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# 10

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## INDUSTRIAL POLICY

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Industrial structure is the outcome of resource allocation.

The adjustment of industrial structure is the process of reallocating resources via entry and exit. There is a need for industry policies to facilitate the evolution of the private sector, especially SMEs.

## History of industrial policy

The Government has long regarded the optimization of industrial structure as the key to achieving long-term sustainable economic growth and modernization. It considers the industrial structure of the Western Region to be primitive and out-of-date; hence, industrial policy is required for renovating or optimizing the industrial structure.

Under the planned economy, the PRC was a master at designing and implementing active industrial policy. The industry bases were relocated from the Eastern Region to the northeast and then to the Central and Western regions. Although they did achieve some objectives, such as self-sufficiency and national security, these industrial policies are widely regarded as failures at optimizing industrial structures. Nevertheless, the Government considers a new round of industrial policy to be necessary to correct the primitive industrial structure that resulted from the previous rounds of industry policy.

This does not mean that the PRC was not skillful in implementing a new industrial policy; rather, the optimization objective is not well defined. The PRC's entry into the WTO will also change the competitive advantages of the Western Region and make the objectives of industrial policy even less well defined.

Various economic studies have also cast doubt on the effects of industrial policy. Their common conclusion is that the Government should remove any barriers that hamper the mobility of resources. The so-called optimum industrial structure will emerge after sufficient reallocation of resources. Public industrial policy will have positive effects only if the Government has well-specified advantages in information and coordination and could serve as a guarantor when the market fails to reallocate resources in a timely and efficient manner.

## Industrial structure of the Western Region

### INDUSTRIAL SECTORS

The Western Region is dominated by the primary sector (7 percent higher than the national average) but relatively weak in the secondary and tertiary sectors (5.6 percent and 1.4 percent lower than national average, respectively). Its weakness in the tertiary sector is manifested in two industries in particular (Table 10-1): finance and insurance (3.3 percent below the national average), and real estate trade (1.9 percent below the national average).

Local governments in the Western Region fail to take into account local competitive advantages and overemphasize the importance of creating a modern manufacturing industry and high-tech industry. As a result, the industrial structure of the various provinces and autonomous regions is very similar.

### SIZE AND OWNERSHIP OF ENTERPRISES

The Western Region, especially the southwest, has a higher proportion of large firms (0.9 percent higher than the national average), but is lower in specialization and lacks division of labor and cooperation between upstream and downstream firms (Table 10-2).

More than 50 percent of the firms are state-owned or state holding enterprises; the proportion of private sector enterprises is significantly lower (6 percent lower than the national average; see Table 10-3).

Most SOEs have other social responsibilities such as retirement pensions, allocation of subsidized houses, childcare, and other social benefits. This feature significantly increases the cost of optimizing a firm's organization structure.

### OTHER FEATURES OF THE INDUSTRIAL STRUCTURE OF THE WESTERN REGION

There are other noteworthy features of the Western Region's industrial structure:

**Table 10-1 Industrial Composition of GDP in 2000**

Region	Primary Industry (%)	Secondary Industry (%)	Tertiary Industry		
			Total (%)	Finance and Insurance (%)	Real Estate (%)
<b>PRC</b>	<b>15.3</b>	<b>47.1</b>	<b>37.6</b>	<b>12.4</b>	<b>8.6</b>
<b>Eastern</b>	<b>11.4</b>	<b>49.2</b>	<b>39.4</b>	<b>14.2</b>	<b>9.2</b>
<b>Central</b>	<b>19.2</b>	<b>46.2</b>	<b>34.6</b>	<b>10.1</b>	<b>8.4</b>
<b>Western</b>	<b>22.3</b>	<b>41.5</b>	<b>36.2</b>	<b>9.1</b>	<b>6.7</b>
<b>Southwest</b>	23.4	40.7	35.8	9.5	7.9
Chongqing	17.8	41.4	40.8	4.3	8.0
Sichuan	23.6	42.4	34.0	4.3	7.7
Guizhou	27.3	39.0	33.7	3.3	8.2
Yunnan	22.3	43.1	34.6	3.5	10.5
Tibet	30.9	23.2	45.9	2.1	4.0
Guangxi	26.3	36.5	37.2	1.0	6.0
<b>Northwest</b>	20.1	42.9	36.9	8.4	4.7
Shaanxi	16.8	44.1	39.1	1.8	5.5
Gansu	19.7	44.7	35.6	5.7	7.1
Qinghai	14.6	43.2	42.1	6.1	3.7
Ningxia	17.3	45.2	37.5	5.8	5.5
Xinjiang	21.1	43.0	35.9	3.1	3.1
Inner Mongolia	25.0	39.7	35.3	1.7	3.6

Source: China Statistical Yearbook 2001.

- *Quality and variety of products.* For lack of expertise and business experience, most firms can only produce low-value-added, low-profit-margin products, and not high-value-added, technology-intensive products.<sup>1</sup>
- *Technology.* Most firms use outdated technology and lack the motivation to invest in R&D and use new technology to upgrade the production process.<sup>2</sup>

**Table 10-2 Industrial Enterprises, by Size, 2000**

Region	Large	Medium	Small	Total
<b>Eastern</b>	<b>4.8</b>	<b>7.9</b>	<b>87.3</b>	<b>100.0</b>
<b>Central</b>	<b>4.8</b>	<b>8.9</b>	<b>86.3</b>	<b>100.0</b>
<b>Western</b>	<b>5.6</b>	<b>10.0</b>	<b>84.5</b>	<b>100.0</b>
Southwest	5.8	10.9	83.3	100.0
Northwest	5.2	8.6	86.3	100.0
<b>PRC</b>	<b>4.9</b>	<b>8.4</b>	<b>86.7</b>	<b>100.0</b>

Source: China Statistical Yearbook 2001.

