          | 1311          | 1229          | 1306          | 1431          | 1511          |
| 29Gas and Water Utility       | 148           | 142           | 131           | 162           | 199           | 272           | 292           | 393           | 434           |
| 30Trade                       | 6547          | 6629          | 7209          | 9127          | 10061         | 10284         | 11355         | 11947         | 12373         |
| 31Finance and Real Estate     | 4922          | 7295          | 8285          | 9333          | 10926         | 13147         | 15770         | 18858         | 20133         |
| 32Ether Private Service       | 4792          | 4149          | 4494          | 5143          | 5623          | 5637          | 6743          | 7722          | 8251          |
| 33Public Service              | 3878          | 3916          | 5274          | 5694          | 6516          | 7302          | 7004          | 7676          | 8160          |
| <b>Total</b>                  | <b>139325</b> | <b>149136</b> | <b>175804</b> | <b>204805</b> | <b>232906</b> | <b>251339</b> | <b>281359</b> | <b>305116</b> | <b>323404</b> |

| Material Input at 1995 Price  | Average       |               |               |               |               |               |               |               | Growth Rate(%) |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                               | 1993          | 1994          | 1995          | 1996          | 1997          | 1998          | 1999          | 2000          |                |
| 1Agriculture                  | 9747          | 9826          | 10497         | 10491         | 10909         | 12131         | 12985         | 9785          | 2.07           |
| 2Coal Mining                  | 143           | 107           | 127           | 121           | 124           | 129           | 121           | 91            | -7.81          |
| 3Metal and Non-Metal          | 725           | 672           | 619           | 560           | 557           | 397           | 369           | 367           | 4.12           |
| 4Oil and gas                  | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0.00           |
| 5Construction                 | 38744         | 41327         | 48969         | 51662         | 55088         | 47200         | 43789         | 43186         | 5.18           |
| 6Food                         | 30663         | 29374         | 30148         | 32575         | 35464         | 35767         | 36169         | 34611         | 2.75           |
| 7Textile                      | 16887         | 14161         | 12441         | 14020         | 14923         | 14209         | 13657         | 12844         | 1.01           |
| 8Apparels                     | 4005          | 5863          | 7258          | 7582          | 7995          | 7855          | 7060          | 6936          | 3.60           |
| 9Lumber and Wood              | 2687          | 2593          | 2512          | 2327          | 2391          | 1897          | 1877          | 1795          | 5.56           |
| 10Furniture                   | 2096          | 2331          | 2400          | 2186          | 2209          | 1804          | 2080          | 2261          | 9.02           |
| 11Paper Allied                | 5132          | 5899          | 6513          | 6763          | 7224          | 7096          | 6971          | 7072          | 6.33           |
| 12Printing,Publishing,Allied  | 2932          | 3719          | 4341          | 4266          | 4466          | 4152          | 4275          | 4889          | 8.16           |
| 13Chemicals                   | 20385         | 23598         | 25269         | 27947         | 28985         | 29421         | 29070         | 28953         | 7.46           |
| 14Petroleum Products          | 1754          | 1667          | 1181          | 1505          | 1675          | 2032          | 2208          | 2279          | 6.12           |
| 15Leather                     | 5985          | 4839          | 3953          | 3791          | 3880          | 3235          | 3170          | 2988          | -0.37          |
| 16Stone,Clay,Glass            | 6788          | 7578          | 8934          | 9002          | 9343          | 8069          | 7350          | 7126          | 6.54           |
| 17Primary Metal               | 26301         | 29117         | 30909         | 33667         | 35653         | 36290         | 33581         | 32686         | 6.84           |
| 18Fabricated Metal            | 9337          | 10077         | 10708         | 11209         | 11852         | 10667         | 10341         | 10247         | 6.32           |
| 19Machinery                   | 16223         | 17965         | 19716         | 19543         | 20720         | 18615         | 21320         | 24231         | 10.59          |
| 20Electrical Machinery        | 32713         | 39344         | 44580         | 51977         | 58388         | 67054         | 77450         | 88000         | 14.13          |
| 21Motor                       | 11922         | 16978         | 27784         | 26534         | 27055         | 23990         | 29668         | 36027         | 15.22          |
| 22Transportation Equipment    | 13880         | 9799          | 7024          | 8047          | 8843          | 8394          | 8118          | 8826          | 3.66           |
| 23Instrument                  | 2160          | 2623          | 2977          | 3070          | 3280          | 3115          | 3474          | 4117          | 11.05          |
| 24Rubber                      | 7799          | 8743          | 9509          | 10073         | 10402         | 10251         | 10981         | 11210         | 11.19          |
| 25Miscellaneous Manufacturing | 2761          | 2574          | 2439          | 2425          | 2510          | 2149          | 2176          | 2451          | 1.02           |
| 26Transportation              | 9404          | 10046         | 12422         | 13727         | 14598         | 16348         | 15537         | 15815         | 8.59           |
| 27Communication               | 1223          | 1592          | 1952          | 2441          | 2714          | 3703          | 4507          | 9110          | 17.67          |
| 28Electric Utility            | 1726          | 1866          | 2003          | 2186          | 2300          | 2425          | 2482          | 2625          | 8.53           |
| 29Gas and Water Utility       | 512           | 532           | 513           | 659           | 729           | 632           | 677           | 844           | 10.49          |
| 30Trade                       | 13110         | 14552         | 16783         | 17229         | 17926         | 17635         | 22161         | 32854         | 10.00          |
| 31Finance and Real Estate     | 21606         | 25591         | 30202         | 33596         | 35692         | 32314         | 33555         | 37701         | 14.07          |
| 32Ether Private Service       | 9376          | 11092         | 13063         | 14767         | 15761         | 16480         | 17899         | 22997         | 9.12           |
| 33Public Service              | 7982          | 12699         | 8061          | 8882          | 9544          | 9469          | 9871          | 7714          | 2.06           |
| <b>Total</b>                  | <b>336709</b> | <b>368745</b> | <b>405805</b> | <b>434833</b> | <b>463202</b> | <b>454926</b> | <b>474948</b> | <b>512638</b> | <b>8.21</b>    |

**Table A-9 Average Shares of Capital Input**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1</b> agriculture                 | 0.60 | 0.60 | 0.58 | 0.56 | 0.58 | 0.58 | 0.59 | 0.56 |
| <b>2</b> coal mining                 | 0.24 | 0.24 | 0.15 | 0.15 | 0.16 | 0.19 | 0.19 | 0.18 |
| <b>3</b> Metal non-metal             | 0.28 | 0.28 | 0.25 | 0.26 | 0.25 | 0.26 | 0.25 | 0.54 |
| <b>4</b> Oil and gas                 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| <b>5</b> construction                | 0.20 | 0.20 | 0.18 | 0.17 | 0.17 | 0.18 | 0.18 | 0.20 |
| <b>6</b> food                        | 0.20 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.18 |
| <b>7</b> textile                     | 0.11 | 0.11 | 0.11 | 0.13 | 0.13 | 0.13 | 0.13 | 0.11 |
| <b>8</b> apparels                    | 0.06 | 0.06 | 0.07 | 0.08 | 0.10 | 0.10 | 0.10 | 0.07 |
| <b>9</b> lumber and wood             | 0.07 | 0.07 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| <b>10</b> Furniture                  | 0.18 | 0.16 | 0.13 | 0.12 | 0.15 | 0.14 | 0.14 | 0.15 |
| <b>11</b> paper allied               | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 |
| <b>12</b> printing,publishing,allied | 0.12 | 0.12 | 0.13 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 |
| <b>13</b> chemicals                  | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.17 | 0.18 | 0.17 |
| <b>14</b> petroleum products         | 0.14 | 0.15 | 0.15 | 0.30 | 0.23 | 0.28 | 0.25 | 0.12 |
| <b>15</b> leather                    | 0.05 | 0.04 | 0.09 | 0.08 | 0.09 | 0.07 | 0.08 | 0.07 |
| <b>16</b> stone,clay,glass           | 0.18 | 0.18 | 0.20 | 0.21 | 0.20 | 0.20 | 0.20 | 0.22 |
| <b>17</b> primary metal              | 0.10 | 0.10 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 |
| <b>18</b> fabricated metal           | 0.10 | 0.10 | 0.15 | 0.16 | 0.14 | 0.14 | 0.14 | 0.15 |
| <b>19</b> Machinery                  | 0.14 | 0.15 | 0.17 | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 |
| <b>20</b> electrical machinery       | 0.16 | 0.15 | 0.16 | 0.17 | 0.17 | 0.15 | 0.16 | 0.14 |
| <b>21</b> Motor                      | 0.22 | 0.22 | 0.19 | 0.19 | 0.17 | 0.18 | 0.18 | 0.25 |
| <b>22</b> transportation equip.      | 0.15 | 0.15 | 0.13 | 0.11 | 0.04 | 0.00 | 0.00 | 0.13 |
| <b>23</b> instrument                 | 0.12 | 0.11 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 |
| <b>24</b> rubber                     | 0.12 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.17 |
| <b>25</b> misc.manufacturing         | 0.18 | 0.18 | 0.15 | 0.16 | 0.15 | 0.15 | 0.15 | 0.17 |
| <b>26</b> transportation             | 0.26 | 0.27 | 0.23 | 0.26 | 0.24 | 0.25 | 0.24 | 0.24 |
| <b>27</b> communication              | 0.54 | 0.54 | 0.60 | 0.61 | 0.61 | 0.61 | 0.61 | 0.56 |
| <b>28</b> electric utility           | 0.37 | 0.38 | 0.53 | 0.61 | 0.62 | 0.59 | 0.58 | 0.49 |
| <b>29</b> gas utility                | 0.22 | 0.23 | 0.23 | 0.27 | 0.23 | 0.23 | 0.22 | 0.21 |
| <b>30</b> trade                      | 0.50 | 0.49 | 0.53 | 0.55 | 0.53 | 0.52 | 0.51 | 0.52 |
| <b>31</b> Finance and real estate    | 0.52 | 0.51 | 0.49 | 0.49 | 0.51 | 0.50 | 0.49 | 0.48 |
| <b>32</b> other private service      | 0.22 | 0.22 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.16 |
| <b>33</b> Public service             | 0.02 | 0.02 | 0.01 | 0.01 | 0.03 | 0.03 | 0.02 | 0.02 |
| <b>Total</b>                         | 0.20 | 0.20 | 0.21 | 0.22 | 0.21 | 0.21 | 0.21 | 0.21 |



| 1992 | 1993 | 1994 | 1995 | 1996  | 1997  | 1998  | 1999  | 2000  | Average rate |
|------|------|------|------|-------|-------|-------|-------|-------|--------------|
| 0.57 | 0.57 | 0.54 | 0.54 | 0.57  | 0.58  | 0.58  | 0.49  | 0.45  | 0.56         |
| 0.18 | 0.18 | 0.15 | 0.14 | -0.10 | -0.10 | -0.10 | -0.21 | -0.21 | 0.08         |
| 0.53 | 0.53 | 0.55 | 0.54 | 0.50  | 0.50  | 0.51  | 0.51  | 0.51  | 0.41         |
| 0.03 | 0.03 | 0.03 | 0.01 | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03         |
| 0.20 | 0.20 | 0.20 | 0.19 | 0.17  | 0.17  | 0.18  | 0.20  | 0.20  | 0.19         |
| 0.18 | 0.19 | 0.20 | 0.20 | 0.20  | 0.20  | 0.20  | 0.21  | 0.18  | 0.19         |
| 0.11 | 0.11 | 0.12 | 0.13 | 0.11  | 0.12  | 0.12  | 0.21  | 0.19  | 0.13         |
| 0.07 | 0.07 | 0.09 | 0.10 | 0.15  | 0.16  | 0.16  | 0.17  | 0.16  | 0.11         |
| 0.09 | 0.09 | 0.10 | 0.10 | 0.12  | 0.12  | 0.12  | 0.13  | 0.12  | 0.10         |
| 0.15 | 0.14 | 0.16 | 0.16 | 0.16  | 0.16  | 0.17  | 0.13  | 0.12  | 0.15         |
| 0.16 | 0.16 | 0.16 | 0.15 | 0.17  | 0.18  | 0.18  | 0.16  | 0.16  | 0.15         |
| 0.13 | 0.13 | 0.14 | 0.14 | 0.14  | 0.14  | 0.14  | 0.12  | 0.12  | 0.13         |
| 0.17 | 0.17 | 0.18 | 0.18 | 0.19  | 0.19  | 0.19  | 0.18  | 0.17  | 0.18         |
| 0.15 | 0.15 | 0.30 | 0.28 | 0.33  | 0.32  | 0.32  | 0.32  | 0.30  | 0.24         |
| 0.07 | 0.07 | 0.09 | 0.08 | 0.10  | 0.10  | 0.11  | 0.11  | 0.09  | 0.08         |
| 0.22 | 0.22 | 0.21 | 0.20 | 0.19  | 0.20  | 0.20  | 0.21  | 0.21  | 0.20         |
| 0.13 | 0.14 | 0.14 | 0.14 | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.13         |
| 0.15 | 0.15 | 0.17 | 0.16 | 0.13  | 0.13  | 0.13  | 0.17  | 0.17  | 0.14         |
| 0.17 | 0.17 | 0.16 | 0.16 | 0.16  | 0.17  | 0.17  | 0.15  | 0.14  | 0.16         |
| 0.15 | 0.15 | 0.18 | 0.18 | 0.22  | 0.22  | 0.22  | 0.18  | 0.17  | 0.17         |
| 0.25 | 0.25 | 0.21 | 0.28 | 0.17  | 0.17  | 0.17  | 0.11  | 0.10  | 0.20         |
| 0.13 | 0.13 | 0.12 | 0.13 | 0.12  | 0.13  | 0.13  | 0.22  | 0.21  | 0.12         |
| 0.14 | 0.14 | 0.14 | 0.13 | 0.15  | 0.15  | 0.15  | 0.14  | 0.13  | 0.14         |
| 0.17 | 0.17 | 0.18 | 0.17 | 0.16  | 0.16  | 0.17  | 0.14  | 0.13  | 0.14         |
| 0.17 | 0.17 | 0.19 | 0.19 | 0.17  | 0.18  | 0.18  | 0.20  | 0.19  | 0.17         |
| 0.23 | 0.23 | 0.24 | 0.24 | 0.22  | 0.22  | 0.22  | 0.24  | 0.23  | 0.24         |
| 0.55 | 0.55 | 0.54 | 0.52 | 0.50  | 0.50  | 0.51  | 0.52  | 0.51  | 0.55         |
| 0.49 | 0.49 | 0.44 | 0.44 | 0.44  | 0.43  | 0.43  | 0.44  | 0.45  | 0.48         |
| 0.21 | 0.21 | 0.19 | 0.18 | 0.18  | 0.18  | 0.18  | 0.22  | 0.21  | 0.21         |
| 0.52 | 0.51 | 0.38 | 0.36 | 0.38  | 0.39  | 0.39  | 0.37  | 0.36  | 0.46         |
| 0.47 | 0.47 | 0.49 | 0.47 | 0.44  | 0.44  | 0.44  | 0.49  | 0.49  | 0.48         |
| 0.15 | 0.15 | 0.15 | 0.14 | 0.14  | 0.15  | 0.15  | 0.16  | 0.16  | 0.17         |
| 0.02 | 0.02 | 0.03 | 0.02 | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.02         |
| 0.22 | 0.22 | 0.22 | 0.21 | 0.21  | 0.21  | 0.21  | 0.21  | 0.20  | 0.21         |

**Table A-10 Average Shares of Labor Input**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1</b> agriculture                 | 0.10 | 0.10 | 0.09 | 0.09 | 0.10 | 0.11 | 0.11 | 0.10 |
| <b>2</b> coal mining                 | 0.39 | 0.39 | 0.45 | 0.45 | 0.46 | 0.50 | 0.51 | 0.47 |
| <b>3</b> Metal non-metal             | 0.46 | 0.47 | 0.41 | 0.40 | 0.41 | 0.40 | 0.42 | 0.17 |
| <b>4</b> Oil and gas                 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| <b>5</b> construction                | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 |
| <b>6</b> food                        | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 |
| <b>7</b> textile                     | 0.12 | 0.12 | 0.11 | 0.12 | 0.12 | 0.13 | 0.14 | 0.13 |
| <b>8</b> apparels                    | 0.18 | 0.18 | 0.15 | 0.15 | 0.14 | 0.15 | 0.16 | 0.15 |
| <b>9</b> lumber and wood             | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.12 | 0.13 | 0.13 |
| <b>10</b> Furniture                  | 0.14 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.17 |
| <b>11</b> paper allied               | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.13 |
| <b>12</b> printing,publishing,allied | 0.24 | 0.24 | 0.25 | 0.25 | 0.23 | 0.24 | 0.26 | 0.26 |
| <b>13</b> chemicals                  | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.11 | 0.10 |
| <b>14</b> petroleum products         | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.03 | 0.04 |
| <b>15</b> leather                    | 0.16 | 0.14 | 0.14 | 0.12 | 0.13 | 0.13 | 0.14 | 0.20 |
| <b>16</b> stone,clay,glass           | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 |
| <b>17</b> primary metal              | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 |
| <b>18</b> fabricated metal           | 0.15 | 0.15 | 0.16 | 0.15 | 0.16 | 0.16 | 0.17 | 0.18 |
| <b>19</b> Machinery                  | 0.16 | 0.16 | 0.14 | 0.15 | 0.16 | 0.17 | 0.17 | 0.18 |
| <b>20</b> electrical machinery       | 0.11 | 0.10 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |
| <b>21</b> Motor                      | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.12 | 0.10 |
| <b>22</b> transportation equip.      | 0.18 | 0.18 | 0.17 | 0.16 | 0.19 | 0.19 | 0.15 | 0.17 |
| <b>23</b> instrument                 | 0.16 | 0.15 | 0.17 | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 |
| <b>24</b> rubber                     | 0.21 | 0.20 | 0.21 | 0.21 | 0.23 | 0.23 | 0.23 | 0.14 |
| <b>25</b> misc.manufacturing         | 0.15 | 0.15 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.19 |
| <b>26</b> transportation             | 0.25 | 0.26 | 0.25 | 0.25 | 0.24 | 0.25 | 0.25 | 0.29 |
| <b>27</b> communication              | 0.28 | 0.29 | 0.25 | 0.26 | 0.25 | 0.25 | 0.26 | 0.30 |
| <b>28</b> electric utility           | 0.10 | 0.10 | 0.09 | 0.09 | 0.08 | 0.08 | 0.09 | 0.09 |
| <b>29</b> gas utility                | 0.12 | 0.12 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.14 |
| <b>30</b> trade                      | 0.18 | 0.19 | 0.18 | 0.18 | 0.18 | 0.20 | 0.20 | 0.19 |
| <b>31</b> Finance and real estate    | 0.25 | 0.25 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 |
| <b>32</b> other private service      | 0.48 | 0.49 | 0.57 | 0.57 | 0.57 | 0.58 | 0.59 | 0.59 |
| <b>33</b> Public service             | 0.51 | 0.53 | 0.55 | 0.50 | 0.50 | 0.51 | 0.47 | 0.56 |
| <b>Total</b>                         | 0.18 | 0.18 | 0.19 | 0.18 | 0.19 | 0.19 | 0.20 | 0.19 |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average rate |
|------|------|------|------|------|------|------|------|------|--------------|
| 0.11 | 0.12 | 0.13 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.10 | 0.11         |
| 0.48 | 0.47 | 0.50 | 0.58 | 0.57 | 0.57 | 0.53 | 0.52 | 0.49 | 0.48         |
| 0.17 | 0.16 | 0.18 | 0.23 | 0.22 | 0.22 | 0.21 | 0.21 | 0.29 | 0.17         |
| 0.03 | 0.03 | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03         |
| 0.27 | 0.26 | 0.27 | 0.25 | 0.24 | 0.24 | 0.28 | 0.27 | 0.25 | 0.27         |
| 0.07 | 0.07 | 0.08 | 0.09 | 0.09 | 0.09 | 0.08 | 0.07 | 0.07 | 0.07         |
| 0.14 | 0.14 | 0.15 | 0.17 | 0.17 | 0.17 | 0.14 | 0.13 | 0.14 | 0.14         |
| 0.17 | 0.18 | 0.21 | 0.20 | 0.20 | 0.20 | 0.18 | 0.16 | 0.17 | 0.17         |
| 0.13 | 0.14 | 0.15 | 0.17 | 0.16 | 0.16 | 0.13 | 0.13 | 0.13 | 0.13         |
| 0.17 | 0.16 | 0.18 | 0.21 | 0.21 | 0.21 | 0.21 | 0.20 | 0.17 | 0.17         |
| 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.12 | 0.11 | 0.12 | 0.13         |
| 0.28 | 0.27 | 0.28 | 0.29 | 0.28 | 0.28 | 0.27 | 0.26 | 0.26 | 0.28         |
| 0.11 | 0.10 | 0.11 | 0.11 | 0.10 | 0.10 | 0.09 | 0.08 | 0.10 | 0.11         |
| 0.05 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.05         |
| 0.21 | 0.19 | 0.20 | 0.19 | 0.19 | 0.19 | 0.20 | 0.17 | 0.17 | 0.21         |
| 0.19 | 0.18 | 0.19 | 0.18 | 0.18 | 0.18 | 0.17 | 0.16 | 0.17 | 0.19         |
| 0.08 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.06 | 0.06 | 0.06 | 0.08         |
| 0.18 | 0.18 | 0.18 | 0.21 | 0.21 | 0.21 | 0.20 | 0.19 | 0.18 | 0.18         |
| 0.19 | 0.18 | 0.19 | 0.18 | 0.18 | 0.18 | 0.17 | 0.16 | 0.17 | 0.19         |
| 0.14 | 0.14 | 0.14 | 0.12 | 0.11 | 0.11 | 0.10 | 0.10 | 0.12 | 0.14         |
| 0.10 | 0.10 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.13 | 0.12 | 0.10         |
| 0.17 | 0.17 | 0.20 | 0.19 | 0.19 | 0.19 | 0.17 | 0.16 | 0.18 | 0.17         |
| 0.19 | 0.16 | 0.17 | 0.18 | 0.17 | 0.17 | 0.17 | 0.16 | 0.17 | 0.19         |
| 0.15 | 0.14 | 0.15 | 0.16 | 0.16 | 0.16 | 0.15 | 0.14 | 0.18 | 0.15         |
| 0.20 | 0.19 | 0.20 | 0.22 | 0.21 | 0.21 | 0.22 | 0.21 | 0.19 | 0.20         |
| 0.29 | 0.27 | 0.29 | 0.30 | 0.28 | 0.28 | 0.24 | 0.23 | 0.27 | 0.29         |
| 0.30 | 0.29 | 0.31 | 0.33 | 0.31 | 0.31 | 0.27 | 0.26 | 0.28 | 0.30         |
| 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09         |
| 0.16 | 0.14 | 0.14 | 0.14 | 0.13 | 0.13 | 0.10 | 0.09 | 0.13 | 0.16         |
| 0.19 | 0.31 | 0.32 | 0.28 | 0.27 | 0.27 | 0.27 | 0.26 | 0.23 | 0.19         |
| 0.24 | 0.24 | 0.24 | 0.26 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.24         |
| 0.60 | 0.59 | 0.60 | 0.59 | 0.58 | 0.57 | 0.55 | 0.55 | 0.57 | 0.60         |
| 0.57 | 0.60 | 0.41 | 0.62 | 0.61 | 0.61 | 0.60 | 0.59 | 0.55 | 0.57         |
| 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.20 | 0.19 | 0.19 | 0.20         |

**Table A-11 Average Shares of Energy Input**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1 agriculture</b>                 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| <b>2 coal mining</b>                 | 0.12 | 0.11 | 0.10 | 0.09 | 0.08 | 0.06 | 0.06 | 0.05 |
| <b>3 Metal non-metal</b>             | 0.11 | 0.10 | 0.13 | 0.12 | 0.11 | 0.10 | 0.09 | 0.06 |
| <b>4 Oil and gas</b>                 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| <b>5 construction</b>                | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| <b>6 food</b>                        | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| <b>7 textile</b>                     | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 |
| <b>8 apparels</b>                    | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| <b>9 lumber and wood</b>             | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| <b>10 Furniture</b>                  | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| <b>11 paper allied</b>               | 0.08 | 0.07 | 0.08 | 0.07 | 0.06 | 0.06 | 0.05 | 0.04 |
| <b>12 printing,publishing,allied</b> | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| <b>13 chemicals</b>                  | 0.13 | 0.12 | 0.12 | 0.10 | 0.10 | 0.08 | 0.08 | 0.09 |
| <b>14 petroleum products</b>         | 0.81 | 0.79 | 0.79 | 0.61 | 0.67 | 0.60 | 0.64 | 0.74 |
| <b>15 leather</b>                    | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| <b>16 stone,clay,glass</b>           | 0.22 | 0.21 | 0.19 | 0.16 | 0.16 | 0.14 | 0.13 | 0.10 |
| <b>17 primary metal</b>              | 0.12 | 0.11 | 0.10 | 0.09 | 0.08 | 0.07 | 0.07 | 0.07 |
| <b>18 fabricated metal</b>           | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.02 |
| <b>19 Machinery</b>                  | 0.04 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| <b>20 electrical machinery</b>       | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| <b>21 Motor</b>                      | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| <b>22 transportation equip.</b>      | 0.03 | 0.03 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 |
| <b>23 instrument</b>                 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| <b>24 rubber</b>                     | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| <b>25 misc.manufacturing</b>         | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| <b>26 transportation</b>             | 0.26 | 0.24 | 0.26 | 0.20 | 0.20 | 0.17 | 0.16 | 0.15 |
| <b>27 communication</b>              | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| <b>28 electric utility</b>           | 0.46 | 0.43 | 0.28 | 0.20 | 0.17 | 0.19 | 0.20 | 0.27 |
| <b>29 gas utility</b>                | 0.46 | 0.44 | 0.47 | 0.45 | 0.46 | 0.45 | 0.46 | 0.51 |
| <b>30 trade</b>                      | 0.08 | 0.07 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 |
| <b>31 Finance and real estate</b>    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| <b>32 other private service</b>      | 0.05 | 0.04 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| <b>33 Public service</b>             | 0.08 | 0.08 | 0.07 | 0.06 | 0.06 | 0.06 | 0.05 | 0.03 |
| <b>Total</b>                         | 0.11 | 0.11 | 0.10 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average rate |
|------|------|------|------|------|------|------|------|------|--------------|
| 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02         |
| 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.07 | 0.05         |
| 0.07 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.09 | 0.09 | 0.09 | 0.07         |
| 0.13 | 0.14 | 0.03 | 0.14 | 0.16 | 0.17 | 0.14 | 0.14 | 0.14 | 0.13         |
| 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02         |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01         |
| 0.03 | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03         |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01         |
| 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.04 | 0.04 | 0.03 | 0.02         |
| 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02         |
| 0.04 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04         |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01         |
| 0.09 | 0.11 | 0.09 | 0.10 | 0.11 | 0.11 | 0.14 | 0.14 | 0.11 | 0.09         |
| 0.68 | 0.58 | 0.59 | 0.57 | 0.58 | 0.59 | 0.59 | 0.61 | 0.66 | 0.68         |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01         |
| 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.09 | 0.11 | 0.12 | 0.13 | 0.09         |
| 0.07 | 0.07 | 0.06 | 0.06 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.07         |
| 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02         |
| 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 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 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01         |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01         |
| 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01         |
| 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03         |
| 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02         |
| 0.15 | 0.16 | 0.14 | 0.12 | 0.14 | 0.14 | 0.14 | 0.15 | 0.17 | 0.15         |
| 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02         |
| 0.27 | 0.31 | 0.30 | 0.29 | 0.31 | 0.32 | 0.30 | 0.29 | 0.29 | 0.27         |
| 0.48 | 0.54 | 0.53 | 0.54 | 0.56 | 0.56 | 0.59 | 0.61 | 0.51 | 0.48         |
| 0.04 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.04         |
| 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02         |
| 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03         |
| 0.03 | 0.03 | 0.02 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.03         |
| 0.08 | 0.08 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.08         |

**Table A-12 Average Shares of Material Input**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1</b> agriculture                 | 0.28 | 0.28 | 0.31 | 0.32 | 0.30 | 0.29 | 0.28 | 0.31 |
| <b>2</b> coal mining                 | 0.25 | 0.26 | 0.30 | 0.31 | 0.29 | 0.25 | 0.25 | 0.29 |
| <b>3</b> Metal non-metal             | 0.15 | 0.15 | 0.21 | 0.22 | 0.23 | 0.24 | 0.23 | 0.23 |
| <b>4</b> Oil and gas                 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.81 | 0.80 |
| <b>5</b> construction                | 0.54 | 0.54 | 0.54 | 0.56 | 0.55 | 0.54 | 0.54 | 0.52 |
| <b>6</b> food                        | 0.73 | 0.73 | 0.74 | 0.74 | 0.73 | 0.73 | 0.71 | 0.74 |
| <b>7</b> textile                     | 0.71 | 0.72 | 0.72 | 0.71 | 0.70 | 0.70 | 0.69 | 0.74 |
| <b>8</b> apparels                    | 0.73 | 0.73 | 0.76 | 0.76 | 0.75 | 0.73 | 0.72 | 0.77 |
| <b>9</b> lumber and wood             | 0.77 | 0.78 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.76 |
| <b>10</b> Furniture                  | 0.64 | 0.68 | 0.72 | 0.72 | 0.70 | 0.71 | 0.72 | 0.66 |
| <b>11</b> paper allied               | 0.69 | 0.70 | 0.67 | 0.67 | 0.69 | 0.70 | 0.69 | 0.68 |
| <b>12</b> printing,publishing,allied | 0.61 | 0.61 | 0.60 | 0.62 | 0.63 | 0.62 | 0.61 | 0.60 |
| <b>13</b> chemicals                  | 0.61 | 0.62 | 0.61 | 0.62 | 0.63 | 0.64 | 0.63 | 0.63 |
| <b>14</b> petroleum products         | 0.04 | 0.04 | 0.05 | 0.07 | 0.07 | 0.09 | 0.08 | 0.09 |
| <b>15</b> leather                    | 0.77 | 0.80 | 0.75 | 0.79 | 0.77 | 0.79 | 0.77 | 0.72 |
| <b>16</b> stone,clay,glass           | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.50 |
| <b>17</b> primary metal              | 0.73 | 0.74 | 0.73 | 0.73 | 0.75 | 0.74 | 0.74 | 0.73 |
| <b>18</b> fabricated metal           | 0.70 | 0.70 | 0.65 | 0.65 | 0.66 | 0.67 | 0.66 | 0.65 |
| <b>19</b> Machinery                  | 0.66 | 0.66 | 0.66 | 0.65 | 0.64 | 0.64 | 0.65 | 0.64 |
| <b>20</b> electrical machinery       | 0.71 | 0.72 | 0.69 | 0.69 | 0.69 | 0.70 | 0.69 | 0.71 |
| <b>21</b> Motor                      | 0.62 | 0.62 | 0.67 | 0.68 | 0.70 | 0.69 | 0.68 | 0.64 |
| <b>22</b> transportation equip.      | 0.63 | 0.63 | 0.68 | 0.71 | 0.83 | 0.79 | 0.83 | 0.69 |
| <b>23</b> instrument                 | 0.68 | 0.71 | 0.65 | 0.67 | 0.65 | 0.66 | 0.65 | 0.67 |
| <b>24</b> rubber                     | 0.63 | 0.64 | 0.64 | 0.64 | 0.63 | 0.62 | 0.63 | 0.67 |
| <b>25</b> misc.manufacturing         | 0.63 | 0.64 | 0.64 | 0.63 | 0.63 | 0.64 | 0.63 | 0.62 |
| <b>26</b> transportation             | 0.23 | 0.23 | 0.27 | 0.29 | 0.32 | 0.32 | 0.35 | 0.32 |
| <b>27</b> communication              | 0.14 | 0.14 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.13 |
| <b>28</b> electric utility           | 0.08 | 0.09 | 0.09 | 0.10 | 0.12 | 0.13 | 0.14 | 0.15 |
| <b>29</b> gas utility                | 0.20 | 0.21 | 0.16 | 0.15 | 0.16 | 0.17 | 0.17 | 0.14 |
| <b>30</b> trade                      | 0.24 | 0.25 | 0.23 | 0.22 | 0.23 | 0.24 | 0.24 | 0.25 |
| <b>31</b> Finance and real estate    | 0.20 | 0.21 | 0.26 | 0.26 | 0.25 | 0.26 | 0.26 | 0.27 |
| <b>32</b> other private service      | 0.25 | 0.25 | 0.21 | 0.20 | 0.21 | 0.21 | 0.20 | 0.22 |
| <b>33</b> Public service             | 0.40 | 0.38 | 0.37 | 0.42 | 0.41 | 0.40 | 0.47 | 0.39 |
| <b>Total</b>                         | 0.50 | 0.51 | 0.51 | 0.51 | 0.52 | 0.52 | 0.52 | 0.51 |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average<br>rate |
|------|------|------|------|------|------|------|------|------|-----------------|
| 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.40 | 0.44 | 0.32 | 0.31            |
| 0.29 | 0.32 | 0.30 | 0.45 | 0.46 | 0.46 | 0.61 | 0.61 | 0.35 | 0.29            |
| 0.24 | 0.23 | 0.22 | 0.21 | 0.20 | 0.20 | 0.19 | 0.20 | 0.21 | 0.24            |
| 0.81 | 0.80 | 0.96 | 0.80 | 0.78 | 0.77 | 0.80 | 0.81 | 0.81 | 0.81            |
| 0.51 | 0.51 | 0.52 | 0.57 | 0.57 | 0.57 | 0.51 | 0.52 | 0.54 | 0.51            |
| 0.73 | 0.71 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 | 0.74 | 0.72 | 0.73            |
| 0.72 | 0.70 | 0.68 | 0.68 | 0.68 | 0.67 | 0.62 | 0.64 | 0.69 | 0.72            |
| 0.75 | 0.71 | 0.68 | 0.64 | 0.63 | 0.62 | 0.63 | 0.66 | 0.71 | 0.75            |
| 0.75 | 0.74 | 0.72 | 0.70 | 0.69 | 0.69 | 0.70 | 0.71 | 0.74 | 0.75            |
| 0.67 | 0.66 | 0.65 | 0.61 | 0.61 | 0.61 | 0.64 | 0.65 | 0.67 | 0.67            |
| 0.67 | 0.67 | 0.67 | 0.66 | 0.65 | 0.65 | 0.66 | 0.68 | 0.67 | 0.67            |
| 0.58 | 0.58 | 0.58 | 0.56 | 0.56 | 0.56 | 0.59 | 0.61 | 0.59 | 0.58            |
| 0.62 | 0.61 | 0.62 | 0.61 | 0.60 | 0.60 | 0.60 | 0.61 | 0.62 | 0.62            |
| 0.11 | 0.09 | 0.09 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.11            |
| 0.71 | 0.72 | 0.71 | 0.70 | 0.69 | 0.69 | 0.67 | 0.72 | 0.73 | 0.71            |
| 0.49 | 0.52 | 0.52 | 0.55 | 0.54 | 0.54 | 0.51 | 0.51 | 0.50 | 0.49            |
| 0.72 | 0.72 | 0.73 | 0.71 | 0.70 | 0.70 | 0.70 | 0.71 | 0.72 | 0.72            |
| 0.64 | 0.64 | 0.64 | 0.64 | 0.63 | 0.63 | 0.60 | 0.61 | 0.65 | 0.64            |
| 0.63 | 0.64 | 0.64 | 0.64 | 0.64 | 0.63 | 0.66 | 0.67 | 0.65 | 0.63            |
| 0.70 | 0.67 | 0.67 | 0.65 | 0.66 | 0.66 | 0.71 | 0.72 | 0.69 | 0.70            |
| 0.64 | 0.68 | 0.58 | 0.69 | 0.69 | 0.69 | 0.73 | 0.75 | 0.67 | 0.64            |
| 0.68 | 0.69 | 0.66 | 0.68 | 0.68 | 0.68 | 0.59 | 0.61 | 0.69 | 0.68            |
| 0.66 | 0.68 | 0.68 | 0.65 | 0.66 | 0.66 | 0.67 | 0.69 | 0.67 | 0.66            |
| 0.65 | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 | 0.67 | 0.69 | 0.65 | 0.65            |
| 0.61 | 0.60 | 0.59 | 0.58 | 0.58 | 0.58 | 0.56 | 0.57 | 0.61 | 0.61            |
| 0.32 | 0.34 | 0.33 | 0.36 | 0.36 | 0.36 | 0.39 | 0.39 | 0.32 | 0.32            |
| 0.13 | 0.15 | 0.16 | 0.16 | 0.17 | 0.17 | 0.20 | 0.21 | 0.14 | 0.13            |
| 0.15 | 0.16 | 0.17 | 0.17 | 0.16 | 0.16 | 0.17 | 0.17 | 0.14 | 0.15            |
| 0.15 | 0.14 | 0.15 | 0.14 | 0.13 | 0.13 | 0.09 | 0.09 | 0.15 | 0.15            |
| 0.26 | 0.27 | 0.28 | 0.29 | 0.30 | 0.30 | 0.32 | 0.33 | 0.26 | 0.26            |
| 0.28 | 0.26 | 0.27 | 0.28 | 0.29 | 0.29 | 0.25 | 0.25 | 0.26 | 0.28            |
| 0.22 | 0.23 | 0.23 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.23 | 0.22            |
| 0.38 | 0.35 | 0.56 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.38 | 0.38            |
| 0.51 | 0.51 | 0.51 | 0.51 | 0.50 | 0.50 | 0.51 | 0.52 | 0.51 | 0.51            |

**Table A-13 Capital Price Index**

|                                      | 1984      | 1985      | 1986      | 1987      | 1988      | 1989      | 1990      | 1991      |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>1</b> agriculture                 | 84        | 77        | 84        | 81        | 85        | 82        | 81        | 86        |
| <b>2</b> coal mining                 | 29        | 25        | 21        | 24        | 23        | 21        | 38        | 49        |
| <b>3</b> Metal non-metal             | 15        | 14        | 17        | 16        | 19        | 22        | 58        | 63        |
| <b>4</b> Oil and gas                 | 0         | 0         | 0         | 0         | 0         | 0         | 62        | 67        |
| <b>5</b> construction                | 175       | 174       | 190       | 195       | 189       | 171       | 155       | 142       |
| <b>6</b> Food                        | 96        | 91        | 95        | 92        | 94        | 92        | 91        | 97        |
| <b>7</b> Textile                     | 67        | 64        | 68        | 69        | 76        | 79        | 85        | 92        |
| <b>8</b> Apparels                    | 70        | 69        | 72        | 74        | 80        | 82        | 88        | 93        |
| <b>9</b> lumber and wood             | 62        | 69        | 85        | 99        | 102       | 100       | 100       | 106       |
| <b>10</b> Furniture                  | 121       | 115       | 118       | 117       | 120       | 117       | 118       | 120       |
| <b>11</b> paper allied               | 187       | 171       | 177       | 179       | 177       | 165       | 158       | 152       |
| <b>12</b> Printing,publishing,allied | 96        | 98        | 110       | 120       | 125       | 123       | 124       | 125       |
| <b>13</b> chemicals                  | 116       | 108       | 118       | 119       | 126       | 124       | 124       | 125       |
| <b>14</b> petroleum products         | 148       | 138       | 142       | 145       | 143       | 132       | 125       | 121       |
| <b>15</b> Leather                    | 55        | 44        | 43        | 41        | 45        | 48        | 57        | 64        |
| <b>16</b> stone,clay,glass           | 93        | 83        | 83        | 81        | 87        | 89        | 90        | 94        |
| <b>17</b> Primary metal              | 100       | 97        | 102       | 105       | 109       | 107       | 112       | 116       |
| <b>18</b> fabricated metal           | 154       | 145       | 151       | 150       | 149       | 141       | 140       | 138       |
| <b>19</b> Machinery                  | 91        | 82        | 80        | 77        | 83        | 84        | 90        | 95        |
| <b>20</b> electrical machinery       | 218       | 196       | 190       | 181       | 177       | 163       | 155       | 147       |
| <b>21</b> Motor                      | 138       | 136       | 137       | 131       | 132       | 130       | 112       | 114       |
| <b>22</b> transportation equip.      | 692       | 649       | 656       | 632       | 426       | 282       | 230       | 194       |
| <b>23</b> instrument                 | 139       | 122       | 120       | 115       | 121       | 118       | 119       | 119       |
| <b>24</b> Rubber                     | 160       | 150       | 162       | 166       | 165       | 153       | 139       | 135       |
| <b>25</b> misc.manufacturing         | 107       | 101       | 105       | 107       | 110       | 107       | 107       | 109       |
| <b>26</b> transportation             | 74        | 70        | 83        | 84        | 89        | 85        | 87        | 92        |
| <b>27</b> communication              | 139       | 125       | 131       | 122       | 122       | 117       | 120       | 121       |
| <b>28</b> electric utility           | 81        | 79        | 89        | 92        | 97        | 99        | 100       | 106       |
| <b>29</b> gas utility                | 224       | 195       | 204       | 209       | 213       | 150       | 123       | 112       |
| <b>30</b> Trade                      | 176       | 174       | 192       | 197       | 190       | 170       | 156       | 146       |
| <b>31</b> Finance and real estate    | 120       | 115       | 128       | 133       | 138       | 131       | 124       | 115       |
| <b>32</b> other private service      | 159       | 147       | 159       | 157       | 157       | 146       | 139       | 133       |
| <b>33</b> Public service             | 129       | 133       | 152       | 163       | 160       | 134       | 133       | 127       |
| <b>Total</b>                         | <b>75</b> | <b>76</b> | <b>82</b> | <b>84</b> | <b>88</b> | <b>86</b> | <b>88</b> | <b>93</b> |



| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average Growth<br>rate(%) |
|------|------|------|------|------|------|------|------|------|---------------------------|
| 89   | 92   | 95   | 100  | 105  | 110  | 107  | 104  | 104  | 1.38                      |
| 58   | 69   | 82   | 100  | 123  | 165  | 156  | 148  | 145  | 10.15                     |
| 66   | 72   | 83   | 100  | 153  | 240  | 259  | 272  | 284  | 18.59                     |
| 71   | 77   | 81   | 100  | 118  | 156  | 146  | 138  | 133  | 0.00                      |
| 127  | 117  | 108  | 100  | 94   | 87   | 82   | 79   | 79   | -4.96                     |
| 99   | 98   | 96   | 100  | 103  | 107  | 106  | 103  | 103  | 0.45                      |
| 93   | 94   | 96   | 100  | 109  | 116  | 111  | 106  | 104  | 2.73                      |
| 94   | 93   | 95   | 100  | 109  | 119  | 114  | 109  | 107  | 2.71                      |
| 107  | 102  | 100  | 100  | 101  | 101  | 98   | 95   | 93   | 2.60                      |
| 115  | 107  | 105  | 100  | 98   | 95   | 91   | 88   | 87   | -2.04                     |
| 136  | 121  | 109  | 100  | 94   | 88   | 85   | 82   | 81   | -5.18                     |
| 118  | 110  | 104  | 100  | 99   | 97   | 93   | 89   | 89   | -0.46                     |
| 119  | 112  | 107  | 100  | 98   | 90   | 86   | 82   | 80   | -2.30                     |
| 116  | 110  | 103  | 100  | 97   | 91   | 91   | 89   | 90   | -3.09                     |
| 69   | 74   | 84   | 100  | 128  | 181  | 175  | 168  | 165  | 6.84                      |
| 94   | 95   | 97   | 100  | 103  | 103  | 100  | 97   | 97   | 0.23                      |
| 111  | 106  | 103  | 100  | 101  | 98   | 95   | 92   | 91   | -0.57                     |
| 127  | 116  | 107  | 100  | 97   | 92   | 90   | 87   | 86   | -3.63                     |
| 96   | 96   | 97   | 100  | 109  | 118  | 116  | 113  | 113  | 1.35                      |
| 133  | 120  | 109  | 100  | 97   | 93   | 92   | 89   | 90   | -5.55                     |
| 109  | 104  | 103  | 100  | 97   | 91   | 89   | 87   | 87   | -2.89                     |
| 159  | 132  | 115  | 100  | 90   | 80   | 79   | 77   | 77   | -13.74                    |
| 113  | 108  | 103  | 100  | 100  | 98   | 97   | 95   | 95   | -2.37                     |
| 126  | 116  | 109  | 100  | 96   | 87   | 84   | 81   | 79   | -4.36                     |
| 106  | 102  | 100  | 100  | 104  | 110  | 107  | 103  | 102  | -0.29                     |
| 93   | 94   | 97   | 100  | 106  | 107  | 104  | 100  | 99   | 1.87                      |
| 117  | 113  | 103  | 100  | 96   | 93   | 86   | 80   | 78   | -3.62                     |
| 104  | 104  | 102  | 100  | 105  | 104  | 100  | 98   | 97   | 1.19                      |
| 101  | 95   | 97   | 100  | 88   | 78   | 70   | 64   | 62   | -7.98                     |
| 132  | 119  | 108  | 100  | 94   | 86   | 85   | 82   | 82   | -4.80                     |
| 108  | 106  | 102  | 100  | 99   | 96   | 93   | 90   | 90   | -1.79                     |
| 123  | 115  | 107  | 100  | 96   | 88   | 86   | 83   | 83   | -4.04                     |
| 118  | 111  | 102  | 100  | 95   | 89   | 81   | 77   | 77   | -3.25                     |
| 94   | 95   | 96   | 100  | 102  | 101  | 101  | 101  | 104  | 2.03                      |

