

# The Strategic Adjustment of China's Industry Structure in the Next Five Years

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This article sets out to analyse the direction of economic policy. The aim is to express some personal opinions about the adjustment of China's industrial structure in the period of the Tenth Five-Year Plan (2001—2005). The paper analyses major problems with the industrial structure, directions and goals for adjusting it in the coming five years, and corresponding approaches and policies for doing this. The main problems at present, I believe, are the manifestly distorted structure of the three industrial sectors and the lag in upgrading the internal make-up of each sector. The main direction for adjustment lies in curbing excessive expansion of secondary industry and speeding up the development of tertiary industry, while at the same time promoting the internal structural upgrading of each industrial sector, especially manufacturing. There are three main approaches to adjusting the industrial structure: (1) structural adjustment of the ownership system; (2) increasing the role of market mechanisms; and (3) rationally defining the role of government

## **I . Main Problems of the Present Industrial Structure**

The problems of China's industrial structure are mainly seen in the following two areas:

### **1. The manifestly distorted structure of the three industrial sectors**

This is mainly seen in the disproportionate size of secondary industry, while tertiary industry is disproportionately small. Prior to the reforms industrialization was carried out in a one-sided fashion, so that in the early period of reform there was an imbalance in industry structure in comparison with countries at the same level of development. This was somewhat mitigated by fairly rapid development of tertiary industry in the 1980s, but in the 1990s the high speed growth of the secondary sector, particularly of industry, once again made the structural discrepancy obvious.

Between 1996 and 1999 the secondary industry as a proportion of GDP at current prices averaged 49.4 percent over the three years, or 55.1 percent at constant prices, which was higher by 10—20 percentage points than in the general case of countries at the same income level. Meanwhile the figures for tertiary industry stood at 32 percent at current prices and 28 percent at constant prices, or 10—20 percentage points below the general case of countries at the same income level. The same discrepancy applied also in comparison with other Asian countries like Japan, the Republic of Korea,

Thailand, Malaysia and Indonesia when they were at the same stage of their development.

This structural discrepancy leads to demand restraints affecting the speed of China's economic growth: the disproportionately large industrial sector causes relative surplus of industrial goods, hence industrial capacity is under-utilized, while the disproportionately small tertiary sector is bad for demand, especially for consumption. Meanwhile, the laggard development of the tertiary sector affects the improvement of the quality of the growth of the other sectors and the stable growth of the economy as a whole.

## 2. Slowness in Upgrading the Internal Structure of Industrial Sectors

Sluggishness in upgrading the internal make-up is a problem found in all three sectors, but the contradictions are most evident in secondary industry. In the process of overall rapid expansion, industry's sluggishness in upgrading its internal make-up is seen in the following.

**Table 1. Structural Shifts in the Three Industry Sectors in the 1990s**

Year	At current prices			At constant prices*		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1990	27.1	41.6	31.3	27.1	41.6	31.3
1995	20.5	48.8	30.7	18.8	52.6	27.9
1998	18.0	49.2	32.8	16.5	55.6	27.9
1999	17.3	49.7	32.9	15.8	56.1	28.1
Annual averages						
1991-1995	21.4	46.0	32.6	21.7	48.3	29.9
1996-1999	18.6	49.4	32.0	16.9	55.1	28.0

**Note:** \* At 1990 constant prices.

**Sources:** Compiled and computed from relevant figures from *China Statistical Yearbook, 1999*; *Statistical Communique on 1999 National Economic and Social Development*.

—a higher proportion of technologically backward, heavy depletion, low value-added processing industries, together with a low proportion of technology- and knowledge-intensive, technologically advanced, high value-added industries.

—a relatively sluggish development of new- and high-tech industries, doing little to spur on overall industrial development.

—little progress ever made in rebuilding traditional industrial technologies, structure of technology and products backward, continuing evidence of low productive efficiency and profitability.

Industry's sluggishness in upgrading its internal make-up leads to the supply of industrial products being unable to keep up with changes in market demand, and is seen in:

—industrial consumer products are unable to stay in line with rising urban consumer demand

- industrial producer goods fail to keep up with rising technological demands of industry
- the technological levels, grades and qualities of commodities cannot meet the needs of raising international competitiveness
- the technological content and value-added of commodities cannot keep up with the requirements of increasing foreign currency earnings.