**Table 10-3 Industrial Enterprises,<sup>a</sup> by Ownership, 2000**

Region	SOEs	COEs	SHEs	FIEs	HMTs	PSEs	Total
<b>Eastern</b>	<b>23.1</b>	<b>22.2</b>	<b>2.4</b>	<b>10.2</b>	<b>14.6</b>	<b>27.5</b>	<b>100.0</b>
<b>Central</b>	<b>46.2</b>	<b>28.7</b>	<b>4.4</b>	<b>2.4</b>	<b>2.6</b>	<b>15.7</b>	<b>100.0</b>
<b>Western</b>	<b>54.6</b>	<b>19.0</b>	<b>4.4</b>	<b>2.4</b>	<b>2.3</b>	<b>17.3</b>	<b>100.0</b>
Southwest	54.2	16.3	4.9	2.8	2.6	19.1	100.0
Northwest	55.2	23.2	3.6	1.7	1.7	14.6	100.0
<b>PRC</b>	<b>32.8</b>	<b>23.2</b>	<b>3.1</b>	<b>7.3</b>	<b>10.1</b>	<b>23.3</b>	<b>100.0</b>

Source: China Statistical Yearbook 2001.

Note: SOEs = State-owned enterprises; COEs = collective-owned enterprises; SHEs = shareholding enterprises; FIEs = foreign investment enterprises; HMTs = enterprises funded by entrepreneurs from Hong Kong, China, Macau, and Taipei, China; PSEs = private sector enterprises.

<sup>a</sup> With annual sales of over 5 million yuan.

- *Productivity.* Compared with firms in advanced economies, most enterprises, especially SOEs, have surplus labor and therefore low labor productivity (Table 1-13).<sup>3</sup>
- *Environmental impact.* The private sector is still dominated by SMEs that often waste natural resources because of inadequate direct controls (such as enforceable property rights of natural resources) or indirect controls (such as resource tax; the tax is currently too low—see Chapter 2).<sup>4</sup>

## Constraints on adjusting the industrial structure

There is a consensus among PRC economists and planners that the “optimization of industrial structure” is the key to the survival of industries in the Western Region and that the dominant mechanism for optimizing the structure should be market-oriented resource mobility. The central question is where the proper dividing line between government industrial policy and the market’s “invisible” hand should be.

The present industrial structure largely depends on government monopoly or regional protectionism. Entry into the WTO and the further open-door policy projected in the Tenth FYP threaten the survival of most secondary and tertiary industries and pose major challenges to the competitive advantages of primary industry in the Western Region. The challenges are as follows:

- *Globalization.* WTO and globalization will challenge government monopoly and regional protectionism in the Western Region. Firms with no competitive advantages will perish facing competition from the FIEs and firms from the Eastern Region. Most firms in the Western Region are not ready to face the challenge.
- *New technology.* The diffusion of new technology will eliminate the existing comparative advantages enjoyed by firms in the Western Region. Tradables will replace traditional

nontradables. Redeemable resources will replace exhausted natural resources.

- *Protection of the ecological system.* Awareness of environmental protection has posed another challenge to the resource-wasting production technology that many firms in the Western Region employ. The proposal of this report is to increase resource tax and environment levies, thereby significantly increasing the production cost of firms and providing them with the incentive to innovate and merge so as to attain competitive advantages in the global market.
- *“New Economy.”* In the era of the New Economy, knowledge will become the most important asset. This will significantly influence consumers’ preference and demand for conventional products and services. The initial objective of industry policy to promote industrialization in the Western Region is facing the new challenges.
- *Regional protectionism.* Decentralized public administration promotes regional protectionism (Chapter 9), which hinders the mobility of resources and the adjustment of industry policy.

Because of the inherent complexity of industrial policy and the aforementioned uncertainties, any suggestion to “optimize” industrial structure should be subject to scrutiny and open to public criticism.

## Role of industrial policy in economic development

### TYPES OF INDUSTRIAL POLICY

In general, studies have identified three approaches to industrial policy, namely:

- The *active approach*, which stimulates economic activity across the board
- The *passive approach* toward correcting market failure in specific sectors
- The *supportive approach*, which lends institutional support to the private sector to provide insurance for optimizing industrial structure

**Table 10-4 Classification of Industrial Policies**

Sources of Market Failure	Manifestation in the Western Region	Self-regulated Market Corrections	Possible Industrial Policy	International Practices
<b>Active industrial policy aimed at promoting a new market</b>				
Lack of information Coordination failure	Lack of information and coordination in some industries: • High-value-added industries • Infrastructure • Education • High-tech industry (including e-commerce) • Tertiary industry	Trial-and-error market experiments	Investment coordination Market coordination Public provision	Manufacturing industry policies that Japan adopted in the 1960s and 1970s and Korea in the 1980s
<b>Passive industrial policy aimed at correcting market failure</b>				
Natural monopoly	Resource industries in gas, electricity, and water Large-scale SOEs Infrastructure construction	Contestable market	Unbundling of industry into competitive components and noncompetitive components, and then regulation of the noncompetitive component	Regulation of utility industries in the UK and Australia in the 1990s
Externality	Environmental protection	Private negotiation in small-scale cases	Pollution tax Regulation	California pollution tax in the 1980s
<b>Supporting industrial policy aimed at supporting evolution of industrial structure in private sector</b>				
Institutional rigidity preventing the private sector from renovating its industrial structure	Lack of incentives in SOEs Local protectionism and other artificial barriers to entry Lack of bankruptcy laws and regulations	Not applicable	Institutional reforms to remove barriers and increase flexibility for the private sector to upgrade industrial structure	Privatization and deregulation in the 1980s and 1990s in most developed countries, including US, UK, and Australia

Source: Compiled by consultants.