**Table A-14 Labor Price Index**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1 Agriculture</b>                 | 37   | 42   | 43   | 43   | 50   | 53   | 61   | 81   |
| <b>2 coal mining</b>                 | 11   | 12   | 13   | 18   | 11   | 20   | 20   | 43   |
| <b>3 Metal non-metal</b>             | 21   | 21   | 25   | 26   | 28   | 38   | 47   | 59   |
| <b>4 Oil and gas</b>                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| <b>5 Construction</b>                | 58   | 54   | 57   | 68   | 82   | 97   | 92   | 96   |
| <b>6 Food</b>                        | 52   | 51   | 47   | 43   | 54   | 71   | 78   | 98   |
| <b>7 Textile</b>                     | 19   | 21   | 24   | 23   | 26   | 36   | 40   | 58   |
| <b>8 Apparels</b>                    | 19   | 17   | 19   | 19   | 25   | 30   | 34   | 53   |
| <b>9 lumber and wood</b>             | 17   | 28   | 33   | 27   | 35   | 36   | 45   | 76   |
| <b>10 Furniture</b>                  | 31   | 35   | 43   | 45   | 61   | 67   | 61   | 81   |
| <b>11 paper allied</b>               | 27   | 33   | 33   | 30   | 34   | 41   | 43   | 63   |
| <b>12 printing,publishing,allied</b> | 50   | 59   | 60   | 59   | 56   | 62   | 73   | 108  |
| <b>13 Chemicals</b>                  | 37   | 50   | 48   | 50   | 67   | 76   | 71   | 84   |
| <b>14 petroleum products</b>         | 37   | 50   | 48   | 49   | 67   | 76   | 71   | 84   |
| <b>15 Leather</b>                    | 13   | 25   | 15   | 14   | 13   | 19   | 20   | 33   |
| <b>16 stone,clay,glass</b>           | 54   | 57   | 41   | 46   | 47   | 59   | 62   | 97   |
| <b>17 primary metal</b>              | 47   | 50   | 49   | 62   | 74   | 86   | 91   | 106  |
| <b>18 fabricated metal</b>           | 45   | 34   | 33   | 36   | 47   | 55   | 54   | 97   |
| <b>19 Machinery</b>                  | 62   | 60   | 67   | 53   | 53   | 54   | 70   | 78   |
| <b>20 electrical machinery</b>       | 41   | 48   | 48   | 33   | 33   | 45   | 51   | 67   |
| <b>21 Motor</b>                      | 46   | 60   | 52   | 44   | 50   | 65   | 68   | 89   |
| <b>22 transportation equip.</b>      | 46   | 60   | 53   | 45   | 50   | 65   | 68   | 89   |
| <b>23 Instrument</b>                 | 37   | 47   | 44   | 28   | 52   | 42   | 65   | 101  |
| <b>24 Rubber</b>                     | 20   | 17   | 18   | 18   | 25   | 35   | 34   | 51   |
| <b>25 misc.manufacturing</b>         | 16   | 17   | 16   | 13   | 20   | 23   | 33   | 51   |
| <b>26 transportation</b>             | 43   | 49   | 44   | 49   | 61   | 61   | 71   | 96   |
| <b>27 Communication</b>              | 43   | 48   | 44   | 48   | 61   | 60   | 72   | 95   |
| <b>28 electric utility</b>           | 64   | 64   | 77   | 73   | 64   | 52   | 82   | 106  |
| <b>29 gas utility</b>                | 64   | 64   | 77   | 73   | 64   | 52   | 82   | 106  |
| <b>30 Trade</b>                      | 123  | 127  | 124  | 101  | 87   | 92   | 112  | 157  |
| <b>31 Finance and real estate</b>    | 124  | 144  | 141  | 96   | 134  | 139  | 130  | 123  |
| <b>32 other private service</b>      | 77   | 79   | 73   | 69   | 67   | 77   | 79   | 88   |
| <b>33 Public service</b>             | 37   | 42   | 43   | 43   | 50   | 53   | 61   | 82   |
| <b>Total</b>                         | 43   | 47   | 47   | 42   | 49   | 57   | 63   | 84   |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average Growth<br>rate(%) |
|------|------|------|------|------|------|------|------|------|---------------------------|
| 88   | 80   | 188  | 100  | 127  | 142  | 166  | 131  | 153  | 8.85                      |
| 49   | 60   | 83   | 100  | 132  | 196  | 244  | 165  | 205  | 18.22                     |
| 76   | 58   | 84   | 100  | 92   | 139  | 197  | 111  | 140  | 11.76                     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.00                      |
| 65   | 75   | 82   | 100  | 98   | 113  | 120  | 125  | 117  | 4.36                      |
| 90   | 80   | 114  | 100  | 126  | 160  | 196  | 148  | 160  | 7.03                      |
| 62   | 91   | 89   | 100  | 135  | 173  | 200  | 162  | 164  | 13.57                     |
| 62   | 69   | 86   | 100  | 132  | 164  | 195  | 173  | 194  | 14.66                     |
| 73   | 79   | 107  | 100  | 161  | 158  | 260  | 92   | 120  | 12.09                     |
| 111  | 83   | 126  | 100  | 115  | 150  | 222  | 227  | 245  | 12.84                     |
| 53   | 65   | 68   | 100  | 91   | 106  | 128  | 137  | 177  | 11.65                     |
| 107  | 97   | 101  | 100  | 131  | 157  | 174  | 171  | 160  | 7.23                      |
| 93   | 72   | 84   | 100  | 133  | 148  | 150  | 130  | 169  | 9.42                      |
| 92   | 72   | 84   | 100  | 133  | 147  | 150  | 130  | 168  | 9.42                      |
| 38   | 47   | 77   | 100  | 144  | 186  | 248  | 245  | 274  | 18.97                     |
| 97   | 82   | 109  | 100  | 171  | 191  | 154  | 178  | 188  | 7.78                      |
| 83   | 84   | 101  | 100  | 133  | 159  | 159  | 168  | 184  | 8.59                      |
| 92   | 102  | 92   | 100  | 132  | 141  | 203  | 144  | 175  | 8.56                      |
| 88   | 83   | 90   | 100  | 122  | 142  | 175  | 67   | 65   | 0.30                      |
| 77   | 97   | 91   | 100  | 113  | 123  | 152  | 1661 | 1607 | 22.94                     |
| 87   | 83   | 101  | 100  | 102  | 108  | 134  | 150  | 123  | 6.19                      |
| 87   | 83   | 101  | 100  | 102  | 108  | 135  | 150  | 124  | 6.18                      |
| 84   | 96   | 111  | 100  | 126  | 144  | 171  | 39   | 46   | 1.37                      |
| 59   | 80   | 85   | 100  | 97   | 112  | 137  | 158  | 173  | 13.56                     |
| 55   | 76   | 83   | 100  | 159  | 173  | 227  | 125  | 135  | 13.46                     |
| 111  | 93   | 200  | 100  | 124  | 120  | 127  | 136  | 156  | 8.06                      |
| 111  | 92   | 199  | 100  | 123  | 120  | 127  | 134  | 154  | 7.98                      |
| 100  | 100  | 656  | 100  | 156  | 138  | 133  | 26   | 25   | -6.00                     |
| 100  | 100  | 656  | 100  | 156  | 138  | 133  | 26   | 25   | -6.01                     |
| 125  | 97   | 113  | 100  | 118  | 120  | 154  | 87   | 90   | -1.95                     |
| 102  | 101  | 101  | 100  | 117  | 122  | 121  | 109  | 121  | -0.19                     |
| 90   | 96   | 104  | 100  | 106  | 102  | 100  | 87   | 96   | 1.39                      |
| 88   | 80   | 188  | 100  | 127  | 142  | 166  | 127  | 148  | 8.61                      |
| 85   | 86   | 133  | 100  | 120  | 130  | 143  | 112  | 121  |                           |

**Table A-15 Energy Price Index**

|                               | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|-------------------------------|------|------|------|------|------|------|------|------|
| 1 Agriculture                 | 84   | 88   | 81   | 81   | 79   | 78   | 79   | 83   |
| 2 coal mining                 | 97   | 101  | 96   | 95   | 91   | 86   | 85   | 87   |
| 3 Metal non-metal             | 90   | 95   | 89   | 88   | 85   | 82   | 81   | 84   |
| 4 Oil and gas                 | 80   | 85   | 85   | 86   | 84   | 83   | 84   | 88   |
| 5 Construction                | 87   | 89   | 81   | 82   | 79   | 77   | 79   | 83   |
| 6 Food                        | 91   | 95   | 90   | 89   | 86   | 83   | 82   | 85   |
| 7 Textile                     | 95   | 99   | 94   | 93   | 89   | 85   | 83   | 86   |
| 8 Apparels                    | 94   | 99   | 95   | 92   | 89   | 85   | 83   | 86   |
| 9 lumber and wood             | 91   | 99   | 95   | 93   | 89   | 84   | 83   | 86   |
| 10 Furniture                  | 93   | 99   | 95   | 93   | 89   | 85   | 82   | 85   |
| 11 paper allied               | 91   | 96   | 91   | 90   | 88   | 84   | 82   | 85   |
| 12 Printing,publishing,allied | 91   | 97   | 92   | 91   | 87   | 83   | 81   | 85   |
| 13 Chemicals                  | 90   | 93   | 87   | 86   | 84   | 81   | 80   | 84   |
| 14 petroleum products         | 66   | 71   | 75   | 78   | 80   | 82   | 86   | 93   |
| 15 Leather                    | 91   | 94   | 88   | 87   | 84   | 81   | 82   | 85   |
| 16 stone,clay,glass           | 81   | 86   | 85   | 85   | 83   | 82   | 82   | 86   |
| 17 Primary metal              | 90   | 94   | 88   | 87   | 84   | 81   | 80   | 84   |
| 18 fabricated metal           | 92   | 97   | 92   | 90   | 87   | 83   | 82   | 86   |
| 19 Machinery                  | 92   | 95   | 89   | 89   | 86   | 82   | 82   | 85   |
| 20 electrical machinery       | 93   | 97   | 92   | 91   | 87   | 83   | 82   | 86   |
| 21 Motor                      | 94   | 96   | 91   | 90   | 87   | 83   | 82   | 85   |
| 22 transportation equip.      | 92   | 98   | 93   | 91   | 88   | 84   | 82   | 85   |
| 23 Instrument                 | 94   | 99   | 94   | 92   | 89   | 84   | 83   | 86   |
| 24 Rubber                     | 92   | 95   | 90   | 89   | 86   | 82   | 82   | 86   |
| 25 misc.manufacturing         | 92   | 96   | 90   | 89   | 86   | 83   | 82   | 85   |
| 26 transportation             | 85   | 88   | 80   | 81   | 78   | 77   | 78   | 82   |
| 27 Communication              | 92   | 97   | 92   | 91   | 87   | 83   | 83   | 86   |
| 28 electric utility           | 83   | 83   | 78   | 79   | 79   | 80   | 83   | 86   |
| 29 gas utility                | 95   | 100  | 95   | 93   | 89   | 85   | 85   | 89   |
| 30 Trade                      | 89   | 94   | 88   | 87   | 84   | 81   | 81   | 84   |
| 31 Finance and real estate    | 92   | 99   | 95   | 93   | 89   | 84   | 83   | 86   |
| 32 other private service      | 90   | 97   | 92   | 90   | 87   | 83   | 82   | 85   |
| 33 Public service             | 83   | 91   | 84   | 84   | 81   | 79   | 79   | 83   |
|                               | 78   | 83   | 82   | 83   | 82   | 81   | 82   | 87   |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|------|
| 85   | 87   | 91   | 100  | 102  | 109  | 115  | 121  | 127  |
| 93   | 94   | 96   | 100  | 104  | 109  | 114  | 118  | 123  |
| 88   | 90   | 93   | 100  | 103  | 109  | 114  | 120  | 125  |
| 92   | 93   | 96   | 100  | 102  | 106  | 109  | 113  | 116  |
| 85   | 87   | 91   | 100  | 102  | 109  | 115  | 121  | 126  |
| 89   | 91   | 94   | 100  | 103  | 109  | 114  | 119  | 125  |
| 90   | 92   | 95   | 100  | 103  | 109  | 114  | 119  | 124  |
| 91   | 93   | 96   | 100  | 103  | 109  | 114  | 120  | 127  |
| 90   | 92   | 95   | 100  | 103  | 109  | 114  | 119  | 124  |
| 90   | 91   | 94   | 100  | 103  | 109  | 114  | 120  | 126  |
| 90   | 92   | 95   | 100  | 104  | 109  | 114  | 119  | 124  |
| 89   | 90   | 93   | 100  | 103  | 109  | 114  | 119  | 125  |
| 86   | 88   | 92   | 100  | 102  | 109  | 115  | 121  | 126  |
| 94   | 93   | 98   | 100  | 101  | 102  | 104  | 105  | 107  |
| 90   | 91   | 94   | 100  | 103  | 109  | 114  | 119  | 125  |
| 89   | 90   | 94   | 100  | 103  | 108  | 113  | 119  | 124  |
| 87   | 90   | 93   | 100  | 103  | 109  | 114  | 119  | 124  |
| 90   | 91   | 94   | 100  | 103  | 109  | 114  | 119  | 125  |
| 89   | 91   | 94   | 100  | 103  | 109  | 114  | 119  | 125  |
| 90   | 92   | 95   | 100  | 104  | 109  | 114  | 119  | 124  |
| 89   | 90   | 93   | 100  | 104  | 109  | 114  | 119  | 125  |
| 89   | 90   | 93   | 100  | 103  | 109  | 114  | 120  | 125  |
| 91   | 92   | 95   | 100  | 104  | 109  | 114  | 119  | 124  |
| 90   | 90   | 94   | 100  | 103  | 109  | 114  | 119  | 124  |
| 89   | 91   | 94   | 100  | 103  | 109  | 114  | 119  | 124  |
| 84   | 86   | 90   | 100  | 102  | 109  | 115  | 121  | 127  |
| 91   | 92   | 95   | 100  | 104  | 109  | 114  | 119  | 123  |
| 90   | 91   | 95   | 100  | 103  | 108  | 110  | 114  | 119  |
| 93   | 93   | 97   | 100  | 102  | 105  | 106  | 108  | 109  |
| 88   | 89   | 92   | 100  | 103  | 109  | 114  | 120  | 125  |
| 91   | 92   | 95   | 100  | 104  | 109  | 114  | 119  | 124  |
| 89   | 90   | 93   | 100  | 103  | 109  | 114  | 119  | 125  |
| 86   | 89   | 92   | 100  | 103  | 109  | 114  | 120  | 125  |
| 90   | 91   | 94   | 100  | 102  | 107  | 110  | 114  | 117  |

**Table A-16 Material Price Index**

|                                      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| <b>1 Agriculture</b>                 | 62   | 65   | 64   | 67   | 70   | 73   | 78   | 84   |
| <b>2 coal mining</b>                 | 57   | 60   | 61   | 63   | 65   | 67   | 73   | 79   |
| <b>3 Metal non-metal</b>             | 58   | 61   | 62   | 64   | 66   | 67   | 73   | 79   |
| <b>4 Oil and gas</b>                 | 59   | 61   | 62   | 64   | 66   | 70   | 72   | 78   |
| <b>5 construction</b>                | 62   | 63   | 63   | 65   | 67   | 69   | 73   | 81   |
| <b>6 food</b>                        | 56   | 59   | 59   | 63   | 68   | 71   | 78   | 83   |
| <b>7 textile</b>                     | 57   | 60   | 60   | 63   | 64   | 65   | 68   | 74   |
| <b>8 apparels</b>                    | 51   | 53   | 56   | 59   | 61   | 62   | 65   | 71   |
| <b>9 lumber and wood</b>             | 56   | 58   | 58   | 62   | 67   | 69   | 75   | 80   |
| <b>10 Furniture</b>                  | 61   | 63   | 64   | 66   | 68   | 70   | 72   | 78   |
| <b>11 paper allied</b>               | 57   | 60   | 61   | 62   | 63   | 65   | 67   | 73   |
| <b>12 printing,publishing,allied</b> | 58   | 60   | 60   | 61   | 63   | 65   | 67   | 74   |
| <b>13 chemicals</b>                  | 73   | 76   | 72   | 73   | 73   | 73   | 75   | 81   |
| <b>14 petroleum products</b>         | 55   | 61   | 61   | 62   | 64   | 66   | 72   | 78   |
| <b>15 leather</b>                    | 55   | 64   | 65   | 67   | 69   | 71   | 69   | 76   |
| <b>16 stone,clay,glass</b>           | 64   | 69   | 70   | 70   | 72   | 74   | 79   | 87   |
| <b>17 primary metal</b>              | 62   | 65   | 66   | 68   | 71   | 72   | 73   | 78   |
| <b>18 fabricated metal</b>           | 61   | 64   | 64   | 66   | 69   | 70   | 71   | 77   |
| <b>19 Machinery</b>                  | 60   | 62   | 63   | 64   | 66   | 67   | 70   | 76   |
| <b>20 electrical machinery</b>       | 61   | 62   | 63   | 64   | 65   | 67   | 70   | 76   |
| <b>21 Motor</b>                      | 67   | 66   | 67   | 70   | 71   | 71   | 84   | 89   |
| <b>22 transportation equip.</b>      | 61   | 63   | 63   | 65   | 67   | 74   | 77   | 82   |
| <b>23 instrument</b>                 | 59   | 62   | 63   | 64   | 66   | 67   | 70   | 77   |
| <b>24 rubber</b>                     | 58   | 62   | 63   | 65   | 66   | 68   | 76   | 81   |
| <b>25 misc.manufacturing</b>         | 59   | 60   | 61   | 64   | 65   | 67   | 71   | 77   |
| <b>26 transportation</b>             | 57   | 62   | 63   | 65   | 67   | 71   | 74   | 81   |
| <b>27 communication</b>              | 60   | 60   | 61   | 62   | 64   | 66   | 69   | 76   |
| <b>28 electric utility</b>           | 53   | 57   | 58   | 57   | 60   | 63   | 69   | 77   |
| <b>29 gas utility</b>                | 61   | 57   | 60   | 60   | 62   | 65   | 70   | 76   |
| <b>30 trade</b>                      | 51   | 54   | 56   | 58   | 61   | 63   | 69   | 76   |
| <b>31 Finance and real estate</b>    | 46   | 51   | 52   | 54   | 58   | 61   | 68   | 75   |
| <b>32 other private service</b>      | 57   | 58   | 59   | 62   | 65   | 66   | 71   | 77   |
| <b>33 Public service</b>             | 61   | 62   | 63   | 64   | 67   | 74   | 73   | 79   |
|                                      | 59   | 61   | 62   | 64   | 67   | 69   | 73   | 79   |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|------|
| 86   | 90   | 95   | 100  | 104  | 107  | 112  | 116  | 119  |
| 83   | 88   | 93   | 100  | 104  | 107  | 113  | 117  | 121  |
| 84   | 88   | 93   | 100  | 104  | 108  | 112  | 116  | 123  |
| 83   | 88   | 99   | 100  | 103  | 104  | 108  | 112  | 116  |
| 86   | 89   | 94   | 100  | 103  | 104  | 107  | 110  | 113  |
| 85   | 89   | 96   | 100  | 103  | 103  | 106  | 109  | 111  |
| 79   | 84   | 91   | 100  | 104  | 108  | 113  | 118  | 124  |
| 78   | 84   | 92   | 100  | 105  | 108  | 113  | 119  | 124  |
| 82   | 88   | 93   | 100  | 104  | 105  | 109  | 113  | 117  |
| 82   | 88   | 92   | 100  | 104  | 107  | 111  | 116  | 120  |
| 79   | 85   | 92   | 100  | 104  | 105  | 109  | 114  | 118  |
| 79   | 85   | 92   | 100  | 104  | 105  | 110  | 115  | 119  |
| 84   | 87   | 91   | 100  | 102  | 108  | 114  | 119  | 125  |
| 83   | 87   | 93   | 100  | 103  | 105  | 110  | 114  | 118  |
| 81   | 86   | 93   | 100  | 105  | 108  | 113  | 117  | 122  |
| 91   | 93   | 96   | 100  | 102  | 105  | 108  | 111  | 114  |
| 83   | 88   | 93   | 100  | 102  | 105  | 108  | 112  | 116  |
| 82   | 87   | 92   | 100  | 102  | 103  | 107  | 110  | 113  |
| 81   | 86   | 92   | 100  | 101  | 100  | 103  | 106  | 108  |
| 81   | 86   | 92   | 100  | 101  | 100  | 102  | 104  | 106  |
| 92   | 95   | 95   | 100  | 103  | 106  | 109  | 112  | 114  |
| 87   | 90   | 94   | 100  | 102  | 102  | 105  | 107  | 110  |
| 82   | 87   | 93   | 100  | 103  | 103  | 105  | 107  | 109  |
| 85   | 88   | 92   | 100  | 102  | 107  | 112  | 117  | 121  |
| 82   | 87   | 92   | 100  | 103  | 106  | 110  | 115  | 118  |
| 86   | 89   | 94   | 100  | 103  | 106  | 109  | 113  | 115  |
| 81   | 86   | 93   | 100  | 103  | 106  | 109  | 112  | 115  |
| 83   | 87   | 93   | 100  | 104  | 108  | 113  | 117  | 123  |
| 82   | 86   | 93   | 100  | 104  | 107  | 111  | 116  | 122  |
| 82   | 87   | 94   | 100  | 104  | 108  | 113  | 117  | 120  |
| 82   | 86   | 93   | 100  | 105  | 109  | 115  | 119  | 125  |
| 82   | 86   | 92   | 100  | 104  | 108  | 113  | 118  | 123  |
| 84   | 89   | 98   | 100  | 103  | 105  | 109  | 113  | 116  |
| 84   | 88   | 93   | 100  | 103  | 105  | 108  | 112  | 115  |

**Table A-17 Price Index of Output by 33 Industries(Korea : 1984-2000)**

|                               | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|-------------------------------|------|------|------|------|------|------|------|------|
| 1 agriculture                 | 0.66 | 0.69 | 0.68 | 0.70 | 0.71 | 0.74 | 0.79 | 0.84 |
| 2 coal mining                 | 0.71 | 0.72 | 0.70 | 0.72 | 0.72 | 0.72 | 0.76 | 0.81 |
| 3 Metal non-metal             | 0.74 | 0.77 | 0.73 | 0.74 | 0.73 | 0.72 | 0.76 | 0.81 |
| 4 Oil and gas                 | 0.64 | 0.67 | 0.68 | 0.69 | 0.70 | 0.73 | 0.75 | 0.81 |
| 5 construction                | 0.65 | 0.67 | 0.66 | 0.67 | 0.69 | 0.70 | 0.75 | 0.82 |
| 6 food                        | 0.59 | 0.61 | 0.61 | 0.65 | 0.68 | 0.71 | 0.78 | 0.83 |
| 7 textile                     | 0.62 | 0.65 | 0.64 | 0.66 | 0.67 | 0.67 | 0.69 | 0.75 |
| 8 apparels                    | 0.53 | 0.55 | 0.57 | 0.60 | 0.61 | 0.63 | 0.65 | 0.72 |
| 9 lumber and wood             | 0.60 | 0.60 | 0.60 | 0.64 | 0.68 | 0.70 | 0.75 | 0.80 |
| 10 Furniture                  | 0.65 | 0.66 | 0.66 | 0.68 | 0.70 | 0.71 | 0.73 | 0.79 |
| 11 paper allied               | 0.62 | 0.65 | 0.65 | 0.65 | 0.66 | 0.66 | 0.68 | 0.75 |
| 12 printing,publishing,allied | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.65 | 0.68 | 0.74 |
| 13 chemicals                  | 0.79 | 0.82 | 0.76 | 0.76 | 0.75 | 0.74 | 0.76 | 0.82 |
| 14 petroleum products         | 0.66 | 0.71 | 0.74 | 0.76 | 0.78 | 0.80 | 0.85 | 0.91 |
| 15 leather                    | 0.58 | 0.67 | 0.68 | 0.69 | 0.71 | 0.72 | 0.71 | 0.77 |
| 16 stone,clay,glass           | 0.72 | 0.76 | 0.75 | 0.76 | 0.76 | 0.76 | 0.81 | 0.88 |
| 17 primary metal              | 0.66 | 0.69 | 0.69 | 0.70 | 0.72 | 0.73 | 0.74 | 0.79 |
| 18 fabricated metal           | 0.64 | 0.67 | 0.66 | 0.68 | 0.70 | 0.71 | 0.72 | 0.77 |
| 19 Machinery                  | 0.62 | 0.64 | 0.64 | 0.65 | 0.67 | 0.68 | 0.70 | 0.76 |
| 20 electrical machinery       | 0.63 | 0.64 | 0.64 | 0.65 | 0.66 | 0.68 | 0.70 | 0.77 |
| 21 Motor                      | 0.72 | 0.70 | 0.70 | 0.73 | 0.74 | 0.73 | 0.87 | 0.91 |
| 22 transportation equip.      | 0.64 | 0.66 | 0.65 | 0.68 | 0.70 | 0.77 | 0.79 | 0.84 |
| 23 instrument                 | 0.62 | 0.65 | 0.65 | 0.66 | 0.67 | 0.68 | 0.71 | 0.78 |
| 24 rubber                     | 0.63 | 0.67 | 0.66 | 0.68 | 0.68 | 0.70 | 0.76 | 0.82 |
| 25 misc.manufacturing         | 0.63 | 0.64 | 0.64 | 0.66 | 0.67 | 0.68 | 0.72 | 0.78 |
| 26 transportation             | 0.73 | 0.76 | 0.71 | 0.72 | 0.73 | 0.74 | 0.76 | 0.82 |
| 27 communication              | 0.67 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.71 | 0.77 |
| 28 electric utility           | 0.78 | 0.78 | 0.72 | 0.71 | 0.72 | 0.73 | 0.78 | 0.83 |
| 29 gas utility                | 0.86 | 0.90 | 0.88 | 0.86 | 0.82 | 0.80 | 0.82 | 0.87 |
| 30 trade                      | 0.62 | 0.64 | 0.63 | 0.64 | 0.65 | 0.66 | 0.70 | 0.77 |
| 31 Finance and real estate    | 0.52 | 0.57 | 0.57 | 0.58 | 0.61 | 0.63 | 0.69 | 0.76 |
| 32 other private service      | 0.65 | 0.69 | 0.67 | 0.69 | 0.69 | 0.70 | 0.72 | 0.78 |
| 33 Public service             | 0.69 | 0.69 | 0.69 | 0.69 | 0.71 | 0.77 | 0.75 | 0.81 |
| <b>Total</b>                  | 0.66 | 0.68 | 0.67 | 0.69 | 0.70 | 0.71 | 0.74 | 0.80 |



| <b>1992</b> | <b>1993</b> | <b>1994</b> | <b>1995</b> | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>Growth Rate(%)<br/>(1984-2000)</b> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------------|
| 0.87        | 0.90        | 0.95        | 1.00        | 1.04        | 1.07        | 1.12        | 1.17        | 1.21        | 3.83                                  |
| 0.85        | 0.89        | 0.94        | 1.00        | 1.04        | 1.08        | 1.13        | 1.18        | 1.22        | 3.41                                  |
| 0.86        | 0.89        | 0.93        | 1.00        | 1.04        | 1.08        | 1.13        | 1.17        | 1.24        | 3.29                                  |
| 0.85        | 0.89        | 0.99        | 1.00        | 1.03        | 1.05        | 1.09        | 1.12        | 1.17        | 3.81                                  |
| 0.87        | 0.90        | 0.94        | 1.00        | 1.03        | 1.04        | 1.08        | 1.11        | 1.15        | 3.53                                  |
| 0.85        | 0.89        | 0.96        | 1.00        | 1.03        | 1.04        | 1.06        | 1.09        | 1.12        | 4.11                                  |
| 0.80        | 0.85        | 0.92        | 1.00        | 1.04        | 1.08        | 1.13        | 1.19        | 1.24        | 4.36                                  |
| 0.78        | 0.84        | 0.92        | 1.00        | 1.05        | 1.08        | 1.13        | 1.19        | 1.24        | 5.32                                  |
| 0.83        | 0.88        | 0.93        | 1.00        | 1.04        | 1.05        | 1.10        | 1.14        | 1.18        | 4.23                                  |
| 0.83        | 0.88        | 0.92        | 1.00        | 1.04        | 1.07        | 1.12        | 1.16        | 1.21        | 3.92                                  |
| 0.80        | 0.85        | 0.92        | 1.00        | 1.04        | 1.05        | 1.10        | 1.14        | 1.19        | 4.10                                  |
| 0.80        | 0.85        | 0.92        | 1.00        | 1.04        | 1.05        | 1.11        | 1.15        | 1.19        | 4.22                                  |
| 0.85        | 0.87        | 0.92        | 1.00        | 1.02        | 1.08        | 1.14        | 1.20        | 1.26        | 3.00                                  |
| 0.93        | 0.93        | 0.97        | 1.00        | 1.01        | 1.03        | 1.05        | 1.06        | 1.08        | 3.38                                  |
| 0.82        | 0.87        | 0.93        | 1.00        | 1.05        | 1.08        | 1.13        | 1.17        | 1.22        | 4.57                                  |
| 0.92        | 0.93        | 0.96        | 1.00        | 1.02        | 1.05        | 1.09        | 1.13        | 1.17        | 3.09                                  |
| 0.84        | 0.88        | 0.93        | 1.00        | 1.02        | 1.05        | 1.09        | 1.13        | 1.17        | 3.53                                  |
| 0.83        | 0.87        | 0.93        | 1.00        | 1.02        | 1.04        | 1.08        | 1.11        | 1.15        | 3.63                                  |
| 0.81        | 0.86        | 0.92        | 1.00        | 1.01        | 1.01        | 1.04        | 1.07        | 1.09        | 3.52                                  |
| 0.82        | 0.86        | 0.92        | 1.00        | 1.01        | 1.00        | 1.02        | 1.05        | 1.07        | 3.31                                  |
| 0.93        | 0.96        | 0.96        | 1.00        | 1.03        | 1.06        | 1.09        | 1.12        | 1.15        | 2.97                                  |
| 0.88        | 0.91        | 0.94        | 1.00        | 1.02        | 1.03        | 1.05        | 1.08        | 1.12        | 3.38                                  |
| 0.83        | 0.87        | 0.93        | 1.00        | 1.03        | 1.04        | 1.06        | 1.09        | 1.11        | 3.63                                  |
| 0.86        | 0.88        | 0.92        | 1.00        | 1.02        | 1.07        | 1.12        | 1.17        | 1.22        | 4.11                                  |
| 0.83        | 0.87        | 0.92        | 1.00        | 1.03        | 1.06        | 1.11        | 1.15        | 1.19        | 3.94                                  |
| 0.86        | 0.89        | 0.93        | 1.00        | 1.03        | 1.07        | 1.11        | 1.16        | 1.20        | 3.09                                  |
| 0.82        | 0.87        | 0.94        | 1.00        | 1.04        | 1.06        | 1.10        | 1.13        | 1.16        | 3.48                                  |
| 0.88        | 0.90        | 0.94        | 1.00        | 1.03        | 1.08        | 1.11        | 1.16        | 1.21        | 2.74                                  |
| 0.91        | 0.92        | 0.96        | 1.00        | 1.02        | 1.05        | 1.07        | 1.10        | 1.11        | 1.82                                  |
| 0.83        | 0.87        | 0.93        | 1.00        | 1.04        | 1.08        | 1.13        | 1.18        | 1.21        | 4.16                                  |
| 0.83        | 0.87        | 0.93        | 1.00        | 1.05        | 1.09        | 1.15        | 1.20        | 1.25        | 5.33                                  |
| 0.83        | 0.87        | 0.93        | 1.00        | 1.04        | 1.08        | 1.14        | 1.19        | 1.24        | 4.07                                  |
| 0.85        | 0.89        | 0.98        | 1.00        | 1.03        | 1.06        | 1.11        | 1.14        | 1.18        | 3.36                                  |
| 0.85        | 0.88        | 0.94        | 1.00        | 1.03        | 1.06        | 1.10        | 1.14        | 1.18        | 3.70                                  |

**Table A-18 Price Index of Commodities from V-Table(Korea : 1984-2000)**

|                               | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|-------------------------------|------|------|------|------|------|------|------|------|
| 1 agriculture                 | 0.53 | 0.56 | 0.56 | 0.61 | 0.66 | 0.70 | 0.78 | 0.82 |
| 2 coal mining                 | 0.65 | 0.70 | 0.74 | 0.77 | 0.80 | 0.82 | 0.87 | 0.94 |
| 3 Metal non-metal             | 0.65 | 0.70 | 0.74 | 0.77 | 0.80 | 0.82 | 0.87 | 0.94 |
| 4 Oil and gas                 | 0.65 | 0.70 | 0.74 | 0.77 | 0.80 | 0.82 | 0.87 | 0.94 |
| 5 construction                | 0.45 | 0.47 | 0.48 | 0.49 | 0.53 | 0.58 | 0.67 | 0.78 |
| 6 food                        | 0.71 | 0.75 | 0.76 | 0.76 | 0.78 | 0.82 | 0.87 | 0.91 |
| 7 textile                     | 0.50 | 0.53 | 0.56 | 0.59 | 0.60 | 0.62 | 0.63 | 0.70 |
| 8 apparels                    | 0.50 | 0.53 | 0.56 | 0.59 | 0.60 | 0.62 | 0.63 | 0.70 |
| 9 lumber and wood             | 0.63 | 0.65 | 0.66 | 0.70 | 0.73 | 0.72 | 0.73 | 0.77 |
| 10 Furniture                  | 0.56 | 0.59 | 0.60 | 0.60 | 0.62 | 0.63 | 0.65 | 0.71 |
| 11 paper allied               | 0.56 | 0.59 | 0.60 | 0.60 | 0.62 | 0.63 | 0.65 | 0.71 |
| 12 printing,publishing,allied | 0.56 | 0.59 | 0.60 | 0.60 | 0.62 | 0.63 | 0.65 | 0.71 |
| 13 chemicals                  | 0.84 | 0.88 | 0.80 | 0.80 | 0.77 | 0.76 | 0.78 | 0.82 |
| 14 petroleum products         | 0.84 | 0.88 | 0.80 | 0.80 | 0.77 | 0.76 | 0.78 | 0.82 |
| 15 leather                    | 0.50 | 0.53 | 0.56 | 0.59 | 0.60 | 0.62 | 0.63 | 0.70 |
| 16 stone,clay,glass           | 0.78 | 0.80 | 0.80 | 0.79 | 0.80 | 0.81 | 0.89 | 1.01 |
| 17 primary metal              | 0.63 | 0.65 | 0.66 | 0.68 | 0.71 | 0.72 | 0.72 | 0.77 |
| 18 fabricated metal           | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 | 0.73 |
| 19 Machinery                  | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 | 0.73 |
| 20 electrical machinery       | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 | 0.73 |
| 21 Motor                      | 0.86 | 0.89 | 0.90 | 0.94 | 0.96 | 0.98 | 1.00 | 1.02 |
| 22 transportation equip.      | 0.86 | 0.89 | 0.90 | 0.94 | 0.96 | 0.98 | 1.00 | 1.02 |
| 23 instrument                 | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 | 0.73 |
| 24 rubber                     | 0.78 | 0.80 | 0.80 | 0.79 | 0.80 | 0.81 | 0.89 | 1.01 |
| 25 misc.manufacturing         | 0.56 | 0.59 | 0.60 | 0.60 | 0.62 | 0.63 | 0.65 | 0.71 |
| 26 transportation             | 0.61 | 0.65 | 0.65 | 0.66 | 0.68 | 0.68 | 0.72 | 0.78 |
| 27 communication              | 0.61 | 0.65 | 0.65 | 0.66 | 0.68 | 0.68 | 0.72 | 0.78 |
| 28 electric utility           | 1.00 | 1.06 | 1.03 | 1.00 | 0.94 | 0.88 | 0.85 | 0.88 |
| 29 gas utility                | 1.00 | 1.06 | 1.03 | 1.00 | 0.94 | 0.88 | 0.85 | 0.88 |
| 30 trade                      | 0.53 | 0.56 | 0.57 | 0.60 | 0.62 | 0.65 | 0.69 | 0.77 |
| 31 Finance and real estate    | 0.42 | 0.46 | 0.48 | 0.50 | 0.55 | 0.59 | 0.66 | 0.73 |
| 32 other private service      | 0.50 | 0.53 | 0.55 | 0.56 | 0.59 | 0.63 | 0.69 | 0.76 |
| 33 Public service             | 0.43 | 0.45 | 0.48 | 0.51 | 0.54 | 0.59 | 0.66 | 0.74 |
| <b>Total</b>                  | 0.57 | 0.59 | 0.60 | 0.63 | 0.65 | 0.67 | 0.72 | 0.78 |

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Growth Rate(%)<br>(1984-2000) |
|------|------|------|------|------|------|------|------|------|-------------------------------|
| 0.83 | 0.87 | 0.96 | 1.00 | 1.02 | 1.00 | 1.02 | 1.03 | 1.05 | 4.31                          |
| 0.95 | 0.94 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 3.36                          |
| 0.95 | 0.94 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 3.36                          |
| 0.95 | 0.94 | 0.99 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 3.36                          |
| 0.85 | 0.89 | 0.93 | 1.00 | 1.05 | 1.12 | 1.18 | 1.25 | 1.31 | 6.52                          |
| 0.93 | 0.95 | 0.98 | 1.00 | 1.07 | 1.09 | 1.13 | 1.17 | 1.21 | 3.48                          |
| 0.76 | 0.82 | 0.91 | 1.00 | 1.05 | 1.08 | 1.14 | 1.20 | 1.25 | 5.67                          |
| 0.76 | 0.82 | 0.91 | 1.00 | 1.05 | 1.08 | 1.14 | 1.20 | 1.25 | 5.67                          |
| 0.80 | 0.88 | 0.90 | 1.00 | 1.07 | 1.08 | 1.14 | 1.20 | 1.26 | 4.35                          |
| 0.77 | 0.83 | 0.91 | 1.00 | 1.04 | 1.04 | 1.08 | 1.12 | 1.16 | 4.52                          |
| 0.77 | 0.83 | 0.91 | 1.00 | 1.04 | 1.04 | 1.08 | 1.12 | 1.16 | 4.52                          |
| 0.77 | 0.83 | 0.91 | 1.00 | 1.04 | 1.04 | 1.08 | 1.12 | 1.16 | 4.52                          |
| 0.84 | 0.86 | 0.90 | 1.00 | 1.02 | 1.09 | 1.15 | 1.21 | 1.28 | 2.65                          |
| 0.84 | 0.86 | 0.90 | 1.00 | 1.02 | 1.09 | 1.15 | 1.21 | 1.28 | 2.65                          |
| 0.76 | 0.82 | 0.91 | 1.00 | 1.05 | 1.08 | 1.14 | 1.20 | 1.25 | 5.67                          |
| 1.05 | 1.01 | 0.98 | 1.00 | 1.03 | 1.06 | 1.08 | 1.11 | 1.13 | 2.35                          |
| 0.82 | 0.87 | 0.93 | 1.00 | 1.02 | 1.04 | 1.08 | 1.12 | 1.16 | 3.78                          |
| 0.78 | 0.84 | 0.91 | 1.00 | 1.00 | 0.95 | 0.97 | 0.98 | 1.00 | 3.15                          |
| 0.78 | 0.84 | 0.91 | 1.00 | 1.00 | 0.95 | 0.97 | 0.98 | 1.00 | 3.15                          |
| 0.78 | 0.84 | 0.91 | 1.00 | 1.00 | 0.95 | 0.97 | 0.98 | 1.00 | 3.15                          |
| 1.01 | 1.01 | 1.01 | 1.00 | 1.04 | 1.09 | 1.11 | 1.14 | 1.17 | 2.04                          |
| 1.01 | 1.01 | 1.01 | 1.00 | 1.04 | 1.09 | 1.11 | 1.14 | 1.17 | 2.04                          |
| 0.78 | 0.84 | 0.91 | 1.00 | 1.00 | 0.95 | 0.97 | 0.98 | 1.00 | 3.15                          |
| 1.05 | 1.01 | 0.98 | 1.00 | 1.03 | 1.06 | 1.08 | 1.11 | 1.13 | 2.35                          |
| 0.77 | 0.83 | 0.91 | 1.00 | 1.04 | 1.04 | 1.08 | 1.12 | 1.16 | 4.52                          |
| 0.83 | 0.89 | 0.95 | 1.00 | 1.00 | 1.01 | 1.03 | 1.06 | 1.08 | 3.66                          |
| 0.83 | 0.89 | 0.95 | 1.00 | 1.00 | 1.01 | 1.03 | 1.06 | 1.08 | 3.66                          |
| 0.94 | 0.95 | 0.97 | 1.00 | 1.04 | 1.09 | 1.13 | 1.17 | 1.21 | 1.47                          |
| 0.94 | 0.95 | 0.97 | 1.00 | 1.04 | 1.09 | 1.13 | 1.17 | 1.21 | 1.47                          |
| 0.84 | 0.88 | 0.94 | 1.00 | 1.04 | 1.08 | 1.12 | 1.17 | 1.21 | 5.15                          |
| 0.80 | 0.85 | 0.94 | 1.00 | 1.06 | 1.11 | 1.17 | 1.23 | 1.29 | 7.03                          |
| 0.84 | 0.89 | 0.94 | 1.00 | 1.08 | 1.14 | 1.21 | 1.27 | 1.34 | 6.28                          |
| 0.81 | 0.84 | 0.91 | 1.00 | 1.07 | 1.13 | 1.20 | 1.27 | 1.35 | 7.16                          |
| 0.84 | 0.88 | 0.93 | 1.00 | 1.04 | 1.07 | 1.12 | 1.16 | 1.21 | 3.94                          |