Problems of industrial structure lead to a great deal of useless supplies, and because a large proportion of the commodities are low grade, low technological content, poor quality, while high grade, high technological content commodities are in short supply, so that while relative superfluous production of commodities, together with under-utilized industrial capacity are serious, many high grade, high quality or high technology commodities still have to be imported in large quantities. It can be said that the general contradiction between supply and demand which is so evident in the Chinese economy, together with its consequences, are to a large extent the result of over-developed secondary industry and the obvious structural problems this entails.

There is a strong relationship between sluggish upgrade of industrial sectors and irrationalities in the structure of enterprise management. The main problems of the structure of enterprise management are that:

- 1) Firms are everywhere too small in scale: poor economies of scale not only affect enterprises' production, sales and product development, but also their technological reconstruction, innovation, and development;
- 2) Industrial concentration is poor; dispersed production and marketing leads to undue competitiveness between firms; while dispersed capital and technological investment harms the improvement of enterprise efficiency;
- 3) The organizational structure of firms is loose, the level of professional cooperation is low; no rational cooperative division of labour has formed between large, medium and small enterprises. This harms the role large enterprises can play in medium and small ones, as well as in raising the latter's technological and managerial standards and product qualities. Meanwhile it also harms the application and extension of new- and high-technology, as well the reconstruction of traditional industries by means of technology.

## **II. Direction and Targets for Adjusting Industry Structure**

The period of the Tenth Five-Year Plan is extremely important in terms of strategically adjusting the structure of industry, and with its the entire economic structure. Such a development in structural adjustment is of the greatest significance, as it will affect whether or not China's economy can maintain high-speed growth for the first decade and indeed first two decades of the 21st century.

The basic direction for industrial structure as a whole will be, given that basic industries are strengthened, to promote the technological reconstruction of traditional industries, continue to make use of our comparative advantage in low cost of labour, and strenuously develop labour- and technology-intensive industries, increase the

proportion of technology-intensive industries while also going further to speed up the development of high-tech industries.

Based on the major structural problems which are found at present, there are two major objectives in strategically adjusting the structure of industry:

### 1. Objectives of structural adjustment of the three industrial macro-sectors

To promote adjustment of the three industrial macro-sectors, excessive expansion of the overall amount of industry must be controlled, moderately reducing the proportion of industry up to and including secondary industry; while correspondingly accelerating the development of tertiary industry, and significantly raising the proportion it occupies. In order to create a favourable economic environment for structural adjustment of the industrial macro-sectors, a suitable speed of economic growth needs to be maintained. If it is too high, it will harm the correction of industry's structural discrepancies, and the improvement of its condition; whereas if it is too low, it will harm capital investment and the reallocation of resources. On the basis of domestic and external conditions during the period of the Tenth Five-Year Plan, the indicative target for macroeconomic GDP growth might be set at 7 to 8 percent. The three industrial sectors would accordingly have growth targets, and the changes they induce, as set out in table two.

### 2. Objectives for the structural adjustment of industry

Industrial structural adjustment oriented towards speeding up the upgrade of industrial sectors should mainly aim to realise the following objectives:

**Table 2. Structural Shifts in the Three Industry Sectors Based on Forecast Growth\***

	% average growth per annum			
	Industry sectors			
	Primary	Secondary	Tertiary	GDP
2000-2005	3.5	8.0	8.5	7.5
2006-2010	3.0	7.0	9.0	7.2
2000-2010	3.3	7.5	8.7	7.3
Structure of production				
2005 proportion (%)	13.8	51.3	34.9	100
Absolute value (100m yuan)	17470	64754	44108	126332
2010 proportion (%)	11.3	50.8	37.9	100
Absolute value (100m yuan)	20253	90821	67866	178940

**Note:** \*Based on 1999 prices.

**Source:** relevant figures from China Statistical Yearbook , 1999 and 2000.

1) Bring industrial production more in accordance with market demand. A major reason why manufactured goods are quite clearly oversupplied and there is an over-capacity in production at present is that the structure of supply is unresponsive to the trend to upgrading the structure of demand. Hence a major objective of structural adjustment of manufacturing industry is to respond to the public's demands for upgraded consumption and production technology; increase the proportion of high grade, high quality and high technology level products; reduce the proportion of low grade, low quality and low technology level products accordingly; and make the structure of supply increasingly responsive to the structure of demand.