Where externalities, lack of competition, barriers to entry and exit, lack of insurance for experimenting new industrial structures, or other market imperfections drive a wedge between private and social goals, most people accept that the Government may be able to enhance welfare through nationalization, regulation, and institutional strengthening. More controversial is whether it should also try to accelerate market development through more active forms of industrial policy. International experience shows no consensus on the effects of industry policies as well.<sup>5</sup>

The theoretical justification for active industrial policy rests on the proposition that information and coordination problems can be pervasive, more so in developing economies and regions like the Western Region. The argument essentially centers on the assumption that, in underdeveloped markets with few participants, awareness of the existence of opportunities can be extremely expensive to attain.

The maturing of a network to take advantage of strategic complementarities can also be costly. Public intervention could therefore speed up the establishment of markets by supplying information and taking an active role in coordinating market participants.

Table 10-4 summarizes these three types of industry policy and their corresponding market and public solutions.

**ROLE OF ACTIVE INDUSTRIAL POLICY**

In the PRC, industrial policy is mainly referred to in terms of active policy. In theory, governments can act as brokers of information and facilitators of mutual learning and collaboration, and thereby play a market-enhancing role in support of industrial development. Whether governments can play this role in practice will depend on their institutional capability. Even aggressive proponents recognize that activism can enhance markets only if four critical background conditions are in place:

- Governments should have a clear agenda on the objective and duration of policy and the timing for the private sector to take over and governments to exit. This agenda should be announced publicly and subjected to scrutiny by legislative authority.
- Companies and officials need to work on the basis of mutual trust. Firms need to be confident not only that additional coordination has merit, but also that the government and the other firms involved will make good on their commitments. The participants also need confidence that arrangements will be flexible enough to adapt to changing circumstances. Ordinarily this will mean a credible government commitment to involve the private sector in implementation.
- Initiatives to promote industrial development must be kept honest through competitive market pressures. Competition can come from other domestic firms or from imports, or take place in export markets. Unless one or more of these forms of competition systematically challenges firms, they will have little incentive to use resources efficiently or to innovate. Productivity will not improve, and industrial expansion will not be sustained.
- A country's strategy for industrial development has to reflect its evolving comparative advantage—its relative abundance of natural resources, skilled and unskilled labor, or capital.

None of these conditions appear to exist in the PRC.

### **IMPLEMENTING AN ACTIVE INDUSTRIAL POLICY**

In practice, governments could adopt one of three broadly classified policies:

- Investment coordination
- Market coordination
- Public provision

In the first two approaches, the government attempts to enhance market signals and private activity—although the institutional demands of investment coordination are much greater than those

of market coordination. The third approach involves the government seeking to supersede the market altogether.

### **Investment coordination**

The classical, “big push” rationale for government activism was that investment in an underdeveloped region posed a huge collective action problem. With markets undeveloped, firms could not perceive the demand for more and better products that the very act of producing them would create. Thus, it was argued, countries could benefit from coordinating such investments, which are mutually beneficial to firms but which they are unlikely to undertake by themselves. Postwar Japan's development of its steel, coal, machinery, and shipbuilding industries illustrates this rationale for intervention, as well as the stringent institutional prerequisites for success. These institutional prerequisites are as follows:

- A domestic private sector capable of efficiently managing complex, large-scale projects
- A private sector willing to cooperate with government in pursuit of the shared goal of competitive industrial development
- Strong technical capabilities in public agencies for analyzing evolving competitive advantages and market demand, technological innovations, and new opportunities
- Sufficient mutual credibility to enable each party to base its investment decisions on the other's commitments, and to adapt its actions in response to changing circumstances without undermining the overall commitment to collaborate

Pursuing this style of investment coordination presupposes levels of public and private institutional capability that are beyond the reach of most developing countries and regions. The Philippine experience of the late 1970s and 1980s shows what can happen when the ambitions of policy do not match institutional reality, and efforts to coordinate investment are pursued where powerful private interests sway government.<sup>6</sup>

### **Market coordination**

The aim of market coordination is to strengthen the private-to-private networks that flourish in mature market systems. Mature domestic, regional, and international market networks create numerous sources of learning and opportunity for firms in the developing region. Specialized buyers open up new market niches and offer information on product standards, equipment providers transfer technological knowhow, input suppliers help with product and process innovations, and competitors are a rich source of new ideas. Often, clusters of firms, buyers, equipment suppliers, input and service providers, industry associations, design centers, and other specialized cooperative organizations come together in the same geographic region.

### **Public provision**

Sometimes information and coordination problems are so severe—markets so underdeveloped, and private agents so lacking in resources and experience—that market-enhancing initiatives are unlikely to yield any response. As a way of kick-starting industrial growth, states have been tempted to supplant market judgments with information and judgments generated in the public sector.

### **ROLE OF PASSIVE INDUSTRIAL POLICY**

The argument favoring passive industry policy is that the free market system fails to achieve acceptable market performance, even under the constraints of a legislative environment set by competition policy (see Chapter 9). In economics, “market failure” is a common phrase to describe this type of situation. The market failure could be due to natural monopoly, externalities, public goods, and imperfect information. The essence of passive industry policy is that it is meant to be discriminatory. Certain industries or groups in the economy are meant to benefit firms with industry assistance. Although it is not widely recognized, it follows that other industries and groups are meant to be disadvantaged.

The difficulties of quantifying the benefits and costs of a passive industry policy lie at the heart of the industrial policy debate. Those who argue for free trade and minimum government involvement stress the general benefits that will flow from a reduction in industry assistance and the particular costs that the distribution of assistance impose on them. Those who receive the benefits of current assistance policies stress the costs to them of reducing industry assistance and the general economic dislocation that may occur if industry assistance is changed quickly.

### **ROLE OF SUPPORTIVE INDUSTRIAL POLICY**

The rationale for supportive industrial policy is contestable market theory. As long as there are no barriers to entry and sunk cost, the incumbent firms will be forced to charge an average-cost price even if monopoly power is prevailing. The purpose of industry policy, therefore, is not to regulate monopoly, but to facilitate the entry and exit of potential entrants.

