

Mainland China's Defense Industry in the Context of the Central-Local Relationship*

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In the late 1970s, Beijing initiated a defense industry conversion which aimed to cut back surplus capacity and encourage the transition of military production lines to civilian product manufacturing. In this process, a side-effect has taken hold; namely, local civilian enterprises in interior provinces have been integrated with large defense industries as satellite contractors. Moreover, these large defense enterprises have become core enterprises. These developments may help the central government to alleviate the chronic localism which emerged in the 1980s.

Keywords: conversion, defense industry conversion, central-local relationship

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The relationship between the center and the localities in mainland China has attracted much attention from scholars since 1990. Some have analyzed the relationship on a macro level in order to understand why and how conflicts have come about,¹ some have focused more on fiscal management in examining fiscal problems between the central and local governments over certain periods of time,² and some have analyzed problems from a township enterprise

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¹Chien-min Chao, "Tiaotiao vs. Kuaikuai: A Perennial Dispute between the Central and Local Governments in Mainland China," *Issues & Studies* 27, no. 8 (August 1991): 31-46.

²Shaoguang Wang and Angang Hu, *Zhongguo guojia nengli baogao* (Report on China's state capacity) (Shengyang: Liaoning People's Press, 1993).

viewpoint.³ One journal even devoted a special issue to a comprehensive study of this topic.⁴

However, no effort has been made to understand the role of the defense industry in the central-local relationship. What changes have been made in the defense industry? Why were these changes needed? How have these changes influenced the central-local relationship? Finally, what implications will these changes have for central-local relations? These are the questions that this paper will tackle. The paper will focus particularly on the role of the defense industry in mainland China's interior,⁵ particularly Guizhou province.

Defense Industry and Local Authorities in the Pre-Reform Period

The defense industry involves researching, developing, designing, testing, and manufacturing weapons used by ground, naval, air, and strategic forces. These weapons include tanks, artillery, warships, bombers, jet fighters, submarines, strategic rockets, radar equipment, and other relevant systems.

In mainland China, the defense industry has been under strict military control since its inception in the late 1950s. At that time, there was a need to accelerate the development of atomic weapons and relevant strategic forces, including nuclear submarines and sea-launched ballistic missiles. Beijing thus expanded the size of its defense industry and established several industrial departments covering space, aerospace, shipbuilding, nuclear, electronics, and ordnance industries. These units were exclusively defense-oriented and did not engage in civilian production.⁶ The industry was organized on vertical (*tiaotiao*) lines,⁷ with command stretching from the central departments in Beijing directly to the localities where subordinate enterprises or factories

³Hui Hung, "Restructuring Property Rights for Township Enterprises," *Zhongguo dalu yanjiu* (Mainland China Studies) 38, no. 4 (April 1995): 55-63.

⁴*Dangdai Zhongguo yanjiu* (Modern China Studies), 1995, nos. 1-2.

⁵The interior region is the Third Front region. For the history of Third Front industrialization, see Barry Naughton, "The Third Front: Defense Industrialization in the Chinese Interior," *The China Quarterly*, no. 115 (September 1988): 351-86.

⁶For a brief development history of each system, see *Dangdai Zhongguo de guofang keji shiye* (China today: Scientific and technological undertakings of national defense), 2 vols. (Beijing: Dangdai Zhongguo chubanshe, 1992).

⁷For an explanation of China's industrial organization in the pre-reform period, see Franz Schurmann, *Ideology and Organization in Communist China*, 2nd edition (Berkeley: University of California Press, 1968), 188-90.

were located. The chain of command bypassed local governments, although defense industries usually had liaisons with them.

In the 1960s, fearing an attack by the United States from the southeast and the Soviet Union from the north, Mao Zedong initiated "Third Front" construction, moving large portions of the defense industry into the interior. It was estimated that between 1966 and 1975, when Third Front construction was at its height, China poured over 200 billion *yuan* into the plan; in contrast, from 1966 to 1980, an estimated 275 billion *yuan* was budgeted for nondefense industrial development.⁸

The buildup of the defense industry brought large-scale, rapid industrialization to the interior. Prior to Third Front construction, these regions had a very limited, small-scale industrial base. For instance, Guizhou province only had small military machinery repair shops, while Sichuan's industrial base, which was inherited from World War II, was concentrated in the Chongqing area and focused on textiles and other light industry as well as ordnance.⁹

However, defense industry buildup led to the development of a dual economy in the interior regions. The large-scale Third Front enterprises were purely defense-oriented, and consequently their end products could not meet local needs. Advanced military technologies could not be transferred to local enterprises or modified for civilian use, and military equipment was not available to local civilian enterprises. In addition, the vertical command structure and the strict state planning system precluded any local input. In the end, there was no economic interaction between the centrally controlled defense enterprises and local factories.

