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China Working Paper No. 90/2
**Construction of a consistent market price data base
for a general equilibrium model of China**

David R. Thompson

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Key to symbols used in tables

n.a. Not applicable

.. Not available

- zero



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Construction of a consistent market price data base for a general equilibrium model of China

1. Introduction

This paper describes the construction of a market price input-output data base for the Chinese economy. Its purpose is to provide a detailed treatment of the data transformations as a reference for studies using this and related data bases, and to complement the theoretical treatment presented in other papers (eg. Martin forthcoming). Basic data were taken from the World Bank (1985) input-output (I/O) table. As the emphasis of the study was on the Chinese textile sector, a number of adjustments to the basic I/O table were undertaken to produce the required additional sectors. A range of sources have been drawn upon to make these adjustments, and some subjective adjustments were necessary to reconcile those sources.

The methods used to create the new sectors in the data base will be discussed first, followed by an explanation of the price adjustments applied to this expanded I/O table. The process used to estimate the value added shares for each primary factor are then explained, and some alternative trade scenarios which involve a 'fine tuning' of the data base are discussed.

2. Adding the cotton, wool, textile and apparel sectors

A **cotton sector** was derived from the crops sector by estimating a gross output value for cotton using the value of imports of cotton and the ratio of gross output to imports (Martin forthcoming: Table 3.1). The cost structure of the cotton activity was first estimated using the China Statistical Yearbook (1984-85) making the assumption that in general the shares for all intermediate inputs and value adding factors were the same as those for the total crops category and then splitting each cost component in proportion to total output value. Cotton imports were estimated using data from the International Economic Data Bank (IEDB) at the Australian National University, and converted to Chinese domestic currency, accounting for the exchange rate, tariff rate and exchange rate scarcity premium.

Approximately 90 per cent of the gross output value of cotton was allocated to the textile industry, the largest user of cotton as an input, with most of the remainder allocated to the chemical industry, a major user of crops output in the original I/O table. Cotton exports were based upon estimates in Table 3.1 of Martin (forthcoming) and investment (stocks and fixed) were set at approximately 20 per cent of crop investment values to reflect the importance of stocks for a durable commodity such as cotton. It was assumed that the intermediate use of both crops and cotton output by the cotton sector was very small.

A **wool sector** was derived from the animal husbandry sector in the same manner as the cotton sector, applying the same assumptions, and using adjusted IEDB data to estimate wool imports. The ratio of production value to imports reported in Table 3.4 of Martin (forthcoming) was then applied to estimate a gross output value for the wool sector. Judgement was used to allocate wool input use to industries which used animal husbandry inputs. In most instances, these allocations involved very small amounts, with the exception of the textile industry which was assumed to use approximately 90 per cent of the gross output value of wool. Wool exports and sales to investment were set at zero.

The **textile and clothing sector** provided in the 1985 World Bank I/O table was divided into textile, apparel and chemical fibre sectors. Gross output of chemical fibres was calculated using the production to imports ratio for 1981 in Table 3.6 of Martin (forthcoming) and an estimated value of imports in 1981. The value of imports was constructed by converting the value of imports in foreign currency to domestic currency using the exchange rate adjusted for a secondary market exchange rate premium.

Gross output in the chemical fibres sector was decomposed into its cost components using the most recent available estimate of the cost structure for this industry in a developing country. Using information on the Indonesian chemical fibres industry (Indonesia, Biro Pusat Statistik 1984) with an adjustment to remove an unusually high input of hotel and restaurant services by this industry in Indonesia, it was estimated that 10 per cent of gross output was accounted for by intermediate inputs, and 90 per cent by gross value adding factors. Gross value added was further partitioned into depreciation, wages and profits and taxes which accounted for 2.7, 15.9 and 81.2 per cent respectively of value added. Intermediate input use was allocated over commodities using the same ratios reported in the Indonesian I/O table. Stock investment for chemical fibres was set at 0.25 billion yuan to reflect the importance of stock demand for these relatively durable commodities and to act as a balancing item. The total use of chemical fibres (8.4 billion yuan) was allocated to the textile industry, whose intermediate demand was assumed to be the only non-investment source of demand for chemical fibres.