## **International experiences in industrial policy**

Today, almost all nations implement some kind of industrial policies. Although active industrial policies that include formal, explicit efforts of government (as in Japan and France) to enhance the development of specific industries (such as steel or electronics) are rare, informal and implicit industrial policies are implemented by even the traditionally free-enterprise nations (such as the United States, Australia, and New Zealand).

### **INDUSTRIAL POLICIES OF THE UNITED STATES**

In the United States, explicit industrial policy has contradicted the dominant free-market ideology that precludes active government intervention in the economy. Policymakers have traditionally been cautious about intervening in the private sector and performing economic planning functions. This

caution has been reinforced by theoretical inclination toward *laissez-faire* and the success of free enterprise in the US. With some notable exceptions, like support of the development of a transcontinental railroad in the 19th century, and the nurturing of industries such as airlines and electronics in the 20th century, the US does *not* have a full-blown industrial policy. Policy has been piecemeal in nature and develops in response to particular problems.

Carbaugh<sup>7</sup> shows that US industrial policy has *not*: (i) formulated industry-specific economic policy designed to promote national champions; (ii) nationalized basic industries, such as steel and aircraft; (iii) bailed out financially troubled firms with loan guarantees; (iv) encouraged cartelization of industries; or (v) provided strong governmental support for exports. Rather, the US Government has attempted to provide a favorable climate for business, given the social, environmental, and safety constraints imposed by modern society. Rather than formulating a coordinated industrial policy to affect particular industries, the US Government has generally emphasized macroeconomic policies (such as fiscal and monetary policies) aimed at objectives such as economic stability, growth, and the broad allocation of GDP.

For example, in the area of promoting investment, the Reagan administration cut taxes in the 1980s, and the move resulted in expanding output and productivity. A general tax cut is really a macroeconomic policy, because it does not target specific industries. Even in the ICT industry and other knowledge-based sectors of the economy, the consensus is that government officials cannot consistently pick the winners among products and firms and thus encourage labor and capital to move into the industries with the highest growth prospects. This is because the development of commercially successful technology requires knowledge of scientific possibilities, an awareness of market demand for new or improved products, and a good sense of timing. The free market is better at picking winners than politicians and bureaucrats.

## INDUSTRIAL POLICIES OF JAPAN

Advocates of active industrial policy often cite Japan as a successful case. They claim that protection from imports, R&D subsidies, and government assistance to specific industries, such as shipbuilding and steel during the 1950s, autos and machine tools during the 1960s, and high-tech industries in the 1970s, fostered the development of Japanese industry. The Ministry of International Trade and Industry is regarded as a successful model for implementing such active industrial policies.

However, various texts on industrial economics contain the following observations:<sup>8</sup>

- Although government subsidies enhanced Japanese competitiveness and industrial development, most of the funds for R&D projects and production facilities came from *private* firms and commercial banks, and therefore followed the lead of the market.
- Only a modest fraction of government subsidies go to emerging industries, as compared with the subsidies granted to other sectors of the economy, such as agriculture, transportation, and the environment. That implies government subsidies mainly targeted political support groups, public goods, and externalities rather than the promotion of industrial development.
- Not all Japanese industrial policies have been successful, as seen in the cases of computers, aluminum, and petrochemicals. Industries in which Japan is competitive in world markets, such as shipbuilding and steel, have witnessed prolonged period of excess capacity.
- Some of Japan's biggest success stories, like televisions, stereos, and videocassette recorders, were not the industries most heavily targeted by the Japanese Government.

In conclusion, the extent to which industrial policy contributed to Japan's economic growth after World War II is unclear. Japan has benefited from a high domestic savings rate, an educated and motivated labor force, good labor-management relations, a timely shift of labor from low-productivity sectors

(such as agriculture) to high-productivity manufacturing, and entrepreneurs willing to take risks.

## Competitive advantages in the Western Region

### PRESENT COMPETITIVE ADVANTAGES IN THE WESTERN REGION

A rough calculation of a competitive advantage index (Table 10-5) shows that:

- The Western Region as a whole enjoys significant competitive advantage in the primary sector with three autonomous regions having an index value over 2. However, the PRC's entry into the WTO is likely to lead to challenges to this competitive advantage. The Western Region will lose competitive advantage in the production of rice, cooking oil, sugar, and cotton.
- No province or autonomous regions has a competitive advantage in the secondary industry, Tibet having the lowest index value (0.323) and Xinjiang the third lowest value in the PRC. The figure has been declining for 10 years and is likely to decline further.
- The Western Region has competitive advantage in the tertiary sector, although not as strong as in the primary industry, with Tibet having the highest index of 2.32. Further analysis of the tertiary sector in Tibet shows that three industries have extremely high output ratios, namely, (i) farming, forestry, animal husbandry, and fishery services; (ii) education, culture and art, radio, film, and television; and (iii) government agencies, Party agencies, and social organizations. These three industries have less growth potential than other industries have, in particular finance and insurance, and social services in which Tibet has a ratio about half the national average.

Table 10-6 lists industry products in which the Western Region has competitive advantage.

**Table 10-5 Competitive Advantages Index in the Western Region, 1998**

Province	Primary Industry	Secondary Industry	Tertiary Industry
<b>Southwest</b>			
Chongqing	1.36	0.79	1.28
Sichuan	1.76	0.81	1.09
Guizhou	1.73	0.81	1.06
Yunnan	1.51	0.79	1.22
Tibet	2.20	0.32	2.32
Guangxi	2.11	0.90	0.91
<b>Northwest</b>			
Shaanxi	1.31	0.89	1.09
Gansu	1.03	0.72	1.52
Qinghai	1.09	0.76	1.40
Ningxia	1.23	0.71	1.46
Xinjiang	2.20	0.62	1.26
Inner Mongolia	1.75	0.62	1.50

Source: Angang Hu (ed.) (2001).