Worse still, the defense industry had a detrimental impact on the regional economy. In order to expedite weapons' production, local governments had to give defense enterprises priority access to water and power supplies, and provide them with housing, food, and other necessities with little benefit in return. For the localities, this was simply another form of "exploitation." When the price of ag-

⁸For a brief estimate of Third Front investment, see John W. Lewis and Litai Xue, *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford, Calif.: Stanford University Press, 1994), 93-94.

⁹*Guizhou nianjian 1985* (Guizhou yearbook 1985) (Guiyang: Guizhou renmin chubanshe, December 1985), 492; and *Sichuan jingji nianjian 1986* (Sichuan economic yearbook 1986) (Chengdu: Sichuansheng shehui kexueyuan chubanshe, December 1986), 254-55.

ricultural products began to rise, the burden on local governments increased still further. For example, the Sichuan provincial government was subsidizing its defense industry to the tune of 72 million *yuan* annually, yet the province was receiving only 50 million *yuan* in revenue from this source. This represented only part of the burden on local governments.¹⁰

Reform of the Defense Industry System

In the late 1970s, China began to reform the defense industry, and “defense conversion” became the most popular slogan.¹¹ Two reasons contributed to this large-scale restructuring. The first involved a change in national priorities from the previous policy of “politics in command” to developing the economy. The second was a change in security perceptions, as diplomatic relations were established with the United States in 1979 and the Soviet threat diminished due to its deteriorating economy and increasing ethnic problems.

As a result, defense industry reform was inevitable. Defense modernization ranked last among the “Four Modernizations,” and at the time, the industry suffered from overcapacity. Chinese sources have said that cutting the industry by over two-thirds would not have hurt the military at all.¹²

Reform of the defense industry was conducted in several steps. The first round of reform was identical to that introduced in regular state enterprises. Despite their military role, defense enterprises count as state enterprises, and most regulations that govern the civilian state-owned industrial sector also apply to defense firms. Also, reform objectives were the same in both the defense and civilian sectors:

¹⁰See You Qianzhi et al., eds., *Zhongguo guofang jingji yunxing fenxi* (An analysis of the workings of China’s defense economics) (Beijing: Zhongguo caizheng jingji chubanshe, February 1991), 106-9.

¹¹For an analysis of China’s defense industry conversion, see Mel Gurtov, “Swords into Market Shares: China’s Conversion of Military Industry to Civilian Production,” *The China Quarterly*, no. 134 (June 1993): 213-41; and Paul Humes Folta, *From Swords to Plowshares? Defense Industry Reform in the PRC* (Boulder, Colo.: Westview Press, 1992).

¹²Jiang Baoqi, Zhang Shengwang, and Ji Bing, “Some Problems on Strategic Adjustment and System Reform of the Defense Industry,” *Jingji yanjiu* (Economic Research) (Beijing), 1988, no. 12:63. Yitzhak Shichor’s research shows that China’s aerospace industry alone had around 800,000 staff spread among 140 enterprises, 37 research units, and many higher educational and vocational colleges, indicating an overcapacity problem. See Yitzhak Shichor, “Taking-off: The Conversion of China’s Military Aviation Industry to Civilian Use” (Unpublished paper).

break up the old rigid planning system, give enterprises more autonomy, and promote economic development.

The introduction of the responsibility system allowed each defense industrial enterprise more freedom to choose which civilian products it could manufacture. The factory director responsibility system made enterprise decisionmaking more efficient. Legal reforms gave defense enterprises protection in transferring declassified military technologies and enabled them to participate in civilian economic activities. Financial reform enabled defense enterprises to retain profits, and thus finance the further development of civilian production and raise funds. Price reform empowered enterprises to fix the prices of goods produced outside the national plan. Labor reform increased worker productivity and promoted labor mobility. Foreign trade reform enabled enterprises to retain a proportion of their foreign exchange earnings, which could then be used to develop civilian production.¹³

Amalgamation and Decentralization

At the central government level, organizational amalgamation and division as well as jurisdiction changes were carried out to facilitate defense conversion. As a first step, in May 1982 Beijing renamed its industrial ministries in order to clarify which specific fields they were in charge of, and set up the Commission of Science, Technology, and Industry for National Defense, whose functions included making policy recommendations concerning conversion. In 1987, the entire defense industrial sector was placed under the State Council's jurisdiction—it had previously been under the Central Military Commission—to pave the way for establishing business connections with foreign firms and allow for better conversion to civilian production.¹⁴

Decentralization was also part of the reform program. Beijing delegated authority over several centrally-controlled defense industrial enterprises to the provinces in which they were located. This move was meant to break down the artificial barriers created by the planning system, while at the same time streamlining the central industrial bureaucracy and facilitating the marketing of civilian products pro-

¹³This portion of reform is cited from Folta, *From Swords to Plowshares?* 87-109.