The cost components of the chemical fibre sector were then subtracted from textile and clothing costs in the basic I/O table to give costs in a revised textile and clothing sector. The new textile/clothing sector was then split into textiles and apparel, based initially upon information in the 1981 I/O table for China provided by the State Planning Commission and Statistical Bureau (1987) which made separate estimates for these sectors. Each of the intermediate input and value added figures were split using the shares implicit in this I/O table. The values of sales (i.e. demands) for the textile and apparel commodities were also based on information in the I/O table by the (China State Planning Commission and Statistical Bureau.

3. Further adjustments

At this stage, some further adjustments were made to the now expanded I/O table. First, the following alterations were made as explained by the World Bank (1985:p.51). These adjustments are largely to account for the pricing system for nontraded goods used in China:

- (i) the wage bill for the health and education sector was multiplied by 1.55;
- (ii) the wage bill for public administration and defence was multiplied by 1.35; and
- (iii) profits and taxes for the housing sector were increased by 2.75 billion yuan.

Second, the size of the apparel sector was doubled (i.e. all entries in the apparel column were multiplied by 2 so that the gross output value of the sector was doubled). This was carried out as it was believed that the size of the sector was substantially under-reported in the World Bank tables and the official data on which these were based. In particular, the production of apparel in township enterprises may contribute around 50 per cent of total production (Zhou, Dillon and Wan 1988:25). On a judgemental basis 10 billion yuan worth of textile inputs was also transferred from the textile industry to the apparel industry, as the use of textiles in the apparel sector initially appeared too small in comparison with that in the textile sector.

4. Price adjustments

As explained in the main report, a dual price system operates in China involving both official and free-market prices. The modelling exercise in Martin (forthcoming) assumes that production and consumption decisions are guided by price changes at the margin, so it was necessary to adjust the input-output table (which reflects official prices) to more closely resemble the free market situation. Peng Zhaoyang (University of Adelaide, pers. comm. 1988) generously provided data on the price relativities between planned and free-market prices for 100 products in seven major categories:

- (i) agricultural products;
- (ii) textile and other light industrial products;
- (iii) chemical products;
- (iv) energy products;
- (v) building materials;
- (vi) non-ferrous metals; and
- (vii) metal products.

Two sets of price relativities were calculated. These were the ratio of 1988 plan prices to world price at the then prevailing official exchange rate of 3.72 yuan/US dollar, and the ratio of 1988 secondary market prices to world prices at a secondary market exchange rate of 5.7 yuan/US dollar. Peng (pers. comm. 1988) has noted that

planned prices include procurement prices for agricultural products and ex-factory prices for industrial products. International or world market prices are those at major distributing centres, or f.o.b. or c.i.f. prices for some products in their major trading countries. The ratio of domestic plan to secondary market prices was calculated by first adjusting the two domestic/foreign price ratios to a common exchange rate and then taking their ratio. An additional source of price adjustment factors for agricultural products was Lardy (1983:p.23), who reported that average rural market prices were 80 per cent above the quota price. The results of the above comparisons were used to construct a set of price adjustment factors which were applied to the I/O table so that it reflected free market prices. The commodities for which Peng provided price relativities did not match exactly the commodities which appear in the I/O table. Therefore, the price adjustment factors were based upon the commodities from Peng's listing which would form the largest component of each I/O table commodity, with some adjustments where the reported price relativities appeared to be out of line with other sources. In general, China's domestic plan prices were considerably lower than international prices, so values in the I/O table were adjusted upwards. Table 1 shows the price adjustment factors finally applied to each commodity.

This adjustment procedure reflects the observation that the official price system induces distortions in profitability (Chen 1988). Typically, industries whose outputs are intermediate inputs face lower official prices and hence appear to have lower levels of profits. In some cases this leads to paradoxical results in the official I/O table with the capital/labour ratio (as measured by profits and taxes divided by wages) being much higher for example, in the textile sector than in the machinery sector.

As noted in the Martin (forthcoming) the gross output values changed following the price adjustment. The revised gross output values were transferred from the row sums to the column sums, with profits and taxes used as the balancing item. In several cases, the price adjustments led to apparent distortions in the returns to labour and capital for the service sectors. Some adjustments were made in the output prices for these relatively minor sectors to obtain realistic shares.