Note: This index is calculated as: industry output in *j* province/national total output in *i* industry/ (GDP in *j* province/national GDP). *J* province has competitive advantage if the ratio is higher than 1; competitive disadvantage if the ratio is lower than 1. This index should be used with caution because it may include distortions due to regional protectionism, that is, the output in the local market may be higher than it should be, thanks to protection.

It is evident that the region is highly diversified and most provinces and autonomous regions have advantages in either agriculture-based products or building materials. With the exception of cigarette making, the whole region does not have advantages in highly value-added industries like oil refining, automobile manufacturing, and high-end household appliances.

### EMERGING COMPETITIVE ADVANTAGES IN THE WESTERN REGION

#### Tourism industry

Tourism is regarded as an industry with no diminishing returns. In the last four decades, the tourism income in the world increased from \$2,100 million in 1950 to \$444,740 million in 1998. It accounted for 10.7 percent of GDP and 10.6 percent of total employment in 1996.

The Western Region has many tourism resources. In the World Heritage List published by UNESCO in 2000, the Western Region has four attractions listed in the cultural category and three attractions listed in

**Table 10-6 Competitive Advantages in Industrial Products in the Western Region, 2000**

Province	Agriculture-based Products	Building Materials	Energy Products	Raw Materials	Machinery Products	Chemical Products	Household Appliances
Chongqing					car parts		
Sichuan			gas				television sets
Guizhou	cigarettes		coal			fertilizer	
Yunnan	cigarettes, sugar	timber			engineering	sulfuric acid, fertilizer	
Tibet		timber					
Shaanxi	cigarettes, cloth				engineering		refrigerators, television sets
Gansu	cooking oil	glass		steel		sulfuric acid, plastic	washing machines
Qinghai	cooking oil	glass	crude oil, gas	steel		fertilizer	
Ningxia	cooking oil	cement	coal, crude oil		engineering	sulfuric acid, fertilizer	
Xinjiang	cooking oil, sugar, cloth		coal, crude oil			fertilizer, plastic	
Inner Mongolia	cooking oil, sugar	glass, timber	coal	iron, steel			
Guangxi	sugar	cement, timber			car parts		

Source: China Statistical Yearbook 2000.

the natural category (Table 10-7). In the Tourism Attraction List published by the Bureau of Tourism, the Western Region has 15 of the PRC's 54 "excellent tourist cities." Entry into the WTO will further enhance this emerging competitive advantage, since a globally integrated market will spread information and facilitate tourist access to these attractions in the remote areas.

Tourism income in the Western Region, however, lags behind that in the Eastern Region and the world average; six provinces and autonomous regions have tourism income/GDP ratios below 5 percent. Five provinces and autonomous regions have a tourism income/GDP ratio between 5 percent and 10 percent, still below the world average. Only Tibet has a tourism income/GDP ratio above the world average (Table 10-8).

#### **Weaknesses of the tourism industry**

The main reason that the Western Region does not fully utilize its tourism resources could be its lack

of understanding of the nature of the tourist industry and its rigidity in implementing marketing campaigns to attract high-quality tourists.

The specific handicaps are as follows:

- The tourist market in the Western Region is still controlled by SOEs and professional bodies, such as local bureaus of tourism. They have little knowledge of the market. As a result, there are frequent reports of abuse of tourist resources.
- Because of the lack of motivation to protect tourist resources to maximize long-term benefits, most local governments are only interested in having the highest returns in a short period of time. This has significantly degraded the quality of attractions in the Western Region.
- The Western Region relies heavily on income from tickets sold to tourists, but ignores tourism's multiplier effect on other industries, such as hotels and restaurants, transportation, arts and

**Table 10-7 PRC Attractions Included in the World Heritage List**

Name of Heritage Site	Year Listed	Location	Western Region
World heritage for cultural values			
Great Wall	1987	Beijing	
Imperial Palace of the Ming and Qing Dynasties	1987	Beijing	
Mogao Caves	1987	Gansu	X
Mausoleum of the First Qin Emperor	1987	Shaanxi	X
Peking Man Site at Zhoukoudian	1987	Beijing	
Mountain Resort and its Outlying Temples, Chengde	1994	Hebei	
Potala Palace and the Jokhang Temple Monastery, Lhasa	1994, 2000	Tibet	X
Temple and Cemetery of Confucius and the Kong Family Mansion in Qufu	1994	Shandong	
Ancient Building Complex in the Wudang Mountains	1994	Hubei	
Lushan National Park	1996	Jiangxi	
Ancient City of Ping Yao	1997	Zhejiang	
Old Town of Lijiang	1997	Yunnan	X
Classical Gardens of Suzhou	1997, 2000	Jiangsu	
Summer Palace, an Imperial Garden in Beijing	1998	Beijing	
Temple of Heaven, an Imperial Sacrificial Altar in Beijing	1998	Beijing	
Dazu Rock Carvings	1999	Chongqing	X
Mount Qincheng and the Dujiangyan Irrigation System	2000	Sichuan	X
Ancient Villages in Southern Anhui-Xidi and Hongcun	2000	Anhui	
Longmen Grottoes	2000	Henan	
Imperial Tombs of the Ming and Qing Dynasties	2000	Hubei	
World heritage for natural values			
Huanglong Scenic and Historic Interest Area	1992	Sichuan	X
Jiuzhaigou Valley Scenic and Historic Interest Area	1992	Sichuan	X
Wulingyuan Scenic and Historic Interest Area	1992	Hunan	
Mount Emei Scenic Area, including Leshan Giant Buddha Scenic Area	1996	Sichuan	X
World heritage for mixed values			
Mount Taishan	1987	Shandong	
Mount Huangshan	1990	Anhui	
Mount Wuyi	1999	Fujian	

Source: UNESCO website: <http://www.unesco.org/>.

