

*Appendix B*

## **Industrial Performance, China 1913–95**

The Chinese definition of industry is wider than that in Western countries. It includes manufacturing, mining, logging, some fishery products, electricity and gas production and distribution. In 1971 the scope was expanded to cover village industries, which are now an important part of total output. Before 1971, grain milling, processing of oil seeds, tobacco products, wine and liquor were treated as agricultural sidelines. State industrial enterprises provide significant in-kind services in the form of housing, health and education for their workers, but these are not counted as output. There are problems in making a clearcut distinction between different branches of industry. Many state enterprises are very large and make a variety of products, but their entire output is attributed to the industry which is their main activity.

The SSB derives its aggregate measures of performance by cumulating returns from enterprises with very few independent checks. These returns show output in current and in “comparable” prices. In order to measure “comparable” prices, enterprises are given price manuals which specify the prices they are to use for benchmark years. Thus the latest benchmark year is 1990 and the manual gives prices for about 2 000 items. In principle, firms estimate “comparable” price values in years after 1990 by multiplying the volume of output of specified items in these years by their price in 1990. However the specification manual does not cover all items produced or specify in sufficient detail. State enterprises have an incentive to mismeasure performance by understating inflation. Although there are penalties for falsification, there are substantial possibilities for exaggerating the volume of output when new products are incorporated into the reporting system at so-called “comparable” prices. In 1978 there were 348 000 industrial enterprises, but by 1996, the number had risen to 8 million. Many of these new small-scale non-state enterprises cannot or do not bother to distinguish between current and “comparable” prices, so the tendency to understate inflation has been increased.

### **The Three Official Measures of Output**

Table B.1 shows the three official measures of output in current prices. The first is gross value of output. This contains a large element of double counting, because each enterprise reports its total sales, without deduction for the inputs it purchases. If the average size of firms changes, as happened in the 1980s and 1990s with the mushroom growth of small scale township and village industry, the

degree of double counting will increase. Production relations which were previously intra-enterprise become inter-enterprise transactions in many cases.

The second measure is net material product. This differs from the Western notion of gross value added, because so-called “non-productive” services are not deducted, but depreciation is. The third measure is gross value added (column 3 of Table B.1) which corresponds to industry’s contribution to GDP. This is the best option, and is now available back to 1952.