Table 1 Price adjustments used in the revised Chinese I/O table

Commodity	Adjustment factor
Crops	1.80
Cotton	1.50
Animal husbandry	1.50
Wool	2.00
Metallurgy	1.60
Electricity	1.00
Coal	1.50
Petroleum mining	4.00
Petroleum refining	3.00
Chemicals	2.00
Chemical fibre	1.40
Machinery	1.40
Building materials	1.50
Wood	1.50
Food processing	1.40
Textiles	1.00
Apparel	1.00
Paper	1.10
Miscellaneous manufacture	1.30
Construction	1.45
Freight transport	1.35
Passenger transport	1.28
Commerce	1.10
Miscellaneous services	1.00
Education and health	1.45
Public administration and defence	1.32
Housing	1.00

5. Value adding factors

The final modification of the basic table was the estimation of primary factor shares such that factor value adding figures could be estimated. For the agricultural industries (crops, cotton, animal husbandry and wool), factor shares of 59 per cent for labour, 12 per cent for capital and 29 per cent for land implicit in McMillan, Whalley and Zhu (1987:p.14) were applied. This was necessary because of the high self-employment value for agriculture reported in the World Bank table. The self-employment value includes returns to labour, capital and land and so it was necessary to obtain a set of shares from another source. All other industries were considered to use only labour and capital value adding factors, and the value of returns to capital was estimated as a balancing item following revision of the gross output value for each commodity obtained from the row sums of the table. The labour share of value added was estimated as wages divided by the revised value added after price adjustment. The capital share of value added was estimated as the sum of depreciation, interest and revised profits and taxes divided by revised value added. The final adjusted version of the 1981 I/O table for China is given in Table 2.

Table 2. Input-Output table for the Peoples' Republic of China, 1981 (market prices, current billion yuan).

Sectors	Crops	Cotton	Animal husb	Wool	Metal	Elect- rical	Coal	Petroleum Mining	Refining	Chem- ical	Chem fibre	Building Machine	material	Wood	Food	Tex- tiles	Apparel	Paper
Crops	19.21	0.00	36.00	0.00	0.00	0.00	0.47	0.00	0.00	4.73	0.00	0.02	2.70	4.50	49.77	0.67	0.71	4.68
Cotton	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	16.62	0.18	0.00
Animal Husbandry	0.00	0.00	1.29	0.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	16.96	1.19	0.03	0.00
Wool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	1.74	0.00	0.00
Metallurgy	0.29	0.01	0.02	0.00	17.71	0.11	0.72	0.24	0.00	1.44	0.00	39.04	0.64	0.16	0.08	0.02	0.13	0.00
Electricity	1.22	0.19	0.29	0.05	2.81	2.87	1.22	0.35	0.17	3.36	0.05	1.40	0.71	0.14	0.44	0.94	0.05	0.43
Coal	0.88	0.14	0.21	0.03	3.00	4.34	1.65	0.02	0.00	2.07	0.00	0.78	2.49	0.15	0.65	0.70	0.08	0.33
Petrol Mining	0.00	0.00	0.00	0.00	1.24	3.40	0.00	2.24	33.08	3.00	0.00	0.64	0.28	0.04	0.16	0.72	0.04	0.04
Petrol Refining	7.07	1.15	1.68	0.27	1.68	2.16	0.36	0.54	0.60	7.02	0.16	2.46	0.48	0.27	1.17	2.00	0.12	0.39
Chemicals	25.02	3.98	0.02	0.00	0.60	0.02	0.50	0.80	0.20	31.86	0.02	5.20	1.00	0.50	5.60	3.58	1.22	3.00
Chemical Fibre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	0.00	0.00
Machinery	1.89	0.21	0.12	0.02	3.92	0.01	0.98	0.70	0.14	2.10	0.01	41.22	1.12	0.35	0.14	2.41	0.18	0.28
Building Materials	0.20	0.02	0.06	0.02	0.15	0.02	0.08	0.15	0.02	0.30	0.00	0.45	2.27	0.15	0.08	0.07	0.00	0.00
Wood	0.14	0.02	0.06	0.02	0.38	0.02	0.90	0.02	0.02	0.08	0.00	0.60	0.60	2.07	0.02	0.28	0.03	1.95
Food Processing	0.72	0.12	0.45	0.03	0.56	0.01	0.14	0.14	0.01	3.50	0.00	0.56	0.14	0.07	5.96	0.03	1.06	0.07
Textiles	0.24	0.04	0.06	0.01	1.04	0.01	0.50	0.70	0.03	1.47	0.01	1.00	0.80	0.14	0.21	31.92	35.00	0.40
Apparel	0.11	0.01	0.03	0.00	1.01	0.00	0.30	0.10	0.01	0.24	0.00	0.77	0.35	0.07	0.07	0.05	2.33	0.00
Paper	0.09	0.00	0.01	0.00	0.53	0.01	0.02	0.11	0.01	0.70	0.02	0.55	0.44	0.11	0.15	0.53	0.13	5.58
Misc. Mfg.	0.12	0.01	0.06	0.01	0.52	0.01	0.26	0.13	0.01	0.59	0.07	0.85	0.26	0.09	0.01	1.21	0.23	0.26
Construction	0.66	0.07	0.00	0.00	2.61	0.00	2.32	0.00	0.00	1.09	0.00	2.18	0.87	0.00	0.00	0.00	0.00	0.00
Freight Transport	0.87	0.14	0.06	0.01	3.20	0.12	0.41	0.41	0.11	1.96	0.14	4.66	1.22	0.45	1.11	0.00	0.84	0.54
Passenger transport	0.01	0.00	0.01	0.00	0.19	0.03	0.06	0.06	0.03	0.32	0.00	0.52	0.06	0.06	0.38	0.24	0.12	0.06
Commerce	1.06	0.07	0.05	0.01	1.58	0.10	0.40	0.57	0.02	2.90	0.02	3.52	2.06	0.24	0.79	2.06	0.24	0.54
Misc. services	0.03	0.01	0.02	0.00	0.25	0.01	0.04	0.03	0.01	0.20	0.00	0.34	0.04	0.02	0.10	0.10	0.03	0.03
Education and health	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pub. Adm. & defence	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Intermediate	59.82	6.18	40.49	0.69	42.98	13.25	11.38	7.30	34.46	70.32	0.54	106.77	18.52	9.58	83.85	78.83	42.76	18.58
Labour value added	137.05	8.45	11.97	0.28	3.90	1.09	5.78	0.73	0.10	4.52	0.56	14.27	4.47	2.68	3.73	4.85	4.06	2.14
Capital value added	27.87	1.72	2.43	0.06	26.28	4.48	7.82	43.57	10.29	48.36	2.93	37.32	11.82	4.22	11.20	23.26	2.25	1.20
Land value added	67.36	4.15	5.88	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Output Value	292.11	20.51	60.77	1.16	73.16	18.81	24.98	51.60	44.85	123.20	4.02	158.36	34.81	16.48	98.78	106.94	49.06	21.92