**Table 10-8 Tourism in the Western Region, 1998**

Province	Number of Tourists	Tourism Income (million yuan)	Tourism Income/GDP (%)	Status of Tourism <sup>a</sup>
Chongqing	21,967,700	9,017	6.3	Average
Sichuan	44,474,000	12,600	3.5	Poor
Guizhou	18,951,300	3,912	4.7	Poor
Yunnan	28,690,900	13,690	7.6	Average
Tibet	386,600	1,673	18.4	Good
Shaanxi	26,040,500	9,450	6.7	Average
Gansu	5,970,000	1,746	2.0	Poor
Qinghai	1,616,600	180	0.8	Poor
Ningxia	1,905,100	482	2.1	Poor
Xinjiang	6,026,600	683	6.0	Average
Inner Mongolia	6,168,900	2,004	1.7	Poor
Guangxi	35,053,300	14,000	6.4	Average

Source: *China Tourism Statistics Yearbook 1999*.

<sup>a</sup> Good = tourism income/GDP > 10%; average = tourism income/GDP between 5% and 10%; poor = tourism income/GDP < 5%.

craft exhibitions, and entertainment.

International experience shows the income from the supply of supporting facilities is much higher than ticket sales.

- The Western Region generally lacks the marketing skills needed to create a dynamic market for high-quality tourists. With the exception of Xi'an, the tourism market in the Western Region is still primitive: information availability in the international market is poor and unreliable, the quality of supporting facilities is well below standard, and tour guides do not have sufficient knowledge to attract interest from tourists. In addition, most sites fail to create a differentiated market for different tourists. The products are similar and normally at the low end of the market.

Encouraging more private sector participation may be the only solution to all these problems. Owing to the local monopoly nature of tourist sites, a regulation regime must be in place to address social interests.

#### **Measures to strengthen the tourism industry**

Measures that would strengthen the tourism industry are as follows:

- Local government should abandon its role in the operation of tourist sites, and focus instead on regulation and coordination, which is badly needed in the tourist market in the Western Region.
- The market should be opened up to let professional tourism companies, including companies from overseas, take over the responsibilities of designing and selling tourist products.
- An integrated or at least coordinated vertical value chain should be encouraged to look after all other tourism-related supporting industries. Vertical merger or alliance should be allowed. To prevent monopoly, the local government should allow the entry of multiple vertically integrated companies. Alternatively, an open and

transparent tendering process should be arranged to select a company to take charge of the tourist market.

- In designing the bidding procedure, due consideration should be given to long-term benefits to the regions. Most likely, the local governments should set multiple objectives including income to local governments, protection of tourist attractions, and other social interests.
- International agencies could assist local governments in designing a well-functioning tendering procedure.

#### **CHINESE TRADITIONAL MEDICINE**

Another industry in which the Western Region does have competitive advantage is in Chinese traditional medicine. It has been widely anticipated that the demand for Chinese traditional medicine will increase with more scientific research. Scientific investigation into the curative effects of Chinese medicaments at the gene level will reveal new insights into disease pathology and possible mechanisms for treatment. (See Chapter 8 for technology policy to promote R&D on Chinese traditional medicine.)

The "preventive" nature of Chinese traditional medicine with no side effects will also contribute to the increase in demand as society increasingly ages.

Almost every minority group in the PRC has its own methods for the practice and use of traditional medicine. Tibetan, Mongolian, and Miao minorities have their own independent diagnostic and curative systems; each system has different effects, ranging from mysterious to exceptionally good.

There are in total 132 minority medicine hospitals in the PRC: 57 Tibetan medicine hospitals, 39 Mongolian medicine hospitals, 30 Wei medicine hospitals, and 6 others. About 99 percent of the education and research and development facilities for minority medicine are located in the Western Region. There are 200 companies specializing in producing medicines (40 for Tibetan, 5 for Mongolian,

120 for Miao, and 4 for Wei medicine). These companies are producing 600 types of medicaments. Among them, 100 types are commonly used in the PRC, with 47 types listed in the National Basic Medicine List.<sup>9</sup>

The Western Region is also rich in herb products, the raw materials for making Chinese medicaments (see Chapter 8 for a list). Among 11 major herb exchange markets, three are in the Western Region. They are Rongxi (Gansu), Cheng du Lianhuaci (Sichuan), and Xi'an (Shaanxi). Another four exchange markets also sell herb products of the Western Region: Shaodong (Hunan), Yueyang (Hunan), Zhangsu (Jiangxi), and Haozhou (Anhui).

In 2000, the medicine output of Guizhou province alone amounted to 2,800 million yuan. This accounted for 10.5 percent of primary product output and about 3 percent of Guizhou's GDP.

Because of the lack of R&D and standardization, the PRC lags behind Japan and Korea in the export of Chinese medicine. However, it has been estimated that after the PRC's entry into the WTO, total exports of Chinese traditional medicine could increase by 30 percent.<sup>10</sup> Some Chinese medicine companies are already pursuing approval from the US Food and Drug Administration. That represents a small step in the right direction.

## Implications for industrial policies

The analysis in this chapter suggests that the Government does not need a full-blown industrial policy to "optimize" industrial structure in the Western Region. Instead, it should direct its efforts toward two priorities:

- First, facilitating the entry and exit of private enterprises, especially private SMEs
- Second, adopting a light-touch industrial assistance policy to support carefully selected industries

These policy reforms are suitable for the Tenth FYP period.

### REMOVING BARRIERS AND PROMOTING PRIVATE SECTOR PARTICIPATION

#### Establishment of new enterprises

In the context of Western Region development, the major barriers to entry come from regional protectionism (see Chapter 9). This is especially true in industries with natural monopoly characteristics and political importance.