**Table A-19 Relative Price Index of Gross Output Deflators by 33 Industries (Korea : 1984-2000)**

|                                      | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   | 1990   | 1991   |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>1 agriculture</b>                 | 100.83 | 101.81 | 100.30 | 101.31 | 102.33 | 103.76 | 106.45 | 104.87 |
| <b>2 coal mining</b>                 | 107.92 | 106.00 | 104.59 | 104.38 | 102.95 | 100.67 | 101.67 | 100.60 |
| <b>3 Metal non-metal</b>             | 112.13 | 112.35 | 109.00 | 108.49 | 105.28 | 101.40 | 101.87 | 101.33 |
| <b>4 Oil and gas</b>                 | 97.56  | 98.34  | 100.33 | 100.50 | 100.99 | 103.32 | 100.76 | 100.74 |
| <b>5 construction</b>                | 99.45  | 97.77  | 97.70  | 97.96  | 98.42  | 98.36  | 100.27 | 102.37 |
| <b>6 food</b>                        | 89.23  | 89.56  | 90.57  | 94.22  | 98.14  | 100.50 | 104.98 | 103.36 |
| <b>7 textile</b>                     | 94.24  | 95.40  | 95.04  | 96.07  | 95.68  | 94.34  | 93.19  | 93.54  |
| <b>8 apparels</b>                    | 80.06  | 80.11  | 84.40  | 86.99  | 88.15  | 88.12  | 87.81  | 89.47  |
| <b>9 lumber and wood</b>             | 92.02  | 88.60  | 89.28  | 93.35  | 97.12  | 98.53  | 101.22 | 99.62  |
| <b>10 Furniture</b>                  | 98.41  | 96.69  | 97.96  | 98.94  | 99.93  | 99.47  | 98.28  | 98.50  |
| <b>11 paper allied</b>               | 94.01  | 95.89  | 96.16  | 94.39  | 94.02  | 93.24  | 92.01  | 92.86  |
| <b>12 printing,publishing,allied</b> | 93.09  | 91.64  | 92.20  | 91.57  | 92.25  | 91.88  | 91.21  | 92.27  |
| <b>13 chemicals</b>                  | 119.95 | 120.24 | 113.08 | 111.28 | 107.39 | 104.45 | 102.56 | 101.52 |
| <b>14 petroleum products</b>         | 100.34 | 104.33 | 109.21 | 111.08 | 111.54 | 112.74 | 113.99 | 113.64 |
| <b>15 leather</b>                    | 88.31  | 98.37  | 100.56 | 99.82  | 101.26 | 101.93 | 94.77  | 95.47  |
| <b>16 stone,clay,glass</b>           | 109.74 | 111.32 | 111.62 | 110.09 | 108.88 | 107.31 | 108.55 | 109.92 |
| <b>17 primary metal</b>              | 101.30 | 101.00 | 102.33 | 102.33 | 103.87 | 102.91 | 99.32  | 98.22  |
| <b>18 fabricated metal</b>           | 97.59  | 97.57  | 98.62  | 99.19  | 100.32 | 99.67  | 96.76  | 96.24  |
| <b>19 Machinery</b>                  | 94.70  | 93.34  | 95.19  | 95.00  | 95.63  | 95.78  | 94.65  | 95.13  |
| <b>20 electrical machinery</b>       | 96.00  | 94.30  | 95.41  | 94.83  | 94.91  | 95.13  | 94.61  | 96.05  |
| <b>21 Motor</b>                      | 109.09 | 102.08 | 103.64 | 105.67 | 106.37 | 102.36 | 116.49 | 113.56 |
| <b>22 transportation equip.</b>      | 98.04  | 96.09  | 97.09  | 98.54  | 99.71  | 108.72 | 105.51 | 104.72 |
| <b>23 instrument</b>                 | 93.91  | 95.95  | 97.11  | 96.41  | 96.13  | 96.20  | 95.52  | 97.07  |
| <b>24 rubber</b>                     | 96.45  | 98.85  | 97.67  | 98.39  | 97.60  | 97.85  | 102.60 | 102.50 |
| <b>25 misc.manufacturing</b>         | 96.24  | 93.89  | 94.76  | 96.03  | 96.08  | 95.87  | 96.40  | 97.55  |
| <b>26 transportation</b>             | 111.32 | 111.77 | 106.06 | 105.40 | 104.07 | 104.31 | 102.62 | 102.11 |
| <b>27 communication</b>              | 101.76 | 100.10 | 101.48 | 99.43  | 98.56  | 97.53  | 94.98  | 95.90  |
| <b>28 electric utility</b>           | 119.44 | 114.47 | 107.22 | 103.44 | 102.71 | 102.90 | 105.23 | 103.70 |
| <b>29 gas utility</b>                | 130.38 | 132.57 | 130.66 | 125.16 | 118.17 | 112.69 | 110.09 | 107.83 |
| <b>30 trade</b>                      | 93.85  | 93.37  | 93.98  | 93.31  | 93.51  | 93.30  | 94.64  | 95.90  |
| <b>31 Finance and real estate</b>    | 79.46  | 83.90  | 85.02  | 85.10  | 86.95  | 88.45  | 92.61  | 95.08  |
| <b>32 other private service</b>      | 98.68  | 100.92 | 99.99  | 100.24 | 99.58  | 97.91  | 97.29  | 97.48  |
| <b>33 Public service</b>             | 104.50 | 101.39 | 101.77 | 101.09 | 101.50 | 108.37 | 101.09 | 100.91 |
| <b>Total</b>                         | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

| 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 102.53 | 101.84 | 101.45 | 100.00 | 101.10 | 101.46 | 102.22 | 102.32 | 102.37 |
| 100.32 | 100.84 | 100.00 | 100.00 | 101.10 | 101.73 | 103.03 | 103.48 | 103.78 |
| 101.38 | 100.55 | 99.70  | 100.00 | 100.61 | 102.18 | 102.59 | 103.03 | 105.47 |
| 100.75 | 100.73 | 105.68 | 100.00 | 99.88  | 99.24  | 99.12  | 98.63  | 98.85  |
| 102.94 | 101.38 | 99.98  | 100.00 | 99.66  | 98.71  | 98.26  | 97.77  | 97.24  |
| 100.57 | 100.82 | 102.20 | 100.00 | 100.27 | 98.12  | 96.74  | 95.88  | 94.71  |
| 94.46  | 96.00  | 97.82  | 100.00 | 100.49 | 101.78 | 103.05 | 104.13 | 105.45 |
| 92.14  | 95.17  | 97.95  | 100.00 | 101.64 | 101.92 | 103.10 | 104.22 | 105.16 |
| 97.49  | 99.37  | 99.79  | 100.00 | 100.72 | 99.30  | 99.98  | 99.78  | 100.33 |
| 98.23  | 100.02 | 97.95  | 100.00 | 101.15 | 100.89 | 101.43 | 101.98 | 102.21 |
| 94.49  | 96.71  | 98.24  | 100.00 | 100.71 | 99.40  | 99.87  | 100.29 | 100.53 |
| 94.11  | 96.13  | 98.07  | 100.00 | 100.80 | 99.62  | 100.58 | 101.04 | 101.10 |
| 99.96  | 98.82  | 97.81  | 100.00 | 99.22  | 102.21 | 103.68 | 105.00 | 106.44 |
| 109.64 | 105.02 | 103.84 | 100.00 | 98.08  | 97.09  | 95.05  | 93.19  | 91.42  |
| 96.53  | 98.16  | 99.17  | 100.00 | 101.49 | 101.85 | 102.49 | 103.03 | 103.84 |
| 108.58 | 105.18 | 102.03 | 100.00 | 99.26  | 99.51  | 99.42  | 99.19  | 98.91  |
| 99.04  | 99.62  | 99.43  | 100.00 | 98.88  | 99.33  | 99.08  | 99.12  | 99.07  |
| 97.49  | 98.40  | 98.83  | 100.00 | 98.76  | 98.10  | 97.75  | 97.47  | 97.14  |
| 96.26  | 97.44  | 98.45  | 100.00 | 98.22  | 95.47  | 94.54  | 93.69  | 92.77  |
| 97.11  | 97.90  | 98.60  | 100.00 | 98.11  | 94.68  | 93.07  | 91.94  | 90.91  |
| 110.43 | 108.27 | 102.04 | 100.00 | 99.92  | 100.10 | 99.30  | 98.59  | 97.54  |
| 104.01 | 103.05 | 100.06 | 100.00 | 98.85  | 97.19  | 95.68  | 94.89  | 94.74  |
| 98.16  | 98.56  | 98.97  | 100.00 | 99.68  | 98.02  | 96.21  | 95.58  | 94.17  |
| 101.21 | 100.00 | 98.31  | 100.00 | 99.16  | 101.20 | 101.99 | 102.75 | 103.65 |
| 98.39  | 98.43  | 98.65  | 100.00 | 100.24 | 100.45 | 100.73 | 101.12 | 100.83 |
| 101.29 | 100.47 | 99.48  | 100.00 | 99.57  | 101.20 | 100.92 | 101.35 | 101.33 |
| 97.35  | 98.62  | 99.88  | 100.00 | 100.29 | 100.43 | 99.69  | 99.34  | 98.39  |
| 103.65 | 101.96 | 100.53 | 100.00 | 99.98  | 101.97 | 101.33 | 101.77 | 102.86 |
| 107.03 | 104.21 | 102.52 | 100.00 | 99.14  | 99.63  | 97.61  | 96.20  | 94.45  |
| 97.64  | 98.52  | 99.82  | 100.00 | 100.92 | 102.11 | 103.16 | 103.66 | 102.97 |
| 97.77  | 98.41  | 99.63  | 100.00 | 101.60 | 103.14 | 104.35 | 105.05 | 106.17 |
| 98.34  | 98.43  | 98.88  | 100.00 | 100.74 | 102.18 | 103.44 | 104.25 | 104.95 |
| 100.71 | 100.95 | 104.25 | 100.00 | 99.77  | 99.80  | 100.58 | 100.25 | 100.24 |
| 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

**Table A-20. Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

Gross Output 1983

| Sector | 1       | 2      | 3      | 4 | 5       | 6       | 7       | 8       | 9      | 10    | 11     | 12     | 13      | 14      | 15     | 16     |
|--------|---------|--------|--------|---|---------|---------|---------|---------|--------|-------|--------|--------|---------|---------|--------|--------|
| 1      | 1230083 | 28952  | 1208   | 1 | 4471    | 7538931 | 607105  | 9       | 196825 | 21259 | 20186  | 27     | 8778    | 4       | 6103   | 319    |
| 2      | 8899    | 21     | 1044   | 1 | 323     | 512     | 728     | 59      | 3048   | 1     | 468    | 33     | 4343    | 821836  | 104    | 187682 |
| 3      | 2405    | 1      | 4      | 1 | 123072  | 9443    | 38      | 1       | 1      | 1     | 11494  | 1      | 152810  | 77      | 88     | 342286 |
| 4      | 1       | 1      | 1      | 1 | 1       | 1       | 1       | 1       | 1      | 1     | 1      | 1      | 1       | 5758919 | 1      | 1      |
| 5      | 34199   | 667    | 1273   | 1 | 17389   | 2418    | 4084    | 19730   | 287    | 176   | 343    | 344    | 5883    | 1839    | 225    | 2247   |
| 6      | 1186814 | 1      | 1      | 1 | 16      | 1907692 | 1152    | 1       | 1715   | 64    | 4141   | 11     | 140050  | 97      | 200607 | 253    |
| 7      | 30402   | 146    | 569    | 1 | 11744   | 4449    | 2676034 | 1105774 | 485    | 3053  | 19673  | 2535   | 56431   | 478     | 41664  | 4966   |
| 8      | 1420    | 1      | 87     | 1 | 123     | 580     | 10030   | 22148   | 1      | 15    | 26     | 171    | 423     | 102     | 1075   | 128    |
| 9      | 863     | 1      | 5      | 1 | 262628  | 1053    | 357     | 1241    | 906    | 67613 | 562    | 10     | 268     | 188     | 165    | 562    |
| 10     | 19387   | 1      | 222    | 1 | 40124   | 8713    | 2951    | 9       | 1      | 4349  | 284    | 36     | 190     | 8       | 172    | 362    |
| 11     | 9211    | 230    | 1261   | 1 | 35505   | 190040  | 25670   | 15415   | 2823   | 4478  | 853724 | 355265 | 68179   | 188     | 9240   | 46796  |
| 12     | 2400    | 2237   | 1137   | 1 | 18208   | 21683   | 6496    | 6290    | 193    | 702   | 7096   | 55452  | 8707    | 1869    | 2261   | 4566   |
| 13     | 690010  | 17729  | 12847  | 1 | 260694  | 321203  | 1373298 | 29373   | 46806  | 28779 | 96120  | 78331  | 3682066 | 29350   | 92854  | 82607  |
| 14     | 281728  | 12400  | 31423  | 1 | 318570  | 202335  | 120998  | 17453   | 4708   | 6353  | 76360  | 17232  | 700874  | 404397  | 15035  | 215557 |
| 15     | 8       | 1      | 39     | 1 | 26      | 1286    | 3023    | 3723    | 65     | 836   | 262    | 207    | 10243   | 82      | 461743 | 255    |
| 16     | 5031    | 1536   | 679    | 1 | 1738414 | 99603   | 5348    | 691     | 528    | 9182  | 9538   | 193    | 125128  | 860     | 1255   | 406779 |
| 17     | 1391    | 14658  | 3896   | 1 | 1209163 | 4208    | 7232    | 682     | 696    | 2510  | 24242  | 19173  | 25944   | 6251    | 1305   | 42748  |
| 18     | 24399   | 4987   | 3254   | 1 | 685342  | 110657  | 13978   | 5732    | 1600   | 12179 | 5179   | 1149   | 91248   | 19164   | 7093   | 29772  |
| 19     | 15214   | 7866   | 9491   | 1 | 198676  | 26627   | 54523   | 4331    | 1310   | 2884  | 7289   | 1641   | 26780   | 9214    | 3616   | 21886  |
| 20     | 5318    | 12039  | 1718   | 1 | 528423  | 6745    | 6223    | 1530    | 709    | 393   | 2493   | 306    | 8371    | 4808    | 821    | 7871   |
| 21     | 873     | 7045   | 6462   | 1 | 19519   | 26435   | 7420    | 3034    | 826    | 2255  | 5096   | 5329   | 12488   | 2919    | 1572   | 12436  |
| 22     | 26373   | 102    | 78     | 1 | 20888   | 376     | 156     | 244     | 9      | 46    | 97     | 59     | 134     | 220     | 59     | 244    |
| 23     | 205     | 1      | 14     | 1 | 6369    | 854     | 630     | 77      | 11     | 45    | 146    | 28     | 1857    | 87      | 35     | 322    |
| 24     | 10017   | 1888   | 2271   | 1 | 9051    | 11514   | 16645   | 3169    | 376    | 20183 | 5485   | 602    | 15244   | 1670    | 12368  | 7159   |
| 25     | 10260   | 17     | 60     | 1 | 3612    | 38144   | 11658   | 40159   | 116    | 207   | 1336   | 283    | 10416   | 162     | 29593  | 466    |
| 26     | 74779   | 4394   | 4925   | 1 | 452341  | 182841  | 88996   | 25857   | 8008   | 7554  | 29998  | 20722  | 168141  | 144405  | 22268  | 137836 |
| 27     | 8728    | 2475   | 2987   | 1 | 47793   | 34734   | 25194   | 8609    | 637    | 3406  | 7657   | 14785  | 25390   | 5295    | 4398   | 14657  |
| 28     | 3721    | 52582  | 25448  | 1 | 53791   | 141257  | 248160  | 21564   | 14551  | 6648  | 65261  | 11545  | 463993  | 28251   | 12454  | 239964 |
| 29     | 2220    | 377    | 1263   | 1 | 5109    | 23547   | 15350   | 7405    | 2750   | 2400  | 4572   | 2025   | 30529   | 2911    | 1685   | 3447   |
| 30     | 161801  | 15418  | 8866   | 1 | 640853  | 501874  | 154282  | 85464   | 18473  | 34147 | 79282  | 37542  | 509025  | 23620   | 100864 | 76527  |
| 31     | 107674  | 15407  | 10820  | 1 | 274645  | 112643  | 181522  | 53043   | 16961  | 9298  | 39871  | 19529  | 160849  | 60449   | 27786  | 78486  |
| 32     | 41137   | 5602   | 6752   | 1 | 450782  | 179749  | 77556   | 32695   | 2527   | 15456 | 21175  | 31491  | 113047  | 24776   | 23136  | 27018  |
| 33     | 22792   | 1      | 1      | 1 | 1       | 1       | 1       | 1       | 1      | 1     | 1      | 1      | 1       | 1       | 1      | 1      |
| wL     | 1272517 | 220161 | 253330 | 1 | 2983705 | 843876  | 928865  | 367874  | 36844  | 53192 | 187064 | 255711 | 795295  | 158404  | 216335 | 388231 |
| rK     | 8072682 | 133905 | 154227 | 1 | 2597592 | 3072733 | 831738  | 128423  | 27385  | 70340 | 227798 | 128070 | 1545854 | 1199793 | 62151  | 509949 |

Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

Gross Output 1983

| 17      | 18      | 19     | 20      | 21     | 22     | 23     | 24     | 25     | 26      | 27     | 28      | 29     | 30      | 31      | 32      | 33      |
|---------|---------|--------|---------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|---------|---------|---------|
| 337     | 625     | 178    | 66      | 52     | 188    | 40     | 202393 | 8944   | 198     | 1      | 1       | 14     | 7812    | 818     | 16978   | 47677   |
| 11083   | 1113    | 1193   | 636     | 211    | 57     | 81     | 355    | 454    | 37      | 1      | 133396  | 1      | 2580    | 84      | 3802    | 68645   |
| 465343  | 1479    | 1089   | 4786    | 684    | 70     | 351    | 121    | 1158   | 4969    | 1      | 1       | 1      | 1       | 1       | 982     | 95      |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1       |
| 31779   | 520     | 3410   | 4922    | 2556   | 4308   | 469    | 1107   | 1622   | 9004    | 5047   | 21602   | 2816   | 78557   | 417136  | 64267   | 318133  |
| 14      | 34      | 8      | 508     | 1      | 2      | 1      | 1      | 4639   | 1       | 1      | 1       | 1      | 1620    | 1       | 206     | 2733    |
| 1117    | 6531    | 4880   | 10440   | 6279   | 2718   | 1066   | 156643 | 160385 | 18835   | 858    | 85      | 69     | 17845   | 2756    | 17077   | 5830    |
| 540     | 89      | 90     | 180     | 56     | 29     | 12     | 42     | 1081   | 6339    | 711    | 27      | 277    | 519     | 1       | 4262    | 78      |
| 236     | 16747   | 2259   | 10854   | 737    | 1928   | 69     | 181    | 2234   | 1078    | 1      | 1       | 1      | 2498    | 3962    | 4670    | 643     |
| 1336    | 700     | 170    | 1344    | 50     | 1232   | 23     | 35     | 1480   | 1291    | 2      | 1       | 8      | 16088   | 1008    | 27051   | 207     |
| 1587    | 10868   | 2841   | 59595   | 2082   | 4222   | 737    | 21468  | 16523  | 4868    | 320    | 57      | 1296   | 204095  | 2298    | 23515   | 237     |
| 4316    | 5972    | 5711   | 11946   | 1234   | 4751   | 917    | 4421   | 10325  | 23138   | 13915  | 3093    | 2057   | 61896   | 51835   | 382294  | 85640   |
| 83235   | 100772  | 56880  | 426523  | 49749  | 70153  | 22693  | 220205 | 240224 | 27591   | 383    | 44457   | 24788  | 55772   | 3915    | 472701  | 82074   |
| 563848  | 69115   | 56253  | 70476   | 26900  | 47253  | 4954   | 32019  | 27836  | 2207075 | 23581  | 1561858 | 47683  | 620070  | 92703   | 258220  | 317580  |
| 1101    | 681     | 479    | 259     | 3284   | 194    | 62     | 47181  | 101321 | 188     | 402    | 1       | 54     | 116     | 1       | 1       | 350     |
| 135113  | 15372   | 13726  | 141351  | 12960  | 12731  | 6513   | 1004   | 23900  | 19020   | 4304   | 135     | 342    | 15284   | 3167    | 12959   | 4879    |
| 4502321 | 1187537 | 517975 | 574708  | 309687 | 413184 | 28214  | 5438   | 93242  | 10008   | 101    | 125     | 6696   | 13803   | 3828    | 10428   | 58977   |
| 41465   | 120588  | 104026 | 69966   | 36408  | 84013  | 9628   | 9749   | 34098  | 37509   | 888    | 3735    | 1220   | 51504   | 6933    | 18918   | 49565   |
| 108391  | 107850  | 864560 | 55863   | 241496 | 275702 | 4415   | 7322   | 5614   | 18277   | 1643   | 18671   | 4212   | 33300   | 4193    | 64675   | 214724  |
| 30978   | 13130   | 135354 | 2212806 | 36147  | 370010 | 22814  | 1312   | 13967  | 40667   | 24993  | 39042   | 2256   | 22827   | 15387   | 83880   | 136040  |
| 6495    | 5473    | 14750  | 8305    | 523564 | 13709  | 859    | 1903   | 3961   | 123500  | 1      | 2889    | 1      | 14355   | 5931    | 52704   | 109584  |
| 1623    | 74      | 1712   | 10084   | 122    | 216014 | 725    | 74     | 38     | 76986   | 27187  | 11      | 33     | 3463    | 771     | 25333   | 730757  |
| 668     | 641     | 14932  | 10289   | 731    | 6644   | 165959 | 194    | 354    | 1511    | 111    | 596     | 630    | 1106    | 550     | 48383   | 6820    |
| 2218    | 4688    | 35274  | 18310   | 39627  | 9940   | 790    | 31672  | 11783  | 124050  | 76     | 584     | 129    | 3489    | 365     | 14118   | 3648    |
| 381     | 1250    | 1440   | 24508   | 970    | 380    | 198    | 3706   | 63912  | 18420   | 42     | 1       | 11     | 35174   | 2806    | 50273   | 2490    |
| 136233  | 55663   | 63532  | 88956   | 29092  | 44000  | 5738   | 34492  | 25058  | 708023  | 33149  | 32859   | 1896   | 269219  | 61345   | 68540   | 81466   |
| 13514   | 13559   | 22000  | 33283   | 7729   | 11162  | 2642   | 4411   | 11442  | 74957   | 73335  | 5873    | 1521   | 468711  | 70697   | 126321  | 83707   |
| 383640  | 72371   | 66238  | 89426   | 53306  | 49748  | 9613   | 35424  | 25988  | 75389   | 23816  | 24970   | 111660 | 302617  | 99285   | 185725  | 87440   |
| 10148   | 3878    | 7636   | 16200   | 1636   | 1811   | 1153   | 1754   | 7060   | 5222    | 1051   | 836     | 1141   | 27729   | 6265    | 14739   | 5824    |
| 195230  | 185355  | 214729 | 396968  | 39465  | 151313 | 41230  | 81493  | 108862 | 199852  | 14006  | 51009   | 6778   | 457739  | 21011   | 193661  | 98332   |
| 127775  | 55277   | 67390  | 115975  | 47572  | 59713  | 13839  | 35371  | 51639  | 225802  | 5932   | 72924   | 6187   | 654855  | 469789  | 294428  | 62253   |
| 31857   | 45577   | 37628  | 105813  | 20563  | 45012  | 5477   | 16638  | 39447  | 128278  | 12989  | 3761    | 8669   | 264814  | 214505  | 414578  | 143006  |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 49475   | 1      | 1       | 1      | 1       | 1       | 1       | 1       |
| 419201  | 406190  | 521412 | 677062  | 266061 | 516454 | 77618  | 292470 | 245259 | 2156046 | 444891 | 357198  | 41360  | 2159415 | 1763928 | 4774222 | 2960308 |
| 777128  | 276884  | 479780 | 984265  | 501509 | 439964 | 61139  | 162626 | 298323 | 2264702 | 847813 | 1374366 | 77993  | 5820536 | 3641312 | 2205268 | 91154   |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1984**

| Sector | 1       | 2      | 3      | 4 | 5       | 6       | 7       | 8       | 9      | 10     | 11     | 12     | 13      | 14      | 15     | 16     |
|--------|---------|--------|--------|---|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|--------|--------|
| 1      | 1380828 | 32724  | 1478   | 0 | 3653    | 8578461 | 725233  | 12      | 346403 | 23306  | 23378  | 32     | 10442   | 5       | 5328   | 370    |
| 2      | 10280   | 24     | 1315   | 0 | 272     | 600     | 894     | 81      | 5519   | 1      | 557    | 39     | 5316    | 943171  | 94     | 224201 |
| 3      | 2813    | 1      | 6      | 0 | 104784  | 11197   | 47      | 1       | 2      | 1      | 13872  | 1      | 189442  | 90      | 80     | 414082 |
| 4      | 1       | 1      | 1      | 0 | 1       | 1       | 1       | 1       | 2      | 1      | 1      | 1      | 1       | 5876757 | 1      | 1      |
| 5      | 39146   | 768    | 1588   | 0 | 14486   | 2805    | 4975    | 27006   | 515    | 197    | 405    | 407    | 7136    | 2091    | 200    | 2660   |
| 6      | 1324692 | 1      | 1      | 0 | 13      | 2158415 | 1368    | 1       | 3002   | 70     | 4768   | 13     | 165657  | 107     | 174153 | 292    |
| 7      | 35577   | 172    | 726    | 0 | 10002   | 5278    | 3332460 | 1547342 | 890    | 3489   | 23751  | 3067   | 69980   | 555     | 37921  | 6010   |
| 8      | 928     | 1      | 62     | 0 | 58      | 384     | 6974    | 17305   | 1      | 10     | 18     | 115    | 293     | 66      | 546    | 87     |
| 9      | 1619    | 2      | 11     | 0 | 358697  | 2003    | 712     | 2785    | 2666   | 123918 | 1089   | 19     | 532     | 351     | 241    | 1091   |
| 10     | 15747   | 1      | 196    | 0 | 23720   | 7174    | 2551    | 8       | 1      | 3450   | 238    | 30     | 164     | 6       | 109    | 304    |
| 11     | 10396   | 261    | 1551   | 0 | 29166   | 217430  | 30833   | 20805   | 4996   | 4936   | 994149 | 414577 | 81550   | 211     | 8112   | 54620  |
| 12     | 2752    | 2582   | 1420   | 0 | 15192   | 25197   | 7925    | 8622    | 346    | 785    | 8392   | 65726  | 10579   | 2128    | 2016   | 5413   |
| 13     | 812731  | 21026  | 16494  | 0 | 223474  | 383500  | 1721333 | 41371   | 86434  | 33105  | 116805 | 95389  | 4595969 | 34345   | 85064  | 100618 |
| 14     | 285645  | 12659  | 34728  | 0 | 235075  | 207951  | 130552  | 21160   | 7484   | 6290   | 79876  | 18064  | 753060  | 407345  | 11856  | 226009 |
| 15     | 12      | 2      | 67     | 0 | 30      | 2042    | 5041    | 6977    | 160    | 1280   | 424    | 335    | 17013   | 127     | 562875 | 412    |
| 16     | 5492    | 1688   | 807    | 0 | 1380993 | 110204  | 6212    | 901     | 903    | 9788   | 10741  | 217    | 144738  | 933     | 1066   | 459155 |
| 17     | 1517    | 16099  | 4632   | 0 | 959947  | 4653    | 8395    | 889     | 1190   | 2674   | 27282  | 21623  | 29991   | 6774    | 1107   | 48221  |
| 18     | 26554   | 5465   | 3860   | 0 | 542844  | 122078  | 16189   | 7459    | 2730   | 12945  | 5815   | 1292   | 105239  | 20721   | 6004   | 33508  |
| 19     | 16612   | 8648   | 11296  | 0 | 157885  | 29472   | 63355   | 5655    | 2242   | 3076   | 8212   | 1853   | 30989   | 9996    | 3071   | 24713  |
| 20     | 6934    | 15804  | 2442   | 0 | 501391  | 8914    | 8634    | 2386    | 1449   | 500    | 3353   | 412    | 11566   | 6228    | 833    | 10612  |
| 21     | 922     | 7490   | 7437   | 0 | 15001   | 28296   | 8338    | 3832    | 1367   | 2325   | 5551   | 5818   | 13975   | 3063    | 1291   | 13580  |
| 22     | 22702   | 89     | 73     | 0 | 13086   | 328     | 142     | 251     | 12     | 38     | 86     | 52     | 122     | 188     | 39     | 217    |
| 23     | 290     | 1      | 22     | 0 | 6580    | 1228    | 951     | 131     | 24     | 62     | 213    | 42     | 2793    | 123     | 38     | 473    |
| 24     | 12158   | 2307   | 3004   | 0 | 7995    | 14165   | 21498   | 4600    | 716    | 23923  | 6868   | 755    | 19607   | 2013    | 11676  | 8985   |
| 25     | 9255    | 16     | 59     | 0 | 2371    | 34880   | 11192   | 43321   | 165    | 182    | 1243   | 264    | 9958    | 145     | 20763  | 434    |
| 26     | 81004   | 4793   | 5815   | 0 | 356613  | 200768  | 102590  | 33493   | 13600  | 7991   | 33525  | 23208  | 193016  | 155406  | 18761  | 154403 |
| 27     | 9959    | 2844   | 3714   | 0 | 39687   | 40172   | 30590   | 11745   | 1140   | 3796   | 9013   | 17441  | 30700   | 6001    | 3903   | 17293  |
| 28     | 3893    | 55401  | 29026  | 0 | 40966   | 149833  | 276339  | 26983   | 23872  | 6793   | 70455  | 12490  | 514526  | 29369   | 10136  | 259666 |
| 29     | 2685    | 460    | 1665   | 0 | 4498    | 28876   | 19761   | 10712   | 5215   | 2836   | 5707   | 2533   | 39140   | 3498    | 1585   | 4312   |
| 30     | 167569  | 16078  | 10009  | 0 | 483033  | 526867  | 170034  | 105840  | 29995  | 34537  | 84711  | 40198  | 558657  | 24302   | 81246  | 81958  |
| 31     | 171985  | 24779  | 18837  | 0 | 319269  | 182381  | 308544  | 101312  | 42475  | 14504  | 65704  | 32251  | 272264  | 95923   | 34519  | 129640 |
| 32     | 28930   | 3967   | 5176   | 0 | 230724  | 128139  | 58042   | 27495   | 2786   | 10616  | 15364  | 22897  | 84251   | 17311   | 12655  | 19649  |
| 33     | 17029   | 1      | 1      | 0 | 1       | 1       | 1       | 1       | 1      | 1      | 1      | 1      | 1       | 1       | 1      | 1      |
| wL     | 1447588 | 252176 | 314121 | 0 | 2470261 | 973094  | 1124457 | 500421  | 65712  | 59095  | 219547 | 300750 | 958747  | 179022  | 191408 | 456709 |
| rK     | 9061129 | 151337 | 188692 | 0 | 2121977 | 3496100 | 993481  | 172371  | 48192  | 77107  | 263796 | 148623 | 1838768 | 1337918 | 54258  | 591915 |

Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)



### Gross Output 1984

|         |         |        |         |        |        |        |        |        |         |         |         |        |         |         |         |         |
|---------|---------|--------|---------|--------|--------|--------|--------|--------|---------|---------|---------|--------|---------|---------|---------|---------|
| 17      | 18      | 19     | 20      | 21     | 22     | 23     | 24     | 25     | 26      | 27      | 28      | 29     | 30      | 31      | 32      | 33      |
| 398     | 728     | 209    | 82      | 66     | 206    | 49     | 267613 | 10251  | 222     | 1       | 1       | 18     | 9082    | 1247    | 18674   | 52897   |
| 13449   | 1333    | 1436   | 809     | 276    | 64     | 102    | 482    | 535    | 43      | 1       | 156746  | 1      | 3086    | 131     | 4304    | 78375   |
| 571889  | 1794    | 1327   | 6160    | 906    | 80     | 449    | 166    | 1384   | 5814    | 1       | 1       | 1      | 1       | 2       | 1126    | 109     |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 1       | 1       | 1       | 1      | 1       | 1       | 1       | 1       |
| 38214   | 617     | 4065   | 6199    | 3311   | 4820   | 586    | 1493   | 1895   | 10309   | 6360    | 25152   | 3596   | 93118   | 648399  | 72081   | 359914  |
| 17      | 39      | 9      | 624     | 1      | 2      | 1      | 1      | 5286   | 1       | 1       | 1       | 1      | 1872    | 2       | 225     | 3015    |
| 1373    | 7926    | 5949   | 13444   | 8314   | 3109   | 1362   | 215914 | 191631 | 22045   | 1106    | 101     | 89     | 21625   | 4380    | 19581   | 6743    |
| 370     | 60      | 61     | 129     | 41     | 19     | 9      | 33     | 721    | 4142    | 512     | 18      | 202    | 351     | 1       | 2729    | 51      |
| 465     | 32591   | 4416   | 22415   | 1566   | 3537   | 140    | 399    | 4281   | 2023    | 2       | 2       | 2      | 4855    | 10098   | 8588    | 1192    |
| 1140    | 590     | 144    | 1202    | 46     | 978    | 20     | 33     | 1228   | 1049    | 2       | 1       | 7      | 13532   | 1112    | 21530   | 166     |
| 1882    | 12720   | 3340   | 74019   | 2659   | 4658   | 909    | 28542  | 19042  | 5496    | 397     | 65      | 1633   | 238556  | 3522    | 26007   | 265     |
| 5198    | 7100    | 6820   | 15071   | 1601   | 5324   | 1148   | 5970   | 12085  | 26531   | 17565   | 3607    | 2631   | 73483   | 80698   | 429443  | 97039   |
| 102993  | 123086  | 69788  | 552825  | 66308  | 80767  | 29180  | 305510 | 288898 | 32503   | 496     | 53265   | 32578  | 68027   | 6263    | 545556  | 95547   |
| 600574  | 72668   | 59411  | 78631   | 30863  | 46829  | 5483   | 38240  | 28817  | 2238147 | 26325   | 1610806 | 53946  | 651050  | 127639  | 256535  | 318252  |
| 1812    | 1107    | 781    | 447     | 5824   | 297    | 106    | 87103  | 162143 | 295     | 694     | 2       | 95     | 189     | 2       | 2       | 542     |
| 154932  | 17400   | 15606  | 169780  | 16008  | 13582  | 7760   | 1291   | 26636  | 20765   | 5172    | 150     | 416    | 17277   | 4695    | 13860   | 5264    |
| 5159434 | 1343331 | 588563 | 689856  | 382270 | 440551 | 33598  | 6987   | 103850 | 10919   | 121     | 139     | 8151   | 15592   | 5671    | 11146   | 63586   |
| 47408   | 136096  | 117932 | 83793   | 44838  | 89372  | 11439  | 12498  | 37890  | 40829   | 1064    | 4135    | 1482   | 58047   | 10246   | 20174   | 53316   |
| 124334  | 122121  | 983358 | 67123   | 298395 | 294255 | 5262   | 9417   | 6259   | 19961   | 1976    | 20738   | 5132   | 37653   | 6217    | 69197   | 231735  |
| 42427   | 17751   | 183817 | 3174579 | 53327  | 471517 | 32470  | 2014   | 18592  | 53028   | 35879   | 51776   | 3281   | 30819   | 27241   | 107155  | 175298  |
| 7205    | 5993    | 16225  | 9651    | 625632 | 14150  | 990    | 2367   | 4271   | 130437  | 1       | 3103    | 1      | 15698   | 8505    | 54533   | 114374  |
| 1467    | 66      | 1535   | 9553    | 119    | 181757 | 682    | 75     | 33     | 66283   | 25769   | 10      | 31     | 3087    | 901     | 21368   | 621741  |
| 996     | 943     | 22078  | 16071   | 1174   | 9218   | 257166 | 324    | 512    | 2145    | 173     | 861     | 997    | 1626    | 1061    | 67293   | 9569    |
| 2828    | 5900    | 44596  | 24454   | 54425  | 11792  | 1046   | 45280  | 14602  | 150588  | 102     | 721     | 175    | 4385    | 602     | 16790   | 4376    |
| 361     | 1169    | 1353   | 24329   | 990    | 335    | 195    | 3937   | 58867  | 16619   | 42      | 1       | 11     | 32858   | 3437    | 44437   | 2220    |
| 155030  | 62528   | 71688  | 106037  | 35660  | 46587  | 6786   | 44009  | 27714  | 767095  | 39539   | 36206   | 2291   | 302001  | 90240   | 72750   | 87221   |
| 16198   | 16043   | 26148  | 41788   | 9979   | 12449  | 3291   | 5929   | 13329  | 85539   | 92132   | 6816    | 1936   | 553807  | 109540  | 141226  | 94397   |
| 421729  | 78532   | 72200  | 102972  | 63121  | 50882  | 10982  | 43662  | 27765  | 78902   | 27440   | 26578   | 130377 | 327924  | 141085  | 190429  | 90434   |
| 12897   | 4866    | 9623   | 21566   | 2239   | 2141   | 1523   | 2500   | 8720   | 6318    | 1399    | 1029    | 1540   | 34739   | 10292   | 17472   | 6964    |
| 212407  | 199065  | 231649 | 452399  | 46251  | 153174 | 46615  | 99412  | 115113 | 207012  | 15972   | 53736   | 7833   | 490917  | 29549   | 196524  | 100654  |
| 214405  | 91559   | 112125 | 203843  | 85985  | 93228  | 24131  | 66549  | 84216  | 360731  | 10433   | 118482  | 11028  | 1083186 | 1019009 | 460809  | 98279   |
| 23536   | 33238   | 27565  | 81887   | 16364  | 30942  | 4205   | 13783  | 28325  | 90229   | 10059   | 2690    | 6803   | 192859  | 204859  | 285687  | 99403   |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 36971   | 1       | 1       | 1      | 1       | 1       | 1       | 1       |
| 500970  | 479169  | 617859 | 847548  | 342495 | 574260 | 96391  | 391894 | 284868 | 2453100 | 557264  | 413329  | 52500  | 2543872 | 2724947 | 5321650 | 3328437 |
| 916359  | 322286  | 560962 | 1215711 | 636993 | 482700 | 74917  | 215011 | 341892 | 2542443 | 1047827 | 1569180 | 97683  | 6765582 | 5550319 | 2425426 | 101126  |

Input-Output Table by 33 sector (1983-2000)<sup>1</sup>

Gross Output 1985

| Sector | 1       | 2      | 3      | 4 | 5       | 6       | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15     | 16     |
|--------|---------|--------|--------|---|---------|---------|---------|---------|--------|--------|---------|--------|---------|---------|--------|--------|
| 1      | 1544473 | 30463  | 1012   | 1 | 12319   | 9664521 | 736382  | 1       | 520362 | 17814  | 10717   | 1      | 4493    | 421     | 970    | 238    |
| 2      | 9496    | 409    | 51     | 1 | 1       | 662     | 538     | 39      | 64     | 26     | 448     | 144    | 6202    | 1058949 | 5      | 205236 |
| 3      | 3684    | 1      | 1      | 1 | 147630  | 4880    | 1918    | 14      | 89     | 86     | 8300    | 2      | 245558  | 3123    | 1807   | 448202 |
| 4      | 1       | 1      | 1      | 1 | 1       | 1       | 1       | 1       | 1      | 1      | 1       | 1      | 192     | 5860325 | 1      | 1      |
| 5      | 68148   | 6921   | 12980  | 1 | 13331   | 17711   | 16186   | 11867   | 3652   | 1637   | 5156    | 1164   | 15667   | 7113    | 162    | 4378   |
| 6      | 1395054 | 1      | 1      | 1 | 16      | 2212237 | 2       | 20630   | 1      | 1      | 8474    | 1      | 132332  | 1207    | 370571 | 28     |
| 7      | 39465   | 810    | 1143   | 1 | 7520    | 8497    | 4018078 | 1783499 | 1004   | 8237   | 18044   | 3903   | 34739   | 391     | 46893  | 4308   |
| 8      | 1617    | 1      | 1      | 1 | 348     | 338     | 2232    | 3603    | 1      | 1      | 1       | 1      | 114     | 1       | 102    | 163    |
| 9      | 28862   | 26743  | 4337   | 1 | 217448  | 7403    | 3950    | 223     | 91958  | 167837 | 33422   | 169    | 13576   | 1154    | 343    | 4189   |
| 10     | 130     | 1      | 1      | 1 | 2521    | 76      | 529     | 7       | 164    | 5750   | 21      | 26     | 48      | 21      | 5      | 1      |
| 11     | 13747   | 212    | 257    | 1 | 24662   | 264174  | 73291   | 25894   | 4708   | 6164   | 1059370 | 424881 | 141205  | 5013    | 16310  | 74152  |
| 12     | 5157    | 1932   | 1108   | 1 | 12787   | 18140   | 14608   | 4927    | 609    | 1534   | 3602    | 72669  | 35435   | 2270    | 871    | 6765   |
| 13     | 976520  | 22147  | 28861  | 1 | 230084  | 441357  | 2069605 | 31342   | 42345  | 46306  | 146052  | 104858 | 5383867 | 52780   | 123668 | 110255 |
| 14     | 350013  | 16127  | 52547  | 1 | 302967  | 206697  | 179372  | 18017   | 10367  | 3850   | 92527   | 9226   | 984224  | 454050  | 13204  | 263064 |
| 15     | 1000    | 1      | 1      | 1 | 295     | 1342    | 3680    | 364730  | 49     | 705    | 1211    | 393    | 2698    | 242     | 288087 | 483    |
| 16     | 5908    | 1334   | 329    | 1 | 856123  | 151256  | 7051    | 390     | 2311   | 7828   | 20169   | 515    | 119728  | 4401    | 854    | 603541 |
| 17     | 7157    | 15424  | 1488   | 1 | 522877  | 9408    | 10509   | -46     | 1094   | 3018   | 26206   | 13447  | 50404   | 5549    | 428    | 19644  |
| 18     | 19521   | 4311   | 6240   | 1 | 269522  | 103636  | 14328   | 2036    | 6184   | 22043  | 7489    | 1089   | 80932   | 34546   | 2144   | 39258  |
| 19     | 29575   | 13556  | 12593  | 1 | 63068   | 20535   | 50213   | 6565    | 3983   | 1197   | 7529    | 4746   | 31990   | 5135    | 3679   | 25220  |
| 20     | 27303   | 14061  | 11000  | 1 | 563692  | 19174   | 26629   | 2608    | 3686   | 3301   | 6095    | 3058   | 30366   | 9123    | 924    | 28564  |
| 21     | 34937   | 8880   | 16786  | 1 | 24937   | 27791   | 9535    | 3421    | 3000   | 3077   | 3704    | 6432   | 17079   | 4339    | 589    | 24929  |
| 22     | 44338   | 833    | 111    | 1 | 1457    | 128     | 47      | 7       | 85     | 17     | 15      | 8      | 89      | 286     | 6      | 33     |
| 23     | 3367    | 490    | 167    | 1 | 85955   | 1577    | 2134    | 74      | 485    | 51     | 422     | 177    | 9328    | 303     | 70     | 1092   |
| 24     | 6303    | 2960   | 3034   | 1 | 10108   | 10849   | 25467   | 1534    | 1376   | 13975  | 1879    | 866    | 14467   | 1661    | 13239  | 10440  |
| 25     | 2987    | 101    | 667    | 1 | 2745    | 39615   | 38884   | 44692   | 246    | 63     | 426     | 345    | 1634    | 8808    | 1512   | 814    |
| 26     | 127210  | 8604   | 13140  | 1 | 284584  | 177546  | 71203   | 35801   | 24401  | 9793   | 27396   | 24179  | 151471  | 189172  | 6832   | 141387 |
| 27     | 25677   | 3282   | 4027   | 1 | 45241   | 34561   | 36853   | 8249    | 3516   | 2435   | 6682    | 9326   | 44145   | 5116    | 2034   | 12172  |
| 28     | 27987   | 53341  | 46090  | 1 | 29888   | 154631  | 341994  | 37050   | 22279  | 8111   | 93818   | 12406  | 472745  | 37851   | 8012   | 225774 |
| 29     | 4959    | 162    | 1153   | 1 | 4780    | 27530   | 19949   | 1908    | 1003   | 722    | 2602    | 1118   | 56454   | 2880    | 913    | 7396   |
| 30     | 296141  | 15079  | 13003  | 1 | 297953  | 601493  | 196205  | 178697  | 27659  | 33373  | 86977   | 68231  | 492939  | 36629   | 63815  | 73694  |
| 31     | 220075  | 29141  | 31312  | 1 | 655887  | 369352  | 282742  | 77619   | 37362  | 36484  | 73161   | 85788  | 471767  | 68023   | 29333  | 129952 |
| 32     | 26194   | 3060   | 2009   | 1 | 16077   | 28059   | 22234   | 5037    | 2308   | 1300   | 3904    | 2534   | 34386   | 8285    | 1548   | 7196   |
| 33     | 26105   | 1      | 1      | 1 | 1       | 1       | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1      | 1      |
| wL     | 1485769 | 316356 | 317801 | 1 | 1934385 | 1071320 | 1224555 | 518474  | 101725 | 70774  | 261558  | 349426 | 1111989 | 176889  | 186076 | 517249 |
| rK     | 9468120 | 105156 | 194462 | 1 | 1443676 | 3636894 | 1180954 | 242998  | 78143  | 68941  | 330083  | 172018 | 2125373 | 1364603 | 110122 | 742526 |

## Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1985

| 17      | 18      | 19     | 20      | 21     | 22     | 23     | 24     | 25     | 26      | 27      | 28      | 29     | 30      | 31      | 32      | 33      |
|---------|---------|--------|---------|--------|--------|--------|--------|--------|---------|---------|---------|--------|---------|---------|---------|---------|
| 88      | 40      | 96     | 90      | 7      | 1      | 22     | 179320 | 9655   | 83      | 1       | 6       | 1      | 5732    | 273     | 21089   | 13179   |
| 10355   | 739     | 371    | 413     | 220    | 21     | 1      | 81     | 664    | 1       | 1       | 320365  | 1      | 3645    | 1       | 750     | 1182    |
| 605687  | 924     | 3406   | 9093    | 388    | 609    | 264    | 754    | 11735  | 3693    | 1       | 1       | 1      | 1       | 1       | 3       | 267     |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 1       | 1       | 1       | 1      | 1       | 1       | 1       | 1       |
| 28626   | 5064    | 5587   | 15422   | 3497   | 6274   | 1123   | 3227   | 3802   | 15682   | 8529    | 72977   | 11215  | 193505  | 778210  | 88364   | 251891  |
| 701     | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 712    | 38      | 1       | 1       | 1      | 1835    | 1       | 2274    | 1082    |
| 4372    | 9156    | 5785   | 20628   | 26173  | 3925   | 1108   | 272690 | 305598 | 21276   | 591     | 116     | 45     | 25131   | 3833    | 22745   | 4433    |
| 58      | 227     | 105    | 1550    | 122    | 625    | 2      | 188    | 1      | 86      | 845     | 1       | 1      | 1282    | 5       | 6760    | 731     |
| 12529   | 46114   | 13113  | 13008   | 16505  | 13535  | 1709   | 2259   | 38838  | 6851    | 9       | 68      | 1      | 6670    | 2507    | 10076   | 1173    |
| 546     | 773     | 16     | 5464    | 1      | 19826  | 88     | 19     | 569    | 426     | 2       | 1       | 1      | 10881   | 876     | 12453   | 684     |
| 6455    | 14731   | 7325   | 85924   | 3369   | 2511   | 8980   | 31999  | 60380  | 3384    | 367     | 72      | 6      | 190783  | 4340    | 11426   | 1446    |
| 4654    | 8112    | 6921   | 28145   | 3300   | 5390   | 1976   | 2430   | 14172  | 25503   | 12710   | 2539    | 1594   | 89822   | 444845  | 123129  | 108677  |
| 109081  | 140767  | 83425  | 480642  | 45511  | 92554  | 49477  | 469025 | 253460 | 31477   | 432     | 78214   | 11965  | 81330   | 78620   | 624417  | 130865  |
| 617084  | 65209   | 61627  | 89947   | 32977  | 23696  | 7005   | 45993  | 28429  | 2472371 | 27379   | 932546  | 56542  | 548847  | 137435  | 237559  | 372023  |
| 738     | 726     | 951    | 721     | 1174   | 153    | 1198   | 226282 | 161389 | 151     | 158     | 1       | 1      | 150     | 29      | 173     | 509     |
| 140328  | 25059   | 17941  | 252207  | 49480  | 16767  | 35678  | 2159   | 25466  | 6974    | 14      | 1105    | 2452   | -11352  | 4383    | 7860    | 3176    |
| 5926976 | 1379732 | 685584 | 891393  | 311436 | 633241 | 31780  | 6284   | 87303  | 7472    | 46      | 144     | 8043   | 8503    | 2566    | 801     | 1009    |
| 54127   | 191890  | 122537 | 221793  | 99495  | 59275  | 24267  | 45028  | 68246  | 30118   | 845     | 3702    | 196    | 51930   | 6799    | 11779   | 26853   |
| 41972   | 26515   | 745170 | 53219   | 460292 | 518752 | 2904   | 5550   | 9289   | 32080   | 2531    | 7263    | 5147   | 53710   | 18694   | 30775   | 583531  |
| 112956  | 63427   | 568520 | 3630033 | 249573 | 185677 | 63161  | 12273  | 76622  | 63135   | 62249   | 49399   | 2443   | 38182   | 48653   | 34188   | 209852  |
| 11181   | 8034    | 28667  | 8472    | 501837 | 3657   | 3391   | 3154   | 4645   | 236725  | 1       | 1582    | 378    | 22349   | 23869   | 51250   | 136702  |
| 153     | 10      | 330    | 150     | 224    | 244462 | 27     | 12     | 4506   | 151640  | 1045    | 43      | 1      | 1770    | 26      | 6972    | 318706  |
| 2028    | 2518    | 56356  | 50691   | 28509  | 21416  | 180036 | 933    | 3027   | 1939    | 113     | 5558    | 2683   | 1637    | 6085    | 42376   | 18716   |
| 5936    | 10541   | 39858  | 42441   | 111839 | 15124  | 9334   | 65634  | 9586   | 161767  | 65      | 823     | 136    | 6116    | 1035    | 7349    | 9787    |
| 718     | 1488    | 2083   | 4964    | 782    | 236    | 3970   | 8932   | 27591  | 2743    | 52      | 107     | 19     | 35904   | 20124   | 27028   | 10667   |
| 115722  | 55371   | 45996  | 88631   | 28554  | 25210  | 8955   | 18973  | 23965  | 1077337 | 13895   | 48230   | 4935   | 328169  | 124272  | 56838   | 130444  |
| 11463   | 16421   | 22669  | 43456   | 10882  | 11269  | 5286   | 6337   | 15125  | 87456   | 111763  | 3750    | 865    | 691362  | 190002  | 109861  | 70907   |
| 412149  | 79910   | 49673  | 105817  | 33539  | 34558  | 13924  | 39384  | 24849  | 97305   | 37561   | 15931   | 117603 | 342688  | 290660  | 265677  | 92988   |
| 7883    | 5054    | 2867   | 8200    | 2336   | 1477   | 1413   | 1584   | 5077   | 7473    | 1283    | 673     | 56166  | 30094   | 27112   | 36444   | 3916    |
| 198239  | 187863  | 221016 | 494615  | 179214 | 131860 | 47741  | 85002  | 86567  | 193640  | 13332   | 29636   | 4826   | 389950  | 52895   | 221200  | 106277  |
| 185152  | 104710  | 153295 | 306941  | 97715  | 252624 | 40626  | 66081  | 91935  | 485876  | 24036   | 84667   | 22181  | 1254888 | 1442802 | 784512  | 237157  |
| 9977    | 8535    | 11814  | 32597   | 7992   | 3516   | 2514   | 4308   | 6653   | 57028   | 3919    | 8356    | 1432   | 104286  | 445689  | 98153   | 36913   |
| 1       | 1       | 1      | 1       | 1      | 1      | 1      | 1      | 1      | 8444    | 1       | 1       | 1      | 1       | 1       | 1       | 1       |
| 531292  | 565596  | 623778 | 1243776 | 394329 | 574187 | 139533 | 500600 | 388634 | 2501623 | 570602  | 413452  | 68528  | 2728591 | 3143667 | 6672844 | 3632838 |
| 1236387 | 515925  | 730701 | 1577644 | 647533 | 414837 | 125411 | 273378 | 328558 | 2306384 | 1351788 | 2388472 | 112019 | 8141214 | 7147688 | 2076497 | 81665   |

Input-Output Table by 33 sector (1983-2000)<sup>1</sup>

Gross Output 1986

| Sector | 1       | 2      | 3      | 4 | 5       | 6        | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15     | 16     |
|--------|---------|--------|--------|---|---------|----------|---------|---------|--------|--------|---------|--------|---------|---------|--------|--------|
| 1      | 1745467 | 31547  | 872    | 1 | 14874   | 10721219 | 699740  | 1       | 506506 | 13461  | 12361   | 1      | 5877    | 336     | 7      | 107    |
| 2      | 10647   | 448    | 63     | 1 | 1       | 517      | 542     | 16      | 65     | 30     | 535     | 167    | 8230    | 1200312 | 6      | 171271 |
| 3      | 4952    | 1      | 1      | 1 | 156950  | 8217     | 2598    | 15      | 85     | 107    | 10746   | 2      | 257756  | 4732    | 2804   | 484683 |
| 4      | 1       | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 3466972 | 1      | 1      |
| 5      | 73441   | 7355   | 13652  | 1 | 14565   | 19389    | 19311   | 12497   | 3935   | 1826   | 6232    | 1193   | 17419   | 7067    | 156    | 4985   |
| 6      | 1477210 | 1      | 1      | 1 | 18      | 2497115  | 6       | 26078   | 1      | 1      | 11004   | 1      | 131619  | 1530    | 592284 | 29     |
| 7      | 48749   | 845    | 1221   | 1 | 9105    | 10912    | 4884124 | 2121140 | 1045   | 9519   | 22711   | 4458   | 46403   | 397     | 55822  | 5928   |
| 8      | 1938    | 1      | 1      | 1 | 345     | 401      | 3300    | 3641    | 1      | 1      | 1       | 1      | 154     | 1       | 117    | 200    |
| 9      | 35073   | 30224  | 4461   | 1 | 233228  | 8697     | 4647    | 240     | 94479  | 187687 | 36464   | 187    | 15593   | 1234    | 342    | 5095   |
| 10     | 162     | 1      | 1      | 1 | 2727    | 92       | 627     | 6       | 201    | 7530   | 31      | 27     | 61      | 25      | 6      | 1      |
| 11     | 18607   | 236    | 281    | 1 | 29038   | 320586   | 94839   | 30374   | 5814   | 7512   | 1317268 | 457125 | 166381  | 8035    | 20310  | 85140  |
| 12     | 6093    | 2187   | 1164   | 1 | 14069   | 20839    | 17609   | 5460    | 633    | 1827   | 4345    | 78575  | 39611   | 2627    | 1059   | 8610   |
| 13     | 1037595 | 24274  | 30065  | 1 | 256040  | 508340   | 2375466 | 35960   | 43802  | 54794  | 187332  | 112937 | 6046698 | 68475   | 160528 | 142929 |
| 14     | 384926  | 14800  | 48746  | 1 | 269877  | 188412   | 182215  | 16347   | 7826   | 3831   | 97690   | 8401   | 898475  | 469513  | 14765  | 263836 |
| 15     | 1068    | 1      | 1      | 1 | 339     | 1561     | 4864    | 475426  | 47     | 855    | 1366    | 445    | 3754    | 299     | 372911 | 688    |
| 16     | 6654    | 1461   | 389    | 1 | 913837  | 170409   | 9201    | 431     | 2696   | 9506   | 29377   | 576    | 146868  | 5763    | 1234   | 688315 |
| 17     | 8542    | 17200  | 1555   | 1 | 570152  | 10865    | 12782   | -7      | 980    | 3538   | 33022   | 15143  | 69848   | 5602    | 463    | 21570  |
| 18     | 25516   | 6077   | 7817   | 1 | 306267  | 118314   | 19469   | 2845    | 6784   | 24178  | 9471    | 1207   | 93899   | 42665   | 2857   | 44468  |
| 19     | 35368   | 14596  | 14179  | 1 | 68699   | 25895    | 65774   | 7952    | 3997   | 1419   | 11187   | 5481   | 40360   | 5746    | 4953   | 32770  |
| 20     | 35381   | 16089  | 12853  | 1 | 588334  | 22134    | 34711   | 3245    | 3713   | 4307   | 8167    | 3868   | 41975   | 10631   | 1009   | 35658  |
| 21     | 41096   | 9656   | 17353  | 1 | 24557   | 31310    | 11408   | 3695    | 2899   | 3521   | 4538    | 6697   | 19693   | 4974    | 718    | 27872  |
| 22     | 57768   | 867    | 102    | 1 | 1518    | 147      | 56      | 10      | 85     | 20     | 18      | 9      | 106     | 257     | 7      | 40     |
| 23     | 4187    | 434    | 184    | 1 | 84120   | 1868     | 2727    | 107     | 467    | 68     | 480     | 164    | 11797   | 325     | 90     | 1398   |
| 24     | 7623    | 3378   | 3264   | 1 | 11736   | 12773    | 36107   | 2155    | 1339   | 19834  | 2434    | 945    | 19196   | 1943    | 11982  | 11826  |
| 25     | 3650    | 120    | 711    | 1 | 3018    | 50393    | 45494   | 58001   | 230    | 77     | 613     | 398    | 1974    | 10127   | 1339   | 1111   |
| 26     | 148311  | 9333   | 12733  | 1 | 309129  | 199393   | 84753   | 39154   | 24505  | 11257  | 34454   | 25071  | 170498  | 215161  | 8899   | 160934 |
| 27     | 30460   | 3577   | 4336   | 1 | 50782   | 41906    | 46058   | 9428    | 3980   | 2960   | 8915    | 9836   | 52940   | 5915    | 2691   | 15860  |
| 28     | 30704   | 55343  | 44175  | 1 | 26982   | 166260   | 364570  | 38136   | 19915  | 8831   | 117408  | 12644  | 492439  | 37361   | 10039  | 235332 |
| 29     | 6418    | 187    | 1431   | 1 | 5230    | 31451    | 26232   | 2117    | 1123   | 944    | 3308    | 1307   | 51253   | 3150    | 1303   | 9327   |
| 30     | 360047  | 17070  | 14344  | 1 | 325883  | 728723   | 244895  | 189101  | 29635  | 39825  | 115182  | 73864  | 569492  | 44111   | 86153  | 90039  |
| 31     | 266985  | 38056  | 33033  | 1 | 891368  | 452569   | 329726  | 98077   | 39796  | 44324  | 100769  | 98505  | 531915  | 98245   | 62795  | 163920 |
| 32     | 30791   | 3368   | 2184   | 1 | 18204   | 33891    | 28202   | 5755    | 2177   | 1582   | 5473    | 2749   | 41453   | 9202    | 2208   | 9083   |
| 33     | 21756   | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1      | 1      |
| wL     | 1613510 | 349230 | 322094 | 1 | 2106482 | 1205400  | 1557477 | 602186  | 102088 | 83303  | 321178  | 362504 | 1321713 | 199872  | 206271 | 612465 |
| rK     | 9762888 | 114451 | 203362 | 1 | 1512695 | 4135911  | 1630559 | 323610  | 85882  | 77946  | 417988  | 177987 | 2509128 | 2505792 | 132606 | 896829 |

## Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1986

| 17      | 18      | 19      | 20      | 21     | 22     | 23     | 24     | 25     | 26      | 27      | 28      | 29     | 30       | 31      | 32      | 33      |
|---------|---------|---------|---------|--------|--------|--------|--------|--------|---------|---------|---------|--------|----------|---------|---------|---------|
| 120     | 52      | 156     | 123     | 11     | 1      | 25     | 178415 | 11977  | 101     | 1       | 6       | 1      | 6460     | 309     | 23575   | 16176   |
| 9193    | 757     | 333     | 366     | 217    | 1      | 1      | 110    | 993    | 1       | 1       | 298272  | 1      | 4475     | 1       | 836     | 1579    |
| 635437  | 1097    | 4774    | 11777   | 571    | 340    | 426    | 985    | 10701  | 4421    | 1       | 1       | 1      | 1        | 1       | 11      | 329     |
| 1       | 1       | 1       | 1       | 1      | 1      | 1      | 1      | 1      | 1       | 1       | 1       | 1      | 1        | 1       | 1       | 1       |
| 29831   | 5976    | 7877    | 20761   | 4949   | 4180   | 1481   | 4103   | 5220   | 16717   | 10271   | 79601   | 11736  | 222408   | 845352  | 97651   | 334870  |
| 848     | 1       | 1       | 6       | 1      | 1      | 1      | 1      | 788    | 38      | 1       | 1       | 1      | 2241     | 1       | 2685    | 1325    |
| 5072    | 11703   | 8515    | 33624   | 38488  | 3398   | 1497   | 356903 | 377588 | 22582   | 751     | 131     | 94     | 29832    | 4704    | 26180   | 6043    |
| 48      | 232     | 165     | 2270    | 182    | 141    | 2      | 267    | 6      | 99      | 1073    | 1       | 1      | 1520     | 5       | 7270    | 944     |
| 14678   | 52428   | 16570   | 15670   | 17934  | 9845   | 2384   | 3497   | 46825  | 6975    | 7       | 79      | 1      | 7621     | 2788    | 11991   | 1510    |
| 836     | 873     | 30      | 8431    | 1      | 17151  | 117    | 27     | 902    | 600     | 2       | 1       | 1      | 12467    | 1139    | 15095   | 1110    |
| 7805    | 18461   | 11199   | 117104  | 5133   | 2410   | 12254  | 41792  | 83027  | 4025    | 401     | 79      | 11     | 211586   | 5507    | 12865   | 2080    |
| 5851    | 10313   | 9155    | 36497   | 4448   | 4538   | 2442   | 3542   | 17131  | 28452   | 14931   | 2985    | 1817   | 98814    | 485812  | 133461  | 126530  |
| 131711  | 173115  | 113061  | 696484  | 66953  | 81875  | 59775  | 605360 | 338192 | 34105   | 502     | 114460  | 13577  | 91468    | 86735   | 721230  | 175774  |
| 637191  | 66203   | 75325   | 106315  | 39749  | 14256  | 7840   | 50714  | 31543  | 2130696 | 29234   | 646906  | 62439  | 544354   | 135806  | 227517  | 363845  |
| 894     | 1035    | 1329    | 906     | 2006   | 141    | 1804   | 352975 | 219747 | 185     | 186     | 1       | 1      | 191      | 37      | 195     | 722     |
| 168289  | 31266   | 26788   | 339002  | 73425  | 13380  | 49533  | 2897   | 34075  | 7772    | 12      | 1077    | 2631   | -11960   | 4545    | 8579    | 4048    |
| 6751076 | 1673057 | 940418  | 1202944 | 444866 | 474440 | 49584  | 8180   | 113441 | 8518    | 65      | 155     | 8998   | 10006    | 2729    | 4921    | 1343    |
| 63420   | 237698  | 176405  | 324296  | 137557 | 55977  | 31300  | 58161  | 88479  | 33630   | 1067    | 4312    | 232    | 60780    | 8304    | 14761   | 38057   |
| 49883   | 33766   | 995657  | 80947   | 718276 | 464776 | 4226   | 6725   | 12800  | 36426   | 2068    | 8520    | 6522   | 61721    | 21868   | 35368   | 850075  |
| 135739  | 85356   | 792440  | 5444965 | 367881 | 166425 | 99097  | 17327  | 109725 | 69314   | 65828   | 56920   | 3142   | 44053    | 58609   | 42342   | 297622  |
| 12846   | 9510    | 39986   | 11683   | 724473 | 3479   | 5642   | 4131   | 6345   | 246663  | 1       | 1762    | 462    | 25746    | 25342   | 57565   | 193379  |
| 134     | 15      | 470     | 199     | 356    | 211756 | 51     | 19     | 5607   | 168532  | 1336    | 45      | 1      | 2079     | 27      | 7926    | 510016  |
| 2627    | 3027    | 73873   | 71281   | 45657  | 20448  | 225079 | 1130   | 4338   | 2337    | 156     | 7027    | 2883   | 1885     | 7300    | 58124   | 33913   |
| 7494    | 12250   | 57582   | 64161   | 155709 | 14798  | 12727  | 88833  | 12566  | 174978  | 93      | 1454    | 203    | 7276     | 1392    | 8584    | 18756   |
| 800     | 1897    | 3018    | 6700    | 1241   | 248    | 5544   | 11788  | 37908  | 3419    | 63      | 107     | 25     | 45542    | 23318   | 32230   | 13675   |
| 128134  | 65334   | 64626   | 117871  | 39887  | 18828  | 11008  | 25036  | 30813  | 1292663 | 14741   | 41205   | 5786   | 374927   | 148961  | 61693   | 159168  |
| 14231   | 21426   | 34176   | 68157   | 17234  | 8793   | 6932   | 8854   | 20259  | 99535   | 117293  | 4361    | 1053   | 853922   | 237466  | 127457  | 92416   |
| 442037  | 91317   | 66377   | 141870  | 45219  | 24237  | 15805  | 48879  | 31469  | 103299  | 44113   | 14236   | 120188 | 368571   | 307635  | 285551  | 111198  |
| 10020   | 6436    | 4279    | 12991   | 3325   | 1367   | 1906   | 2061   | 6737   | 8972    | 1688    | 856     | 57700  | 34849    | 30662   | 39726   | 5050    |
| 227951  | 232153  | 319812  | 661902  | 283722 | 108345 | 62744  | 112281 | 120394 | 214114  | 16677   | 32091   | 6057   | 439946   | 64083   | 257090  | 146309  |
| 217413  | 145934  | 209556  | 501370  | 147556 | 280168 | 45372  | 79547  | 122626 | 618541  | 22508   | 115677  | 11267  | 1310835  | 1781299 | 795508  | 270614  |
| 12196   | 10905   | 17436   | 51008   | 13446  | 2819   | 3079   | 5901   | 8901   | 62840   | 4604    | 10198   | 1671   | 126506   | 500038  | 104749  | 45018   |
| 1       | 1       | 1       | 1       | 1      | 1      | 1      | 1      | 1      | 10455   | 1       | 1       | 1      | 1        | 1       | 1       | 1       |
| 614283  | 658674  | 927158  | 1850036 | 533077 | 455527 | 164289 | 662978 | 545204 | 2694649 | 668998  | 430561  | 74321  | 3253932  | 3716634 | 7529065 | 3980486 |
| 1436218 | 679881  | 1066346 | 2379929 | 947759 | 298579 | 155898 | 366983 | 452824 | 2873474 | 1571137 | 2920042 | 143026 | 10214942 | 8271425 | 2378573 | 94207   |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1987**

| Sector | 1        | 2      | 3      | 4 | 5       | 6        | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15     | 16     |
|--------|----------|--------|--------|---|---------|----------|---------|---------|--------|--------|---------|--------|---------|---------|--------|--------|
| 1      | 1659186  | 30104  | 786    | 1 | 14301   | 11326294 | 889117  | 1       | 583568 | 31497  | 14341   | 1      | 7055    | 411     | 5534   | 127    |
| 2      | 10964    | 487    | 78     | 1 | 1       | 691      | 698     | 25      | 77     | 32     | 602     | 217    | 14358   | 1294203 | 6      | 214685 |
| 3      | 6301     | 1      | 1      | 1 | 134109  | 8695     | 3382    | 14      | 97     | 108    | 12731   | 3      | 281829  | 3006    | 3397   | 515284 |
| 4      | 1        | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 2       | 4253510 | 1      | 1      |
| 5      | 80261    | 8293   | 15933  | 1 | 16176   | 22566    | 27162   | 17666   | 5092   | 2103   | 8644    | 1614   | 27496   | 3674    | 243    | 6796   |
| 6      | 1607958  | 1      | 1      | 1 | 18      | 2957624  | 21      | 49169   | 1      | 1      | 9326    | 1      | 153027  | 1144    | 650136 | 38     |
| 7      | 56591    | 1112   | 1484   | 1 | 13158   | 12744    | 6110128 | 2724570 | 1282   | 11184  | 29389   | 5826   | 69839   | 518     | 85693  | 7576   |
| 8      | 2339     | 1      | 1      | 1 | 540     | 516      | 4520    | 6280    | 1      | 1      | 1       | 1      | 267     | 1       | 176    | 346    |
| 9      | 34745    | 24325  | 3919   | 1 | 251633  | 11802    | 4701    | 288     | 115682 | 187830 | 45438   | 237    | 18444   | 1232    | 518    | 6036   |
| 10     | 171      | 1      | 2      | 1 | 3690    | 88       | 928     | 10      | 11     | 8204   | 44      | 37     | 65      | 29      | 7      | 2      |
| 11     | 15785    | 261    | 311    | 1 | 28510   | 342996   | 108775  | 42311   | 6874   | 8456   | 1750350 | 566438 | 204637  | 5775    | 27679  | 103159 |
| 12     | 5972     | 2167   | 1101   | 1 | 15409   | 22292    | 23281   | 6800    | 905    | 1831   | 5195    | 94109  | 51884   | 5129    | 1333   | 9706   |
| 13     | 1028609  | 24747  | 33872  | 1 | 306746  | 641156   | 2756744 | 51973   | 56638  | 60726  | 252196  | 138288 | 7524882 | 82352   | 187178 | 168997 |
| 14     | 358244   | 14747  | 49745  | 1 | 308151  | 196015   | 200749  | 22591   | 11204  | 4056   | 102255  | 10575  | 1007700 | 447500  | 17385  | 305414 |
| 15     | 1644     | 1      | 1      | 1 | 594     | 2482     | 7395    | 584072  | 54     | 911    | 2787    | 595    | 6355    | 469     | 440295 | 1286   |
| 16     | 7483     | 1341   | 441    | 1 | 1114756 | 182858   | 13175   | 628     | 2872   | 8866   | 34562   | 774    | 159716  | 4772    | 1634   | 764744 |
| 17     | 8421     | 19908  | -498   | 1 | 689543  | 9456     | 14719   | -616    | -95    | 4242   | 41525   | 27488  | 84141   | 8530    | 621    | 25118  |
| 18     | 27391    | 5367   | 8274   | 1 | 438291  | 134719   | 24857   | 4270    | 7351   | 34966  | 12398   | 1635   | 112830  | 55207   | 3164   | 51708  |
| 19     | 43473    | 16413  | 15437  | 1 | 98439   | 40756    | 129016  | 15498   | 5109   | 1701   | 18726   | 10637  | 86136   | 10340   | 8997   | 51794  |
| 20     | 39006    | 16168  | 13900  | 1 | 585212  | 27893    | 41764   | 3826    | 4958   | 4564   | 10346   | 3594   | 53962   | 21274   | 1347   | 44760  |
| 21     | 48217    | 15073  | 23996  | 1 | 39696   | 51023    | 21679   | 7810    | 4993   | 5746   | 8108    | 11513  | 32624   | 6912    | 1253   | 50287  |
| 22     | 50963    | 840    | 116    | 1 | 1523    | 174      | 85      | 8       | 89     | 23     | 24      | 11     | 105     | 834     | 10     | 92     |
| 23     | 5748     | 619    | 181    | 1 | 79980   | 2261     | 2743    | 109     | 536    | 65     | 711     | 248    | 15062   | 2034    | 98     | 1790   |
| 24     | 7483     | 4048   | 3286   | 1 | 13191   | 13398    | 38814   | 1905    | 1616   | 19007  | 2857    | 1255   | 23209   | 2197    | 18584  | 14544  |
| 25     | 3975     | 111    | 725    | 1 | 3415    | 41774    | 57168   | 60621   | 239    | 70     | 627     | 529    | 2235    | 7450    | 2132   | 1160   |
| 26     | 138118   | 8821   | 13086  | 1 | 319506  | 190369   | 94326   | 44774   | 24852  | 10403  | 38347   | 28085  | 194286  | 202055  | 9295   | 176458 |
| 27     | 30710    | 3756   | 4391   | 1 | 56401   | 45133    | 50098   | 10902   | 4242   | 2824   | 9956    | 11441  | 62566   | 6237    | 3149   | 18104  |
| 28     | 30387    | 52558  | 45737  | 1 | 30875   | 170957   | 481129  | 43115   | 24055  | 8724   | 137395  | 14640  | 566447  | 31023   | 10721  | 259689 |
| 29     | 5616     | 171    | 1192   | 1 | 5446    | 29868    | 30436   | 2499    | 1062   | 818    | 3847    | 1403   | 47761   | 3856    | 1322   | 10285  |
| 30     | 276609   | 19768  | 16345  | 1 | 390123  | 771931   | 323642  | 294234  | 38499  | 46134  | 145244  | 91524  | 750895  | 48661   | 85789  | 113800 |
| 31     | 311897   | 39079  | 32023  | 1 | 971489  | 489323   | 408260  | 128084  | 50160  | 41473  | 125437  | 114237 | 697241  | 140222  | 65532  | 220436 |
| 32     | 30385    | 3562   | 1913   | 1 | 19922   | 37107    | 31568   | 6947    | 2897   | 1574   | 7073    | 2976   | 47760   | 23658   | 2801   | 10664  |
| 33     | 19857    | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1      | 1      |
| wL     | 1744543  | 390210 | 343753 | 1 | 2542855 | 1494246  | 1987558 | 774369  | 134021 | 93143  | 408772  | 414977 | 1693473 | 274334  | 272087 | 754270 |
| rK     | 10639596 | 135618 | 213547 | 1 | 1766349 | 4451869  | 2133232 | 532967  | 107627 | 106030 | 535625  | 213606 | 2976324 | 2109039 | 178893 | 978646 |

**Notes**

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1987

| 17      | 18      | 19      | 20      | 21      | 22     | 23     | 24     | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32      | 33      |
|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|---------|--------|----------|----------|---------|---------|
| 1298    | 58      | 207     | 138     | 16      | 1      | 28     | 198517 | 16338  | 100     | 1       | 8       | 1      | 7117     | 452      | 32059   | 19988   |
| 12382   | 1089    | 477     | 223     | 100     | 1      | 1      | 145    | 1113   | 1       | 1       | 183995  | 1      | 5243     | 1        | 969     | 1758    |
| 831308  | 1442    | 2015    | 10067   | 689     | 276    | 445    | 774    | 10055  | 3403    | 1       | 1       | 1      | 1        | 1        | 7       | 317     |
| 1       | 1       | 1       | 1       | 1       | 1      | 1      | 1      | 1      | 1       | 1       | 252874  | 23965  | 1        | 1        | 1       | 1       |
| 26244   | 9534    | 9793    | 24060   | 3013    | 6016   | 1929   | 5869   | 7476   | 20490   | 12281   | 98295   | 17370  | 293444   | 1001108  | 117491  | 411296  |
| 1300    | 2       | 1       | 1       | 1       | 1      | 1      | 1      | 3839   | 42      | 1       | 1       | 1      | 2438     | 1        | 4212    | 1444    |
| 5223    | 19173   | 10972   | 48591   | 82749   | 3665   | 2135   | 422712 | 483730 | 29883   | 1102    | 187     | 90     | 47061    | 6896     | 32593   | 7970    |
| 117     | 460     | 181     | 2325    | 420     | 181    | 3      | 409    | 1      | 133     | 1637    | 1       | 1      | 2155     | 11       | 10055   | 1395    |
| 8332    | 58377   | 23382   | 23098   | 26598   | 8419   | 2647   | 3828   | 60138  | 7505    | 10      | 77      | 2      | 7107     | 2669     | 11783   | 1656    |
| 32      | 1498    | 60      | 2284    | 1       | 17319  | 174    | 38     | 1104   | 622     | 3       | 1       | 1      | 16981    | 1530     | 19365   | 1149    |
| 4601    | 25159   | 10354   | 143550  | 12904   | 4502   | 14008  | 45419  | 95031  | 4540    | 563     | 106     | 13     | 275393   | 6615     | 15154   | 2374    |
| 5738    | 13238   | 11064   | 46832   | 5410    | 4524   | 3317   | 4103   | 25116  | 31629   | 18884   | 3502    | 2462   | 113655   | 525511   | 147647  | 157829  |
| 163849  | 217690  | 157737  | 1023600 | 136056  | 82790  | 80502  | 734036 | 477798 | 38266   | 712     | 110200  | 15470  | 127418   | 121524   | 940983  | 262525  |
| 652567  | 80216   | 74301   | 116956  | 65160   | 18172  | 9866   | 57906  | 41670  | 2324181 | 36002   | 469439  | 55482  | 722421   | 151822   | 262736  | 427699  |
| 1577    | 2795    | 2225    | 2294    | 1541    | 275    | 2552   | 435011 | 262038 | 293     | 526     | 1       | 1      | 435      | 127      | 810     | 790     |
| 233214  | 41538   | 32725   | 351928  | 96477   | 13712  | 43311  | 4917   | 41632  | 8245    | 21      | 1462    | 3872   | -12494   | 6491     | 10268   | 4862    |
| 8669002 | 1957375 | 1187124 | 1526676 | 655974  | 459662 | 56267  | 10645  | 147228 | 8334    | 58      | 188     | 10228  | 11854    | 3144     | 7710    | 1434    |
| 92698   | 273542  | 208154  | 405174  | 186814  | 62167  | 34196  | 67698  | 110002 | 44184   | 1538    | 5302    | 255    | 87405    | 9944     | 16930   | 55573   |
| 77644   | 43063   | 1077574 | 100721  | 1105636 | 458730 | 5450   | 13274  | 21690  | 44166   | 2712    | 19682   | 7579   | 99985    | 30949    | 45239   | 874427  |
| 230148  | 94323   | 891755  | 6732220 | 541660  | 178924 | 107777 | 23641  | 149877 | 78896   | 92566   | 68501   | 3641   | 57427    | 69290    | 49236   | 288915  |
| 20365   | 15178   | 52799   | 19681   | 1319058 | 5371   | 10072  | 7452   | 11416  | 432302  | 1       | 3097    | 688    | 43982    | 48457    | 93291   | 236164  |
| 191     | 17      | 168     | 327     | 521     | 234652 | 84     | 22     | 9779   | 164566  | 2193    | 50      | 1      | 3346     | 78       | 11490   | 443328  |
| 3073    | 3921    | 105037  | 99125   | 72547   | 30750  | 306616 | 1888   | 5761   | 2596    | 157     | 8814    | 2933   | 3901     | 9274     | 70250   | 36627   |
| 10672   | 17623   | 71975   | 77999   | 249484  | 20207  | 16401  | 127833 | 16898  | 200059  | 88      | 1266    | 176    | 9637     | 1681     | 10808   | 13062   |
| 536     | 1882    | 3828    | 6283    | 1317    | 231    | 6854   | 13240  | 42578  | 3211    | 90      | 142     | 22     | 49318    | 23379    | 53707   | 14636   |
| 150148  | 76238   | 83280   | 151690  | 59767   | 21828  | 13909  | 28302  | 38449  | 1597319 | 20714   | 41147   | 6082   | 533048   | 190739   | 71607   | 187447  |
| 14783   | 25816   | 37295   | 76920   | 19354   | 10340  | 7982   | 10946  | 25225  | 99891   | 147590  | 3875    | 1128   | 1010521  | 282598   | 142861  | 101585  |
| 483138  | 104618  | 75037   | 164546  | 81286   | 28866  | 18632  | 58155  | 38257  | 109095  | 51224   | 18238   | 129826 | 420992   | 319298   | 301059  | 120413  |
| 23103   | 7704    | 5125    | 14704   | 4252    | 1412   | 2015   | 2533   | 8153   | 8507    | 1862    | 913     | 74286  | 40521    | 33651    | 44630   | 5712    |
| 318024  | 265768  | 412013  | 924604  | 472433  | 134702 | 80087  | 162140 | 161625 | 259906  | 21061   | 41571   | 7491   | 638484   | 91944    | 313943  | 154480  |
| 315363  | 169233  | 318286  | 761602  | 205799  | 241280 | 52402  | 121371 | 148882 | 718769  | 28275   | 222285  | 16027  | 1665803  | 2049403  | 851843  | 320921  |
| 9791    | 13930   | 20008   | 53298   | 22750   | 3243   | 3929   | 6713   | 11747  | 63304   | 6648    | 12483   | 2134   | 170275   | 553035   | 110219  | 54012   |
| 1       | 1       | 1       | 1       | 1       | 1      | 1      | 1      | 1      | 33166   | 1       | 1       | 1      | 1        | 1        | 1       | 1       |
| 792368  | 787561  | 1175472 | 2389931 | 843925  | 453558 | 223506 | 884527 | 719960 | 2869316 | 800770  | 448267  | 91012  | 4171420  | 4412029  | 8701389 | 4505364 |
| 1839286 | 710396  | 1335134 | 3028615 | 1306844 | -96432 | 197184 | 455889 | 575826 | 2938653 | 1926379 | 3321815 | 138155 | 11927204 | 10189704 | 2787526 | 236235  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1988

| Sector | 1        | 2      | 3      | 4 | 5       | 6        | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15     | 16      |
|--------|----------|--------|--------|---|---------|----------|---------|---------|--------|--------|---------|--------|---------|---------|--------|---------|
| 1      | 1873695  | 26276  | 1111   | 1 | 15746   | 13262697 | 904992  | 1       | 714621 | 47520  | 15507   | 1      | 16772   | 588     | 5204   | 183     |
| 2      | 10812    | 575    | 69     | 1 | 1       | 935      | 885     | 49      | 116    | 56     | 812     | 305    | 16904   | 1354442 | 7      | 224813  |
| 3      | 4874     | 1      | 1      | 1 | 124383  | 6417     | 2976    | 14      | 126    | 142    | 13731   | 5      | 290815  | 4066    | 3281   | 613521  |
| 4      | 1        | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 6       | 3429141 | 1      | 1       |
| 5      | 92183    | 8873   | 20177  | 1 | 15767   | 28309    | 32834   | 20589   | 7236   | 3706   | 11322   | 2110   | 35260   | 4419    | 290    | 8559    |
| 6      | 1843835  | 1      | 1      | 1 | 18      | 3397731  | 19      | 53371   | 1      | 1      | 10375   | 1      | 186230  | 956     | 805699 | 64      |
| 7      | 62056    | 1055   | 1605   | 1 | 11059   | 13522    | 6270944 | 2803596 | 1665   | 18081  | 31921   | 6135   | 72774   | 680     | 96069  | 8325    |
| 8      | 2201     | 1      | 1      | 1 | 537     | 629      | 5184    | 10619   | 1      | 1      | 1       | 1      | 313     | 1       | 198    | 456     |
| 9      | 42123    | 24082  | 5558   | 1 | 277887  | 15703    | 5534    | 353     | 176548 | 282141 | 56693   | 358    | 22925   | 1568    | 622    | 7615    |
| 10     | 242      | 1      | 1      | 1 | 4790    | 124      | 1013    | 16      | 15     | 12605  | 61      | 53     | 93      | 35      | 9      | 5       |
| 11     | 17314    | 252    | 382    | 1 | 33024   | 404375   | 124023  | 46544   | 9432   | 13462  | 2074066 | 674033 | 226604  | 9693    | 29825  | 117705  |
| 12     | 6721     | 2305   | 1294   | 1 | 15670   | 28309    | 27997   | 8026    | 1186   | 3200   | 6699    | 108345 | 64315   | 6410    | 1613   | 11145   |
| 13     | 1053459  | 20212  | 32243  | 1 | 287740  | 743101   | 2928652 | 54978   | 65716  | 91380  | 292359  | 165326 | 8946735 | 98674   | 210845 | 201109  |
| 14     | 315590   | 11067  | 44312  | 1 | 270743  | 171002   | 176645  | 17586   | 12706  | 5317   | 83702   | 10292  | 891714  | 448769  | 15907  | 308231  |
| 15     | 1641     | 1      | 1      | 1 | 542     | 2814     | 7568    | 648615  | 71     | 1522   | 3286    | 798    | 7977    | 531     | 493483 | 1720    |
| 16     | 8272     | 1213   | 422    | 1 | 1184917 | 166296   | 13388   | 671     | 3550   | 11823  | 40590   | 853    | 171720  | 7202    | 1824   | 916567  |
| 17     | 8214     | 18716  | -413   | 1 | 673660  | 10135    | 15363   | -587    | 70     | 6575   | 50873   | 36851  | 109919  | 9774    | 677    | 28619   |
| 18     | 29891    | 5208   | 9422   | 1 | 520563  | 186550   | 24241   | 4606    | 10153  | 55907  | 14607   | 2119   | 149278  | 70074   | 3481   | 59750   |
| 19     | 43830    | 18083  | 17215  | 1 | 99447   | 54252    | 134052  | 15395   | 6875   | 2825   | 22427   | 13106  | 98434   | 11749   | 10158  | 59123   |
| 20     | 39758    | 15859  | 15324  | 1 | 556192  | 31900    | 46975   | 4090    | 6797   | 7277   | 12254   | 4551   | 64254   | 25289   | 1489   | 50108   |
| 21     | 54562    | 15697  | 30097  | 1 | 43128   | 64124    | 25736   | 8858    | 6602   | 8712   | 10180   | 15106  | 40566   | 8699    | 1487   | 65707   |
| 22     | 52288    | 878    | 128    | 1 | 1543    | 209      | 114     | 8       | 109    | 38     | 27      | 15     | 133     | 1262    | 11     | 111     |
| 23     | 6714     | 710    | 247    | 1 | 92071   | 3135     | 4043    | 124     | 848    | 122    | 986     | 368    | 19798   | 2649    | 121    | 2370    |
| 24     | 8139     | 4067   | 3649   | 1 | 12505   | 16087    | 45505   | 2309    | 2199   | 30797  | 3496    | 1593   | 28905   | 2517    | 21315  | 15668   |
| 25     | 3944     | 104    | 760    | 1 | 3257    | 46318    | 60564   | 62123   | 304    | 102    | 686     | 576    | 2521    | 8506    | 2293   | 1308    |
| 26     | 145196   | 9136   | 15236  | 1 | 350913  | 234103   | 110505  | 51205   | 34137  | 16972  | 48017   | 35482  | 237097  | 203417  | 11087  | 220013  |
| 27     | 32479    | 3762   | 5153   | 1 | 55646   | 53453    | 55128   | 11552   | 5396   | 4571   | 11733   | 13505  | 75265   | 7335    | 3594   | 21264   |
| 28     | 37958    | 49526  | 47688  | 1 | 28063   | 185571   | 517143  | 46808   | 29237  | 12984  | 154288  | 16843  | 644597  | 33115   | 11445  | 271088  |
| 29     | 6510     | 165    | 1338   | 1 | 4935    | 36672    | 34567   | 2623    | 1438   | 1300   | 4493    | 1620   | 67368   | 4613    | 1478   | 12556   |
| 30     | 332449   | 19466  | 18892  | 1 | 380363  | 901510   | 336783  | 317145  | 54935  | 69886  | 172191  | 111359 | 875604  | 56908   | 87295  | 134272  |
| 31     | 435540   | 46130  | 42333  | 1 | 1112187 | 612893   | 509888  | 141577  | 64429  | 64832  | 160322  | 136183 | 905016  | 182986  | 73724  | 284904  |
| 32     | 32984    | 3811   | 2318   | 1 | 19061   | 46603    | 37036   | 7743    | 4567   | 2617   | 8373    | 3546   | 60127   | 28184   | 3476   | 13201   |
| 33     | 18063    | 1      | 1      | 1 | 1       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1      | 1       |
| wL     | 2292581  | 493307 | 371043 | 1 | 2772491 | 1772943  | 2193247 | 893302  | 187988 | 136596 | 492713  | 522556 | 2080322 | 329381  | 300321 | 938558  |
| rK     | 12428166 | 190811 | 236719 | 1 | 1981369 | 5318016  | 2219895 | 610336  | 135439 | 154567 | 606791  | 254424 | 3440188 | 2448885 | 168651 | 1171333 |

## Notes

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)