Table 3 shows labour shares in each industry for the original and adjusted I/O tables for comparative purposes. Because official prices for producer goods such as coal and machinery are particularly low in China (as outlined in section 4) the profitability of these sectors is depressed and hence the labour share of primary factor returns is raised disproportionately. The adjustments made to the table typically lowered the labour share in producer goods industries such as metals, coal and machinery. Labour shares increased in some other industries which were not price adjusted (eg. electricity) as prices of intermediate inputs were raised due to price adjustment in other sectors and so residual returns to capital declined.

Table 3 Labour shares of value added in the original and adjusted I/O tables

Industry	1981 table from World Bank	Adjusted 1981 table
Crops	0.97 ^a	0.59
Cotton	..	0.59
Animal husbandry	0.99 ^a	0.59
Wool	..	0.59
Metallurgy	0.27	0.13
Electricity	0.10	0.19
Coal	0.79	0.42
Petroleum mining	0.09	0.01
Petroleum refining	0.02	0.09
Chemicals	0.24	0.09
Chemical fibres	..	0.16
Machinery	0.38	0.28
Building materials	0.46	0.27
Wood	0.57	0.39
Food processing	0.21	0.25
Textiles	0.24	0.17
Apparel	..	0.64
Paper	0.33	0.64
Miscellaneous manufacturing	0.44	0.39
Construction	0.61	0.45
Freight transport	0.54	0.43
Passenger transport	0.42	0.54
Commerce	0.41	0.48
Miscellaneous services	0.20	0.40
Education and health	0.99	0.93
Public admin. and defence	0.99	0.94
Housing	0.10	0.05

^a Self-employment income is imputed to labour.