2) Promote increased industrial efficiency and improved quality. A major difference between present and past structural adjustment of industry is a change of emphasis from eliminating structural shortages to solving irrational duplication. In this circumstances, a reorganisation of existing assets stocks is needed, so that, through market competition, production and sales will be concentrated in the most outstanding enterprises, and some of the inefficient, uncompetitive, backward firms will be eliminated. Clearly, structural adjustment will and must benefit efforts to raise the efficiency and quality of industrial growth.

3) Promote the strengthening of international competitiveness of industry. The structural adjustment of industry in the period of the Tenth Five-Year Plan faces a macro-environment of expanded opening to the outside world. Industries and firms undergoing this process will at the same time have to face the onslaught of foreign commodities and capital, bringing a new international challenge to upgrading the industrial structure. Therefore, the structural adjustment of industry, as well as having to pay serious attention to new- and high-technology industries, will have to take seriously strengthening the comparative advantage of traditional industries, deal properly with the relationship between new- and high-tech industry and traditional industry development. So as to make the direction of structural adjustment of industry be of benefit to strengthening the international competitiveness of the industrial structure.

### **III. Approaches and Policies in the Structural Adjustment of Industry**

Having clarified the objectives and emphases of the structural adjustment of industry, we have to actually carry out the procedure by going through the necessary steps. The rate of progress and results we achieve will be determined by internal mechanisms of structural changes, as well as by external guidance and incentive function, especially the government's approaches and policies to the process.

#### **1. Adjust the ownership structure to promoting structural adjustment of industry**

1) Step up the strategic adjustment of state-owned enterprises (SOEs) and promote the upgrade of their industrial structure. From the latter angle, the SOEs should shorten

their battle lines, get out of a large number of general processing industries, while also lowering their proportions in basic industries; strengthen technology-intensive industries, particularly new- and high-technology industries, which have good prospects for development; and give full play to the SOE's leading and promoting role in upgrading the industrial structure. Among domestic industries, it is primarily the SOE's and industries in which they have controlling interests which in the present stage have the economies of scale, and the scientific and technological strength, to compete with foreign invested industry in the vital arena of new- and high-technology; hence the state-owned economy must shoulder this major task. But since the problems of the SOE's structure and efficiency have yet to be resolved, the development of new- and high-technology industries should be promoted by through forms of shareholding, such as taking controlling or subsidiary interests.

2) Expand the development of tertiary industry towards China's non-state economy, and promote rapid expansion. In order to accelerate this development, raise the service industries' international competitiveness, while also promoting increasing investment on the part of society. We should permit and encourage China's non-state economy to enter many more sectors of tertiary industry and move along the adjustment of the structure of ownership in this sector. This will take two forms: first, as quickly as possible reduce or even eliminate systemic barriers and artificial limitations on the entry of non-state firms into these sectors and induce collective, individual and joint stock enterprises to rational enter the tertiary sector; promote the development of equal competition and cooperation between firms in each ownership, to step up the SOEs raising their productivity and strengthen the competitiveness of domestic industries. Secondly, considering that many non-state firms will be hampered in entering the tertiary sector by problems of capital and technology, in order to speed up bringing them in to strengthen the competitive framework as quickly as possible, move to raise the efficient allocation of resources and productivity, in the short term we could do more to develop the joint stock economy with the state holding a controlling interest as the dominant form. On the one hand, enable the circulation and listing of shares in these industries to draw in investment on the part of society, while on the other hand, urge existing state-owned service firms to set up new corporate governance structures, to raise productivity and competitiveness during their institutional renovation.

## **2. Regulate the structural adjustment of industry by strengthening market mechanisms**

The government's approaches and policies for the structural adjustment of industry in the Tenth Five-Year Plan period should embrace some major shifts and corresponding reforms. It should not only propose a list of industries or commodities to be promoted or curbed, but should accompany this with economic or legal measures that accord with what the laws of the market require. It should also pay careful attention to strengthening and perfecting the regulatory role of the market; policy measures for structural adjustment should in the main proceed via market mechanisms. This will be

even more so when it comes to accelerating the upgrade of the makeup of industry sectors. To strengthen the regulatory role of the market in the structural adjustment of industry, the following reforms need to be pushed on a priority basis:

- perfect major markets in both city and country and solidify the entire market system;
- speed up strategic adjustment of the framework of state-owned industries and SOE reforms;
- deepen the reforms of the finance and investment system, and bring a rational investment mechanism into being as soon as possible;
- go further in perfecting principles and mechanisms of market competition to accelerate the processes of competition of the fittest and mergers and acquisitions of firms;
- step up creation of the social security system, and establish systems to deal with enterprise bankruptcy and reemployment of employees.