### Gross Output 1988

| 17       | 18      | 19      | 20      | 21      | 22     | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33      |
|----------|---------|---------|---------|---------|--------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|---------|
| 1498     | 88      | 269     | 239     | 24      | 1      | 33     | 254613  | 18647  | 127     | 1       | 7       | 1      | 20196    | 634      | 37052    | 21709   |
| 14307    | 1404    | 1470    | 552     | 196     | 11     | 1      | 1237    | 1586   | 1       | 1       | 310701  | 1      | 6418     | 1        | 1127     | 2310    |
| 954703   | 1575    | 2183    | 12120   | 839     | 294    | 561    | 835     | 12282  | 3491    | 1       | 1       | 1      | 1        | 1        | 6        | 352     |
| 1        | 1       | 1       | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 270185  | 28889  | 1        | 1        | 1        | 1       |
| 34010    | 12880   | 12985   | 34187   | 4314    | 6402   | 2687   | 7255    | 8661   | 25869   | 15796   | 129174  | 22045  | 363665   | 1160088  | 140640   | 466760  |
| 1640     | 2       | 1       | 1       | 1       | 1      | 1      | 1       | 4800   | 53      | 1       | 1       | 1      | 3196     | 1        | 4382     | 2020    |
| 5540     | 21998   | 13968   | 54506   | 84700   | 3270   | 2554   | 472378  | 444517 | 31212   | 1038    | 198     | 122    | 43343    | 6663     | 31562    | 8006    |
| 109      | 728     | 253     | 3110    | 581     | 213    | 3      | 432     | 1      | 157     | 1990    | 1       | 1      | 2470     | 16       | 10855    | 1730    |
| 11631    | 96670   | 31465   | 32121   | 37910   | 10661  | 3399   | 4663    | 79141  | 9729    | 13      | 87      | 5      | 8985     | 3459     | 13806    | 2384    |
| 44       | 2712    | 92      | 3454    | 1       | 19709  | 189    | 48      | 1846   | 971     | 5       | 1       | 1      | 22791    | 2131     | 25099    | 1768    |
| 5180     | 33480   | 12892   | 204015  | 17632   | 4703   | 18713  | 58216   | 100364 | 5355    | 623     | 129     | 21     | 312283   | 7819     | 17044    | 2897    |
| 6907     | 18158   | 14098   | 67158   | 7539    | 5137   | 4355   | 4814    | 27881  | 39141   | 23255   | 4023    | 3119   | 123634   | 707366   | 171548   | 196920  |
| 202429   | 286116  | 190963  | 1339254 | 165847  | 94909  | 101341 | 863251  | 491562 | 39465   | 851     | 109284  | 17996  | 139177   | 142066   | 1129552  | 309046  |
| 712738   | 79873   | 71401   | 128482  | 68311   | 15455  | 10421  | 54482   | 35752  | 2248691 | 35336   | 532869  | 67815  | 667307   | 148940   | 235713   | 447776  |
| 1892     | 3517    | 3125    | 2782    | 2059    | 329    | 2888   | 513008  | 274355 | 326     | 623     | 1       | 1      | 509      | 173      | 892      | 983     |
| 319184   | 47873   | 41733   | 435865  | 104334  | 13625  | 50726  | 5636    | 49237  | 9194    | 23      | 1712    | 4471   | -15300   | 7312     | 11320    | 5615    |
| 10062114 | 2530545 | 1405986 | 2025352 | 871072  | 412317 | 71881  | 13083   | 175462 | 8718    | 60      | 208     | 12039  | 12713    | 3788     | 8635     | 1665    |
| 117302   | 339920  | 263155  | 554773  | 257007  | 70578  | 44801  | 78992   | 120665 | 46821   | 1689    | 6317    | 312    | 106396   | 12087    | 18697    | 81428   |
| 87407    | 56613   | 1286232 | 132793  | 1248416 | 502466 | 6618   | 15912   | 22911  | 53591   | 2631    | 24537   | 8062   | 114371   | 36284    | 50600    | 973974  |
| 273715   | 122760  | 1120894 | 9034057 | 698310  | 188068 | 146796 | 27019   | 142643 | 86644   | 111634  | 84316   | 4480   | 58611    | 81253    | 56034    | 325246  |
| 26319    | 21105   | 60565   | 27445   | 1682655 | 5813   | 14458  | 8887    | 13307  | 562008  | 1       | 3718    | 941    | 53602    | 61185    | 113918   | 292011  |
| 278      | 21      | 178     | 457     | 710     | 292528 | 120    | 24      | 10765  | 200272  | 2635    | 58      | 1      | 3856     | 109      | 10771    | 573648  |
| 4264     | 5861    | 143549  | 147542  | 97092   | 31605  | 398716 | 2498    | 7198   | 3562    | 244     | 11319   | 4312   | 5615     | 12667    | 86752    | 48490   |
| 12674    | 24589   | 84846   | 102159  | 317379  | 21161  | 19117  | 152771  | 17968  | 237891  | 97      | 1529    | 269    | 11823    | 2195     | 10442    | 15949   |
| 543      | 2305    | 4421    | 7803    | 1648    | 264    | 7560   | 13108   | 48849  | 5148    | 103     | 151     | 25     | 52859    | 23676    | 67787    | 16792   |
| 190464   | 102619  | 107170  | 212335  | 84575   | 24633  | 18245  | 34282   | 44034  | 1612574 | 24204   | 60408   | 8469   | 647770   | 240458   | 85949    | 229598  |
| 16940    | 33255   | 45953   | 102293  | 25831   | 10596  | 9755   | 13362   | 26540  | 114569  | 171776  | 4116    | 1452   | 1177746  | 343653   | 159644   | 119538  |
| 557844   | 123331  | 85513   | 207781  | 102595  | 27694  | 22552  | 62837   | 38870  | 117905  | 58817   | 21871   | 143574 | 446979   | 337439   | 323173   | 137679  |
| 28087    | 10113   | 6303    | 19821   | 5516    | 1467   | 2481   | 2739    | 8481   | 9590    | 2179    | 1049    | 87745  | 45309    | 37814    | 47943    | 7213    |
| 380799   | 347709  | 502846  | 1222661 | 574579  | 141916 | 102008 | 193533  | 160265 | 300542  | 25194   | 49927   | 9899   | 713624   | 114297   | 357249   | 187795  |
| 413396   | 252218  | 411667  | 1040449 | 298682  | 308160 | 67341  | 164315  | 181408 | 928771  | 31537   | 279670  | 23484  | 1933114  | 2649433  | 887587   | 389764  |
| 12069    | 19737   | 25001   | 73553   | 32191   | 3417   | 7736   | 7946    | 13256  | 73236   | 8764    | 15849   | 2907   | 204079   | 679420   | 135941   | 73024   |
| 1        | 1       | 1       | 1       | 1       | 1      | 1      | 1       | 1      | 55556   | 1       | 1       | 1      | 1        | 1        | 1        | 1       |
| 1043714  | 1047923 | 1486780 | 3147292 | 1094334 | 530552 | 292361 | 1062664 | 745011 | 3437705 | 927421  | 497117  | 109193 | 5053999  | 5498611  | 10260508 | 5528301 |
| 2208362  | 945470  | 1568735 | 3709976 | 1693287 | 503    | 250881 | 562586  | 598129 | 3456158 | 2279578 | 3457935 | 167787 | 13362907 | 12269421 | 3240814  | 292011  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1989

| Sector | 1        | 2      | 3      | 4 | 5       | 6        | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15      | 16      |
|--------|----------|--------|--------|---|---------|----------|---------|---------|--------|--------|---------|--------|---------|---------|---------|---------|
| 1      | 1749449  | 19930  | 1329   | 0 | 35226   | 13025892 | 796928  | 1       | 749356 | 51571  | 14825   | 1      | 15542   | 472     | 11712   | 191     |
| 2      | 10528    | 455    | 86     | 0 | 2       | 958      | 813     | 39      | 126    | 63     | 809     | 346    | 16337   | 1133512 | 16      | 245237  |
| 3      | 4875     | 1      | 1      | 0 | 298047  | 6751     | 2807    | 11      | 141    | 165    | 14061   | 5      | 288661  | 3495    | 7909    | 687378  |
| 4      | 1        | 1      | 2      | 0 | 3       | 1        | 1       | 1       | 2      | 2      | 1       | 2      | 8       | 3966379 | 3       | 2       |
| 5      | 100969   | 7895   | 28296  | 0 | 41377   | 32616    | 33918   | 18282   | 8901   | 4718   | 12698   | 2693   | 38331   | 4160    | 767     | 10502   |
| 6      | 1545510  | 1      | 1      | 0 | 37      | 2995796  | 15      | 36267   | 1      | 1      | 8905    | 1      | 154929  | 689     | 1628006 | 60      |
| 7      | 62682    | 866    | 2076   | 0 | 26765   | 14367    | 5974017 | 2295824 | 1889   | 21228  | 33014   | 7221   | 72958   | 591     | 233927  | 9421    |
| 8      | 2838     | 1      | 2      | 0 | 1660    | 853      | 6304    | 11099   | 1      | 1      | 1       | 2      | 401     | 1       | 615     | 659     |
| 9      | 41707    | 19370  | 7046   | 0 | 659251  | 16355    | 5168    | 284     | 196323 | 324711 | 57477   | 413    | 22528   | 1334    | 1485    | 8447    |
| 10     | 393      | 1      | 2      | 0 | 18592   | 210      | 1548    | 21      | 27     | 23735  | 101     | 99     | 149     | 49      | 36      | 8       |
| 11     | 16799    | 198    | 474    | 0 | 76775   | 412718   | 113493  | 36612   | 10278  | 15182  | 2060546 | 762122 | 218221  | 8083    | 69761   | 127944  |
| 12     | 6721     | 1873   | 1657   | 0 | 37542   | 29777    | 26404   | 6506    | 1332   | 3720   | 6859    | 126252 | 63831   | 5509    | 3889    | 12485   |
| 13     | 967096   | 15074  | 37898  | 0 | 632904  | 717584   | 2535665 | 40917   | 67754  | 97507  | 274809  | 176864 | 8151725 | 77855   | 466605  | 206829  |
| 14     | 299919   | 8544   | 53918  | 0 | 616488  | 170944   | 158327  | 13549   | 13561  | 5873   | 81448   | 11398  | 841085  | 366551  | 36443   | 328160  |
| 15     | 1414     | 1      | 1      | 0 | 1119    | 2550     | 6150    | 453026  | 69     | 1524   | 2899    | 801    | 6821    | 393     | 1024897 | 1660    |
| 16     | 8674     | 1034   | 566    | 0 | 2977374 | 183449   | 13242   | 571     | 4182   | 14412  | 43586   | 1042   | 178736  | 6492    | 4611    | 1076842 |
| 17     | 8122     | 15034  | -523   | 0 | 1596009 | 10542    | 14327   | -470    | 77     | 7556   | 51506   | 42463  | 107873  | 8306    | 1613    | 31702   |
| 18     | 28369    | 4016   | 11449  | 0 | 1183729 | 186235   | 21697   | 3544    | 10821  | 61672  | 14195   | 2343   | 140611  | 57158   | 7963    | 63527   |
| 19     | 49940    | 16738  | 25114  | 0 | 271491  | 65023    | 144053  | 14221   | 8798   | 3742   | 26165   | 17402  | 111315  | 11505   | 27901   | 75468   |
| 20     | 36533    | 11839  | 18029  | 0 | 1224541 | 30834    | 40710   | 3047    | 7014   | 7772   | 11529   | 4873   | 58599   | 19972   | 3298    | 51582   |
| 21     | 25481    | 5955   | 17996  | 0 | 48257   | 31500    | 11335   | 3354    | 3463   | 4729   | 4868    | 8221   | 18803   | 3492    | 1673    | 34376   |
| 22     | 180964   | 2469   | 568    | 0 | 12791   | 762      | 373     | 22      | 422    | 152    | 97      | 60     | 455     | 3755    | 95      | 430     |
| 23     | 6531     | 561    | 308    | 0 | 214577  | 3208     | 3709    | 97      | 927    | 138    | 982     | 417    | 19113   | 2215    | 284     | 2583    |
| 24     | 20113    | 8165   | 11545  | 0 | 74041   | 41818    | 106060  | 4625    | 6103   | 88463  | 8845    | 4587   | 70896   | 5345    | 126978  | 43378   |
| 25     | 4294     | 92     | 1060   | 0 | 8495    | 53048    | 62192   | 54836   | 372    | 129    | 765     | 731    | 2725    | 7960    | 6017    | 1596    |
| 26     | 142590   | 7289   | 19157  | 0 | 825698  | 241833   | 102351  | 40767   | 37651  | 19373  | 48283   | 40606  | 231098  | 171693  | 26246   | 242055  |
| 27     | 30456    | 2866   | 6187   | 0 | 125023  | 52725    | 48754   | 8782    | 5682   | 4983   | 11265   | 14757  | 70048   | 5912    | 8124    | 22338   |
| 28     | 33774    | 35798  | 54326  | 0 | 59827   | 173683   | 433966  | 33764   | 29216  | 13428  | 140562  | 17464  | 569239  | 25324   | 24547   | 270217  |
| 29     | 8975     | 184    | 2361   | 0 | 16302   | 53183    | 44947   | 2932    | 2227   | 2083   | 6342    | 2603   | 92183   | 5466    | 4913    | 19393   |
| 30     | 322500   | 15340  | 23464  | 0 | 884075  | 919917   | 308126  | 249416  | 59850  | 78801  | 171032  | 125886 | 843035  | 47447   | 204139  | 145922  |
| 31     | 472703   | 40672  | 58826  | 0 | 2892179 | 699711   | 521924  | 124570  | 78533  | 81787  | 178163  | 172239 | 974879  | 170690  | 192886  | 346408  |
| 32     | 31455    | 2952   | 2830   | 0 | 43552   | 46748    | 33309   | 5986    | 4891   | 2901   | 8176    | 3940   | 56909   | 23100   | 7991    | 14103   |
| 33     | 11894    | 1      | 1      | 0 | 2       | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 2       | 1       |
| wL     | 2388394  | 417494 | 494917 | 0 | 6920506 | 1942896  | 2154969 | 754469  | 219949 | 165406 | 525580  | 634396 | 2151022 | 294923  | 754223  | 1095394 |
| rK     | 12361648 | 154179 | 301459 | 0 | 4721947 | 5564066  | 2082446 | 492153  | 151294 | 178698 | 617976  | 294899 | 3396131 | 2093474 | 404381  | 1305203 |

## Notes

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1989

| 17       | 18      | 19      | 20      | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33      |
|----------|---------|---------|---------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|---------|
| 1519     | 86      | 292     | 233     | 24      | 2       | 30     | 279386  | 15370  | 118     | 1       | 6       | 1      | 19778    | 725      | 35814    | 18887   |
| 15134    | 1425    | 1665    | 561     | 204     | 20      | 1      | 1416    | 1363   | 1       | 1       | 289344  | 1      | 6554     | 1        | 1136     | 2096    |
| 1037299  | 1641    | 2538    | 12652   | 898     | 527     | 552    | 981     | 10843  | 3481    | 1       | 1       | 1      | 1        | 1        | 6        | 328     |
| 1        | 1       | 2       | 1       | 1       | 2       | 1      | 2       | 1      | 1       | 1       | 347757  | 53938  | 1        | 2        | 1        | 1       |
| 40471    | 14700   | 16536   | 39084   | 5055    | 12572   | 2896   | 9339    | 8375   | 28249   | 17972   | 135315  | 33499  | 417769   | 1558065  | 159476   | 476365  |
| 1493     | 2       | 1       | 1       | 1       | 2       | 1      | 1       | 3552   | 44      | 1       | 1       | 1      | 2810     | 1        | 3802     | 1578    |
| 6079     | 23155   | 16404   | 57466   | 91527   | 5922    | 2538   | 560753  | 396383 | 31432   | 1089    | 191     | 171    | 45917    | 8252     | 33005    | 7535    |
| 152      | 979     | 379     | 4185    | 801     | 492     | 4      | 655     | 1      | 201     | 2665    | 1       | 2      | 3340     | 25       | 14488    | 2078    |
| 12511    | 99743   | 36222   | 33196   | 40157   | 18926   | 3311   | 5426    | 69177  | 9604    | 13      | 82      | 6      | 9331     | 4199     | 14152    | 2199    |
| 77       | 4579    | 172     | 5841    | 2       | 57246   | 301    | 91      | 2639   | 1568    | 8       | 2       | 2      | 38723    | 4234     | 42095    | 2668    |
| 5460     | 33851   | 14544   | 206614  | 18302   | 8181    | 17864  | 66384   | 85969  | 5180    | 628     | 120     | 28     | 317792   | 9302     | 17120    | 2619    |
| 7504     | 18920   | 16391   | 70094   | 8064    | 9210    | 4285   | 5657    | 24613  | 39020   | 24155   | 3847    | 4327   | 129663   | 867329   | 177589   | 183477  |
| 201893   | 273707  | 203823  | 1283269 | 162878  | 156213  | 91529  | 931344  | 398379 | 36120   | 811     | 95950   | 22920  | 134004   | 159919   | 1073514  | 264354  |
| 735884   | 79099   | 78893   | 127446  | 69450   | 26333   | 9744   | 60849   | 29995  | 2130566 | 34883   | 484326  | 89412  | 665129   | 173561   | 231907   | 396508  |
| 1771     | 3158    | 3130    | 2502    | 1898    | 509     | 2448   | 519422  | 208667 | 280     | 558     | 1       | 1      | 460      | 182      | 796      | 789     |
| 363662   | 52317   | 50885   | 477105  | 117054  | 25619   | 52337  | 6946    | 45584  | 9613    | 25      | 1717    | 6505   | -16829   | 9403     | 12290    | 5487    |
| 10809236 | 2607443 | 1616367 | 2090314 | 921433  | 730966  | 69927  | 15203   | 153164 | 8594    | 61      | 197     | 16515  | 13184    | 4593     | 8839     | 1534    |
| 120947   | 336173  | 290372  | 549555  | 260939  | 120094  | 41831  | 88105   | 101097 | 44301   | 1665    | 5734    | 411    | 105905   | 14066    | 18371    | 72007   |
| 108198   | 67218   | 1703910 | 157926  | 1521731 | 1026457 | 7419   | 21307   | 23045  | 60877   | 3114    | 26738   | 12744  | 136676   | 50694    | 59687    | 1034033 |
| 273249   | 117548  | 1197506 | 8664593 | 686456  | 309839  | 132709 | 29178   | 115712 | 79375   | 106553  | 74098   | 5711   | 56486    | 91550    | 53304    | 278474  |
| 13353    | 10271   | 32885   | 13378   | 840654  | 4867    | 6643   | 4877    | 5486   | 261665  | 0       | 1661    | 610    | 26254    | 35037    | 55076    | 127066  |
| 1045     | 74      | 718     | 1652    | 2629    | 1815175 | 409    | 98      | 32892  | 691030  | 9471    | 193     | 5      | 13995    | 461      | 38592    | 1849904 |
| 4506     | 5941    | 162340  | 149793  | 101032  | 55118   | 381558 | 2856    | 6181   | 3454    | 246     | 10530   | 5819   | 5729     | 15108    | 87358    | 43948   |
| 34027    | 63323   | 243781  | 263512  | 839073  | 93761   | 46479  | 443691  | 39199  | 586112  | 250     | 3613    | 921    | 30644    | 6653     | 26714    | 36724   |
| 642      | 2615    | 5596    | 8867    | 1919    | 516     | 8099   | 16773   | 46954  | 5588    | 116     | 157     | 38     | 60363    | 31609    | 76409    | 17036   |
| 203210   | 105016  | 122366  | 217651  | 88854   | 43372   | 17628  | 39566   | 38176  | 1578844 | 24691   | 56737   | 11539  | 667198   | 289556   | 87383    | 210094  |
| 17257    | 32496   | 50100   | 100120  | 25913   | 17815   | 8999   | 14725   | 21970  | 107108  | 167318  | 3692    | 1889   | 1158298  | 395138   | 154979   | 104445  |
| 539242   | 114351  | 88462   | 192967  | 97657   | 44179   | 19741  | 65707   | 30532  | 104590  | 54360   | 18612   | 177230 | 417118   | 368152   | 297686   | 114143  |
| 42070    | 14528   | 10103   | 28523   | 8135    | 3626    | 3365   | 4437    | 10322  | 13181   | 3121    | 1383    | 167832 | 65516    | 63926    | 68428    | 9266    |
| 401328   | 351490  | 567141  | 1237981 | 596289  | 246828  | 97356  | 220638  | 137249 | 290666  | 25387   | 46320   | 13322  | 726060   | 135956   | 358778   | 169746  |
| 487445   | 285253  | 519467  | 1178650 | 346795  | 599646  | 71906  | 209584  | 173813 | 1004971 | 35554   | 290298  | 35360  | 2200477  | 3525919  | 997290   | 394161  |
| 12504    | 19613   | 27719   | 73212   | 32840   | 5842    | 7258   | 8905    | 11159  | 69628   | 8682    | 14455   | 3845   | 204113   | 794460   | 134207   | 64886   |
| 1        | 1       | 1       | 1       | 1       | 1       | 1      | 1       | 1      | 36471   | 1       | 1       | 1      | 1        | 1        | 1        | 1       |
| 1181301  | 1137636 | 1800855 | 3422326 | 1219645 | 990984  | 299657 | 1301063 | 685189 | 3570537 | 1003617 | 495308  | 157819 | 5522233  | 7024132  | 11066227 | 5366406 |
| 2386368  | 979963  | 1814135 | 3851620 | 1801781 | 897     | 245505 | 657626  | 525207 | 3427256 | 2355232 | 3289441 | 231534 | 13940185 | 14964140 | 3337128  | 270632  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1990

| Sector | 1        | 2      | 3      | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12     | 13      | 14      | 15      | 16      |
|--------|----------|--------|--------|---|----------|----------|---------|---------|--------|--------|---------|--------|---------|---------|---------|---------|
| 1      | 2027915  | 36819  | 2571   | 1 | 49558    | 13576937 | 782055  | 29      | 789873 | 3304   | 66749   | 1      | 167281  | 576     | 69141   | 126     |
| 2      | 1        | 357    | 31     | 1 | 1        | 1349     | 112     | 29      | 25     | 1      | 923     | 238    | 9485    | 1134199 | 12      | 177057  |
| 3      | 5535     | 11     | 32     | 1 | 399250   | 19213    | 3607    | 45      | 525    | 1      | 16003   | 161    | 313080  | 49963   | 1734    | 993495  |
| 4      | 1        | 1      | 1      | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 5029627 | 1       | 1       |
| 5      | 65573    | 9431   | 20987  | 1 | 113789   | 23634    | 8588    | 1783    | 3015   | 534    | 4054    | 26     | 28280   | 13731   | 3252    | 6999    |
| 6      | 2110364  | 1      | 1      | 1 | 211      | 3627309  | 14384   | 33444   | 1      | 1      | 11793   | 1      | 211167  | 314     | 956035  | 206     |
| 7      | 66072    | 382    | 1023   | 1 | 48332    | 10326    | 6131097 | 2424639 | 859    | 24289  | 29049   | 5700   | 19583   | 1113    | 665981  | 9097    |
| 8      | 476      | 1      | 1      | 1 | 2305     | 518      | 1271    | 2123    | 315    | 190    | 501     | 1      | 1109    | 501     | 10687   | 245     |
| 9      | 40226    | 25565  | 10407  | 1 | 1053545  | 20246    | 4058    | 3072    | 272138 | 458510 | 8047    | 105    | 11952   | 1463    | 2736    | 9966    |
| 10     | 148      | 1      | 13     | 1 | 213341   | 293      | 29      | 121     | 28     | 23260  | 62      | 19     | 257     | 1       | 445     | 171     |
| 11     | 36525    | 19     | 300    | 1 | 136301   | 422195   | 127310  | 27164   | 14025  | 18349  | 2197335 | 925168 | 199745  | 5706    | 119759  | 144821  |
| 12     | 7806     | 377    | 1197   | 1 | 44567    | 31985    | 18374   | 3675    | 858    | 2889   | 10481   | 152762 | 36253   | 4164    | 35829   | 8693    |
| 13     | 883784   | 16911  | 25507  | 1 | 551853   | 493736   | 2815875 | 20454   | 70278  | 78652  | 279539  | 172831 | 7937349 | 120538  | 603496  | 257164  |
| 14     | 390643   | 2697   | 52831  | 1 | 655863   | 144217   | 153217  | 9429    | 13351  | 8666   | 73672   | 13676  | 1250340 | 450162  | 31426   | 321725  |
| 15     | 3893     | 210    | 614    | 1 | 5155     | 2681     | 7723    | 11308   | 91     | 8509   | 3299    | 776    | 5092    | 692     | 2481253 | 512     |
| 16     | 18593    | 83     | 1009   | 1 | 5069144  | 123629   | 10433   | 1191    | 2752   | 24671  | 31022   | 652    | 189556  | 11802   | 3658    | 1087781 |
| 17     | 14417    | 10403  | 2428   | 1 | 2516071  | 16169    | 10498   | 360     | 2400   | 15743  | 37894   | 22323  | 132250  | 15993   | 5642    | 68209   |
| 18     | 50729    | 3075   | 9897   | 1 | 1952426  | 407980   | 28454   | 2028    | 10849  | 54407  | 13388   | 1407   | 189637  | 63695   | 37245   | 59545   |
| 19     | 131390   | 16592  | 48560  | 1 | 1438683  | 90494    | 194985  | 12413   | 16838  | 14830  | 37662   | 5905   | 167340  | 51091   | 26911   | 118085  |
| 20     | 35818    | 9807   | 4727   | 1 | 1642843  | 28900    | 26601   | 1198    | 1591   | 1568   | 6169    | 4160   | 30230   | 7932    | 6215    | 23427   |
| 21     | 1        | 1      | 1      | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1       | 1       |
| 22     | 205318   | 14737  | 56437  | 1 | 127991   | 69907    | 24082   | 6106    | 10282  | 14136  | 11342   | 22941  | 48801   | 7190    | 10835   | 93025   |
| 23     | 21330    | 600    | 240    | 1 | 72009    | 5678     | 5914    | 476     | 225    | 510    | 1937    | 633    | 28471   | 7297    | 1608    | 3920    |
| 24     | 97066    | 3490   | 10596  | 1 | 927122   | 484749   | 91471   | 61292   | 6250   | 69806  | 54164   | 17042  | 239503  | 13935   | 194009  | 40398   |
| 25     | 6502     | 79     | 829    | 1 | 6481     | 102644   | 60222   | 43634   | 2053   | 95     | 780     | 29     | 3257    | 351     | 69083   | 916     |
| 26     | 218095   | 15884  | 22123  | 1 | 784429   | 357801   | 151354  | 36642   | 89104  | 37499  | 54138   | 67136  | 276079  | 214877  | 71743   | 278715  |
| 27     | 27331    | 772    | 4368   | 1 | 119176   | 49122    | 36457   | 10695   | 5024   | 4716   | 11489   | 19816  | 48851   | 9891    | 13816   | 21442   |
| 28     | 51054    | 35640  | 44883  | 1 | 83457    | 157950   | 328512  | 26593   | 28484  | 14682  | 117796  | 13040  | 424087  | 34238   | 45698   | 235392  |
| 29     | 9877     | 157    | 2078   | 1 | 17155    | 36262    | 31792   | 3344    | 2516   | 1444   | 5421    | 1986   | 72122   | 17690   | 7280    | 15511   |
| 30     | 455897   | 12396  | 18635  | 1 | 1358574  | 1303541  | 362399  | 196228  | 80316  | 111498 | 136490  | 117899 | 727758  | 56181   | 457084  | 196166  |
| 31     | 402060   | 28185  | 108269 | 1 | 4143699  | 872451   | 855065  | 136486  | 99689  | 94389  | 252391  | 253982 | 1346062 | 141974  | 331072  | 404646  |
| 32     | 38397    | 1617   | 3541   | 1 | 58567    | 62455    | 29484   | 3992    | 6147   | 4485   | 6188    | 13192  | 108084  | 12343   | 13297   | 10522   |
| 33     | 23508    | 1      | 1      | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1      | 1       | 1       | 1       | 1       |
| wL     | 2310322  | 335872 | 254201 | 1 | 11643069 | 2029027  | 2032761 | 609589  | 248727 | 276791 | 610416  | 795111 | 2064649 | 385565  | 1735902 | 1428722 |
| rK     | 12587511 | 127211 | 829109 | 1 | 9082903  | 5339854  | 1694235 | 270376  | 177116 | 241815 | 734729  | 390198 | 3388129 | 1098663 | 641942  | 1707542 |

## Notes

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

## Gross Output 1990

| 17       | 18      | 19      | 20       | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33      |
|----------|---------|---------|----------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|---------|
| 721      | 59      | 370     | 2587     | 1       | 91      | 31     | 154811  | 35152  | 48      | 13      | 5       | 1      | 8630     | 759      | 31795    | 21902   |
| 9538     | 470     | 294     | 623      | 17      | 221     | 1      | 191     | 53     | 1442    | 73      | 306045  | 2036   | 4044     | 125      | 1203     | 19      |
| 1062345  | 1982    | 4231    | 14374    | 314     | 3734    | 528    | 6476    | 12138  | 3976    | 1       | 11      | 1      | 1        | 11       | 557      | 756     |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 336407 | 1        | 1        | 1        | 1       |
| 80450    | 8066    | 12756   | 28680    | 8677    | 10168   | 1379   | 7159    | 3263   | 33382   | 26832   | 305962  | 21979  | 332394   | 2311030  | 167752   | 513319  |
| 153      | 1       | 179     | 1        | 1       | 29      | 1      | 257     | 390    | 68      | 1       | 1       | 1      | 3715     | 1        | 4121     | 1671    |
| 4213     | 9444    | 13533   | 43756    | 98663   | 16024   | 2245   | 245278  | 303806 | 19388   | 1159    | 276     | 221    | 43823    | 14532    | 15139    | 18467   |
| 402      | 199     | 1890    | 2329     | 3879    | 357     | 138    | 205     | 68     | 191     | 2451    | 1       | 1      | 2248     | 1400     | 11451    | 24040   |
| 17887    | 79196   | 42796   | 31967    | 29854   | 32754   | 1777   | 4654    | 84234  | 19130   | 24      | 127     | 3      | 20789    | 7152     | 14087    | 6990    |
| 56       | 2300    | 138     | 1385     | 125     | 14851   | 4      | 84      | 72     | 1422    | 3193    | 2       | 7      | 19799    | 5768     | 33230    | 6714    |
| 9791     | 40816   | 25747   | 220814   | 3556    | 32296   | 18279  | 66986   | 89315  | 7112    | 1112    | 175     | 23     | 349195   | 23485    | 16154    | 5075    |
| 5948     | 15217   | 13176   | 51001    | 2779    | 4747    | 4796   | 29272   | 15970  | 29656   | 4156    | 2937    | 1525   | 151361   | 1229542  | 180862   | 193920  |
| 209538   | 171786  | 255180  | 727986   | 85134   | 273680  | 35576  | 2627099 | 275520 | 31536   | 947     | 177217  | 27219  | 59484    | 101614   | 1220250  | 127754  |
| 887212   | 53236   | 72822   | 95444    | 39697   | 56569   | 5418   | 58705   | 21850  | 2247798 | 17173   | 523850  | 81669  | 698475   | 221146   | 238140   | 315248  |
| 1494     | 3517    | 9077    | 5231     | 1707    | 3597    | 3129   | 1304    | 113955 | 3893    | 1597    | 1       | 1      | 15504    | 1671     | 2896     | 5778    |
| 300886   | 59702   | 99056   | 886539   | 71782   | 81117   | 55859  | 56814   | 65620  | 11191   | 332     | 1898    | 3933   | 2793     | 11145    | 13702    | 18844   |
| 12490588 | 2977355 | 2250071 | 1958118  | 185838  | 1934969 | 96192  | 51648   | 165627 | 13041   | 68      | 338     | 15301  | 11894    | 14679    | 14461    | 6328    |
| 64349    | 397328  | 427392  | 302744   | 211342  | 222200  | 33884  | 81130   | 73389  | 56048   | 2475    | 8094    | 661    | 90067    | 18546    | 24858    | 97031   |
| 246523   | 248833  | 2862440 | 374935   | 413803  | 1013191 | 22862  | 106737  | 34050  | 58989   | 8616    | 26143   | 16359  | 85698    | 40741    | 28996    | 1154958 |
| 77157    | 67638   | 693895  | 10383864 | 664651  | 279196  | 234972 | 25545   | 99923  | 93127   | 107655  | 62234   | 1338   | 92674    | 199387   | 102594   | 274623  |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1      | 1        | 1        | 1        | 115692  |
| 36628    | 27777   | 93997   | 32357    | 3789591 | 1640496 | 20351  | 14835   | 15310  | 853815  | 4312    | 3369    | 2327   | 68703    | 112023   | 148161   | 965104  |
| 13263    | 26200   | 189716  | 243346   | 83554   | 89403   | 308734 | 2567    | 2963   | 13924   | 10846   | 15278   | 9443   | 12408    | 34273    | 148279   | 200008  |
| 30234    | 90426   | 202365  | 854278   | 398253  | 601227  | 68065  | 509222  | 164025 | 291844  | 247     | 1359    | 972    | 99224    | 135594   | 25509    | 20508   |
| 764      | 3964    | 11895   | 10230    | 2596    | 1999    | 4374   | 2635    | 35008  | 2864    | 151     | 135     | 64     | 49821    | 42030    | 66694    | 36595   |
| 259086   | 86387   | 164069  | 311735   | 76201   | 87439   | 23530  | 74605   | 51951  | 1566717 | 38273   | 53070   | 9992   | 683985   | 472311   | 151350   | 252156  |
| 23432    | 23941   | 44959   | 76272    | 18202   | 22788   | 7534   | 18867   | 14035  | 110515  | 184536  | 5485    | 1451   | 1291399  | 548616   | 182098   | 135867  |
| 527473   | 90888   | 98320   | 159034   | 49028   | 75674   | 15038  | 108900  | 24031  | 106936  | 47025   | 446787  | 130891 | 435694   | 471388   | 276613   | 93607   |
| 19435    | 9198    | 13441   | 26018    | 2658    | 5361    | 3224   | 5611    | 7545   | 11698   | 2730    | 354390  | 197512 | 59646    | 91442    | 74052    | 13678   |
| 500133   | 285275  | 505765  | 1217867  | 466299  | 433062  | 98610  | 238046  | 139201 | 320931  | 18880   | 66769   | 16913  | 1016627  | 174066   | 293522   | 227388  |
| 635323   | 366479  | 503774  | 1211093  | 411676  | 516275  | 131108 | 312086  | 233370 | 1466422 | 141206  | 165896  | 70985  | 3124486  | 4250315  | 1657250  | 610347  |
| 51007    | 19535   | 44814   | 80600    | 17328   | 16323   | 4276   | 12883   | 7061   | 68183   | 11819   | 10204   | 1979   | 149804   | 914588   | 202395   | 63525   |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 3614    | 1       | 1       | 1      | 1        | 1        | 1        | 1       |
| 1542134  | 1346495 | 2413223 | 3719997  | 1146711 | 1801276 | 316340 | 997278  | 618301 | 4653531 | 1288633 | 530968  | 211847 | 5762302  | 9084058  | 12619123 | 7469428 |
| 2880102  | 1171848 | 2189928 | 3894042  | 2768317 | 1371078 | 244701 | 1165063 | 566367 | 3819043 | 2428037 | 2915152 | 301818 | 16022124 | 18597246 | 3303155  | 246312  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1991

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13      | 14      | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|---------|---------|---------|---------|
| 1      | 2065834  | 29329  | 3076    | 0 | 54285    | 14499291 | 827555  | 30      | 917023 | 3786   | 72117   | 1       | 185184  | 855     | 62153   | 143     |
| 2      | 1        | 217    | 28      | 0 | 1        | 1098     | 90      | 23      | 22     | 1      | 760     | 198     | 8002    | 1281992 | 8       | 152913  |
| 3      | 5910     | 10     | 40      | 0 | 458400   | 21507    | 4001    | 49      | 638    | 1      | 18123   | 185     | 363284  | 77671   | 1634    | 1180099 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1       | 6300228 | 1       | 1       |
| 5      | 72371    | 8140   | 27199   | 0 | 135041   | 27345    | 9845    | 2009    | 3793   | 663    | 4746    | 31      | 33918   | 22065   | 3167    | 8594    |
| 6      | 2370829  | 1      | 1       | 0 | 255      | 4271957  | 16786   | 38346   | 1      | 1      | 14051   | 1       | 257797  | 513     | 947748  | 257     |
| 7      | 68188    | 308    | 1240    | 0 | 53635    | 11171    | 6572679 | 2553813 | 1011   | 28198  | 31796   | 6315    | 21962   | 1673    | 606497  | 10444   |
| 8      | 530      | 1      | 1       | 0 | 2760     | 605      | 1471    | 2413    | 400    | 238    | 592     | 1       | 1342    | 812     | 10503   | 303     |
| 9      | 48521    | 24113  | 14741   | 0 | 1366460  | 25601    | 5085    | 3782    | 374103 | 622125 | 10294   | 136     | 15667   | 2570    | 2912    | 13373   |
| 10     | 167      | 1      | 18      | 0 | 259038   | 347      | 34      | 139     | 36     | 29545  | 74      | 23      | 315     | 2       | 444     | 215     |
| 11     | 38083    | 15     | 367     | 0 | 152815   | 461488   | 137887  | 28907   | 16666  | 21521  | 2429918 | 1035563 | 226326  | 8661    | 110187  | 167977  |
| 12     | 8009     | 302    | 1442    | 0 | 49169    | 34404    | 19583   | 3849    | 1003   | 3335   | 11405   | 168261  | 40422   | 6220    | 32439   | 9922    |
| 13     | 933764   | 13972  | 31646   | 0 | 626951   | 546872   | 3090429 | 22056   | 84623  | 93477  | 313242  | 196029  | 9113322 | 185417  | 562654  | 302255  |
| 14     | 451365   | 2437   | 71681   | 0 | 814855   | 174688   | 183895  | 11119   | 17581  | 11264  | 90281   | 16963   | 1569951 | 757270  | 32042   | 413528  |
| 15     | 4194     | 177    | 777     | 0 | 5971     | 3027     | 8642    | 12432   | 112    | 10311  | 3770    | 897     | 5961    | 1085    | 2358629 | 614     |
| 16     | 20219    | 70     | 1288    | 0 | 5927413  | 140939   | 11785   | 1321    | 3411   | 30178  | 35780   | 761     | 224006  | 18686   | 3510    | 1315906 |
| 17     | 15052    | 8493   | 2976    | 0 | 2824616  | 17696    | 11385   | 384     | 2856   | 18489  | 41960   | 25020   | 150046  | 24310   | 5197    | 79219   |
| 18     | 58838    | 2789   | 13479   | 0 | 2434972  | 496065   | 34282   | 2401    | 14341  | 70984  | 16468   | 1751    | 239019  | 107557  | 38120   | 76827   |
| 19     | 147670   | 14582  | 64088   | 0 | 1738658  | 106622   | 227638  | 14238   | 21567  | 18749  | 44893   | 7124    | 204381  | 83601   | 26690   | 147637  |
| 20     | 38653    | 8276   | 5989    | 0 | 1906322  | 32695    | 29819   | 1319    | 1957   | 1903   | 7061    | 4819    | 35452   | 12462   | 5918    | 28124   |
| 21     | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       |
| 22     | 236476   | 13273  | 76328   | 0 | 158512   | 84407    | 28812   | 7178    | 13497  | 18315  | 13855   | 28365   | 61080   | 12056   | 11012   | 119188  |
| 23     | 22711    | 500    | 300     | 0 | 82442    | 6337     | 6541    | 517     | 273    | 611    | 2188    | 724     | 32942   | 11311   | 1511    | 4643    |
| 24     | 107834   | 3032   | 13823   | 0 | 1107508  | 564556   | 105557  | 69494   | 7913   | 87235  | 63818   | 20325   | 289143  | 22539   | 190190  | 49926   |
| 25     | 8323     | 79     | 1247    | 0 | 8922     | 137757   | 80085   | 57011   | 2995   | 137    | 1059    | 40      | 4531    | 654     | 78041   | 1305    |
| 26     | 239157   | 13620  | 28487   | 0 | 924932   | 411318   | 172404  | 41008   | 111355 | 46256  | 62963   | 79032   | 328989  | 343053  | 69421   | 339992  |
| 27     | 30111    | 665    | 5651    | 0 | 141182   | 56734    | 41722   | 12026   | 6308   | 5845   | 13424   | 23436   | 58486   | 15865   | 13432   | 26279   |
| 28     | 56685    | 30942  | 58517   | 0 | 99636    | 183846   | 378879  | 30134   | 36043  | 18336  | 138711  | 15542   | 511682  | 55345   | 44772   | 290736  |
| 29     | 11578    | 144    | 2860    | 0 | 21623    | 44563    | 38713   | 4000    | 3361   | 1904   | 6739    | 2499    | 91875   | 30191   | 7531    | 20227   |
| 30     | 478612   | 10176  | 22972   | 0 | 1533625  | 1434633  | 395201  | 210247  | 96094  | 131671 | 151973  | 132872  | 830260  | 85870   | 423437  | 229093  |
| 31     | 476712   | 26132  | 150742  | 0 | 5282901  | 1084441  | 1053123 | 165160  | 134707 | 125890 | 317385  | 323278  | 1734365 | 245080  | 346389  | 533718  |
| 32     | 43311    | 1426   | 4690    | 0 | 71035    | 73853    | 34546   | 4596    | 7901   | 5691   | 7403    | 15975   | 132487  | 20269   | 13235   | 13203   |
| 33     | 15862    | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       |
| wL     | 2613725  | 297130 | 337698  | 0 | 14163608 | 2406437  | 2388845 | 703845  | 320692 | 352244 | 732420  | 965657  | 2538304 | 635066  | 1732962 | 1798072 |
| rK     | 13893987 | 109798 | 1074638 | 0 | 10780298 | 6178966  | 1942563 | 304584  | 222804 | 300244 | 860126  | 462359  | 4064032 | 1765573 | 625258  | 2096672 |

## Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

## Gross Output 1991

| 17       | 18      | 19      | 20       | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33      |
|----------|---------|---------|----------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|---------|
| 809      | 69      | 424     | 2931     | 1       | 106     | 35     | 173643  | 35718  | 52      | 15      | 6       | 1      | 9056     | 913      | 36221    | 23903   |
| 8154     | 417     | 257     | 538      | 14      | 196     | 1      | 163     | 41     | 1211    | 64      | 262374  | 2098   | 3234     | 115      | 1045     | 15      |
| 1249102  | 2420    | 5083    | 17071    | 357     | 4553    | 621    | 7614    | 12927  | 4593    | 1       | 13      | 1      | 1        | 14       | 665      | 865     |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 384014 | 1        | 1        | 1        | 1       |
| 97774    | 10182   | 15840   | 35208    | 10198   | 12813   | 1678   | 8699    | 3592   | 39861   | 33240   | 372895  | 32185  | 377894   | 3012266  | 207047   | 606952  |
| 189      | 1       | 226     | 1        | 1       | 37      | 1      | 318     | 437    | 83      | 1       | 1       | 1      | 4298     | 1        | 5178     | 2011    |
| 4788     | 11147   | 15714   | 50227    | 108438  | 18882   | 2555   | 278714  | 312732 | 21648   | 1342    | 314     | 303    | 46587    | 17711    | 17472    | 20418   |
| 493      | 254     | 2368    | 2885     | 4600    | 454     | 170    | 251     | 76     | 230     | 3063    | 1       | 1      | 2579     | 1842     | 14262    | 28682   |
| 23758    | 109254  | 58080   | 42888    | 38349   | 45110   | 2364   | 6181    | 101344 | 24965   | 32      | 169     | 5      | 25830    | 10189    | 19002    | 9033    |
| 69       | 2970    | 176     | 1739     | 150     | 19147   | 5      | 104     | 81     | 1737    | 4047    | 3       | 11     | 23030    | 7691     | 41962    | 8123    |
| 11241    | 48673   | 30204   | 256084   | 3948    | 38448   | 21022  | 76903   | 92887  | 8023    | 1302    | 201     | 31     | 375049   | 28919    | 18836    | 5668    |
| 6720     | 17857   | 15210   | 58203    | 3036    | 5561    | 5427   | 33069   | 16344  | 32921   | 4786    | 3328    | 2076   | 159972   | 1489862  | 207521   | 213160  |
| 243784   | 207581  | 303347  | 855506   | 95793   | 330156  | 41458  | 3056169 | 290355 | 36048   | 1123    | 206761  | 38156  | 64738    | 126790   | 1441766  | 144606  |
| 1128826  | 70350   | 94670   | 122660   | 48847   | 74629   | 6905   | 74685   | 25182  | 2809934 | 22273   | 668388  | 125199 | 831324   | 301766   | 307705   | 390232  |
| 1773     | 4333    | 11002   | 6267     | 1958    | 4424    | 3718   | 1547    | 122442 | 4537    | 1930    | 1       | 1      | 17203    | 2126     | 3488     | 6668    |
| 360301   | 74252   | 121198  | 1072304  | 83131   | 100719  | 66999  | 68027   | 71176  | 13167   | 405     | 2279    | 5675   | 3129     | 14313    | 16662    | 21954   |
| 14359912 | 3555152 | 2643115 | 2273867  | 206628  | 2306622 | 110769 | 59372   | 172478 | 14730   | 80      | 389     | 21195  | 12792    | 18100    | 16883    | 7078    |
| 82185    | 527059  | 557737  | 390557   | 261050  | 294258  | 43347  | 103607  | 84902  | 70332   | 3223    | 10367   | 1017   | 107607   | 25403    | 32242    | 120568  |
| 305098   | 319851  | 3619667 | 468699   | 495291  | 1300188 | 28341  | 132085  | 38171  | 71729   | 10869   | 32446   | 24393  | 99214    | 54076    | 36444    | 1390651 |
| 91687    | 83480   | 842514  | 12463752 | 763856  | 344013  | 279679 | 30353   | 107556 | 108730  | 130402  | 74162   | 1916   | 103017   | 254109   | 123810   | 317498  |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1      | 1        | 1        | 1        | 110628  |
| 46454    | 36589   | 121808  | 41451    | 4648264 | 2157357 | 25853  | 18813   | 17589  | 1063938 | 5575    | 4284    | 3555   | 81509    | 152374   | 190832   | 1190852 |
| 15550    | 31904   | 227272  | 288186   | 94743   | 108687  | 362567 | 3010    | 3146   | 16039   | 12962   | 17964   | 13339  | 13608    | 43096    | 176553   | 228144  |
| 36985    | 114893  | 252947  | 1055598  | 471180  | 762631  | 83403  | 622885  | 181755 | 350778  | 308     | 1667    | 1432   | 113548   | 177899   | 31691    | 24408   |
| 1077     | 5805    | 17134   | 14566    | 3539    | 2922    | 6177   | 3715    | 44702  | 3966    | 217     | 191     | 109    | 65700    | 63544    | 95482    | 50190   |
| 312847   | 108342  | 202425  | 380217   | 88988   | 109479  | 28460  | 90078   | 56822  | 1858740 | 47108   | 64263   | 14538  | 772601   | 611657   | 185599   | 296230  |
| 28427    | 30167   | 55730   | 93464    | 21356   | 28665   | 9155   | 22887   | 15423  | 131729  | 228203  | 6672    | 2121   | 1465551  | 713807   | 224352   | 160364  |
| 644891   | 115413  | 122822  | 196397   | 57972   | 95933   | 18415  | 133129  | 26613  | 128455  | 58604   | 547784  | 192815 | 498296   | 618096   | 343449   | 111344  |
| 25087    | 12332   | 17728   | 33924    | 3318    | 7175    | 4168   | 7242    | 8822   | 14836   | 3593    | 458751  | 307193 | 72024    | 126593   | 97076    | 17177   |
| 578167   | 342524  | 597404  | 1422085  | 521336  | 519101  | 114182 | 275162  | 145762 | 364519  | 22248   | 77405   | 23558  | 1099385  | 215811   | 344598   | 255744  |
| 829490   | 496964  | 672052  | 1597171  | 519825  | 698927  | 171457 | 407427  | 275992 | 1881114 | 187927  | 217208  | 111667 | 3816060  | 5951532  | 2197395  | 775290  |
| 63355    | 25201   | 56874   | 101122   | 20816   | 21023   | 5320   | 16000   | 7945   | 83209   | 14964   | 12710   | 2961   | 174059   | 1218341  | 255303   | 76765   |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 2639    | 1       | 1       | 1      | 1        | 1        | 1        | 1       |
| 1921148  | 1742217 | 3071760 | 4681001  | 1381586 | 2326766 | 394733 | 1242263 | 697707 | 5695881 | 1636389 | 663330  | 317985 | 6715135  | 12136953 | 15965093 | 9053087 |
| 3500631  | 1479342 | 2719689 | 4780754  | 3254165 | 1727963 | 297910 | 1415945 | 623549 | 4560710 | 3008238 | 3553222 | 442006 | 18217068 | 24242538 | 4077283  | 291269  |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1992**

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9       | 10     | 11      | 12      | 13       | 14      | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|---------|--------|---------|---------|----------|---------|---------|---------|
| 1      | 2221852  | 28903  | 3458    | 0 | 59644    | 15816947 | 900471  | 33      | 1024210 | 4209   | 78932   | 1       | 204077   | 1009    | 64115   | 158     |
| 2      | 1        | 199    | 30      | 0 | 1        | 1117     | 91      | 23      | 23      | 1      | 776     | 203     | 8226     | 1411741 | 8       | 158104  |
| 3      | 6456     | 10     | 46      | 0 | 511561   | 23829    | 4422    | 54      | 724     | 1      | 20148   | 206     | 406634   | 93139   | 1712    | 1328664 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1       | 1      | 1       | 1       | 1        | 7196918 | 1       | 1       |
| 5      | 79796    | 8223   | 31347   | 0 | 152105   | 30580    | 10983   | 2229    | 4343    | 756    | 5325    | 34      | 38319    | 26705   | 3349    | 9766    |
| 6      | 2627061  | 1      | 2       | 0 | 288      | 4801235  | 18818   | 42760   | 1       | 1      | 15845   | 1       | 292698   | 624     | 1007262 | 293     |
| 7      | 73600    | 305    | 1399    | 0 | 59140    | 12230    | 7177371 | 2774067 | 1133    | 31467  | 34925   | 6961    | 24289    | 1982    | 627882  | 11618   |
| 8      | 586      | 1      | 2       | 0 | 3116     | 678      | 1644    | 2684    | 459     | 272    | 665     | 1       | 1520     | 985     | 11132   | 345     |
| 9      | 54726    | 24919  | 17379   | 0 | 1574463  | 29287    | 5803    | 4293    | 438176  | 725477 | 11815   | 157     | 18106    | 3182    | 3150    | 15546   |
| 10     | 185      | 1      | 21      | 0 | 293511   | 391      | 38      | 155     | 41      | 33881  | 84      | 26      | 359      | 2       | 472     | 246     |
| 11     | 41278    | 15     | 415     | 0 | 169206   | 507340   | 151203  | 31531   | 18758   | 24116  | 2680230 | 1146157 | 251356   | 10305   | 114550  | 187648  |
| 12     | 8655     | 299    | 1629    | 0 | 54279    | 37708    | 21410   | 4185    | 1126    | 3726   | 12542   | 185669  | 44757    | 7378    | 33622   | 11051   |
| 13     | 1016366  | 13934  | 36004   | 0 | 697129   | 603747   | 3403180 | 24160   | 95652   | 105195 | 346969  | 217880  | 10163923 | 221538  | 587401  | 339076  |
| 14     | 503546   | 2491   | 83587   | 0 | 928664   | 197665   | 207556  | 12484   | 20368   | 12992  | 102496  | 19324   | 1794606  | 927355  | 34285   | 475475  |
| 15     | 4582     | 177    | 888     | 0 | 6665     | 3355     | 9553    | 13670   | 127     | 11648  | 4191    | 1001    | 6674     | 1301    | 2471772 | 691     |
| 16     | 22196    | 71     | 1478    | 0 | 6647248  | 156927   | 13089   | 1460    | 3888    | 34252  | 39971   | 853     | 251965   | 22517   | 3696    | 1488832 |
| 17     | 16338    | 8447   | 3377    | 0 | 3132012  | 19482    | 12502   | 419     | 3219    | 20748  | 46348   | 27731   | 166875   | 28964   | 5411    | 88621   |
| 18     | 65713    | 2854   | 15736   | 0 | 2778161  | 561942   | 38736   | 2698    | 16633   | 81966  | 18717   | 1997    | 273527   | 131863  | 40834   | 88435   |
| 19     | 163565   | 14799  | 74198   | 0 | 1967339  | 119785   | 255092  | 15871   | 24807   | 21471  | 50602   | 8058    | 231958   | 101647  | 28354   | 168541  |
| 20     | 42344    | 8307   | 6858    | 0 | 2133414  | 36329    | 33049   | 1455    | 2226    | 2155   | 7872    | 5391    | 39794    | 14986   | 6218    | 31754   |
| 21     | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1       | 1      | 1       | 1       | 1        | 1       | 1       | 1       |
| 22     | 263655   | 13559  | 88952   | 0 | 180541   | 95452    | 32499   | 8054    | 15627   | 21112  | 15719   | 32293   | 69778    | 14755   | 11776   | 136960  |
| 23     | 24787    | 500    | 342     | 0 | 91920    | 7015     | 7223    | 568     | 310     | 689    | 2430    | 806     | 36840    | 13551   | 1581    | 5223    |
| 24     | 119073   | 3068   | 15954   | 0 | 1249308  | 632294   | 117922  | 77226   | 9073    | 99592  | 71713   | 22917   | 327144   | 27319   | 201430  | 56819   |
| 25     | 9541     | 83     | 1494    | 0 | 10447    | 160163   | 92874   | 65767   | 3565    | 162    | 1235    | 46      | 5322     | 823     | 85802   | 1541    |
| 26     | 263131   | 13730  | 32761   | 0 | 1039598  | 459010   | 191906  | 45406   | 127230  | 52618  | 70497   | 88792   | 370887   | 414318  | 73259   | 385539  |
| 27     | 33174    | 672    | 6508    | 0 | 158898   | 63398    | 46505   | 13334   | 7217    | 6658   | 15050   | 26366   | 66023    | 19187   | 14193   | 29840   |
| 28     | 62593    | 31306  | 67540   | 0 | 112395   | 205907   | 423267  | 33487   | 41330   | 20934  | 155873  | 17525   | 578938   | 67085   | 47418   | 330880  |
| 29     | 12964    | 148    | 3347    | 0 | 24734    | 50610    | 43854   | 4508    | 3908    | 2204   | 7679    | 2857    | 105408   | 37107   | 8088    | 23342   |
| 30     | 519959   | 10130  | 26086   | 0 | 1702045  | 1580819  | 434367  | 229865  | 108410  | 147895 | 168015  | 147402  | 924210   | 102403  | 441219  | 256513  |
| 31     | 535415   | 26891  | 176966  | 0 | 6061416  | 1235370  | 1196649 | 186680  | 157113  | 146185 | 362759  | 370762  | 1995937  | 302152  | 373146  | 617814  |
| 32     | 48019    | 1449   | 5435    | 0 | 80456    | 83050    | 38750   | 5128    | 9097    | 6523   | 8352    | 18086   | 150509   | 24668   | 14074   | 15087   |
| 33     | 14130    | 0      | 1       | 0 | 1        | 1        | 1       | 1       | 1       | 1      | 1       | 1       | 1        | 1       | 1       | 1       |
| wL     | 2900445  | 302111 | 391701  | 0 | 16056304 | 2708542  | 2681921 | 786031  | 369557  | 404134 | 827109  | 1094239 | 2886158  | 773585  | 1844478 | 2056472 |
| rK     | 15316310 | 110902 | 1238258 | 0 | 12140173 | 6908747  | 2166484 | 337903  | 255058  | 342199 | 964910  | 520465  | 4590458  | 2136472 | 661099  | 2382147 |

**Notes**

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)



## Gross Output 1992

| 17       | 18      | 19      | 20       | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|----------|
| 894      | 77      | 471     | 3250     | 1       | 118     | 39     | 192071  | 38391  | 58      | 17      | 6       | 2      | 9829     | 1028     | 40216    | 26237    |
| 8410     | 435     | 267     | 556      | 14      | 204     | 1      | 168     | 41     | 1243    | 66      | 270601  | 2259   | 3274     | 120      | 1082     | 16       |
| 1402873  | 2746    | 5742    | 19227    | 397     | 5162    | 698    | 8554    | 14113  | 5135    | 1       | 15      | 2      | 1        | 16       | 750      | 964      |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 429026 | 1        | 1        | 1        | 1        |
| 110833   | 11660   | 18061   | 40024    | 11457   | 14665   | 1903   | 9864    | 3958   | 44977   | 37874   | 422689  | 38098  | 420497   | 3476279  | 235668   | 682985   |
| 215      | 1       | 259     | 1        | 1       | 43      | 1      | 362     | 484    | 94      | 1       | 1       | 2      | 4807     | 2        | 5923     | 2274     |
| 5313     | 12497   | 17540   | 55896    | 119257  | 21156   | 2837   | 309395  | 337344 | 23912   | 1497    | 349     | 351    | 50748    | 20009    | 19468    | 22492    |
| 560      | 291     | 2706    | 3287     | 5180    | 521     | 193    | 285     | 84     | 260     | 3498    | 1       | 2      | 2876     | 2130     | 16270    | 32348    |
| 27550    | 127992  | 67744   | 49875    | 44072   | 52815   | 2743   | 7170    | 114234 | 28816   | 38      | 196     | 6      | 29402    | 12028    | 22125    | 10398    |
| 79       | 3422    | 202     | 1989     | 170     | 22045   | 6      | 119     | 90     | 1972    | 4639    | 3       | 13     | 25779    | 8929     | 48048    | 9195     |
| 12527    | 54796   | 33855   | 286181   | 4360    | 43259   | 23438  | 85726   | 100616 | 8899    | 1458    | 224     | 37     | 410253   | 32808    | 21076    | 6270     |
| 7466     | 20043   | 16998   | 64847    | 3343    | 6238    | 6033   | 36752   | 17651  | 36406   | 5344    | 3697    | 2409   | 174461   | 1685107  | 231502   | 235084   |
| 272806   | 234682  | 341450  | 960087   | 106238  | 373032  | 46418  | 3421183 | 315844 | 40154   | 1263    | 231369  | 44587  | 71114    | 144447   | 1620047  | 160637   |
| 1294712  | 81518   | 109219  | 141088   | 55525   | 86424   | 7924   | 85690   | 28076  | 3208012 | 25677   | 766589  | 149948 | 935972   | 352364   | 354378   | 444303   |
| 1991     | 4918    | 12431   | 7060     | 2180    | 5018    | 4179   | 1738    | 133700 | 5073    | 2180    | 1       | 2      | 18970    | 2431     | 3935     | 7436     |
| 406639   | 84664   | 137587  | 1213676  | 92983   | 114771  | 75658  | 76803   | 78086  | 14791   | 459     | 2572    | 6688   | 3467     | 16445    | 18883    | 24596    |
| 16024468 | 4008051 | 2966792 | 2544703  | 228517  | 2598888 | 123677 | 66277   | 187095 | 16362   | 90      | 434     | 24698  | 14012    | 20562    | 18918    | 7841     |
| 94368    | 611412  | 644169  | 449734   | 297066  | 341145  | 49800  | 119007  | 94764  | 80386   | 3719    | 11903   | 1219   | 121288   | 29696    | 37174    | 137427   |
| 347434   | 367980  | 4146110 | 535263   | 558974  | 1494922 | 32291  | 150466  | 42254  | 81306   | 12441   | 36947   | 29007  | 110905   | 62692    | 41672    | 1572032  |
| 103265   | 94988   | 954472  | 14077830 | 852622  | 391202  | 315170 | 34198   | 117754 | 121896  | 147626  | 83525   | 2254   | 113895   | 291368   | 140020   | 354975   |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1      | 1        | 1        | 1        | 116183   |
| 53249    | 42372   | 140443  | 47649    | 5280466 | 2496805 | 29650  | 21573   | 19598  | 1213930 | 6423    | 4911    | 4256   | 91714    | 177816   | 219644   | 1355039  |
| 17448    | 36168   | 256516  | 324296   | 105359  | 123137  | 407057 | 3378    | 3432   | 17914   | 14620   | 20156   | 15630  | 14989    | 49231    | 198925   | 254126   |
| 41988    | 131773  | 288841  | 1201792  | 530122  | 874146  | 94735  | 707375  | 200573 | 396385  | 351     | 1893    | 1698   | 126537   | 205607   | 36126    | 27506    |
| 1270     | 6911    | 20311   | 17215    | 4134    | 3477    | 7283   | 4379    | 51209  | 4653    | 257     | 225     | 134    | 76004    | 76239    | 112988   | 58716    |
| 353879   | 123812  | 230318  | 431316   | 99759   | 125035  | 32210  | 101928  | 62479  | 2092839 | 53561   | 72690   | 17172  | 857877   | 704379   | 210806   | 332631   |
| 32199    | 34521   | 63495   | 106167   | 23973   | 32783   | 10376  | 25932   | 16981  | 148520  | 259812  | 7557    | 2508   | 1629503  | 823120   | 255166   | 180312   |
| 732118   | 132371  | 140253  | 223599   | 65224   | 109962  | 20918  | 151189  | 29369  | 145157  | 66874   | 621860  | 228577 | 555302   | 714374   | 391510   | 125479   |
| 28880    | 14342   | 20528   | 39164    | 3786    | 8339    | 4801   | 8339    | 9871   | 17000   | 4157    | 528083  | 369270 | 81388    | 148361   | 112211   | 19629    |
| 645763   | 386504  | 671161  | 1592889  | 577080  | 585397  | 127602 | 307439  | 158256 | 405260  | 24977   | 86452   | 27476  | 1205358  | 245396   | 386472   | 283554   |
| 957812   | 579746  | 780570  | 1849529  | 594874  | 814855  | 198091 | 470620  | 309785 | 2162113 | 218117  | 250804  | 134645 | 4325450  | 6996375  | 2547785  | 888678   |
| 72216    | 29022   | 65209   | 115594   | 23515   | 24195   | 6068   | 18244   | 8803   | 94409   | 17145   | 14487   | 3525   | 194758   | 1413827  | 292209   | 86862    |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 2405    | 1       | 1       | 1      | 1        | 1        | 1        | 1        |
| 2191798  | 2008098 | 3525056 | 5355726  | 1562124 | 2680227 | 450591 | 1417765 | 773763 | 6468361 | 1876534 | 756759  | 378828 | 7520398  | 14096914 | 18289257 | 10252899 |
| 3967421  | 1693845 | 3100420 | 5433736  | 3655102 | 1977314 | 337820 | 1605312 | 686954 | 5145034 | 3426924 | 4026913 | 523101 | 20266885 | 27971444 | 4639999  | 327692   |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1993

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14      | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|---------|---------|---------|
| 1      | 2205285  | 10036  | 1800    | 1 | 80099    | 15356851 | 674084  | 14      | 996975 | 5232   | 42912   | 1       | 234200   | 770     | 21185   | 1       |
| 2      | 1        | 201    | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 13450    | 933193  | 1       | 199827  |
| 3      | 1616     | 1      | 1       | 1 | 706909   | 23503    | 3698    | 1       | 1      | 1      | 38634   | 1       | 326078   | 212938  | 1836    | 1548962 |
| 4      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 8145463 | 1       | 1       |
| 5      | 72354    | 5559   | 28981   | 1 | 130577   | 35096    | 8323    | 2792    | 4939   | 782    | 5758    | 32      | 49090    | 14409   | 2437    | 11813   |
| 6      | 2911982  | 1      | 1       | 1 | 1        | 5016872  | 22330   | 40448   | 1      | 1      | 15345   | 1       | 262498   | 543     | 976273  | 1       |
| 7      | 83271    | 241    | 1743    | 1 | 54765    | 12120    | 7208770 | 2395237 | 1431   | 28949  | 44347   | 8125    | 32680    | 2315    | 421131  | 11977   |
| 8      | 362      | 1      | 1       | 1 | 3683     | 822      | 1678    | 6168    | 533    | 313    | 855     | 1       | 2076     | 1119    | 8029    | 407     |
| 9      | 79153    | 15047  | 17609   | 1 | 1800045  | 37900    | 7536    | 194     | 670844 | 846915 | 58339   | 208     | 19732    | 3327    | 3122    | 34681   |
| 10     | 212      | 1      | 26      | 1 | 320174   | 489      | 49      | 125     | 34     | 37969  | 97      | 21      | 462      | 1       | 477     | 248     |
| 11     | 54089    | 11     | 395     | 1 | 146368   | 571662   | 162943  | 39311   | 28391  | 30034  | 2686991 | 1208551 | 242416   | 9762    | 91285   | 175872  |
| 12     | 12143    | 283    | 2208    | 1 | 73251    | 45967    | 27880   | 4275    | 1747   | 5316   | 17782   | 232516  | 60592    | 10328   | 27158   | 14392   |
| 13     | 1105447  | 6898   | 39539   | 1 | 583855   | 647964   | 3228078 | 18399   | 111059 | 127143 | 376884  | 262287  | 10909835 | 242987  | 426199  | 349981  |
| 14     | 545096   | 1906   | 101029  | 1 | 1273967  | 218633   | 220681  | 8328    | 29246  | 19641  | 94999   | 25411   | 2247150  | 1025561 | 26862   | 523931  |
| 15     | 3886     | 127    | 914     | 1 | 6683     | 3198     | 8157    | 53728   | 121    | 14165  | 3704    | 1150    | 5902     | 965     | 1924809 | 378     |
| 16     | 13856    | 40     | 998     | 1 | 7117883  | 171335   | 12998   | 4390    | 5019   | 37786  | 43092   | 994     | 274095   | 14894   | 3350    | 1910210 |
| 17     | 17954    | 5132   | 1516    | 1 | 3447475  | 16071    | 10322   | 93      | 2525   | 22542  | 48805   | 31394   | 195264   | 26540   | 4910    | 114101  |
| 18     | 51851    | 1846   | 15437   | 1 | 3828593  | 507534   | 40128   | 1445    | 16044  | 164109 | 20834   | 1913    | 184230   | 97140   | 30243   | 94346   |
| 19     | 144929   | 10267  | 66624   | 1 | 2455610  | 110575   | 272434  | 14446   | 30584  | 23010  | 56900   | 8631    | 261525   | 127939  | 22176   | 159308  |
| 20     | 50197    | 5910   | 6819    | 1 | 2181425  | 35823    | 32911   | 1558    | 3052   | 2276   | 8031    | 4630    | 41749    | 13998   | 4116    | 35923   |
| 21     | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 1       | 1       | 1       |
| 22     | 232202   | 8747   | 94088   | 1 | 170646   | 90974    | 27972   | 3423    | 17423  | 20786  | 15560   | 23114   | 71192    | 10637   | 7676    | 142300  |
| 23     | 30527    | 361    | 273     | 1 | 86157    | 7430     | 7513    | 579     | 414    | 806    | 2666    | 807     | 47104    | 16044   | 1517    | 5498    |
| 24     | 144736   | 2066   | 14624   | 1 | 1082725  | 686492   | 148156  | 82770   | 9342   | 107805 | 93412   | 23030   | 659692   | 24131   | 133552  | 55178   |
| 25     | 9372     | 67     | 1375    | 1 | 12488    | 98278    | 101280  | 92553   | 4908   | 212    | 1499    | 54      | 8335     | 1071    | 72913   | 1882    |
| 26     | 321173   | 13224  | 42778   | 1 | 1187883  | 472922   | 227105  | 44523   | 125890 | 68787  | 90021   | 87790   | 496903   | 168916  | 67686   | 516407  |
| 27     | 53037    | 423    | 8842    | 1 | 178121   | 87339    | 62887   | 14347   | 8538   | 6336   | 26054   | 37188   | 104229   | 34063   | 17358   | 62482   |
| 28     | 62475    | 22857  | 74689   | 1 | 121480   | 224742   | 468578  | 27346   | 58264  | 23296  | 190552  | 16642   | 691726   | 104081  | 35409   | 366359  |
| 29     | 15293    | 110    | 4281    | 1 | 27277    | 59337    | 47020   | 4960    | 4493   | 2514   | 8691    | 2684    | 126769   | 46579   | 6845    | 24880   |
| 30     | 529106   | 16264  | 24518   | 1 | 1831734  | 1710795  | 588138  | 260627  | 126111 | 124344 | 196441  | 154798  | 992237   | 73948   | 560366  | 259733  |
| 31     | 578637   | 21869  | 260378  | 1 | 6935463  | 1414710  | 1297982 | 269166  | 172905 | 162124 | 443091  | 374061  | 2042966  | 387493  | 314739  | 759593  |
| 32     | 55915    | 1205   | 7253    | 1 | 115863   | 75915    | 53813   | 5868    | 13820  | 7890   | 14288   | 22158   | 195431   | 36946   | 21816   | 34761   |
| 33     | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 1       | 1       | 1       |
| wL     | 3166052  | 188209 | 465679  | 1 | 17704235 | 2870252  | 2789859 | 855495  | 441404 | 461602 | 834225  | 1162944 | 3027206  | 581773  | 1334138 | 2209104 |
| rK     | 14750972 | 58438  | 1550459 | 1 | 13458067 | 7786655  | 2454070 | 444609  | 304267 | 457006 | 1032762 | 620816  | 5273241  | 5244720 | 625172  | 2546625 |

## Notes

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1993

| 17       | 18      | 19      | 20       | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|----------|
| 1156     | 427     | 518     | 292      | 1       | 1       | 3      | 237650  | 53330  | 1       | 8       | 1       | 1      | 4996     | 1        | 53078    | 13655    |
| 26130    | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 572263  | 6984   | 1        | 1        | 1        | 1        |
| 1325608  | 2084    | 8468    | 17094    | 1       | 5404    | 802    | 2454    | 9251   | 1       | 1       | 1       | 1      | 1        | 19       | 684      | 2287     |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 697184 | 1        | 1        | 1        | 1        |
| 78168    | 14769   | 19941   | 57053    | 15026   | 11428   | 2071   | 9714    | 4779   | 45857   | 48764   | 464080  | 31017  | 306543   | 3787738  | 249486   | 1463934  |
| 1        | 1       | 49      | 4576     | 1       | 332     | 1      | 1675    | 340    | 1       | 1       | 1       | 1      | 5654     | 1        | 12999    | 3173     |
| 6168     | 14562   | 23475   | 57570    | 45545   | 188681  | 3586   | 268484  | 262687 | 27062   | 2112    | 455     | 555    | 58757    | 24316    | 21838    | 26308    |
| 616      | 386     | 3755    | 4734     | 5406    | 350     | 237    | 265     | 73     | 302     | 5079    | 2       | 1      | 3226     | 2719     | 14743    | 35613    |
| 36755    | 142169  | 100616  | 53254    | 36659   | 40282   | 3828   | 5676    | 146058 | 14005   | 49      | 297     | 8      | 47651    | 19441    | 38474    | 9459     |
| 96       | 1968    | 219     | 431      | 197     | 31140   | 7      | 86      | 94     | 2247    | 6770    | 5       | 21     | 35587    | 11555    | 60408    | 9730     |
| 9822     | 59351   | 49113   | 342500   | 1816    | 51865   | 28582  | 97866   | 111343 | 9705    | 1705    | 255     | 54     | 271137   | 63503    | 20293    | 6476     |
| 11092    | 27954   | 26313   | 77732    | 4995    | 8877    | 8996   | 34167   | 16421  | 95075   | 8204    | 5322    | 2837   | 201089   | 1606748  | 276708   | 261941   |
| 185607   | 300893  | 249137  | 1238636  | 141372  | 328149  | 50669  | 3663709 | 328141 | 44802   | 1725    | 158093  | 46884  | 66386    | 192914   | 2075002  | 134841   |
| 1116393  | 105273  | 149258  | 151066   | 63125   | 126192  | 11481  | 148702  | 33704  | 3689111 | 37839   | 1008590 | 233028 | 1259747  | 484036   | 559827   | 376484   |
| 1702     | 3877    | 6975    | 11097    | 2101    | 8593    | 6174   | 1949    | 125327 | 1567    | 2802    | 1       | 1      | 20471    | 2299     | 3588     | 4655     |
| 592003   | 75014   | 132584  | 1268292  | 100889  | 79216   | 95393  | 90499   | 58353  | 7633    | 591     | 2033    | 10149  | -6331    | 4378     | 17711    | 16003    |
| 17640675 | 4303924 | 3061704 | 2333239  | 486864  | 2563352 | 125903 | 82837   | 183473 | 15406   | 92      | 409     | 33976  | 6644     | 19530    | 26955    | 1601     |
| 97249    | 900373  | 784749  | 437922   | 245677  | 366802  | 51698  | 136003  | 81564  | 76196   | 4003    | 11161   | 1445   | 96615    | 57642    | 37425    | 82963    |
| 342794   | 455089  | 5343152 | 510335   | 689992  | 1740122 | 37863  | 163089  | 33813  | 68992   | 15786   | 60333   | 25264  | 109120   | 105205   | 51110    | 1329827  |
| 138801   | 152007  | 1106714 | 15458666 | 794269  | 821594  | 481674 | 29702   | 103608 | 123008  | 185666  | 122294  | 1881   | 147261   | 247965   | 181151   | 311192   |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1      | 1        | 1        | 1        | 92675    |
| 54280    | 46857   | 173381  | 46989    | 6649576 | 2987304 | 30789  | 23885   | 14906  | 1464986 | 3499    | 4736    | 4866   | 89303    | 196793   | 197729   | 1272601  |
| 20485    | 41989   | 294984  | 409873   | 156116  | 167614  | 407652 | 3232    | 3381   | 20133   | 10497   | 24165   | 14102  | 22310    | 58261    | 275943   | 111511   |
| 45953    | 132679  | 325939  | 1327528  | 526233  | 1261035 | 102537 | 972612  | 149346 | 411493  | 380     | 2251    | 1582   | 110859   | 135174   | 42934    | 36229    |
| 1410     | 11605   | 20532   | 22133    | 4483    | 5388    | 7234   | 4646    | 118862 | 6047    | 314     | 274     | 176    | 181873   | 99719    | 164716   | 35964    |
| 459325   | 184475  | 314772  | 536952   | 118022  | 154894  | 40035  | 113718  | 68294  | 2040268 | 62300   | 110635  | 22242  | 984590   | 885538   | 236442   | 375977   |
| 107210   | 41458   | 82670   | 166834   | 45817   | 75271   | 10595  | 57301   | 14211  | 102884  | 303180  | 21469   | 7744   | 1730062  | 761142   | 219637   | 169183   |
| 976999   | 158958  | 175462  | 276207   | 55141   | 114371  | 25361  | 145438  | 30679  | 203010  | 87430   | 688162  | 208354 | 589576   | 733155   | 443243   | 163842   |
| 32344    | 17391   | 26546   | 46708    | 6349    | 7589    | 6107   | 9420    | 9589   | 15200   | 2188    | 638763  | 536124 | 124807   | 152534   | 111895   | 37080    |
| 618943   | 396701  | 671856  | 1406037  | 544502  | 561138  | 129093 | 342701  | 185166 | 421855  | 24821   | 133825  | 22265  | 1243971  | 229359   | 405620   | 313377   |
| 1194060  | 742317  | 1029647 | 2223856  | 685584  | 1057394 | 236064 | 488398  | 304880 | 3315876 | 345644  | 357389  | 210596 | 5393233  | 8925580  | 2708660  | 864613   |
| 87200    | 37230   | 85545   | 154365   | 26287   | 31487   | 9125   | 20463   | 11240  | 95799   | 23043   | 18545   | 5142   | 217741   | 1246195  | 703002   | 97781    |
| 1        | 1       | 1       | 1        | 1       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 1      | 1        | 1        | 1        | 1        |
| 2280942  | 2228499 | 3878080 | 5756108  | 1599156 | 3111206 | 445740 | 1507002 | 752044 | 6760884 | 2130845 | 794920  | 425680 | 12946338 | 17233579 | 21041119 | 12071047 |
| 4617525  | 2103885 | 3570477 | 7738851  | 3537511 | 2246162 | 372647 | 1874264 | 763645 | 5951806 | 3919713 | 4090343 | 586607 | 15776531 | 35673474 | 5493363  | 517896   |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1994**

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9       | 10     | 11      | 12      | 13       | 14      | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|---------|--------|---------|---------|----------|---------|---------|---------|
| 1      | 2282846  | 7831   | 1737    | 0 | 81563    | 15504014 | 624140  | 24      | 1006378 | 5820   | 48851   | 1       | 260011   | 704     | 17369   | 1       |
| 2      | 1        | 160    | 1       | 0 | 1        | 1        | 1       | 2       | 1       | 1      | 1       | 1       | 15312    | 875016  | 1       | 220670  |
| 3      | 1687     | 1      | 1       | 0 | 725798   | 23925    | 3452    | 2       | 1       | 1      | 44346   | 1       | 365018   | 196328  | 1518    | 1681953 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 2       | 1       | 1      | 1       | 1       | 1        | 8566625 | 1       | 1       |
| 5      | 74602    | 4320   | 27853   | 0 | 132435   | 35291    | 7676    | 4783    | 4965    | 866    | 6529    | 39      | 54283    | 13123   | 1990    | 12671   |
| 6      | 3158260  | 1      | 1       | 0 | 1        | 5306674  | 21662   | 72901   | 1       | 1      | 18303   | 1       | 305336   | 521     | 838615  | 1       |
| 7      | 75805    | 165    | 1479    | 0 | 49041    | 10761    | 5869828 | 3623550 | 1270    | 28319  | 44397   | 8834    | 31906    | 1861    | 303639  | 11343   |
| 8      | 1261     | 3      | 3       | 0 | 12621    | 2792     | 5227    | 35706   | 1810    | 1173   | 3274    | 4       | 7758     | 3445    | 22153   | 1476    |
| 9      | 81037    | 11612  | 16804   | 0 | 1812815  | 37843    | 6901    | 330     | 669738  | 931751 | 65684   | 254     | 21666    | 3008    | 2531    | 36939   |
| 10     | 314      | 1      | 36      | 0 | 466987   | 706      | 64      | 307     | 49      | 60497  | 158     | 37      | 735      | 1       | 560     | 382     |
| 11     | 61617    | 9      | 419     | 0 | 164016   | 635124   | 166028  | 74418   | 31538   | 36765  | 3366182 | 1644286 | 296171   | 9823    | 82361   | 208429  |
| 12     | 15720    | 276    | 2665    | 0 | 93279    | 58036    | 32283   | 9197    | 2205    | 7396   | 25315   | 359499  | 84125    | 11810   | 27845   | 19382   |
| 13     | 1262645  | 5939   | 42097   | 0 | 655995   | 721813   | 3297946 | 34923   | 123698  | 156055 | 473405  | 357803  | 13364545 | 245162  | 385557  | 415872  |
| 14     | 523602   | 1380   | 90460   | 0 | 1203755  | 204821   | 189605  | 13294   | 27394   | 20273  | 100353  | 29152   | 2315009  | 870197  | 20436   | 523570  |
| 15     | 4474     | 110    | 981     | 0 | 7569     | 3591     | 8400    | 102806  | 136     | 17527  | 4691    | 1581    | 7288     | 982     | 1755353 | 452     |
| 16     | 15862    | 35     | 1065    | 0 | 8015600  | 191298   | 13310   | 8352    | 5603    | 46484  | 54251   | 1359    | 336533   | 15062   | 3037    | 2275027 |
| 17     | 21260    | 4581   | 1673    | 0 | 4015687  | 18560    | 10933   | 183     | 2915    | 28684  | 63555   | 44399   | 247983   | 27761   | 4605    | 140562  |
| 18     | 60204    | 1616   | 16708   | 0 | 4372802  | 574730   | 41675   | 2789    | 18165   | 204759 | 26602   | 2653    | 229415   | 99631   | 27811   | 113964  |
| 19     | 164299   | 8773   | 70403   | 0 | 2738367  | 122255   | 276247  | 27214   | 33810   | 28031  | 70937   | 11686   | 317969   | 128118  | 19911   | 187884  |
| 20     | 55449    | 4921   | 7021    | 0 | 2370302  | 38592    | 32517   | 2860    | 3288    | 2701   | 9756    | 6108    | 49459    | 13659   | 3601    | 41281   |
| 21     | 132      | 100    | 123     | 1 | 130      | 129      | 118     | 220     | 129     | 142    | 145     | 158     | 142      | 117     | 105     | 138     |
| 22     | 98882    | 2808   | 37348   | 0 | 71483    | 37783    | 10654   | 2422    | 7235    | 9512   | 7287    | 11756   | 32514    | 4001    | 2589    | 63042   |
| 23     | 31828    | 284    | 266     | 0 | 88360    | 7554     | 7006    | 1004    | 420     | 903    | 3057    | 1005    | 52670    | 14776   | 1253    | 5963    |
| 24     | 158671   | 1707   | 14944   | 0 | 1167591  | 733983   | 145277  | 150790  | 9987    | 127000 | 112617  | 30154   | 775629   | 23368   | 115959  | 62930   |
| 25     | 9316     | 50     | 1274    | 0 | 12211    | 95277    | 90049   | 152885  | 4757    | 227    | 1639    | 64      | 8886     | 940     | 57403   | 1946    |
| 26     | 373516   | 11592  | 46374   | 0 | 1358928  | 536403   | 236240  | 86047   | 142766  | 85965  | 115132  | 121938  | 619777   | 173528  | 62345   | 624791  |
| 27     | 67900    | 408    | 10552   | 0 | 224319   | 109052   | 72014   | 30525   | 10660   | 8716   | 36682   | 56862   | 143113   | 38522   | 17601   | 83220   |
| 28     | 67627    | 18650  | 75362   | 0 | 129351   | 237263   | 453683  | 49192   | 61501   | 27098  | 226835  | 21515   | 803048   | 99521   | 30357   | 412566  |
| 29     | 15589    | 84     | 4068    | 0 | 27352    | 58992    | 42872   | 8402    | 4467    | 2754   | 9743    | 3268    | 138593   | 41942   | 5526    | 26385   |
| 30     | 478302   | 11083  | 20660   | 0 | 1628822  | 1508299  | 475549  | 391522  | 111168  | 120789 | 195287  | 167127  | 961982   | 59049   | 401202  | 244264  |
| 31     | 699206   | 19919  | 293282  | 0 | 8243785  | 1667235  | 1402891 | 540502  | 203738  | 210517 | 588809  | 539839  | 2647603  | 413611  | 301219  | 954888  |
| 32     | 97788    | 1588   | 11824   | 0 | 199321   | 129484   | 84179   | 17054   | 23568   | 14827  | 27480   | 46282   | 366560   | 57076   | 30218   | 63245   |
| 33     | 0        | 0      | 0       | 0 | 0        | 0        | 0       | 0       | 0       | 0      | 0       | 0       | 0        | 0       | 0       | 0       |
| wL     | 3712673  | 166363 | 509022  | 0 | 20421974 | 3282607  | 2926220 | 1667109 | 504743  | 581672 | 1075805 | 1628735 | 3807178  | 602630  | 1239086 | 2694989 |
| rK     | 15963965 | 47672  | 1564091 | 0 | 14326981 | 8218663  | 2375545 | 799605  | 321100  | 531477 | 1229142 | 802427  | 6120547  | 5013842 | 535861  | 2867196 |

**Notes**

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1994

| 17       | 18      | 19      | 20       | 21      | 22      | 23     | 24      | 25     | 26      | 27      | 28      | 29     | 30       | 31       | 32       | 33      |
|----------|---------|---------|----------|---------|---------|--------|---------|--------|---------|---------|---------|--------|----------|----------|----------|---------|
| 1206     | 441     | 563     | 349      | 2       | 1       | 4      | 258158  | 50383  | 1       | 10      | 1       | 1      | 5293     | 1        | 58419    | 9072    |
| 27945    | 1       | 1       | 1        | 2       | 1       | 1      | 1       | 1      | 1       | 1       | 633356  | 7163   | 1        | 1        | 1        | 1       |
| 1393987  | 2167    | 9288    | 20563    | 2       | 4270    | 992    | 2688    | 8812   | 1       | 1       | 1       | 1      | 1        | 21       | 759      | 1532    |
| 1        | 1       | 1       | 1        | 2       | 1       | 1      | 1       | 1      | 1       | 1       | 1       | 802008 | 1        | 1        | 1        | 1       |
| 81200    | 15172   | 21606   | 67798    | 31138   | 8921    | 2531   | 10510   | 4497   | 51113   | 58361   | 498900  | 30899  | 323502   | 4157753  | 273503   | 968728  |
| 1        | 1       | 55      | 5720     | 2       | 273     | 1      | 1907    | 336    | 1       | 1       | 1       | 1      | 6276     | 1        | 14990    | 2208    |
| 5657     | 13207   | 22457   | 60403    | 83332   | 130040  | 3869   | 256484  | 218248 | 26632   | 2232    | 432     | 488    | 54748    | 23567    | 21138    | 15371   |
| 2162     | 1340    | 13746   | 19007    | 37851   | 924     | 980    | 968     | 231    | 1136    | 20538   | 8       | 3      | 11504    | 10084    | 54608    | 79624   |
| 37912    | 145015  | 108251  | 62838    | 75434   | 31223   | 4644   | 6098    | 136473 | 15500   | 58      | 317     | 8      | 49933    | 21190    | 41881    | 6216    |
| 143      | 2907    | 342     | 736      | 588     | 34957   | 13     | 133     | 127    | 3602    | 11652   | 8       | 30     | 54009    | 18240    | 95234    | 9259    |
| 11273    | 67360   | 58793   | 449683   | 4157    | 44731   | 38588  | 116992  | 115759 | 11952   | 2254    | 303     | 59     | 316140   | 77016    | 24579    | 4735    |
| 14466    | 36054   | 35795   | 115978   | 12995   | 8700    | 13802  | 46416   | 19400  | 133054  | 12328   | 7183    | 3549   | 266447   | 2214436  | 380867   | 217631  |
| 213589   | 342409  | 299039  | 1630583  | 324542  | 283763  | 68590  | 4391362 | 342065 | 55320   | 2287    | 188275  | 51740  | 77610    | 234585   | 2519959  | 98846   |
| 1080409  | 100748  | 150664  | 167244   | 121868  | 91771   | 13070  | 149892  | 29547  | 3830797 | 42190   | 1010132 | 216273 | 1238547  | 494994   | 571759   | 232098  |
| 1974     | 4448    | 8440    | 14726    | 4861    | 7491    | 8425   | 2355    | 131702 | 1950    | 3745    | 1       | 1      | 24126    | 2818     | 4393     | 3440    |
| 682810   | 85559   | 159503  | 1673433  | 232134  | 68658   | 129426 | 108720  | 60968  | 9447    | 785     | 2427    | 11226  | -7419    | 5336     | 21558    | 11758   |
| 21045777 | 5077625 | 3809911 | 3184356  | 1158718 | 2298037 | 176692 | 102936  | 198282 | 19721   | 126     | 505     | 38873  | 8052     | 24620    | 33937    | 1216    |
| 113762   | 1041550 | 957512  | 586031   | 573319  | 322435  | 71140  | 165711  | 86431  | 95640   | 5395    | 13512   | 1622   | 114819   | 71252    | 46202    | 61822   |
| 391522   | 514003  | 6365356 | 666793   | 1572129 | 1493489 | 50871  | 194017  | 34984  | 84551   | 20773   | 71313   | 27672  | 126615   | 126972   | 61605    | 967546  |
| 154471   | 167288  | 1284671 | 19680633 | 1763368 | 687085  | 630575 | 34430   | 104450 | 146888  | 238061  | 140849  | 2008   | 166495   | 291606   | 212757   | 220616  |
| 133      | 132     | 139     | 152      | 266     | 100     | 157    | 139     | 121    | 143     | 154     | 138     | 128    | 135      | 141      | 141      | 7865981 |
| 23288    | 19880   | 77588   | 23062    | 5691267 | 963103  | 15539  | 10674   | 5793   | 674410  | 1729    | 2103    | 2002   | 38924    | 89219    | 89527    | 347808  |
| 21517    | 43615   | 323189  | 492513   | 327134  | 132302  | 503703 | 3536    | 3217   | 22692   | 12703   | 26268   | 14205  | 23807    | 64667    | 305889   | 74615   |
| 50755    | 144914  | 375493  | 1677336  | 1159479 | 1046622 | 133221 | 1118910 | 149423 | 487666  | 483     | 2573    | 1675   | 124392   | 157764   | 50044    | 25490   |
| 1412     | 11493   | 21447   | 25356    | 8956    | 4055    | 8523   | 4847    | 107831 | 6498    | 363     | 284     | 169    | 185041   | 105528   | 174087   | 22944   |
| 538188   | 213745  | 384691  | 719717   | 275866  | 136378  | 55181  | 138782  | 72487  | 2565058 | 84101   | 134152  | 24993  | 1171999  | 1096409  | 292366   | 280626  |
| 138286   | 52880   | 111222  | 246172   | 117893  | 72957   | 16075  | 76983   | 16605  | 142391  | 450552  | 28658   | 9579   | 2267047  | 1037429  | 298975   | 139011  |
| 1065496  | 171429  | 199592  | 344593   | 119965  | 93729   | 32535  | 165207  | 30308  | 237560  | 109855  | 776678  | 217913 | 653215   | 844899   | 510139   | 113825  |
| 33218    | 17663   | 28436   | 54877    | 13008   | 5857    | 7377   | 10077   | 8921   | 16750   | 2589    | 678909  | 528040 | 130220   | 165538   | 121277   | 24259   |
| 563706   | 357282  | 638235  | 1464913  | 989287  | 384035  | 138303 | 325094  | 152765 | 412251  | 26045   | 126134  | 19447  | 1150987  | 220734   | 389861   | 181812  |
| 1453679  | 893671  | 1307472 | 3097145  | 1665036 | 967338  | 338065 | 619309  | 336226 | 4331485 | 484814  | 450273  | 245875 | 6670363  | 11482333 | 3480050  | 670528  |
| 153644   | 64870   | 157217  | 311145   | 92399   | 41691   | 18913  | 37555   | 17941  | 181117  | 46778   | 33817   | 8689   | 389762   | 2320272  | 1307214  | 109752  |
| 0        | 0       | 0       | 0        | 0       | 0       | 0      | 0       | 0      | 0       | 0       | 0       | 0      | 0        | 0        | 0        | 0       |
| 2694795  | 2603576 | 4778926 | 7779527  | 3768973 | 2762099 | 619472 | 1854459 | 804851 | 8570604 | 2900458 | 971914  | 482300 | 15538771 | 21514861 | 26234277 | 9084678 |
| 5034684  | 2268461 | 4060609 | 9652775  | 7694520 | 1840361 | 477958 | 2128558 | 754250 | 6963189 | 4924025 | 4615465 | 613385 | 17475622 | 41101713 | 6321061  | 359715  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1995