6. Alternative trade scenarios

It was noted in Martin (forthcoming) that the trade structure within China has altered substantially since 1981. To cover this aspect, two alternative data bases were constructed for use in the model. These will now be discussed.

(a) Rest of world (ROW) export figures were estimated using IEDB data on China and ROW exports for 1981. The relative share of China's exports in ROW exports was used to scale the China export figures in the basic I/O table to produce a more accurate estimate of ROW exports for use in the model. The effect of this refined data set on model outcomes could then be gauged. The estimated China and ROW exports using the above method are shown in Table 4.

(b) A further data base was constructed which incorporated a trade structure (i.e. export and import structure) which resembled the more recent 1986 situation. IEDB data was used to calculate the share of exports and imports of each commodity in total Chinese exports and imports. A scaling factor was thereby created which would re-scale 1981 exports/imports to a 1986 figure. A second scaling factor was also created which reflected the change in China's exports and imports as a share of GDP between 1981 and 1988 (World Bank Tables 1989). The basic 1981 export/import figures were scaled by both of these factors. Hence a new 1986 trade structure was created which had the correct size in terms of share of GDP, and the correct commodity composition of exports and imports for 1986.

The new trade values were then price adjusted as explained in section 3. A revised gross output value was calculated as the row sum for each commodity. These revised values were then made the column totals (i.e. industry gross outputs) in the I/O table, with profits and taxes used as the balancing item. The revised I/O table with a 1986 trade structure is given in Table 5.

Table 4 Exports for China and the rest of world, 1981 (billion of yuan)

Commodity	China exports	Rest of world exports
Crops	3.94	213.13
Cotton	0.07	3.48
Animal husbandry	1.20	40.01
Wool	..	383.00
Metallurgy	2.80	334.63
Electricity	..	2.64
Coal	0.50	36.24
Petroleum mining	6.32	644.00
Petroleum refining	3.63	306.43
Chemicals	5.92	558.18
Chemical fibre	..	4.42
Machinery	6.08	3861.50
Building materials	0.29	23.19
Wood	0.57	86.49
Food processing	3.71	607.64
Textiles	6.00	85.41
Apparel	4.99	88.13
Paper	0.36	77.57
Misc. manufacturing	3.64	345.93
Construction	..	..
Freight transport	3.31	162.07
Passenger transport	..	..
Commerce	3.78	185.42
Misc. services	..	..
Education and health	..	..
Public admin. and defence	..	..
Housing	..	..

Table 5. Input-Output table for the Peoples' Republic of China, 1986 (market prices, current billion yuan)