¹⁴See *Dangdai Zhongguo de guofang keji shiye*, 159-61; and *Zhonggong nianbao 1994* (Yearbook on Chinese Communism 1994) (Taipei: Institute for the Study of Chinese Communist Problems, 1994), 1-15, 22.

duced by local defense factories.¹⁵

The China Zhenhua Electronics Industrial Corporation in Guizhou province is one example of an enterprise that has been handed over to local control. In 1984, the Ministry of Electronics Industry reorganized its thirty-one units in Guizhou into the China Zhenhua Electronics Industrial Corporation, centered in what was formerly the ministry's Guizhou office. The new company exercised unified management over personnel, finance, materials, production, supplies, and marketing. In November 1985, the China Zhenhua Corp. was put under the joint control of the Ministry of Electronics Industry and the Guizhou provincial government.¹⁶ In August 1986, the provincial government set up an electronics industry office to take charge of both the civilian and military electronics industries, breaking down the barrier between vertical and horizontal chains of command and between military and civilian sectors.¹⁷

Similar adjustments have been made in industries under the Ministry of Aviation Industry. In March 1986, this ministry announced that its Guizhou office was an agency under the joint leadership of the ministry and the Guizhou provincial government. This office has a contract with the ministry to exercise unified control over all aviation industry enterprises in the province.¹⁸

Local offices for national defense science, technology, and industry (*guofang kexue jishu gongye bangongshi*) have also played an important role in this joint leadership system. These offices have several units providing help to defense industrial enterprises in such fields as identifying suitable civilian products, rationalizing production layout, coordinating loans, public facilities, and infrastructure.¹⁹

Reorganization was also further intensified in defense enterprises. After several years of trials, the Beijing government began encouraging the defense industrial sector to form enterprise conglom-

¹⁵Folta, *From Swords to Plowshares?* 65. It is said that all military electronics enterprises have been devolved to provincial governments.

¹⁶*Guizhou nianjian 1986* (Guizhou yearbook 1986) (Guiyang: Guizhou renmin chubanshe, December 1986), 442.

¹⁷*Guizhou nianjian 1987* (Guizhou yearbook 1987) (Guiyang: Guizhou renmin chubanshe, November 1987), 491.

¹⁸*Ibid.*, 483.

¹⁹Dai Zhenlong, "The Local Government's Role in Conversion from Military to Civilian Industry: The Example of Chongqing City," in *Restructuring the Military Industry: Conversion for the Development of the Civilian Economy* (Proceedings of the Conference on International Cooperation to Promote the Conversion from Military to Civilian Industry, Hong Kong, July 7-11, 1993), 172-76.

erates (*jituan*) in the 1990s.²⁰ This development has chiefly served to break down the vertically organized, self-contained industrial system of the past. The authorities hope that such reorganization—especially conglomerates that bring together technology development, industry, and trade, and encourage division of labor, economies of scale, and mutual assistance—will promote overall development. Enterprise conglomerates have a fairly large degree of autonomy, and perform projects under contract to their superior units.²¹ The development and manufacture of military products, however, is still controlled by the central plan. Although these enterprise conglomerates are based in the provinces, they remain the property of their superior units, who receive the profits over the local governments.²²

The formation of conglomerates in Guizhou province took place in several steps. In 1986, it was decreed that enterprises under the Aviation and Astronautics Industry ministries should be administered locally. In 1988, two companies were set up: the Guizhou General Corporation of the Aviation Industry, consisting of forty-six enterprises with registered capital of 1.5 billion *yuan*; and the Guizhou General Corporation of the Astronautics Industry, with thirty-eight enterprises and registered capital of 1.2 billion *yuan*.²³

Military industrial conglomerates made their formal appearance in Guizhou in 1992. There are three main conglomerates: the Guizhou Aviation and Guizhou Astronautics Industrial Conglomerates, whose core enterprises are respectively the Guizhou General Corporations of the Aviation and Astronautics Industry, and the Zhenhua Electronics Conglomerate, based on the China Zhenhua Electronics Industrial Corporation. These three were among the first batch of fifty-five experimental enterprise conglomerates set up by the government.²⁴

²⁰For an analysis of the Chinese concept of an enterprise conglomerate, see Lou Renhe and Liu Yuzhen, "The Basic Thinking behind the Establishment of Enterprise Conglomerates by Military Enterprises," *Junshi jingji yanjiu* (Military Economics Studies) (Wuhan) 13, no. 12 (December 1992): 53-56. The Chinese enterprise conglomerate consists of any group of companies linked by some form of cooperation: for example, a core plant and a number of satellite plants. It does not include the Western concept of the conglomerate as a collection of enterprises linked by a holding company. In other words, the Chinese expand the meaning of the term.