The legal infrastructure for commercial enterprises has room for several improvements:

- The minimum registered capital requirements for forming a limited liability company should be significantly reduced (or eliminated, as in many Western countries). To the extent that high minimum capital requirements were felt to be necessary on account of the high perceived risk of making loans to businesses, this might be addressed by improving disclosure requirements.
- The scope for official interference and substantive review in the registration of private enterprises must be significantly reduced. The new laws for private enterprises (for companies, partnerships, and individually owned enterprises)<sup>11</sup> contain some provisions—such as the need for an excessively specific definition of business scope and for approval of changes in business scope, site, "necessary conditions for production," and a "lawful enterprise name"—that open the possibility for bureaucratic interference in the registration and establishment of private enterprises. These provisions need to be significantly relaxed, in line with international practice, so as to reduce or completely eliminate the scope of bureaucratic discretion and possible corruption.
- Removing unnecessary entry restrictions for private enterprises, as discussed above, would probably eliminate the need for requiring a narrow definition of business scope.

- The five-year period of unlimited liability for wholly individually owned enterprises following liquidation should be eliminated. This period seems excessive, and such unresolved potential liabilities may discourage entrepreneurial activity. Forcing entrepreneurs to accept personal liability until their business can reach the minimum size required to form a limited liability company would appear to discourage startup activity or place entrepreneurs at unreasonable high risk of losing their personal property and that of their families to creditors.
- Furthermore, it would be difficult to enforce this provision in practice. Up until now, the Western Region has not had a fully developed industry that investigates another person's personal property. Anonymous banking, among other things, made such investigations impractical in the past. In recent years there have been a number of cases in which creditors sought to enforce court judgments against individually owned enterprises. Individual investors that looked liquid previously suddenly seemed unable to pay off debts.

### **Bankruptcy**

There is also a need to unify bankruptcy law and to restore the normal priority of creditors' claims. Bankruptcy regulations are one example of the "one country, two systems" principle in the area of law. The Enterprise Bankruptcy Law of 1986 applies to SOEs while the Civil Procedure Law of 1991 contains bankruptcy provisions that apply to "an enterprise with legal status" (see Chapter 4). The line between the two laws is not clear, since many SOEs are also persons. The definition of an SOE is not a trivial question, since stakes in many SOEs have been sold to nonstate enterprises and the public at large. Furthermore, the two laws differ substantially in areas that affect creditors' rights. Under the Bankruptcy Law, for example, bankruptcy is not available if an enterprise is "public" or has "important bearing on the national economy and the people's livelihood." In those cases, relevant government departments "will

provide economic assistance or take other measures to assist in the discharge of liabilities." The law also gives the bankrupt's department in charge two years to fashion reorganization and thereby delay bankruptcy proceedings. The definition of an SOE also determines the applicability of additional regulations (*Supplementary Notice on Issues Concerning the Trial Implementation in Several Cities of State-Owned Enterprise Bankruptcy and Merger and Reemployment of Workers*, March 1997) giving workers first priority in the distribution of recovery proceeds. This dual-track approach to bankruptcy could undermine creditors' rights.

### **Promotion of SMEs in the Western Region**

Broad consensus is emerging on the central role played by SMEs in growth, competitiveness, innovation, and employment creation. In the European Union, more than 99 percent of the 18 million enterprises in the nonagricultural market sectors are SMEs. They employ 66 percent of the work force and generate 55 percent of total turnover.<sup>12</sup> In the construction industry, 88.8 percent of the labor force works in SMEs. In other service-oriented industries, such as, trade, business activities, and transport and communication, the ratios are all around 50 percent.

In World Bank (2001b), SMEs are a key vehicle for mobility in each of three areas that are linked to poverty reduction:

- *Empowerment.* SMEs allow many poor people to gain control over their economic future.
- *Security.* SMEs are the principal safety net for the bulk of the population in times of economic downturn when employment opportunities shrink.
- *Opportunity.* In most poor counties, SMEs represent virtually the only employment opportunity for millions of low-income people.

In order to create an environment conducive to the growth and development of SMEs, the Government should follow ILO recommendations, namely:<sup>13</sup>

- Adopt and pursue appropriate fiscal, monetary, and employment policies to promote an optimal economic environment (as regards, in particular, inflation, interest and exchange rates, taxation, employment, and social stability).
- Establish and apply appropriate legal provisions with regard to property rights, including intellectual property, location of establishments, enforcement of contracts, fair competition, as well as adequate social and labor legislation.
- Improve the attractiveness of entrepreneurship by avoiding policy and legal measures that disadvantage those who wish to become entrepreneurs.

These measures should be complemented with policies for the promotion of efficient and competitive SMEs able to provide productive and sustainable employment under adequate social conditions. The Government should:

- Create conditions in which all enterprises, whatever their size or type, are afforded:
  - Equal opportunity in relation to access to credit, foreign exchange, and imported inputs
  - Fair taxation
  - Nondiscriminatory application of labor legislation, in order to raise the quality of employment in SMEs
- Remove constraints on the development and growth of SMEs, arising in particular from:
  - Difficulties of access to credit and capital markets, a problem that can be addressed in the context of the guarantee funds provided for the 2002 Law in Promoting Small and Medium Enterprises
  - Low levels of technical and managerial skills
  - Inadequate information
  - Low levels of productivity and quality
  - Insufficient access to new technologies
  - Difficulty of access to new technologies
  - Lack of transport and communications infrastructure
  - Inappropriate, inadequate, or overly burdensome registration, licensing, reporting,

and other administrative requirements (including those that act as disincentives to the hiring of personnel), without prejudicing the level of effectiveness of inspections of conditions of employment or the system of supervision of working conditions and related issues

### **GENERAL GUIDELINES ON IMPLEMENTING A LIGHT-TOUCH INDUSTRIAL POLICY**

International experience highlights why the debate over industrial policy has been unusually heated. Industrial policy is combustible. Economic theory and evidence suggest that the possibility of successful, market-enhancing activism cannot be dismissed out of hand. But institutional theory and evidence suggest that, implemented badly, activist industrial policy can be a recipe for disaster.