Sectors	Crops	Cotton	Animal husb	Wool	Metal	Elect- rical	Coal	Petroleum Mining	Refining	Che- mical	Chem fibre	Machine	Building material	Wood	Food	Tex- tiles	Apparel	Paper
Crops	19.21	0.00	36.00	0.00	0.00	0.00	0.47	0.00	0.00	4.73	0.00	0.02	2.70	4.50	49.77	0.67	0.71	4.68
Cotton	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	16.62	0.18	0.00
Animal Husbandry	0.00	0.00	1.29	0.21	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	16.96	1.19	0.03	0.00
Wool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	2.47	0.00	0.00
Metallurgy	0.29	0.01	0.02	0.00	17.71	0.11	0.72	0.24	0.00	1.44	0.00	39.04	0.64	0.16	0.08	0.02	0.13	0.00
Electricity	1.22	0.19	0.29	0.05	2.81	2.87	1.22	0.35	0.17	3.36	0.05	1.40	0.71	0.14	0.44	0.94	0.05	0.43
Coal	0.88	0.14	0.21	0.03	3.00	4.34	1.65	0.02	0.00	2.07	0.00	0.78	2.49	0.15	0.65	0.70	0.08	0.33
Petrol Mining	0.00	0.00	0.00	0.00	1.24	3.40	0.00	2.24	33.08	3.00	0.00	0.64	0.28	0.04	0.16	0.72	0.04	0.04
Petrol Refining	7.07	1.15	1.68	0.27	1.68	2.16	0.36	0.54	0.60	7.02	0.16	2.46	0.48	0.27	1.17	2.00	0.12	0.39
Chemicals	25.02	3.98	0.02	0.00	0.60	0.02	0.50	0.80	0.20	31.86	0.02	5.20	1.00	0.50	5.60	3.58	1.22	3.00
Chemical Fibre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	0.00	0.00
Machinery	1.89	0.21	0.12	0.02	3.92	0.01	0.98	0.70	0.14	2.10	0.01	41.22	1.12	0.35	0.14	2.41	0.18	0.28
Building Materials	0.20	0.02	0.06	0.02	0.15	0.02	0.08	0.15	0.02	0.30	0.00	0.45	2.27	0.15	0.08	0.07	0.00	0.00
Wood	0.14	0.02	0.06	0.02	0.38	0.02	0.90	0.02	0.02	0.08	0.00	0.60	0.60	2.07	0.02	0.28	0.03	1.95
Food Processing	0.72	0.12	0.45	0.03	0.56	0.01	0.14	0.14	0.01	3.50	0.00	0.56	0.14	0.07	5.96	0.03	1.06	0.07
Textiles	0.24	0.04	0.06	0.01	1.04	0.01	0.50	0.70	0.03	1.47	0.01	1.00	0.80	0.14	0.21	31.92	35.00	0.40
Apparel	0.11	0.01	0.03	0.00	1.01	0.00	0.30	0.10	0.01	0.24	0.00	0.77	0.35	0.07	0.07	0.05	2.33	0.00
Paper	0.09	0.00	0.01	0.00	0.53	0.01	0.02	0.11	0.01	0.70	0.02	0.55	0.44	0.11	0.15	0.53	0.13	5.58
Misc. Mfg.	0.12	0.01	0.06	0.01	0.52	0.01	0.26	0.13	0.01	0.59	0.07	0.85	0.26	0.09	0.01	1.21	0.23	0.26
Construction	0.66	0.07	0.00	0.00	2.61	0.00	2.32	0.00	0.00	1.09	0.00	2.18	0.87	0.00	0.00	0.00	0.00	0.00
Freight Transport	0.87	0.14	0.06	0.01	3.20	0.12	0.41	0.41	0.11	1.96	0.14	4.66	1.22	0.45	1.11	0.00	0.84	0.54
Passenger transport	0.01	0.00	0.01	0.00	0.19	0.03	0.06	0.06	0.03	0.32	0.00	0.52	0.06	0.06	0.38	0.24	0.12	0.06
Commerce	1.06	0.07	0.05	0.01	1.58	0.10	0.40	0.57	0.02	2.90	0.02	3.52	2.06	0.24	0.79	2.06	0.24	0.54
Misc. services	0.03	0.01	0.02	0.00	0.25	0.01	0.04	0.03	0.01	0.20	0.00	0.34	0.04	0.02	0.10	0.10	0.03	0.03
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Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Intermediate	59.82	6.18	40.49	0.69	42.98	13.25	11.38	7.30	34.46	70.32	0.54	106.77	18.52	9.58	83.85	79.56	42.76	18.58
Labour value added	141.46	11.74	11.87	0.25	3.90	1.09	5.78	0.73	0.10	4.52	0.56	14.27	4.47	2.68	3.73	4.85	4.06	2.14
Capital value added	28.77	2.39	2.41	0.05	16.79	3.75	7.53	41.89	7.90	45.64	2.93	16.26	11.71	2.60	4.35	12.44	2.25	1.01
Land value added	69.53	5.77	5.84	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Output Value	299.59	26.09	60.61	1.11	63.67	18.08	24.69	49.92	42.47	120.48	4.02	137.30	34.70	14.86	91.92	96.85	49.06	21.73

Table 5 continued.