Industry adjustment policies in countries with market economies are basically aimed at making up for market failure and to strengthen the role of the market. But given that China's market mechanisms are incomplete, completing them is fundamental to strengthening their role. Hence bringing industry policy into full play is premised on pushing ahead with economic system reforms.

### **3. Rationally define the role of government in the structural adjustment of industry**

Apart from promulgating indicative industry policies, governments in developed countries play an intervening role in the structural adjustment of industry by providing the following: (1) policy support for upgrading industries and strengthening international competitiveness; (2) economic assistance for adjustment and reconstruction of declining industries; (3) help needed for the technological reconstruction and improvement of small firms. In developing countries, due to the incomplete market mechanism, relative technological backwardness, poor international competitiveness and so on, governments ought to play a greater role in structural adjustment. The experience of Asia's emerging market countries and regions shows us that the main role government can play in this adjustment process lies in speeding up the upgrade of industries and technological improvement, and promoting the importance of raising international competitiveness.

As a developing country, China's government should in the strategic adjustment of industrial structure during the Tenth Five-Year Plan, undertake a promoting and initiating role in the following areas:

(1) Strengthen weak links in industrial structural adjustment. The main weak links, which are confined by the level of the economy, hemmed in by problems of the economic system, and inaccessible to effective market regulation, at present include building basic facilities in agriculture and in society; developing service industries for

production and intermediate service institutions; technological reconstruction and improvement for small and medium enterprises. In order to alleviate structural discrepancies between the three major industrial sectors, and speed up structural upgrading within each, in its policies, system and financial contribution the government should promote the improvement of these weak links and speedy development of related aspects.

(2) Support upgrading the key links in the industrial structure. These links currently are development of new- and high-technology and the transformation by it traditional industries. New- and high-technology industries are to be found in each industrial sector. They can bring about speedy development and rapid rise in the proportion of technology-intensive industry. The transformation of traditional industries by new- and high-technology industries can bring them rapid technological improvement and content, as well as rapid growth in high value added products.

However, the development and application of new- and high-technology industries requires high investment and faces high risks, while the economic scale of China's industries is small, so that most find it difficult to bear the pressure of this "double high". Therefore in this area the government needs to adopt a policy slanted towards these industries, giving major support to aspects from science and technology development to industrial investment, as well as providing structural safeguards for large-scale industrial conglomerates which span trades and regions.

(3) Promote the strengthening of the international competitiveness of industries. Entry into the WTO will bring favourable conditions for traditional industries in China that have some comparative advantage, Such industries will have a space in which they can gain more rapid technological reconstruction and develop further. But China's technology-intensive industries which have weak bases, especially new- and high-technology industries will be relatively more hard hit, which may impact heavily on the process of upgrading the industrial structure. We cannot remain content with the temporary economic equilibrium and short-term benefits bequeathed us by an intensifying international division of labour, as this may confine our efforts to upgrade of the industrial structure and thus damage our long-term growth prospects. Under such conditions, the government should play serious attention to protecting and supporting technology-intensive, especially new- and high-technology industries; it should urge these infant industries to strengthen their international competitiveness at top speed during the period of protection, so as to guarantee smooth progress in upgrading the structure of domestic industries.

(4) Continue solving the problem of irrational duplicate construction. In the process of structural adjustment of industry in the case of industries or products where market demand is rapidly increasing, the problem of irrational duplicate construction will continue to arise. Experience shows that in China's industrial development, duplicate construction and the excessive competition it causes are caused by systemic factors, and simply relying on market mechanisms to regulate it imposes too high a price

economically and in opportunity costs. Hence, by means of advancing reforms to the system, the government should make use of economic and legal means, including regular publication of information regarding industrial development, to induce individual and corporate investment, regularise the behaviour of regional governments, and so gradually reduce and resolve these sorts of problems.

As a separate issue, China, as a developing country, has a massive task in employment, the issues of stand-downs and unemployment are quite noticeable, hence in the process of structural adjustment of industry the government should also enact industry assistance policies for adjusting and reconstructing declining industries (which after entry into the WTO will be mainly mining and quarrying industries), carry out reemployment programs for stood-down employees of moribund and bankrupt SOEs, and so on.

Source: *China & World Economy* Number 2, 2001 <http://www.iwep.org.cn/>