There is a need to draw a sharp distinction between initiatives that require only a light touch from government and initiatives that require high-intensity government support. High-intensity initiatives should be approached cautiously, or not at all, unless countries have unusually strong institutional capability—a high level of administrative capability, commitment mechanisms that credibly restrain arbitrary government action, the ability to respond flexibly to surprises, a competitive business environment, and a track record of public-private partnership.

In contrast, light-touch initiatives offer more flexibility. The essential institutional attribute for success is an unambiguous commitment by government to public-private partnership. Once this commitment exits, and when the business environment is reasonably supportive of private sector development, the benefits of experimentation with light-touch initiatives can be large, and the cost of failure low.

#### **Principles of light-touch industrial policy formulation**

The current institutional capability in the PRC cannot guarantee the success of a high-intensity

industry policy. The light-touch initiatives may be the most suitable approach. The following principles are the most appropriate for the implementation of industry policy in the PRC:

- Further reform of SOEs to diversify ownership and introduce modern corporate governance. Well-functioning firms and professional managers should have more information and incentives than the Government in determining the existence and magnitude of, and utilizing, regional competitive advantages, such as the well-known competitive advantages of rich natural resources, a cheap labor force, and abundant energy resources in the Western Region. The firms should be leading players to achieve the five objectives set by Premier Zhu Rongji in his *Premier's Report on the Outline of the Tenth Five-Year Plan for National Economic and Social Development*.<sup>14</sup>
- The Government could use some light-touch initiatives to facilitate the mobility of resources and the formation of markets, such as the establishment of a market for the exchange of new and high technology (Chapter 9), the provision of guiding information to the private sector on the competitive advantages in some regions, demonstration of the economic benefits of using e-commerce, and the development of the tourism industry.
- The Government might, within its capability, initiate investment in the construction of infrastructure such as, roads and railways, airports, cross-border ports, and water, electricity, gas, and telecommunication systems. Subsequent public-private partnerships should be arranged well in advance, and the principles and managerial rules should be transparent and open to the public. Several contractual arrangements should be compared and their relative merits should be identified and subject to public scrutiny (see Chapter 1 for a discussion of public-private partnerships).
- There should be a regulatory body, like the US Department of Justice and the Australian Consumer and Competition Commission, independent of the administration, to identify and prosecute any sources of market failure. Possible examples include pollution, government monopoly and regional protectionism, and any institutional barriers that hinder the mobility of resources (see Chapter 9 for a discussion of competition policy).
- An "access regime" should be explicitly established as a guideline to facilitate the private sector's entry into industries monopolized by the Government and probably the FIEs after the PRC becomes a member of the WTO.
- A well-defined legislative framework should be set up to facilitate the mobility of resources and to protect property rights. The framework could include (i) patent law and copyright law to facilitate the exchange of innovations; and (ii) bankruptcy law to facilitate the exit of firms from the market.
- Attention should also be given to protecting the interests of people who happen to be the victims of structural adjustment. The Government should consider seeking assistance from international lending agencies on the establishment of a social security system.
- The Government should also reform its VAT to allow the deduction of fixed asset inputs so as to encourage the upgrading of equipment and the use of new technology (see Chapter 2 for a discussion of consumption-based VAT).
- A flexible financial system is essential to guarantee the private sector receives financial support for structural adjustment (see Chapter 3 for a discussion of private sector financing).
- Human resources development is another essential component in which the Government could contribute to enhance institutional capabilities and facilitate the implementation of industry policy.

## Notes

- 1 These low-value-added products in the PRC are in surplus. For example, the manufacturers of 29-inch TV sets can only make a profit of 10 yuan on each set. For any size below that, profits are negative. About 80 percent of equipment operates below its designed capacity. Meanwhile, since 1995 the PRC has imported \$140,000 million worth of manufactured goods each year to meet the demand for technology-intensive goods. (See *Financial Review*, 8 June 2001; and Peiyuan Zhen [2001]).
- 2 R&D expense in the large and medium-sized enterprises account for 1.28 percent of sales volume, much lower than the 5–10 percent spent by Fortune 500 enterprises on average. (See Peiyuan Zhen [2001]).
- 3 Surplus labor accounts for 30–40 percent in the PRC. In 1998, labor productivity in the steel industry in the PRC was only 29 percent of the world average. In the manufacturing sector, each laborer contributed \$2,200, as compared with \$97,300 in the US and \$45,330 in the UK.
- 4 There are many small-scale mining companies in the Western Region. Simple equipment or no equipment at all is used to extract coal, crude oil, and other minerals, manufacture low-quality products, and sell these on the local market. These mining sites are full of dust and workers are not properly protected.
- 5 Ergas (1986); Andretsch (1993).
- 6 See World Bank (1997).
- 7 Carbaugh (2000).
- 8 Carbaugh (2000).
- 9 *China Business* (in Chinese), 26 June 2001.
- 10 *China Business* (in Chinese), 28 June 2001.
- 11 Partnership Enterprises Law of 1997; Company Law of 1999; and Wholly Individually Owned Enterprises Law of 1999.
- 12 Commission of the European Communities (2001).
- 13 The following section is a summary of the recommendations by International Labor Organization. (See International Labor Organization [1998].)
- 14 Premier Zhu Rongji, at the Fourth Session of the Ninth National People's Congress on 5 March 2001, set out five objectives for optimizing the industrial structure: (i) enhancing traditional industries with high, new, and advanced technologies; (ii) continuing to close down plants and mines that produce shoddy goods, waste resources, cause serious pollution, or operate under unsafe conditions; (iii) developing new and high-tech industries, and using information technology to stimulate industrialization; (iv) intensifying the construction of water conservation, transportation, energy, and other infrastructure facilities and attaching great importance to strategic issues concerning resources; and (v) accelerating the development of the service industries.