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14      | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|---------|---------|---------|
| 1      | 1590513  | 5378   | 472     | 1 | 126179   | 16802961 | 839207  | 16      | 870615 | 5532   | 2901    | 1       | 208915   | 1       | 167430  | 76      |
| 2      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 9680     | 961020  | 1       | 194135  |
| 3      | 743      | 1      | 1       | 1 | 780670   | 33980    | 4173    | 1       | 1      | 2768   | 56180   | 1       | 298423   | 67      | 1416    | 2189331 |
| 4      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 189478   | 8862174 | 1       | 1       |
| 5      | 25455    | 1348   | 7835    | 1 | 29570    | 17578    | 5340    | 14128   | 1435   | 1112   | 3364    | 983     | 24380    | 5239    | 1783    | 8405    |
| 6      | 3344748  | 1      | 1       | 1 | 1        | 5964123  | 14810   | 9       | 1      | 1      | 10021   | 1       | 326428   | 1       | 868604  | 459     |
| 7      | 104778   | 67     | 861     | 1 | 44147    | 5093     | 5273068 | 4282455 | 2598   | 39712  | 55440   | 9604    | 19708    | 454     | 260933  | 17388   |
| 8      | 10061    | 373    | 934     | 1 | 59411    | 15722    | 7898    | 27790   | 1865   | 8851   | 4753    | 3358    | 16847    | 2190    | 6212    | 10985   |
| 9      | 160428   | 11269  | 12886   | 1 | 1959412  | 21436    | 5495    | 1190    | 904012 | 845778 | 82002   | 1164    | 19143    | 4278    | 2873    | 48940   |
| 10     | 258      | 7      | 42      | 1 | 466298   | 459      | 104     | 220     | 49     | 48368  | 15      | 2       | 338      | 47      | 124     | 212     |
| 11     | 60494    | 4      | 234     | 1 | 191746   | 701666   | 121385  | 118250  | 30278  | 131533 | 4388991 | 2091633 | 431801   | 689     | 79512   | 218026  |
| 12     | 15184    | 307    | 2476    | 1 | 121777   | 83283    | 30704   | 30503   | 2683   | 8972   | 47466   | 608912  | 158909   | 16265   | 32238   | 36893   |
| 13     | 1546513  | 5274   | 43892   | 1 | 712577   | 526404   | 3784590 | 78390   | 151723 | 192176 | 480495  | 267682  | 16374903 | 138868  | 443111  | 675776  |
| 14     | 548312   | 2025   | 102208  | 1 | 485469   | 239254   | 229385  | 94906   | 29289  | 26886  | 105377  | 41451   | 2791677  | 437238  | 25059   | 500620  |
| 15     | 3300     | 49     | 26      | 1 | 10484    | 215      | 540     | 861643  | 18601  | 19909  | 462     | 448     | 1888     | 1       | 1076443 | 94      |
| 16     | 13688    | 103    | 712     | 1 | 9826703  | 252757   | 7974    | 3872    | 6001   | 62365  | 46262   | 1373    | 363968   | 11316   | 8388    | 2845688 |
| 17     | 35931    | 3234   | 1994    | 1 | 6277807  | 9983     | 11093   | 628     | 865    | 122611 | 30190   | 786     | 223604   | 27544   | 2573    | 146949  |
| 18     | 37689    | 2623   | 7604    | 1 | 5358704  | 725409   | 42764   | 12893   | 16601  | 130867 | 23585   | 3259    | 327285   | 66560   | 55900   | 156224  |
| 19     | 250853   | 7420   | 50010   | 1 | 3381998  | 94766    | 213354  | 97043   | 21020  | 23825  | 56628   | 77884   | 310826   | 164311  | 20408   | 245973  |
| 20     | 70261    | 4759   | 7090    | 1 | 3042897  | 25744    | 19661   | 8748    | 3102   | 6281   | 11800   | 32918   | 54586    | 14378   | 3241    | 44457   |
| 21     | 75879    | 4502   | 94994   | 1 | 106461   | 59775    | 16285   | 12705   | 11610  | 3104   | 17830   | 27892   | 62667    | 7927    | 6580    | 144733  |
| 22     | 51564    | 606    | 1358    | 1 | 3780     | 315      | 828     | 130     | 341    | 234    | 12      | 3       | 936      | 705     | 170     | 429     |
| 23     | 60355    | 192    | 183     | 1 | 147179   | 5569     | 4452    | 1923    | 257    | 1082   | 2812    | 2908    | 49261    | 19249   | 852     | 6780    |
| 24     | 286252   | 1782   | 20771   | 1 | 1498501  | 936897   | 184753  | 171871  | 15514  | 157133 | 130194  | 84771   | 930504   | 14160   | 162730  | 121904  |
| 25     | 10896    | 90     | 829     | 1 | 24024    | 88353    | 21666   | 141830  | 2503   | 476    | 2965    | 613     | 12123    | 1186    | 40433   | 2630    |
| 26     | 424360   | 11292  | 54317   | 1 | 1349535  | 564826   | 193439  | 152476  | 151518 | 95352  | 114989  | 127068  | 673194   | 126800  | 63307   | 637118  |
| 27     | 75826    | 370    | 9734    | 1 | 188878   | 65917    | 35497   | 32202   | 11353  | 8863   | 36656   | 61262   | 105002   | 37072   | 13076   | 77628   |
| 28     | 73932    | 16589  | 90798   | 1 | 138399   | 292859   | 284304  | 34196   | 47054  | 19808  | 248118  | 45244   | 928850   | 138757  | 29590   | 545624  |
| 29     | 13268    | 80     | 3947    | 1 | 28294    | 71398    | 105257  | 14867   | 5347   | 4584   | 14177   | 5821    | 127442   | 10156   | 6115    | 22028   |
| 30     | 265033   | 3021   | 11072   | 1 | 2044085  | 1127561  | 312702  | 426656  | 116455 | 157242 | 322181  | 199686  | 1018003  | 60993   | 304928  | 304822  |
| 31     | 1862311  | 60111  | 279776  | 1 | 10663868 | 1848008  | 1196466 | 745547  | 163131 | 296172 | 548652  | 673123  | 2479553  | 417400  | 294538  | 871121  |
| 32     | 113307   | 2992   | 8419    | 1 | 552458   | 169309   | 92420   | 34591   | 8139   | 29432  | 36209   | 63345   | 775429   | 43583   | 35514   | 120545  |
| 33     | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 1       | 1       | 1       |
| wL     | 2932053  | 164359 | 693117  | 1 | 21311195 | 4060540  | 3185438 | 2280295 | 600559 | 840343 | 1330391 | 2212599 | 4520676  | 669069  | 1103024 | 3015147 |
| rK     | 19001207 | -27126 | 1503886 | 1 | 14349270 | 8500081  | 2098000 | 1735197 | 417053 | 618337 | 1685736 | 1058055 | 7927529  | 6029030 | 561044  | 3130169 |

## Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

## Gross Output 1995

| 17       | 18      | 19      | 20       | 21       | 22      | 23     | 24      | 25     | 26       | 27      | 28      | 29      | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|----------|---------|--------|---------|--------|----------|---------|---------|---------|----------|----------|----------|----------|
| 102      | 1       | 13      | 1        | 1        | 1       | 13     | 383295  | 38982  | 1        | 1       | 1       | 1       | 13219    | 28424    | 91259    | 28252    |
| 26270    | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1       | 673609  | 7951    | 1        | 1        | 332      | 66       |
| 1471040  | 2992    | 10071   | 32872    | 547      | 1042    | 685    | 2670    | 9015   | 1        | 1       | 1       | 1       | 1        | 227      | 866      | 6141     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1       | 1       | 1189494 | 1        | 1        | 1        | 1        |
| 40519    | 13546   | 16032   | 34525    | 11434    | 1651    | 1582   | 7642    | 1595   | 19166    | 33679   | 726935  | 14543   | 121895   | 4888180  | 129933   | 1039398  |
| 1        | 1       | 171     | 1288     | 1        | 1       | 40     | 2162    | 106    | 1        | 1       | 1       | 1       | 1832     | 5384     | 40875    | 12666    |
| 5228     | 10595   | 11835   | 25692    | 226055   | 46588   | 2804   | 269009  | 213944 | 15391    | 1449    | 2191    | 210     | 22190    | 11341    | 51348    | 36370    |
| 18623    | 18525   | 40460   | 33634    | 21679    | 11428   | 2945   | 14171   | 3475   | 23701    | 5375    | 4062    | 1208    | 40167    | 63851    | 72280    | 63528    |
| 35381    | 90219   | 65640   | 60895    | 51308    | 83675   | 14255  | 11433   | 142980 | 13373    | 50      | 393     | 1       | 52213    | 8879     | 32684    | 15055    |
| 147      | 1551    | 3947    | 1648     | 225961   | 22396   | 384    | 832     | 614    | 7279     | 6790    | 17      | 163     | 64273    | 46441    | 121062   | 12854    |
| 9742     | 64293   | 61821   | 439515   | 33493    | 8042    | 30604  | 127596  | 97128  | 9698     | 2020    | 93      | 78      | 357143   | 84568    | 31556    | 46362    |
| 19128    | 34032   | 44706   | 171261   | 23179    | 10186   | 10917  | 50432   | 21621  | 138372   | 67327   | 7612    | 4640    | 445225   | 2366779  | 644372   | 268177   |
| 339446   | 349724  | 405893  | 2022209  | 475196   | 292161  | 61916  | 5112508 | 364893 | 239009   | 28524   | 208723  | 60447   | 101848   | 290454   | 2904485  | 220771   |
| 1393107  | 142746  | 152266  | 143216   | 128586   | 37024   | 14010  | 140471  | 31546  | 3992365  | 39129   | 1187761 | 295114  | 1277118  | 495524   | 489438   | 395405   |
| 692      | 2508    | 1201    | 6452     | 1183     | 513     | 6487   | 42      | 104774 | 716      | 1185    | 1       | 1       | 3004     | 1722     | 3397     | 1809     |
| 627985   | 69567   | 162967  | 1900632  | 255106   | 50236   | 73980  | 63781   | 48958  | 3098     | 861     | 4629    | 6535    | 47590    | 3298     | 59032    | 20199    |
| 24234412 | 6136778 | 4653588 | 3771010  | 2657522  | 1410101 | 148945 | 81390   | 229851 | 3684     | -7      | 11254   | 38067   | -8223    | 2379     | 66241    | 7665     |
| 134710   | 1493514 | 1318002 | 579270   | 640653   | 280421  | 57183  | 198236  | 72596  | 68912    | 2596    | 15518   | 2217    | 80874    | 20507    | 64900    | 94403    |
| 469818   | 396589  | 6943722 | 811048   | 1716976  | 1683952 | 60915  | 407109  | 31337  | 77147    | 4966    | 65077   | 39307   | 114140   | 275549   | 231211   | 1387983  |
| 106744   | 106117  | 1542849 | 24770516 | 2011868  | 511101  | 714847 | 26924   | 115795 | 152287   | 273991  | 165099  | 5329    | 223168   | 491898   | 507800   | 279829   |
| 42892    | 36762   | 148265  | 32609    | 13313227 | 52237   | 5107   | 30785   | 8412   | 980257   | 2379    | 5577    | 5313    | 90832    | 150016   | 129784   | 251626   |
| 2199     | 675     | 2526    | 1913     | 212      | 954704  | 125    | 265     | 136    | 402317   | 4573    | 446     | 118     | 4607     | 23782    | 70064    | 1534587  |
| 23984    | 26070   | 395963  | 485267   | 309561   | 210980  | 433188 | 3987    | 2877   | 22349    | 13920   | 24300   | 19935   | 23631    | 94620    | 477408   | 199394   |
| 85729    | 193218  | 612199  | 1512220  | 2082465  | 157176  | 135466 | 1420819 | 172059 | 581169   | 4531    | 22927   | 1403    | 195075   | 132178   | 121054   | 56054    |
| 2029     | 106320  | 7777    | 13974    | 2511     | 2664    | 4927   | 4970    | 122796 | 6533     | 13181   | 2566    | 114     | 144860   | 127003   | 216869   | 71771    |
| 473690   | 225295  | 416622  | 730895   | 280844   | 92800   | 57227  | 151330  | 82599  | 4490616  | 102664  | 130570  | 29143   | 1284971  | 1198298  | 376370   | 528758   |
| 118591   | 39317   | 67049   | 231734   | 79624    | 23599   | 15541  | 42625   | 13498  | 157785   | 405934  | 30661   | 9677    | 2735366  | 2496896  | 293357   | 354009   |
| 1287754  | 232225  | 210914  | 380963   | 268375   | 43093   | 36160  | 218130  | 50737  | 183117   | 137850  | 804911  | 232783  | 696823   | 986113   | 522384   | 321325   |
| 43123    | 24651   | 22843   | 70395    | 21740    | 2851    | 8693   | 16902   | 11263  | 15135    | 5607    | 809385  | 271299  | 183259   | 195514   | 180665   | 78359    |
| 672841   | 437151  | 865793  | 1812200  | 781268   | 300291  | 124281 | 286572  | 124220 | 359034   | 30656   | 56316   | 40388   | 512601   | 209033   | 481861   | 292058   |
| 1653196  | 768771  | 1443976 | 3010352  | 1778271  | 735485  | 443328 | 754320  | 388326 | 4377587  | 772587  | 306239  | 202869  | 9742292  | 16685283 | 4521410  | 1054374  |
| 320100   | 84255   | 472698  | 2086462  | 804289   | 80188   | 569020 | 54440   | 26367  | 272676   | 172564  | 212008  | 30927   | 367751   | 494716   | 1321350  | 176911   |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1       | 1       | 1       | 1        | 1        | 1        | 1        |
| 3385762  | 3534142 | 5617696 | 8032030  | 5335171  | 1953205 | 824648 | 2374009 | 913277 | 10176946 | 3941976 | 1186769 | 521500  | 16159279 | 28146611 | 31835897 | 15492451 |
| 6283118  | 2151005 | 5057347 | 15256547 | 6746468  | 1238278 | 698665 | 2347831 | 730548 | 7453387  | 5969527 | 5258204 | 680837  | 21968522 | 46219357 | 7816382  | 648420   |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1996**

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14       | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|----------|---------|---------|
| 1      | 1635901  | 5362   | 445     | 0 | 139237   | 18652281 | 998675  | 18      | 861383 | 5450   | 3225    | 1       | 236795   | 1        | 174770  | 80      |
| 2      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 12245    | 1412874  | 1       | 228054  |
| 3      | 755      | 1      | 1       | 0 | 850966   | 37261    | 4906    | 1       | 1      | 2694   | 61686   | 1       | 334128   | 87       | 1460    | 2276327 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 229108   | 12453764 | 1       | 1       |
| 5      | 26855    | 1378   | 7581    | 0 | 33471    | 20015    | 6518    | 16671   | 1457   | 1124   | 3836    | 1063    | 28345    | 7079     | 1909    | 9075    |
| 6      | 3610691  | 1      | 1       | 0 | 1        | 6948637  | 18497   | 11      | 1      | 1      | 11691   | 1       | 388327   | 1        | 951617  | 507     |
| 7      | 103255   | 64     | 778     | 0 | 46675    | 5416     | 6012275 | 4719977 | 2462   | 37485  | 59044   | 9696    | 21402    | 574      | 260966  | 17535   |
| 8      | 8758     | 314    | 746     | 0 | 55489    | 14771    | 7955    | 27058   | 1562   | 7381   | 4472    | 2995    | 16162    | 2442     | 5488    | 9786    |
| 9      | 153453   | 10448  | 11305   | 0 | 2010795  | 22129    | 6081    | 1273    | 831799 | 774908 | 84768   | 1141    | 20179    | 5241     | 2789    | 47905   |
| 10     | 260      | 7      | 39      | 0 | 504100   | 499      | 121     | 248     | 48     | 46683  | 16      | 2       | 376      | 61       | 126     | 218     |
| 11     | 59806    | 4      | 212     | 0 | 203378   | 748666   | 138845  | 130749  | 28795  | 124556 | 4689310 | 2118523 | 470433   | 872      | 79777   | 220580  |
| 12     | 14217    | 278    | 2126    | 0 | 122339   | 84166    | 33265   | 31945   | 2417   | 8047   | 48033   | 584146  | 163977   | 19506    | 30636   | 35353   |
| 13     | 1593626  | 5267   | 41482   | 0 | 787793   | 585435   | 4512186 | 90344   | 150396 | 189684 | 535099  | 282598  | 18594935 | 183273   | 463402  | 712626  |
| 14     | 635708   | 2276   | 108680  | 0 | 603864   | 299376   | 307703  | 123064  | 32665  | 29857  | 132035  | 49235   | 3566800  | 649249   | 29485   | 593970  |
| 15     | 2882     | 42     | 21      | 0 | 9824     | 202      | 546     | 841702  | 15628  | 16656  | 436     | 401     | 1817     | 1        | 954177  | 84      |
| 16     | 13442    | 98     | 641     | 0 | 10353148 | 267884   | 9060    | 4252    | 5669   | 58662  | 49096   | 1381    | 393879   | 14232    | 8359    | 2859765 |
| 17     | 35335    | 3083   | 1798    | 0 | 6623673  | 10596    | 12622   | 691     | 818    | 115497 | 32086   | 792     | 242329   | 34693    | 2568    | 147889  |
| 18     | 38322    | 2585   | 7091    | 0 | 5845786  | 796058   | 50309   | 14662   | 16238  | 127458 | 25917   | 3395    | 366728   | 86678    | 57685   | 162559  |
| 19     | 241166   | 6914   | 44095   | 0 | 3488332  | 98327    | 237319  | 104344  | 19439  | 21940  | 58835   | 76712   | 329304   | 202314   | 19912   | 241997  |
| 20     | 77328    | 5076   | 7157    | 0 | 3593036  | 30579    | 25036   | 10768   | 3284   | 6621   | 14035   | 37117   | 66205    | 20267    | 3620    | 50071   |
| 21     | 76210    | 4383   | 87503   | 0 | 114717   | 64794    | 18924   | 14272   | 11217  | 2986   | 19354   | 28700   | 69360    | 10196    | 6707    | 148759  |
| 22     | 46570    | 531    | 1125    | 0 | 3662     | 307      | 865     | 131     | 297    | 202    | 11      | 3       | 932      | 815      | 155     | 397     |
| 23     | 63296    | 195    | 176     | 0 | 165599   | 6303     | 5402    | 2256    | 259    | 1086   | 3187    | 3124    | 56931    | 25854    | 907     | 7277    |
| 24     | 285928   | 1725   | 19029   | 0 | 1605881  | 1010012  | 213518  | 192007  | 14907  | 150340 | 140544  | 86751   | 1024259  | 18114    | 164965  | 124610  |
| 25     | 10052    | 80     | 702     | 0 | 23778    | 87968    | 23125   | 146336  | 2222   | 421    | 2956    | 579     | 12325    | 1402     | 37855   | 2483    |
| 26     | 440785   | 11369  | 51745   | 0 | 1503918  | 633189   | 232472  | 177133  | 151393 | 94868  | 129081  | 135221  | 770576   | 168684   | 66735   | 677233  |
| 27     | 82879    | 392    | 9758    | 0 | 221493   | 77759    | 44891   | 39366   | 11936  | 9279   | 43300   | 68602   | 126477   | 51897    | 14505   | 86831   |
| 28     | 77753    | 16910  | 87579   | 0 | 156160   | 332409   | 345944  | 40222   | 47603  | 19954  | 282006  | 48749   | 1076506  | 186899   | 31583   | 587229  |
| 29     | 15945    | 93     | 4351    | 0 | 36481    | 92606    | 146356  | 19983   | 6181   | 5276   | 18413   | 7167    | 168781   | 15632    | 7458    | 27091   |
| 30     | 264290   | 2920   | 10126   | 0 | 2186893  | 1213521  | 360784  | 475845  | 111710 | 150193 | 347212  | 204007  | 1118699  | 77897    | 308597  | 311067  |
| 31     | 1952548  | 61088  | 269027  | 0 | 11995325 | 2091123  | 1451393 | 874241  | 164527 | 297436 | 621669  | 723036  | 2864877  | 560486   | 313403  | 934662  |
| 32     | 119401   | 3056   | 8137    | 0 | 624594   | 192556   | 112682  | 40768   | 8251   | 29708  | 41237   | 68388   | 900485   | 58821    | 37981   | 129995  |
| 33     | 0        | 0      | 0       | 0 | 0        | 0        | 0       | 0       | 0      | 0      | 0       | 0       | 0        | 0        | 0       | 0       |
| wL     | 2905459  | 157866 | 629921  | 0 | 22656784 | 4342631  | 3652138 | 2527206 | 572464 | 797625 | 1424737 | 2246269 | 4936615  | 849134   | 1109280 | 3057578 |
| rK     | 19853208 | -27471 | 1441122 | 0 | 16085217 | 9585146  | 2536239 | 2027706 | 419171 | 618834 | 1903495 | 1132593 | 9127888  | 8067883  | 594922  | 3346906 |

**Notes**

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)



## Gross Output 1996

| 17       | 18      | 19      | 20       | 21       | 22      | 23     | 24      | 25     | 26       | 27      | 28      | 29      | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|----------|---------|--------|---------|--------|----------|---------|---------|---------|----------|----------|----------|----------|
| 117      | 1       | 13      | 1        | 1        | 1       | 13     | 418717  | 41083  | 1        | 1       | 1       | 1       | 13916    | 32741    | 106894   | 33018    |
| 33776    | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1       | 837099  | 11848   | 1        | 1        | 434      | 86       |
| 1674011  | 3252    | 10292   | 37117    | 540      | 1249    | 704    | 2881    | 9385   | 1        | 1       | 1       | 1       | 1        | 259      | 1002     | 7089     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1       | 1       | 1694213 | 1        | 1        | 1        | 1        |
| 47880    | 15286   | 17012   | 40481    | 11740    | 2055    | 1689   | 8563    | 1724   | 22336    | 43440   | 830263  | 19917   | 131619   | 5775516  | 156112   | 1245994  |
| 1        | 1       | 185     | 1545     | 1        | 1       | 43     | 2479    | 117    | 1        | 1       | 1       | 1       | 2024     | 6509     | 50250    | 15535    |
| 5770     | 11167   | 11731   | 28139    | 216803   | 54158   | 2795   | 281562  | 216032 | 16754    | 1746    | 2338    | 269     | 22381    | 12516    | 57626    | 40724    |
| 18158    | 17249   | 35427   | 32541    | 18367    | 11736   | 2594   | 13103   | 3100   | 22791    | 5721    | 3828    | 1365    | 35788    | 62251    | 71659    | 62839    |
| 37906    | 92300   | 63151   | 64735    | 47763    | 94413   | 13794  | 11615   | 140135 | 14130    | 59      | 407     | 1       | 51114    | 9511     | 35603    | 16362    |
| 165      | 1671    | 4000    | 1846     | 221590   | 26621   | 392    | 891     | 633    | 8102     | 8364    | 18      | 214     | 66284    | 52407    | 138921   | 14717    |
| 10788    | 67984   | 61472   | 482910   | 32226    | 9379    | 30609  | 133979  | 98390  | 10591    | 2441    | 100     | 99      | 361365   | 93631    | 35528    | 52080    |
| 20061    | 34084   | 42104   | 178226   | 21123    | 11251   | 10342  | 50156   | 20744  | 143123   | 77075   | 7716    | 5640    | 426681   | 2481951  | 687138   | 285330   |
| 391779   | 385453  | 420686  | 2315900  | 476559   | 355139  | 64548  | 5595443 | 385279 | 272055   | 35935   | 232843  | 80857   | 107413   | 335193   | 3408460  | 258493   |
| 1809055  | 177014  | 177560  | 184537   | 145089   | 50636   | 16433  | 172976  | 37476  | 5112936  | 55463   | 1490804 | 444148  | 1515423  | 643398   | 646226   | 520892   |
| 677      | 2343    | 1055    | 6263     | 1006     | 529     | 5732   | 39      | 93768  | 691      | 1266    | 1       | 1       | 2685     | 1685     | 3378     | 1796     |
| 690721   | 73069   | 160964  | 2074320  | 243808   | 58193   | 73498  | 66524   | 49262  | 3361     | 1033    | 4921    | 8331    | 47831    | 3627     | 66017    | 22538    |
| 26693940 | 6455010 | 4603038 | 4121562  | 2543500  | 1635823 | 148189 | 85013   | 231616 | 4002     | -9      | 11982   | 48596   | -8277    | 2620     | 74187    | 8565     |
| 153416   | 1624269 | 1347922 | 654602   | 633972   | 336348  | 58823  | 214085  | 75635  | 77400    | 3226    | 17081   | 2926    | 84162    | 23351    | 75151    | 109068   |
| 505899   | 407803  | 6714326 | 866571   | 1606470  | 1909719 | 59248  | 415695  | 30869  | 81926    | 5837    | 67731   | 49054   | 112307   | 296675   | 253141   | 1516197  |
| 131586   | 124918  | 1707904 | 30298606 | 2154953  | 663555  | 795954 | 31472   | 130585 | 185139   | 368667  | 196712  | 7614    | 251380   | 606299   | 636467   | 349941   |
| 48251    | 39491   | 149776  | 36399    | 13013229 | 61888   | 5189   | 32839   | 8657   | 1087526  | 2921    | 6064    | 6926    | 93369    | 168737   | 148445   | 287157   |
| 2224     | 652     | 2295    | 1920     | 186      | 1017133 | 114    | 254     | 126    | 401370   | 5050    | 436     | 139     | 4258     | 24054    | 72064    | 1574824  |
| 28172    | 29243   | 417669  | 565595   | 315953   | 261005  | 459610 | 4441    | 3092   | 25890    | 17847   | 27588   | 27138   | 25364    | 111130   | 570178   | 237603   |
| 95912    | 206428  | 615056  | 1678744  | 2024408  | 185199  | 136894 | 1507353 | 176102 | 641241   | 5534    | 24792   | 1819    | 199427   | 147861   | 137703   | 63619    |
| 2097     | 104907  | 7216    | 14327    | 2254     | 2899    | 4599   | 4870    | 116075 | 6658     | 14866   | 2563    | 137     | 136772   | 131212   | 227841   | 75231    |
| 551091   | 250297  | 435259  | 843739   | 283903   | 113706  | 60137  | 166949  | 87911  | 5152380  | 130371  | 146824  | 39295   | 1366024  | 1393933  | 445208   | 624056   |
| 145184   | 45964   | 73711   | 281501   | 84700    | 30428   | 17185  | 49484   | 15117  | 190505   | 542446  | 36281   | 13731   | 3059977  | 3056435  | 365159   | 439662   |
| 1516902  | 261221  | 223104  | 445278   | 274689   | 53461   | 38474  | 243652  | 54676  | 212729   | 177241  | 916424  | 317795  | 750036   | 1161445  | 625653   | 383978   |
| 58045    | 31686   | 27612   | 94021    | 25427    | 4042    | 10569  | 21574   | 13869  | 20092    | 8238    | 1053033 | 423235  | 225405   | 263141   | 247262   | 107002   |
| 751502   | 466257  | 868377  | 2008390  | 758216   | 353237  | 125381 | 303517  | 126926 | 395481   | 37374   | 60796   | 52280   | 523158   | 233442   | 547216   | 330922   |
| 1941382  | 862104  | 1522730 | 3507742  | 1814509  | 909633  | 470244 | 839988  | 417181 | 5069837  | 990304  | 347593  | 276104  | 10454019 | 19591501 | 5398582  | 1256084  |
| 377810   | 94964   | 501012  | 2443558  | 824851   | 99679   | 606635 | 60930   | 28470  | 317401   | 222317  | 241861  | 42306   | 396623   | 583837   | 1585716  | 211827   |
| 0        | 0       | 0       | 0        | 0        | 0       | 0      | 0       | 0      | 0        | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| 3757822  | 3745759 | 5599050 | 8845634  | 5145206  | 2283145 | 826723 | 2498577 | 927307 | 11139606 | 4775599 | 1273122 | 670819  | 16388431 | 31235861 | 35926602 | 17443660 |
| 7352949  | 2403831 | 5314782 | 17716036 | 6860213  | 1526197 | 738528 | 2605457 | 782125 | 8602262  | 7625363 | 5947683 | 923423  | 23492155 | 54082644 | 9300611  | 769805   |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1997

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14       | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|----------|---------|---------|
| 1      | 1735384  | 5619   | 458     | 0 | 151058   | 20270738 | 1108129 | 20      | 900374 | 5687   | 3507    | 1       | 259005   | 1        | 186111  | 86      |
| 2      | 1        | 1      | 1       | 0 | 1        | 1        | 2       | 1       | 1      | 1      | 1       | 1       | 13781    | 1654563  | 1       | 250750  |
| 3      | 798      | 1      | 1       | 0 | 919527   | 40332    | 5422    | 1       | 1      | 2800   | 66810   | 1       | 364007   | 99       | 1548    | 2422670 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 254761   | 14409010 | 1       | 1       |
| 5      | 28694    | 1454   | 7851    | 0 | 36574    | 21909    | 7285    | 18453   | 1534   | 1181   | 4201    | 1143    | 31228    | 8115     | 2048    | 9767    |
| 6      | 3887575  | 1      | 1       | 0 | 1        | 7664563  | 20832   | 13      | 1      | 1      | 12903   | 1       | 431104   | 2        | 1028532 | 549     |
| 7      | 108106   | 66     | 789     | 0 | 49978    | 5810     | 6584262 | 5119589 | 2540   | 38600  | 63367   | 10225   | 23104    | 644      | 274278  | 18493   |
| 8      | 8777     | 311    | 724     | 0 | 56872    | 15166    | 8339    | 28093   | 1542   | 7275   | 4594    | 3023    | 16701    | 2626     | 5521    | 9879    |
| 9      | 158806   | 10681  | 11340   | 0 | 2128192  | 23462    | 6582    | 1365    | 848201 | 788740 | 89924   | 1189    | 21532    | 5819     | 2897    | 49938   |
| 10     | 274      | 7      | 40      | 0 | 543301   | 538      | 133     | 271     | 50     | 48387  | 17      | 2       | 408      | 69       | 134     | 232     |
| 11     | 62644    | 4      | 215     | 0 | 217867   | 803385   | 152123  | 141883  | 29719  | 128320 | 5034995 | 2234951 | 508078   | 980      | 83884   | 232735  |
| 12     | 14636    | 283    | 2122    | 0 | 128797   | 88762    | 35818   | 34068   | 2452   | 8147   | 50686   | 605635  | 174048   | 21543    | 31659   | 36658   |
| 13     | 1691303  | 5522   | 42673   | 0 | 855062   | 636521   | 5008986 | 99332   | 157274 | 197997 | 582134  | 302066  | 20348173 | 208674   | 493697  | 761824  |
| 14     | 697205   | 2465   | 115534  | 0 | 677318   | 336371   | 352989  | 139826  | 35300  | 32207  | 148438  | 54385   | 4033455  | 763923   | 32462   | 656184  |
| 15     | 2887     | 41     | 20      | 0 | 10062    | 208      | 572     | 873319  | 15423  | 16406  | 447     | 404     | 1876     | 1        | 959302  | 85      |
| 16     | 14049    | 101    | 650     | 0 | 11065945 | 286821   | 9904    | 4604    | 5838   | 60300  | 52598   | 1454    | 424448   | 15958    | 8770    | 3010606 |
| 17     | 36956    | 3185   | 1823    | 0 | 7084762  | 11353    | 13808   | 749     | 843    | 118806 | 34399   | 834     | 261323   | 38927    | 2696    | 155801  |
| 18     | 40506    | 2699   | 7265    | 0 | 6319272  | 862020   | 55622   | 16055   | 16912  | 132504 | 28080   | 3614    | 399681   | 98292    | 61207   | 173078  |
| 19     | 250212   | 7087   | 44344   | 0 | 3701351  | 104512   | 257544  | 112154  | 19872  | 22388  | 62573   | 80159   | 352277   | 225193   | 20738   | 252906  |
| 20     | 83653    | 5425   | 7505    | 0 | 3975175  | 33889    | 28329   | 12068   | 3501   | 7045   | 15563   | 40440   | 73847    | 23522    | 3931    | 54562   |
| 21     | 80194    | 4556   | 89250   | 0 | 123454   | 69850    | 20829   | 15558   | 11630  | 3091   | 20876   | 30417   | 75255    | 11511    | 7085    | 157677  |
| 22     | 47418    | 534    | 1110    | 0 | 3814     | 320      | 922     | 138     | 297    | 202    | 12      | 3       | 978      | 890      | 159     | 407     |
| 23     | 67535    | 205    | 182     | 0 | 180702   | 6890     | 6029    | 2494    | 272    | 1140   | 3486    | 3357    | 62633    | 29595    | 972     | 7821    |
| 24     | 300484   | 1791   | 19383   | 0 | 1725950  | 1087402  | 234708  | 209043  | 15436  | 155393 | 151402  | 91820   | 1109865  | 20423    | 174029  | 131909  |
| 25     | 10290    | 81     | 696     | 0 | 24893    | 92251    | 24760   | 155187  | 2241   | 424    | 3102    | 597     | 13008    | 1539     | 38899   | 2560    |
| 26     | 468957   | 11948  | 53362   | 0 | 1636369  | 690142   | 258705  | 195237  | 158709 | 99270  | 140774  | 144893  | 845314   | 192537   | 71273   | 725776  |
| 27     | 89492    | 418    | 10213   | 0 | 244596   | 86018    | 50702   | 44037   | 12700  | 9854   | 47928   | 74606   | 140814   | 60119    | 15723   | 94444   |
| 28     | 83021    | 17837  | 90642   | 0 | 170526   | 363617   | 386373  | 44493   | 50084  | 20955  | 308663  | 52424   | 1185180  | 214099   | 33852   | 631593  |
| 29     | 17633    | 101    | 4664    | 0 | 41260    | 104916   | 169295  | 22894   | 6736   | 5739   | 20873   | 7983    | 192453   | 18546    | 8279    | 30178   |
| 30     | 277636   | 3030   | 10311   | 0 | 2349479  | 1305990  | 396432  | 517862  | 115630 | 155179 | 373888  | 215843  | 1211721  | 87791    | 325426  | 329159  |
| 31     | 2083100  | 64381  | 278204  | 0 | 13087929 | 2285532  | 1619651 | 966261  | 172955 | 312099 | 679863  | 776903  | 3151449  | 641519   | 335644  | 1004433 |
| 32     | 127579   | 3226   | 8427    | 0 | 682525   | 210778   | 125937  | 45127   | 8687   | 31220  | 45166   | 73595   | 992070   | 67428    | 40738   | 139912  |
| 33     | 0        | 0      | 0       | 0 | 0        | 0        | 0       | 0       | 0      | 0      | 0       | 0       | 0        | 0        | 0       | 0       |
| wL     | 3046462  | 163518 | 640214  | 0 | 24295727 | 4664802  | 4005495 | 2745217 | 591449 | 822567 | 1531333 | 2372145 | 5337110  | 955198   | 1167587 | 3229362 |
| rK     | 21159406 | -28923 | 1488784 | 0 | 17532759 | 10465760 | 2827424 | 2238890 | 440202 | 648691 | 2079593 | 1215753 | 10030879 | 9225040  | 636502  | 3593142 |

## Notes

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

## Gross Output 1997

| 17       | 18      | 19      | 20       | 21       | 22      | 23     | 24      | 25     | 26       | 27      | 28      | 29      | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|----------|---------|--------|---------|--------|----------|---------|---------|---------|----------|----------|----------|----------|
| 129      | 1       | 14      | 1        | 1        | 1       | 14     | 452826  | 43905  | 1        | 1       | 1       | 2       | 14873    | 35981    | 118081   | 36455    |
| 38209    | 1       | 1       | 1        | 1        | 2       | 1      | 1       | 1      | 1        | 2       | 937421  | 13914   | 1        | 1        | 493      | 98       |
| 1833037  | 3510    | 10885   | 40533    | 565      | 1388    | 746    | 3103    | 9989   | 1        | 1       | 1       | 1       | 1        | 283      | 1102     | 7796     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 2       | 1       | 1965797 | 1        | 1        | 1        | 1        |
| 53018    | 16685   | 18195   | 44703    | 12417    | 2310    | 1811   | 9328    | 1856   | 24624    | 49263   | 910109  | 22896   | 141689   | 6392931  | 173694   | 1385632  |
| 1        | 1       | 200     | 1719     | 1        | 1       | 47     | 2721    | 127    | 1        | 2       | 1       | 2       | 2196     | 7260     | 56339    | 17409    |
| 6261     | 11944   | 12294   | 30449    | 224696   | 59667   | 2938   | 300529  | 227865 | 18098    | 1940    | 2511    | 303     | 23608    | 13576    | 62827    | 44377    |
| 18860    | 17660   | 35539   | 33705    | 18221    | 12376   | 2610   | 13387   | 3130   | 23567    | 6085    | 3936    | 1472    | 36135    | 64630    | 74783    | 65546    |
| 40654    | 97584   | 65418   | 69240    | 48930    | 102815  | 14331  | 12254   | 146103 | 15088    | 65      | 432     | 1       | 53295    | 10197    | 38368    | 17624    |
| 181      | 1799    | 4220    | 2010     | 231160   | 29521   | 414    | 957     | 672    | 8809     | 9356    | 20      | 242     | 70377    | 57214    | 152451   | 16142    |
| 11711    | 72749   | 64453   | 522790   | 33414    | 10337   | 32185  | 143069  | 103827 | 11446    | 2714    | 107     | 112     | 381360   | 101602   | 38752    | 56777    |
| 21402    | 35844   | 43386   | 189621   | 21525    | 12188   | 10687  | 52636   | 21513  | 152014   | 84212   | 8149    | 6247    | 442535   | 2646853  | 736583   | 305708   |
| 430911   | 417916  | 446911  | 2540268  | 500659   | 396611  | 68768  | 6053993 | 411936 | 297904   | 40479   | 253520  | 92326   | 114853   | 368532   | 3766862  | 285530   |
| 2056202  | 198332  | 194929  | 209176   | 157517   | 58437   | 18092  | 193402  | 41407  | 5785724  | 64563   | 1677401 | 524087  | 1674516  | 731018   | 738029   | 594591   |
| 703      | 2397    | 1058    | 6482     | 997      | 557     | 5763   | 40      | 94609  | 714      | 1345    | 1       | 1       | 2709     | 1748     | 3523     | 1872     |
| 748135   | 78015   | 168393  | 2240609  | 252234   | 63999   | 77110  | 70878   | 51868  | 3624     | 1146    | 5276    | 9368    | 50364    | 3927     | 71847    | 24516    |
| 28933428 | 6896922 | 4818915 | 4455152  | 2633283  | 1800295 | 155581 | 90643   | 244041 | 4319     | -10     | 12856   | 54682   | -8721    | 2839     | 80796    | 9324     |
| 168057   | 1753938 | 1426157 | 715115   | 663336   | 374105  | 62415  | 230692  | 80541  | 84411    | 3620    | 18523   | 3327    | 89628    | 25570    | 82717    | 119989   |
| 543960   | 432240  | 6973056 | 929225   | 1649888  | 2084936 | 61706  | 439682  | 32265  | 87700    | 6427    | 72093   | 54757   | 117396   | 318873   | 273489   | 1637253  |
| 147524   | 138055  | 1849425 | 33875964 | 2307660  | 755357  | 864366 | 34709   | 142317 | 206646   | 423304  | 218318  | 8862    | 273986   | 679479   | 716979   | 394010   |
| 52619    | 42454   | 157761  | 39586    | 13555118 | 68528   | 5482   | 35229   | 9177   | 1180735  | 3262    | 6547    | 7841    | 98988    | 183944   | 162660   | 314497   |
| 2347     | 679     | 2339    | 2021     | 187      | 1089797 | 116    | 264     | 129    | 421663   | 5457    | 456     | 152     | 4368     | 25373    | 76408    | 1668926  |
| 31151    | 31876   | 446081  | 623711   | 333707   | 293044  | 492274 | 4831    | 3323   | 28502    | 20211   | 30199   | 31154   | 27266    | 122837   | 633504   | 263859   |
| 104460   | 221624  | 647006  | 1823365  | 2105970  | 204802  | 144416 | 1614923 | 186444 | 695297   | 6172    | 26730   | 2057    | 211154   | 160976   | 150693   | 69586    |
| 2224     | 109708  | 7394    | 15158    | 2284     | 3122    | 4725   | 5082    | 119703 | 7032     | 16151   | 2691    | 150     | 141058   | 139145   | 242865   | 80152    |
| 607633   | 272048  | 463535  | 927768   | 298996   | 127298  | 64226  | 181077  | 94225  | 5655864  | 147219  | 160257  | 44980   | 1464258  | 1536362  | 493238   | 691033   |
| 162469   | 50704   | 79671   | 314155   | 90535    | 34573   | 18627  | 54472   | 16445  | 212242   | 621684  | 40192   | 15952   | 3328975  | 3419008  | 410590   | 494114   |
| 1678576  | 284947  | 238456  | 491392   | 290338   | 60068   | 41239  | 265225  | 58815  | 234360   | 200867  | 1003882 | 365083  | 806877   | 1284743  | 695652   | 426724   |
| 66525    | 35798   | 30566   | 107463   | 27835    | 4703    | 11733  | 24322   | 15451  | 22926    | 9669    | 1194709 | 503571  | 251144   | 301467   | 284741   | 123159   |
| 818154   | 500382  | 913126  | 2180552  | 788454   | 390473  | 132218 | 325049  | 134327 | 428651   | 41671   | 65521   | 59089   | 553706   | 254050   | 598603   | 361815   |
| 2146499  | 939617  | 1626149 | 3867772  | 1916273  | 1021189 | 503613 | 913595  | 448386 | 5580680  | 1121373 | 380446  | 316924  | 11236847 | 21653173 | 5997561  | 1394747  |
| 418365   | 103660  | 535855  | 2698470  | 872440   | 112075  | 650673 | 66371   | 30646  | 349916   | 252125  | 265124  | 48634   | 426973   | 646260   | 1764340  | 235569   |
| 0        | 0       | 0       | 0        | 0        | 0       | 0      | 0       | 0      | 0        | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| 4083463  | 4012394 | 5876576 | 9585945  | 5340400  | 2519103 | 870174 | 2670830 | 979544 | 12051350 | 5314745 | 1369510 | 756762  | 17312958 | 33929700 | 39226881 | 19036500 |
| 8121677  | 2617336 | 5670055 | 19514805 | 7237695  | 1711650 | 790142 | 2830930 | 839786 | 9459545  | 8625948 | 6503311 | 1058880 | 25226006 | 59714000 | 10322166 | 853929   |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 1998**