Sectors	Misc manuf	Freight Constr	Passng Transp	Comme- Transp	Comme- rce	Misc serv	Educat. Health	Public admin	House	INTER- MEDIATE	CONSUMPTION HSHOL	GOVT	INVESTMENT FIXED	STOCKS	TRADE EXPORT	IMPORTS	GROSS OUTPUT
Crops	3.78	6.30	0.00	0.00	6.66	0.00	1.86	0.00	0.00	141.68	119.99	1.55	5.40	29.45	4.51	2.98	299.59
Cotton	0.15	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	18.57	0.00	0.00	1.11	6.06	0.36	0.01	26.09
Animal Husbandry	0.12	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	22.85	32.25	0.00	0.00	4.47	1.04	0.00	60.61
Wool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00	1.36	1.11
Metallurgy	1.28	10.37	0.80	0.00	0.00	0.00	0.00	0.00	0.00	73.06	0.00	0.00	0.00	2.40	1.63	13.43	63.67
Electricity	0.65	0.17	0.09	0.02	0.47	0.20	0.30	0.00	0.00	18.59	0.35	0.50	0.00	0.00	0.00	0.00	18.08
Coal	0.45	0.24	0.89	0.14	0.32	0.11	0.54	0.00	0.00	20.18	4.04	0.41	0.00	0.00	0.45	0.37	24.69
Petrol Mining	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.20	0.08	0.00	0.00	0.00	4.64	0.00	49.92
Petrol Refining	0.66	1.35	4.77	3.00	0.00	0.00	0.06	0.00	0.00	39.42	0.99	0.87	0.00	0.00	1.68	0.50	42.47
Chemicals	1.20	4.80	0.30	1.20	3.80	0.20	14.52	0.00	0.00	109.34	11.94	2.00	0.00	3.12	5.89	11.81	120.48
Chemical Fibre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	0.00	0.00	0.00	0.35	0.00	2.98	4.03
Machinery	0.42	13.58	1.26	1.44	6.02	0.21	2.24	0.00	0.21	81.19	21.18	11.77	48.58	3.50	9.67	38.60	137.30
Building Materials	0.15	29.18	0.00	0.00	0.00	0.00	0.00	0.00	0.60	33.94	0.00	0.30	0.00	0.30	0.19	0.03	34.70
Wood	0.38	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.38	11.67	4.97	0.75	0.00	0.30	0.47	3.29	14.86
Food Processing	0.70	0.14	0.14	0.00	5.60	0.28	2.10	0.00	0.00	22.54	72.80	0.90	0.00	0.63	4.11	9.06	91.92
Textiles	0.98	0.33	0.04	0.00	1.56	0.20	2.30	0.00	0.00	78.99	20.59	0.52	0.00	3.74	4.21	11.20	96.85
Apparel	0.27	1.18	0.16	0.00	0.14	0.10	1.10	0.00	0.00	8.40	26.16	0.48	0.00	0.76	9.91	0.00	49.06
Paper	0.44	0.50	0.22	0.00	2.20	0.33	5.17	0.00	0.00	17.85	2.46	0.67	0.00	1.21	0.33	0.80	21.73
Misc. Mfg.	3.58	1.82	0.00	0.00	0.26	0.00	4.49	0.00	0.00	14.84	4.04	2.60	0.00	1.82	8.42	5.65	26.07
Construction	0.15	5.80	5.80	0.00	0.15	0.00	0.44	0.00	1.23	23.35	0.00	3.05	82.51	0.00	0.00	0.00	108.90
Freight Transport	0.95	2.67	0.54	0.08	1.49	0.24	1.16	0.00	0.00	23.36	3.81	0.16	1.35	1.08	3.58	0.00	33.34
Passenger transport	0.06	0.20	0.06	0.00	0.13	0.00	0.00	0.00	0.00	2.64	3.10	2.56	0.00	0.00	0.00	0.00	8.29
Commerce	1.49	1.77	0.74	0.11	1.14	0.22	1.62	0.00	0.11	23.43	28.53	0.30	2.20	0.72	4.10	0.00	59.27
Misc. services	0.03	0.08	0.06	0.00	0.10	0.10	0.35	0.00	0.00	1.99	8.00	2.00	0.00	0.00	0.00	0.00	11.99
Education and health	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	3.60	75.28	0.00	0.00	0.00	0.00	78.91
Pub. Adm. & defence	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.70	0.00	0.00	0.00	0.00	12.70
Housing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.97	0.00	0.00	0.00	0.00	0.00	13.97
Intermediate	18.19	84.23	15.87	5.99	33.03	2.19	38.49	0.00	2.73	847.73	382.85	119.36	141.15	59.90	65.20	102.06	1510.58
Labour value added	2.63	11.09	6.77	1.25	11.67	2.04	18.40	11.91	0.57								
Capital value added	5.25	13.58	10.70	1.05	14.57	7.76	22.02	0.79	10.67								
Land value added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
Gross Output Value	26.07	108.90	33.34	8.29	59.27	11.99	78.91	12.70	13.97								

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