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14       | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|----------|---------|---------|
| 1      | 1599538  | 4393   | 455     | 1 | 146248   | 21542034 | 879477  | 386     | 631806 | 7071   | 3179    | 1       | 214101   | 1        | 94450   | 128     |
| 2      | 1        | 1      | 1       | 1 | 2        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 7559     | 1811408  | 1       | 178906  |
| 3      | 874      | 1      | 1       | 1 | 484505   | 31234    | 12886   | 1       | 1      | 1223   | 70957   | 1       | 412060   | 767      | 2519    | 1830990 |
| 4      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 18444784 | 1       | 1       |
| 5      | 29717    | 1180   | 5181    | 1 | 26000    | 19335    | 9395    | 21320   | 1222   | 1143   | 5666    | 1083    | 28087    | 7816     | 2003    | 8800    |
| 6      | 4538638  | 1      | 1       | 1 | 1        | 7871678  | 20692   | 35      | 1      | 1      | 16862   | 1       | 434784   | 730      | 883275  | 668     |
| 7      | 114948   | 90     | 870     | 1 | 52690    | 7025     | 6505328 | 5489325 | 474    | 31468  | 131598  | 9558    | 23304    | 1102     | 252338  | 19275   |
| 8      | 6340     | 256    | 188     | 1 | 45522    | 10000    | 4231    | 21851   | 559    | 3841   | 1811    | 1372    | 11614    | 2501     | 1824    | 5022    |
| 9      | 158703   | 9293   | 11048   | 1 | 1698658  | 24063    | 5376    | 1319    | 789705 | 599169 | 121380  | 1224    | 18509    | 4319     | 1931    | 48274   |
| 10     | 301      | 6      | 18      | 1 | 424992   | 414      | 76      | 165     | 48     | 44143  | 24      | 2       | 358      | 115      | 160     | 238     |
| 11     | 60640    | 6      | 296     | 1 | 223168   | 798175   | 153510  | 156499  | 23871  | 97639  | 4951700 | 1930033 | 453055   | 3155     | 78198   | 184038  |
| 12     | 14908    | 228    | 1666    | 1 | 125152   | 94488    | 41150   | 50403   | 2154   | 7575   | 49917   | 582188  | 173778   | 27324    | 26618   | 29778   |
| 13     | 1954731  | 3571   | 23540   | 1 | 707463   | 626068   | 5242197 | 86659   | 136079 | 158226 | 602624  | 334172  | 22562476 | 368215   | 437682  | 611412  |
| 14     | 819803   | 2809   | 107887  | 1 | 802528   | 450662   | 398104  | 179032  | 46201  | 37936  | 204490  | 62998   | 5976400  | 1204380  | 41704   | 1052162 |
| 15     | 5506     | 90     | 237     | 1 | 19475    | 243      | 1015    | 426006  | 52     | 16846  | 2827    | 1042    | 3190     | 1        | 862171  | 835     |
| 16     | 11645    | 87     | 619     | 1 | 9408107  | 256352   | 13431   | 3931    | 5993   | 50246  | 54066   | 1485    | 323528   | 24824    | 12395   | 2828863 |
| 17     | 29493    | 2641   | 1068    | 1 | 6023110  | 10982    | 12325   | 1110    | 986    | 137412 | 21766   | 925     | 250910   | 36455    | 2726    | 155728  |
| 18     | 30551    | 2049   | 5463    | 1 | 6575097  | 694829   | 49885   | 15894   | 14007  | 114724 | 27354   | 2955    | 321862   | 149741   | 59115   | 122578  |
| 19     | 250486   | 6119   | 30073   | 1 | 2984468  | 93952    | 140809  | 50528   | 16811  | 19593  | 56259   | 43147   | 274094   | 204703   | 15162   | 217045  |
| 20     | 80204    | 4605   | 5714    | 1 | 3075881  | 32149    | 34111   | 14483   | 2091   | 7712   | 18763   | 27977   | 65142    | 29396    | 2957    | 45769   |
| 21     | 51477    | 4147   | 63098   | 1 | 127955   | 66848    | 20449   | 14923   | 10163  | 3199   | 21924   | 31013   | 64016    | 15052    | 6290    | 133577  |
| 22     | 35600    | 525    | 1498    | 1 | 4158     | 201      | 1082    | 284     | 294    | 207    | 45      | 3       | 512      | 1746     | 159     | 371     |
| 23     | 37024    | 144    | 151     | 1 | 183703   | 5571     | 6329    | 1443    | 293    | 1027   | 5182    | 2586    | 49307    | 29869    | 1044    | 7342    |
| 24     | 294712   | 1583   | 13783   | 1 | 1480034  | 1052053  | 251348  | 221686  | 13170  | 143614 | 161867  | 89405   | 1090397  | 38386    | 152648  | 138651  |
| 25     | 4937     | 59     | 474     | 1 | 28431    | 107747   | 17349   | 154770  | 1494   | 368    | 4956    | 896     | 7809     | 2534     | 39309   | 2216    |
| 26     | 367786   | 10817  | 45986   | 1 | 1564163  | 619124   | 259505  | 212156  | 104716 | 79301  | 139374  | 133285  | 760171   | 200887   | 59173   | 535980  |
| 27     | 109363   | 519    | 10349   | 1 | 338404   | 124546   | 88418   | 87057   | 17135  | 16040  | 66445   | 103999  | 207271   | 103077   | 20226   | 130873  |
| 28     | 181586   | 15772  | 89253   | 1 | 137719   | 401678   | 486164  | 66189   | 56745  | 22300  | 382865  | 51240   | 1372614  | 258252   | 34253   | 681877  |
| 29     | 16282    | 71     | 2727    | 1 | 35040    | 83497    | 205031  | 31606   | 6502   | 5341   | 25856   | 8224    | 281569   | 18703    | 8060    | 30942   |
| 30     | 276571   | 2493   | 5646    | 1 | 2269788  | 1271198  | 379826  | 522576  | 89204  | 128378 | 355891  | 162625  | 1254473  | 125733   | 237149  | 317939  |
| 31     | 3374450  | 87500  | 209701  | 1 | 11821414 | 2362531  | 1767934 | 1280546 | 204869 | 301792 | 804709  | 961098  | 3158999  | 742246   | 334030  | 1204417 |
| 32     | 144501   | 3216   | 6080    | 1 | 850146   | 158273   | 159834  | 62608   | 7635   | 34252  | 65533   | 158156  | 1297971  | 113306   | 55051   | 149733  |
| 33     | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 1        | 1       | 1       |
| wL     | 2828228  | 126341 | 480657  | 1 | 27631458 | 4194771  | 3553186 | 2548473 | 397542 | 657391 | 1378078 | 2049412 | 4760324  | 1065594  | 1082815 | 2852703 |
| rK     | 16901736 | -50868 | 1176483 | 1 | 20362146 | 11384450 | 5376028 | 2468161 | 391725 | 396810 | 1923816 | 945899  | 9840470  | 11843205 | 588095  | 3535616 |

**Notes**

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

### Gross Output 1998

| 17       | 18      | 19      | 20       | 21       | 22      | 23     | 24      | 25     | 26       | 27       | 28      | 29      | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|----------|---------|--------|---------|--------|----------|----------|---------|---------|----------|----------|----------|----------|
| 130      | 1       | 8       | 1        | 1        | 1       | 28     | 355686  | 27088  | 1        | 1        | 1       | 1       | 19051    | 29236    | 134892   | 33078    |
| 28240    | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1        | 1607792 | 16937   | 1        | 1        | 497      | 87       |
| 2774166  | 3720    | 12061   | 40917    | 595      | 908     | 684    | 2365    | 5996   | 1        | 1        | 1       | 1       | 1        | 385      | 848      | 7651     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1        | 1       | 3003856 | 1        | 1        | 1        | 1        |
| 49609    | 13795   | 17362   | 42983    | 10535    | 2766    | 1490   | 9126    | 1676   | 19758    | 66133    | 780690  | 17514   | 70951    | 6735472  | 192629   | 2200257  |
| 1        | 1       | 214     | 2518     | 1        | 1       | 19     | 2626    | 137    | 1        | 1        | 1       | 1       | 933      | 8093     | 34524    | 19505    |
| 6286     | 10967   | 12057   | 38090    | 210390   | 82109   | 2748   | 320759  | 179131 | 19264    | 2907     | 3076    | 487     | 18928    | 19862    | 66901    | 44566    |
| 12353    | 8530    | 20494   | 23183    | 19610    | 7262    | 1475   | 8589    | 2054   | 16279    | 7075     | 3478    | 1138    | 28332    | 61718    | 73400    | 58317    |
| 34175    | 91906   | 62440   | 77441    | 45469    | 88537   | 5127   | 11760   | 101506 | 10824    | 94       | 554     | 1       | 39549    | 10507    | 32905    | 17873    |
| 105      | 1238    | 4173    | 2354     | 327194   | 34127   | 444    | 963     | 745    | 7308     | 8681     | 26      | 287     | 50388    | 60001    | 159063   | 13150    |
| 9311     | 65769   | 58997   | 505042   | 33538    | 7548    | 30484  | 137320  | 91854  | 12916    | 4181     | 202     | 168     | 402438   | 95130    | 39561    | 69269    |
| 20876    | 31929   | 43563   | 208457   | 21376    | 15258   | 10693  | 48270   | 20955  | 155077   | 103978   | 9683    | 6781    | 361631   | 2070377  | 846076   | 323686   |
| 338231   | 354915  | 356010  | 2778931  | 408135   | 295172  | 67189  | 6464007 | 338881 | 64210    | 31159    | 430909  | 95519   | 68252    | 409056   | 3446447  | 285961   |
| 2313279  | 240409  | 340694  | 389447   | 286296   | 82104   | 27362  | 281981  | 44831  | 5995733  | 107199   | 962570  | 427108  | 1585332  | 842215   | 1211188  | 838997   |
| 2173     | 2836    | 3638    | 26269    | 1823     | 421     | 8757   | 125     | 61623  | 2347     | 1962     | 1       | 1       | 3265     | 2210     | 16728    | 4452     |
| 781229   | 69579   | 192436  | 3217791  | 249399   | 77965   | 52477  | 56311   | 46839  | 3505     | 1910     | 11578   | 9923    | 36069    | 4802     | 53117    | 26194    |
| 30606419 | 5990833 | 4353108 | 4420386  | 2613982  | 1273105 | 134251 | 78237   | 272303 | 5807     | -9       | 28736   | 45771   | -10185   | 3676     | 74130    | 10003    |
| 137459   | 1820866 | 1324096 | 705030   | 571155   | 498215  | 53674  | 212692  | 72686  | 81409    | 5200     | 24966   | 3254    | 68329    | 21528    | 67222    | 146693   |
| 420068   | 427072  | 6671945 | 869781   | 1469529  | 1949296 | 49491  | 561784  | 25161  | 86715    | 8691     | 96209   | 52764   | 80900    | 212161   | 228212   | 1514437  |
| 140067   | 125515  | 1553608 | 42049264 | 1919987  | 730006  | 826413 | 33745   | 114126 | 210366   | 505330   | 220848  | 8571    | 184555   | 652855   | 536981   | 248270   |
| 42824    | 38442   | 159945  | 45170    | 11708142 | 52646   | 5167   | 33460   | 7015   | 972808   | 3437     | 5576    | 8682    | 75655    | 159382   | 166787   | 302046   |
| 2524     | 648     | 1611    | 1654     | 238      | 1419521 | 121    | 230     | 113    | 368781   | 6264     | 736     | 155     | 2617     | 21657    | 29913    | 1192419  |
| 29065    | 25353   | 339013  | 633822   | 251575   | 675084  | 733343 | 4758    | 2858   | 33296    | 25254    | 29589   | 26360   | 24874    | 97149    | 627468   | 87590    |
| 92031    | 215415  | 610472  | 1902419  | 2153544  | 205761  | 149494 | 1547116 | 190546 | 476524   | 5488     | 27291   | 2113    | 167129   | 116137   | 135934   | 77196    |
| 1704     | 110204  | 5716    | 12398    | 2444     | 3888    | 5023   | 3994    | 157164 | 4934     | 15444    | 2195    | 145     | 92402    | 83604    | 189422   | 52664    |
| 522036   | 250154  | 425579  | 863548   | 239145   | 104804  | 58691  | 148277  | 73989  | 7980449  | 150863   | 128961  | 41318   | 1220442  | 1290390  | 483551   | 699849   |
| 235335   | 81470   | 129921  | 489826   | 137761   | 41376   | 22125  | 85098   | 18319  | 253060   | 1325188  | 51024   | 24916   | 2999326  | 2800788  | 635365   | 727118   |
| 1934863  | 308292  | 298203  | 573835   | 272680   | 62610   | 36590  | 274184  | 58579  | 200436   | 201048   | 850825  | 319354  | 665621   | 1366200  | 829596   | 477838   |
| 76436    | 40037   | 32219   | 139361   | 34377    | 4480    | 10247  | 28783   | 11624  | 18157    | 7481     | 1562500 | 728377  | 252627   | 302440   | 354540   | 198439   |
| 722427   | 460776  | 813011  | 2214420  | 752982   | 360868  | 136730 | 305651  | 119750 | 399891   | 48297    | 71960   | 56792   | 903795   | 244673   | 613362   | 252181   |
| 1839643  | 1070415 | 1418954 | 4392006  | 2113814  | 726164  | 427224 | 946445  | 399799 | 6319988  | 1411844  | 578494  | 256354  | 12579191 | 21092719 | 7832863  | 1683955  |
| 484715   | 121561  | 598515  | 2572792  | 826658   | 120475  | 480045 | 79179   | 37871  | 350134   | 285920   | 230138  | 45128   | 437606   | 705741   | 1954414  | 265775   |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1        | 1       | 1       | 1        | 1        | 1        | 1        |
| 3545530  | 3740668 | 5025860 | 9734088  | 5021046  | 2570289 | 825885 | 2534891 | 934652 | 10989477 | 5415072  | 1484819 | 740391  | 16623532 | 34296872 | 40579698 | 19613602 |
| 8626468  | 3291538 | 4370101 | 17049640 | 3813425  | 3266304 | 676212 | 2420462 | 836908 | 10893061 | 10383092 | 7162290 | 1715664 | 22790685 | 71330784 | 11657953 | 1244423  |

Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>

Gross Output 1999

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14       | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|----------|---------|---------|
| 1      | 1732384  | 5007   | 508     | 0 | 160274   | 21555254 | 945579  | 380     | 713657 | 9620   | 3669    | 1       | 245432   | 1        | 93242   | 142     |
| 2      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 5627     | 1503766  | 1       | 128629  |
| 3      | 772      | 1      | 1       | 0 | 432716   | 25470    | 11291   | 1       | 1      | 1356   | 66731   | 1       | 384953   | 799      | 2027    | 1652191 |
| 4      | 1        | 1      | 1       | 0 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 22485750 | 1       | 1       |
| 5      | 21833    | 913    | 3920    | 0 | 19329    | 13124    | 6852    | 14249   | 936    | 1055   | 4436    | 899     | 21841    | 6779     | 1341    | 6610    |
| 6      | 6305325  | 1      | 1       | 0 | 1        | 10103367 | 28537   | 44      | 1      | 2      | 24960   | 2       | 639321   | 1198     | 1118509 | 949     |
| 7      | 122500   | 101    | 955     | 0 | 56818    | 6916     | 6882174 | 5321400 | 527    | 42123  | 149428  | 11509   | 26286    | 1386     | 245119  | 20999   |
| 8      | 7790     | 330    | 238     | 0 | 56598    | 11352    | 5161    | 24423   | 716    | 5929   | 2370    | 1905    | 15104    | 3627     | 2043    | 6308    |
| 9      | 144239   | 8889   | 10341   | 0 | 1562156  | 20205    | 4850    | 1090    | 748546 | 684024 | 117542  | 1257    | 17805    | 4634     | 1599    | 44854   |
| 10     | 308      | 7      | 19      | 0 | 439434   | 391      | 77      | 153     | 51     | 56660  | 26      | 2       | 387      | 138      | 149     | 249     |
| 11     | 57640    | 6      | 290     | 0 | 214644   | 700939   | 144852  | 135317  | 23664  | 116578 | 5014988 | 2072857 | 455806   | 3540     | 67752   | 178840  |
| 12     | 13891    | 223    | 1598    | 0 | 118003   | 81345    | 38065   | 42723   | 2093   | 8866   | 49560   | 612968  | 171393   | 30056    | 22608   | 28368   |
| 13     | 1911078  | 3675   | 23702   | 0 | 699868   | 565497   | 5087786 | 77069   | 138752 | 194310 | 627752  | 369149  | 23347574 | 424944   | 390042  | 611105  |
| 14     | 832115   | 3000   | 112777  | 0 | 824243   | 422612   | 401139  | 165302  | 48908  | 48367  | 221155  | 72250   | 6420618  | 1443032  | 38584   | 1091810 |
| 15     | 6081     | 105    | 269     | 0 | 21764    | 248      | 1113    | 427989  | 60     | 23370  | 3327    | 1300    | 3728     | 1        | 867957  | 943     |
| 16     | 10255    | 81     | 561     | 0 | 8383859  | 208581   | 11742   | 3149    | 5505   | 55583  | 50734   | 1477    | 301575   | 25807    | 9950    | 2546966 |
| 17     | 27624    | 2604   | 1030    | 0 | 5708304  | 9503     | 11459   | 946     | 963    | 161665 | 21722   | 979     | 248741   | 40306    | 2327    | 149115  |
| 18     | 30785    | 2173   | 5670    | 0 | 6704058  | 646859   | 49901   | 14568   | 14720  | 145209 | 29369   | 3364    | 343280   | 178112   | 54297   | 126275  |
| 19     | 244492   | 6286   | 30230   | 0 | 2947607  | 84724    | 136438  | 44863   | 17114  | 24022  | 58509   | 47585   | 283169   | 235855   | 13490   | 216582  |
| 20     | 78529    | 4745   | 5762    | 0 | 3047372  | 29081    | 33155   | 12899   | 2135   | 9484   | 19574   | 30951   | 67509    | 33975    | 2639    | 45814   |
| 21     | 52498    | 4450   | 66271   | 0 | 132040   | 62985    | 20702   | 13844   | 10810  | 4098   | 23823   | 35736   | 69100    | 18120    | 5847    | 139268  |
| 22     | 37710    | 585    | 1634    | 0 | 4457     | 196      | 1138    | 273     | 325    | 275    | 50      | 4       | 574      | 2184     | 154     | 402     |
| 23     | 36501    | 149    | 153     | 0 | 183255   | 5074     | 6194    | 1294    | 301    | 1272   | 5443    | 2881    | 51451    | 34760    | 938     | 7400    |
| 24     | 301439   | 1704   | 14519   | 0 | 1531772  | 994159   | 255212  | 206260  | 14049  | 184512 | 176404  | 103325  | 1180454  | 46346    | 142316  | 144982  |
| 25     | 4796     | 60     | 474     | 0 | 27948    | 96705    | 16731   | 136770  | 1514   | 449    | 5129    | 983     | 8029     | 2905     | 34808   | 2201    |
| 26     | 329841   | 10210  | 42473   | 0 | 1419426  | 512984   | 231036  | 173077  | 97944  | 89333  | 133181  | 135060  | 721580   | 212667   | 48372   | 491415  |
| 27     | 111497   | 557    | 10865   | 0 | 349099   | 117311   | 89487   | 80737   | 18220  | 20541  | 72178   | 119801  | 223663   | 124049   | 18796   | 136406  |
| 28     | 170197   | 15557  | 86153   | 0 | 130612   | 347827   | 452350  | 56433   | 55469  | 26254  | 382353  | 54265   | 1361696  | 285727   | 29263   | 653378  |
| 29     | 13803    | 64     | 2381    | 0 | 30058    | 65398    | 172553  | 24374   | 5749   | 5688   | 23356   | 7877    | 252654   | 18716    | 6228    | 26818   |
| 30     | 318538   | 3022   | 6696    | 0 | 2645216  | 1352648  | 434273  | 547494  | 107150 | 185725 | 436738  | 211632  | 1529254  | 170940   | 248965  | 374360  |
| 31     | 3009641  | 82132  | 192615  | 0 | 10668474 | 1946731  | 1565316 | 1038919 | 190565 | 338100 | 764717  | 968542  | 2982117  | 781446   | 271556  | 1098194 |
| 32     | 138717   | 3250   | 6011    | 0 | 825798   | 140373   | 152318  | 54671   | 7644   | 41302  | 67030   | 171547  | 1318825  | 128396   | 48171   | 146949  |
| 33     | 0        | 0      | 0       | 0 | 0        | 0        | 0       | 0       | 0      | 0      | 0       | 0       | 0        | 0        | 0       | 0       |
| wL     | 2548141  | 119797 | 445987  | 0 | 25190335 | 3491678  | 3177979 | 2088641 | 373550 | 743974 | 1322918 | 2086303 | 4539510  | 1133287  | 889253  | 2627582 |
| rK     | 15326462 | -48545 | 1098689 | 0 | 18683372 | 9537608  | 4839451 | 2035910 | 370466 | 451979 | 1858764 | 969157  | 9444739  | 12677066 | 486094  | 3277678 |

Notes

1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method

2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)

Gross Output 1999

| 17       | 18      | 19      | 20       | 21       | 22      | 23     | 24      | 25     | 26       | 27       | 28      | 29      | 30       | 31       | 32       | 33       |
|----------|---------|---------|----------|----------|---------|--------|---------|--------|----------|----------|---------|---------|----------|----------|----------|----------|
| 145      | 1       | 11      | 1        | 1        | 1       | 36     | 436437  | 31682  | 1        | 1        | 1       | 1       | 28921    | 38740    | 175191   | 41482    |
| 20335    | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1        | 1349248 | 14000   | 1        | 1        | 419      | 71       |
| 2507044  | 3427    | 12878   | 43864    | 671      | 806     | 711    | 2365    | 5716   | 1        | 1        | 1       | 1       | 1        | 416      | 898      | 7819     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1      | 1       | 1      | 1        | 1        | 1       | 3646241 | 1        | 1        | 1        | 1        |
| 37318    | 10579   | 15431   | 38356    | 9893     | 2043    | 1289   | 7596    | 1330   | 15475    | 63738    | 684425  | 15124   | 73066    | 6054390  | 169710   | 1871788  |
| 1        | 1       | 360     | 4249     | 2        | 1       | 30     | 4133    | 205    | 1        | 2        | 2       | 2       | 1817     | 13756    | 57514    | 31377    |
| 6859     | 12199   | 15543   | 49302    | 286592   | 87940   | 3449   | 387272  | 206158 | 21886    | 4064     | 3911    | 610     | 28274    | 25897    | 85495    | 54993    |
| 15540    | 10940   | 30463   | 34598    | 30799    | 8967    | 2135   | 11956   | 2725   | 21323    | 11404    | 5100    | 1644    | 48795    | 92781    | 108151   | 82971    |
| 31802    | 87187   | 68650   | 85484    | 52823    | 80870   | 5489   | 12109   | 99629  | 10488    | 112      | 600     | 1       | 50382    | 11683    | 35862    | 18809    |
| 109      | 1321    | 5159    | 2921     | 427369   | 35047   | 534    | 1115    | 822    | 7961     | 11637    | 32      | 344     | 72170    | 75013    | 194911   | 15559    |
| 9062     | 65253   | 67839   | 583059   | 40748    | 7210    | 34128  | 147879  | 94289  | 13088    | 5213     | 229     | 187     | 536177   | 110630   | 45093    | 76239    |
| 19917    | 31055   | 49106   | 235923   | 25460    | 14288   | 11736  | 50958   | 21087  | 154050   | 127100   | 10767   | 7427    | 472329   | 2360351  | 945412   | 349247   |
| 338572   | 362183  | 421051  | 3299811  | 510036   | 290022  | 77369  | 7159760 | 357795 | 66922    | 39962    | 502705  | 109762  | 93530    | 489289   | 4040536  | 323721   |
| 2404073  | 254704  | 418330  | 480111   | 371444   | 83753   | 32711  | 324264  | 49141  | 6487733  | 142736   | 1165851 | 509545  | 2255472  | 1045895  | 1474216  | 986068   |
| 2457     | 3269    | 4860    | 35238    | 2573     | 467     | 11392  | 157     | 73499  | 2764     | 2842     | 1       | 1       | 5054     | 2986     | 22154    | 5693     |
| 704441   | 63961   | 205016  | 3441900  | 280750   | 69006   | 54434  | 56185   | 44548  | 3291     | 2206     | 12167   | 10272   | 44525    | 5175     | 56095    | 26711    |
| 29351040 | 5856858 | 4932255 | 5028577  | 3129486  | 1198376 | 148102 | 83020   | 275431 | 5798     | -11      | 32116   | 50388   | -13371   | 4212     | 83260    | 10848    |
| 141819   | 1915159 | 1614043 | 862863   | 735654   | 504539  | 63703  | 242812  | 79097  | 87451    | 6873     | 30019   | 3853    | 96507    | 26540    | 81227    | 171158   |
| 419804   | 435106  | 7877982 | 1031125  | 1833434  | 1912155 | 56896  | 621235  | 26522  | 90230    | 11128    | 112055  | 60533   | 110682   | 253361   | 267114   | 1711613  |
| 140416   | 128275  | 1840167 | 50004959 | 2402915  | 718331  | 953039 | 37432   | 120674 | 219578   | 649053   | 258027  | 9864    | 253281   | 782065   | 630478   | 281470   |
| 44716    | 40921   | 197324  | 55950    | 15262396 | 53958   | 6206   | 38660   | 7726   | 1057630  | 4598     | 6786    | 10407   | 108146   | 198866   | 203971   | 356677   |
| 2738     | 716     | 2064    | 2128     | 322      | 1511189 | 151    | 276     | 129    | 416446   | 8705     | 930     | 193     | 3886     | 28068    | 37997    | 1462563  |
| 29338    | 26089   | 404310  | 758935   | 317023   | 668865  | 851537 | 5314    | 3043   | 34993    | 32661    | 34808   | 30545   | 34372    | 117178   | 741796   | 99987    |
| 96379    | 229980  | 755350  | 2363345  | 2815532  | 211508  | 180096 | 1792789 | 210473 | 519592   | 7364     | 33309   | 2540    | 239605   | 145333   | 166727   | 91425    |
| 1695     | 111747  | 6717    | 14629    | 3034     | 3796    | 5747   | 4396    | 164884 | 5109     | 19681    | 2545    | 165     | 125822   | 99368    | 220666   | 59239    |
| 479354   | 234169  | 461711  | 940623   | 274143   | 94460   | 61995  | 150657  | 71659  | 7629813  | 177485   | 138008  | 43553   | 1534158  | 1415866  | 520030   | 726752   |
| 245655   | 86697   | 160234  | 606533   | 179525   | 42394   | 26568  | 98291   | 20169  | 275038   | 1772313  | 62073   | 29857   | 4286076  | 3493531  | 776768   | 858362   |
| 1856797  | 301608  | 338113  | 653244   | 326683   | 58976   | 40393  | 291150  | 59293  | 200272   | 247195   | 951580  | 351813  | 874457   | 1566659  | 932419   | 518587   |
| 66347    | 35428   | 33042   | 143496   | 37252    | 3817    | 10232  | 27645   | 10642  | 16410    | 8319     | 1580649 | 725782  | 300193   | 313696   | 360429   | 194795   |
| 851911   | 553932  | 1132746 | 3097666  | 1108523  | 417702  | 185480 | 398828  | 148945 | 490991   | 72970    | 98897   | 76881   | 1459043  | 344772   | 847125   | 336310   |
| 1679930  | 996498  | 1530950 | 4757672  | 2409816  | 650894  | 448793 | 956340  | 385079 | 6009038  | 1651844  | 615669  | 268734  | 15725626 | 23016329 | 8377380  | 1739062  |
| 476422   | 121805  | 695048  | 2999739  | 1014356  | 116230  | 542775 | 86114   | 39261  | 358320   | 360059   | 263623  | 50918   | 588824   | 828888   | 2249839  | 295423   |
| 0        | 0       | 0       | 0        | 0        | 0       | 0      | 0       | 0      | 0        | 0        | 0       | 0       | 0        | 0        | 0        | 0        |
| 3270665  | 3517796 | 5477727 | 10651828 | 5782407  | 2327313 | 876411 | 2587459 | 909401 | 10555118 | 6400056  | 1596318 | 784045  | 20993063 | 37805529 | 43842345 | 20461577 |
| 8009206  | 3115458 | 4793834 | 18777839 | 4420090  | 2976672 | 722224 | 2486646 | 819568 | 10530222 | 12351161 | 7749958 | 1828581 | 28967529 | 79136960 | 12676776 | 1306626  |

**Input-Output Table by 33 sector (1983-2000)<sup>1)</sup>**

**Gross Output 2000**

| Sector | 1        | 2      | 3       | 4 | 5        | 6        | 7       | 8       | 9      | 10     | 11      | 12      | 13       | 14       | 15      | 16      |
|--------|----------|--------|---------|---|----------|----------|---------|---------|--------|--------|---------|---------|----------|----------|---------|---------|
| 1      | 1703896  | 4077   | 473     | 1 | 219728   | 21731859 | 567766  | 55      | 651560 | 7818   | 2683    | 6       | 200225   | 1        | 86387   | 68      |
| 2      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 8806     | 929874   | 1       | 153668  |
| 3      | 803      | 1      | 1       | 1 | 348891   | 25964    | 1348    | 1       | 72     | 2131   | 59594   | 1       | 326124   | 781      | 2041    | 1658768 |
| 4      | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 27223604 | 1       | 1       |
| 5      | 24444    | 1148   | 3846    | 1 | 24092    | 26280    | 12286   | 15085   | 1481   | 1325   | 6365    | 1540    | 35224    | 7894     | 2065    | 9729    |
| 6      | 3615059  | 1      | 1       | 1 | 1        | 7237136  | 32820   | 1       | 1      | 1      | 19564   | 125     | 354323   | 990      | 785147  | 859     |
| 7      | 107288   | 74     | 501     | 1 | 55566    | 8912     | 7309236 | 5341298 | 910    | 53269  | 151492  | 15625   | 39110    | 1179     | 422685  | 25272   |
| 8      | 5436     | 170    | 142     | 1 | 40878    | 12947    | 5160    | 219564  | 1364   | 6078   | 3241    | 2265    | 14029    | 3568     | 2175    | 5483    |
| 9      | 154816   | 8973   | 8211    | 1 | 1366599  | 33744    | 10023   | 1092    | 820014 | 810046 | 102570  | 1385    | 25885    | 4112     | 2213    | 40593   |
| 10     | 144      | 1      | 18      | 1 | 389418   | 983      | 261     | 637     | 6      | 89081  | 65      | 1       | 223      | 20       | 30      | 309     |
| 11     | 78629    | 6      | 179     | 1 | 210066   | 832625   | 142931  | 127162  | 31156  | 121102 | 5436392 | 2376252 | 417114   | 4029     | 69930   | 171271  |
| 12     | 13625    | 147    | 1131    | 1 | 109595   | 86391    | 36958   | 46764   | 2253   | 8682   | 56465   | 932482  | 171110   | 34421    | 25375   | 24131   |
| 13     | 2031156  | 1797   | 19800   | 1 | 811621   | 475245   | 5048163 | 80690   | 172700 | 211082 | 664939  | 405508  | 24077183 | 530843   | 438462  | 537597  |
| 14     | 1019067  | 3433   | 152876  | 1 | 1018345  | 543033   | 407044  | 162633  | 58100  | 67517  | 240169  | 85239   | 8048134  | 1562270  | 50495   | 1223295 |
| 15     | 3210     | 1      | 133     | 1 | 20430    | 3145     | 21836   | 458933  | 160    | 23327  | 2729    | 777     | 3266     | 14       | 919536  | 1466    |
| 16     | 12311    | 154    | 671     | 1 | 8431145  | 340646   | 9407    | 3914    | 6141   | 62972  | 60103   | 1687    | 423502   | 18421    | 13474   | 2785929 |
| 17     | 32383    | 3532   | 119     | 1 | 5340285  | 15353    | 8980    | 53      | 1018   | 237271 | 22182   | 1767    | 323607   | 40198    | 2333    | 146005  |
| 18     | 30932    | 2456   | 4275    | 1 | 6643565  | 711935   | 61994   | 19512   | 33289  | 206490 | 30583   | 7376    | 412639   | 205064   | 64920   | 137300  |
| 19     | 189188   | 5625   | 20514   | 1 | 3321978  | 111187   | 137154  | 41841   | 17039  | 30691  | 90713   | 72650   | 292745   | 246528   | 15386   | 214043  |
| 20     | 71628    | 5105   | 4842    | 1 | 4044866  | 22177    | 24738   | 10029   | 6862   | 17855  | 20727   | 41652   | 61915    | 31669    | 3262    | 61099   |
| 21     | 22961    | 3400   | 36049   | 1 | 102907   | 38267    | 11752   | 7146    | 6726   | 4612   | 15331   | 22951   | 49695    | 12365    | 4099    | 88362   |
| 22     | 106997   | 682    | 1309    | 1 | 1874     | 31       | 40      | 8       | 241    | 188    | 31      | 1       | 281      | 1099     | 12      | 201     |
| 23     | 41080    | 113    | 129     | 1 | 205986   | 8121     | 4200    | 1439    | 277    | 1275   | 6738    | 3206    | 72268    | 41461    | 872     | 7448    |
| 24     | 341276   | 2788   | 7993    | 1 | 2090788  | 1179629  | 330064  | 188967  | 14576  | 206096 | 176623  | 117691  | 1038348  | 45435    | 147892  | 143590  |
| 25     | 4166     | 42     | 328     | 1 | 32516    | 109029   | 18530   | 135978  | 1183   | 521    | 3713    | 693     | 9110     | 1238     | 40643   | 1517    |
| 26     | 285449   | 3076   | 29715   | 1 | 875728   | 574411   | 249713  | 257499  | 73890  | 48494  | 149573  | 180005  | 755869   | 267448   | 61621   | 346826  |
| 27     | 107070   | 697    | 10505   | 1 | 355090   | 148058   | 94316   | 106993  | 20306  | 19546  | 79318   | 141181  | 230116   | 92526    | 23405   | 143563  |
| 28     | 95385    | 15227  | 75119   | 1 | 167135   | 322086   | 423663  | 14448   | 62629  | 29361  | 390217  | 63035   | 1614341  | 382171   | 25025   | 606746  |
| 29     | 13691    | 113    | 2054    | 1 | 52716    | 85600    | 136333  | 19517   | 4258   | 4180   | 22172   | 8369    | 333677   | 14054    | 5205    | 30331   |
| 30     | 414353   | 4476   | 12666   | 1 | 2284826  | 1925217  | 527869  | 551098  | 95456  | 215306 | 356291  | 313572  | 1601233  | 108650   | 183461  | 327481  |
| 31     | 2169278  | 58735  | 280702  | 1 | 10654122 | 2414360  | 1127765 | 912233  | 129659 | 286970 | 740538  | 993962  | 3921789  | 866199   | 271402  | 1106541 |
| 32     | 117538   | 3161   | 7225    | 1 | 920039   | 253462   | 138088  | 54992   | 11822  | 32836  | 76060   | 167452  | 1300446  | 123550   | 57821   | 149194  |
| 33     | 1        | 1      | 1       | 1 | 1        | 1        | 1       | 1       | 1      | 1      | 1       | 1       | 1        | 1        | 1       | 1       |
| wL     | 3038241  | 120224 | 415575  | 1 | 24659325 | 4230920  | 3997689 | 2181308 | 429315 | 850980 | 1359367 | 1914228 | 4920135  | 1212149  | 1056767 | 2506586 |
| rK     | 19068340 | -17656 | 1035092 | 1 | 15704367 | 10533109 | 4442612 | 847418  | 434948 | 727452 | 1920502 | 943897  | 8849051  | 14906877 | 355541  | 2888135 |

**Notes**

- 1) The tables are annual Input-Output Tables by 33 sector(1983-2000) generated by RAS method
- 2) The last two rows of each table are compensation to Labor (row 34 : wL) and rental payments to capital (row 35 : rK)



## Gross Output 2000

|          |         |         |          |          |         |         |         |        |          |          |         |         |          |          |          |          |
|----------|---------|---------|----------|----------|---------|---------|---------|--------|----------|----------|---------|---------|----------|----------|----------|----------|
| 17       | 18      | 19      | 20       | 21       | 22      | 23      | 24      | 25     | 26       | 27       | 28      | 29      | 30       | 31       | 32       | 33       |
| 92       | 80      | 2       | 1        | 1        | 1       | 21      | 248055  | 29288  | 1        | 1        | 1       | 157     | 2105238  | 16068    | 170334   | 14668    |
| 53116    | 5       | 4       | 1        | 1        | 1       | 1       | 1       | 1      | 1        | 1        | 1312027 | 55666   | 1        | 1        | 374      | 1        |
| 2334382  | 7869    | 10384   | 32805    | 1508     | 811     | 268     | 2952    | 7160   | 4        | 1        | 132     | 36      | 8590     | 498      | 1455     | 2525     |
| 1        | 1       | 1       | 1        | 1        | 1       | 1       | 1       | 1      | 1        | 1        | 1       | 4635834 | 1        | 1        | 1        | 1        |
| 39123    | 14373   | 23969   | 50142    | 13719    | 3101    | 1818    | 13343   | 1685   | 24843    | 93363    | 864589  | 19148   | 269685   | 6161502  | 325770   | 265049   |
| 1        | 28      | 180     | 515      | 1        | 1       | 1       | 3080    | 48     | 1        | 1        | 1       | 1       | 11406678 | 5502     | 96609    | 9301     |
| 7373     | 12873   | 15805   | 124477   | 628530   | 74658   | 6723    | 344870  | 226961 | 22452    | 3842     | 2448    | 532     | 63816    | 22246    | 107835   | 27662    |
| 11505    | 8221    | 19818   | 25348    | 14946    | 8465    | 2456    | 6369    | 3392   | 24082    | 8217     | 4399    | 1129    | 124235   | 46180    | 97006    | 156423   |
| 37992    | 83586   | 82130   | 92126    | 61248    | 83037   | 7835    | 14255   | 87644  | 15691    | 302      | 1324    | 1       | 71089    | 9255     | 39142    | 8221     |
| 38       | 1019    | 3902    | 3603     | 579825   | 31319   | 1879    | 318     | 840    | 10014    | 10216    | 22      | 396     | 122912   | 104393   | 243439   | 17453    |
| 15731    | 73803   | 82748   | 650863   | 46092    | 7697    | 33087   | 174085  | 124993 | 13613    | 7236     | 242     | 216     | 358557   | 123745   | 56073    | 23167    |
| 18543    | 30759   | 44023   | 261088   | 30038    | 16097   | 14135   | 55546   | 23958  | 135037   | 131093   | 8760    | 6899    | 396124   | 2928194  | 968149   | 316015   |
| 354429   | 398917  | 486026  | 3664808  | 628857   | 343514  | 89747   | 7473146 | 410269 | 75013    | 21575    | 436762  | 146177  | 89834    | 401897   | 7182300  | 228182   |
| 1619747  | 347234  | 466913  | 506527   | 468400   | 103185  | 37983   | 364509  | 63146  | 8330962  | 146483   | 1689046 | 369700  | 2467851  | 1111992  | 1655251  | 733311   |
| 1578     | 2353    | 6639    | 30089    | 14360    | 1137    | 12289   | 598     | 64554  | 3431     | 1834     | 1389    | 222     | 25106    | 6686     | 16834    | 2376     |
| 722663   | 64033   | 153333  | 2067072  | 359979   | 96519   | 143550  | 65127   | 86373  | 4925     | 2457     | 15275   | 11226   | 101648   | 6523     | 85780    | 16418    |
| 29635920 | 6171356 | 5313171 | 5357258  | 3823413  | 1524157 | 176934  | 87543   | 366736 | 12312    | -5       | 12387   | 48305   | -14476   | 3198     | 96545    | 9157     |
| 204652   | 2082988 | 1878674 | 1233586  | 1042568  | 613121  | 130718  | 229489  | 101633 | 88288    | 6702     | 26251   | 6703    | 97277    | 80104    | 112558   | 115456   |
| 464906   | 434617  | 9540938 | 1238003  | 2534785  | 2054992 | 74944   | 695024  | 35664  | 86819    | 7446     | 143427  | 72325   | 117915   | 187562   | 279718   | 1387909  |
| 130058   | 115307  | 2328294 | 58801688 | 3067521  | 717988  | 1229673 | 49513   | 144440 | 223131   | 839415   | 278057  | 11156   | 305887   | 711834   | 1030489  | 298103   |
| 25684    | 30305   | 166298  | 46196    | 19312177 | 58618   | 5222    | 31258   | 6815   | 1090222  | 7815     | 6087    | 9216    | 84203    | 150918   | 1398207  | 83587    |
| 259      | 43      | 863     | 885      | 276      | 1541035 | 22      | 26      | 58     | 825367   | 11684    | 239     | 88      | 6346     | 15879    | 51203    | 1534737  |
| 30430    | 29253   | 517439  | 1273653  | 380503   | 651576  | 982203  | 5826    | 3083   | 29897    | 35108    | 31781   | 28038   | 31956    | 115479   | 628534   | 89782    |
| 91644    | 266678  | 857579  | 2933641  | 3428510  | 228689  | 228988  | 2111949 | 240284 | 354516   | 7388     | 28732   | 3284    | 207711   | 97285    | 529004   | 57636    |
| 1336     | 85051   | 4904    | 14859    | 3152     | 2821    | 4460    | 4081    | 266258 | 5647     | 21965    | 1985    | 262     | 187407   | 76227    | 222933   | 45735    |
| 517702   | 198241  | 428625  | 890698   | 399951   | 110629  | 71570   | 171128  | 78668  | 8971355  | 179035   | 58552   | 33806   | 1555541  | 1294115  | 527258   | 568594   |
| 135866   | 59644   | 131667  | 556509   | 173112   | 45905   | 34401   | 103158  | 32733  | 360233   | 5234377  | 50861   | 31206   | 3616773  | 4567344  | 946135   | 472068   |
| 1919887  | 269199  | 338132  | 798267   | 415005   | 77302   | 47328   | 370234  | 67437  | 193611   | 282718   | 784420  | 364314  | 1445358  | 1681438  | 1131779  | 457684   |
| 88437    | 41110   | 33804   | 120872   | 39365    | 3370    | 7697    | 33254   | 8178   | 23303    | 14038    | 1529960 | 619751  | 523688   | 325547   | 370389   | 151920   |
| 686302   | 478482  | 1098822 | 4174857  | 1533531  | 456714  | 245373  | 498226  | 184260 | 488935   | 137986   | 78512   | 55405   | 3947586  | 480530   | 1454699  | 398363   |
| 1854058  | 806944  | 2236366 | 6580441  | 2179381  | 941323  | 555358  | 1093978 | 330584 | 4733705  | 2798415  | 898723  | 482804  | 13582572 | 27710847 | 9265139  | 2426529  |
| 563211   | 148234  | 696886  | 3070221  | 894445   | 130669  | 446038  | 126428  | 32455  | 581206   | 873784   | 281825  | 61954   | 701402   | 1665812  | 2323692  | 375243   |
| 1        | 1       | 1       | 1        | 1        | 1       | 1       | 1       | 1      | 1        | 1        | 1       | 1       | 1        | 1        | 1        | 1        |
| 3735229  | 3830041 | 6199108 | 11904501 | 6025929  | 2334848 | 896439  | 3034810 | 860180 | 11570082 | 6631474  | 1467616 | 784391  | 25994135 | 43802295 | 45553038 | 19569487 |
| 7520068  | 2864839 | 6054286 | 24081598 | 6327100  | 1846220 | 719098  | 3351018 | 708111 | 8172970  | 11696345 | 8912547 | 2116794 | 30122099 | 87138053 | 13795420 | 7931092  |