²¹*Ibid.*

²²*Zhongguo junzhuanmin* (China's conversion) (Beijing: Zhongguo jingji chubanshe, January 1994), 48.

²³*Guizhou nianjian 1989* (Guizhou yearbook 1989) (Guiyang: Guizhou renmin chubanshe, September 1989), 387.

²⁴*Guizhou nianjian 1992* (Guizhou yearbook 1992) (Guiyang: Guizhou renmin chubanshe, August 1992), 335.

Enterprise conglomerates are granted certain privileges. For example, the Guizhou Aviation Industrial Conglomerate, consisting of forty-four closely connected units, twenty-two semi-closely connected units, and more than two hundred loosely connected units, is allowed to conduct its own imports and exports and make decisions concerning external cooperation in funding and technology.²⁵

The overall enterprise organization of the defense industry has now been settled. At the top, there is an industrial department or reorganized general headquarters corporation directly under the State Council. In the next layer, there is the provincial-level general corporation, followed by the enterprise conglomerates, enterprises, and individual factories.²⁶ For example, in 1993 the China General Corporation of Astronautics Industry was set up under the State Council. The corporation has the functions of a defense industry department, including industry policy and planning. Below the Beijing head office, there is the Guizhou Astronautics Industrial Conglomerate, centered on the Guizhou General Corporation of Astronautics Industry. At the next level is the Jiangnan Astronautics Enterprise Group, which in turn oversees the Zunyi Shengda Electric Appliance Company and other connected companies.²⁷

Enterprise Relocation

In addition to the above reforms, the Chinese government has offered special assistance to the defense industrial sector, particularly in the Third Front region, in facilitating conversion to civilian production. One important measure has been to relocate enterprises and factories from remote mountainous areas to urban areas in the heartland or even to the coastal provinces. The purpose of this move has been to bring these enterprises closer to their markets and improve communications with the outside world, allowing them to integrate with the civilian economy.

²⁵ *Guizhou nianjian 1993* (Guizhou yearbook 1993) (Guiyang: Guizhou renmin chubanshe, August 1993), 345.

²⁶ Jean-Claude Berthelemy and Saadet Deger, "Conversion of Military Industries to Civilian Production in China: Prospects, Problems, and Policies" (OECD Development Center Report issued at the International Conference on the Conversion of China's Military Industries, co-sponsored by the OECD Development Center and the China Association for the Peaceful Use of Military Industrial Technology, Beijing, June 26-27, 1995), 28.

²⁷ This information is compiled from the 1992, 1993, and 1994 editions of *Guizhou nianjian*.

The government has drawn up a number of regulations to facilitate relocation. One resolution passed at the August 1984 Third Front Adjustment Work Conference called for the transfer of defense enterprises scattered in remote mountainous areas, or areas with a problematic geographical location.²⁸ The transfer of these enterprises was included in the national plan, and the cost of moving machinery and equipment as well as providing new housing for employees and schooling for their children was all to come from loans made by state banks or self-raised funds.

There is not much information to be found on how much the government has invested in relocating Third Front enterprises. What there is indicates that during the Seventh Five-Year Plan (1986-90), 2 billion *yuan* was spent on relocating and reorganization, 800 million *yuan* of which was provided by the state in the form of direct loans and loans from development banks. Another 600 million *yuan* was invested by the ministries in charge of the enterprises and the remaining 600 million *yuan* was provided by the enterprises themselves. This investment was spread among 121 production enterprises and research units within the national plan with a total work force of over 160,000; these units were all in imminent danger of collapse. The relocation of these enterprises was expected to be completed in 1990.²⁹

Guizhou is one of the provinces that has benefitted from the 1986-90 relocation drive, as twenty-four of its enterprises and institutes were included in the program, at a cost of 380.9 million *yuan*. Of these, fifteen factories were moved to Guiyang, five factories were moved to Zunyi city, and one research institute was moved to Hefei in Anhui province. Another three factories remained in their original locations but their product ranges were adjusted.³⁰ By 1990, twelve of these factories had been relocated, one had completed product adjustment, and the others had completed basic engineering work in preparation for removal.³¹

²⁸At the end of 1983, the Beijing government set up an office for Third Front Adjustment and Reform under the State Council to provide systematic assistance to Third Front areas in coping with post-reform problems.

²⁹Third Line Task Force, Sichuan Provincial Academy of Social Sciences, "The Adjustment of Our Country's Policy toward Third Front Industries," in *Kaifa daxi'nan: Diqu chanye juan* (Developing the great southwest: Regional industries) (Beijing: Xueyuan chubanshe, September 1991), 507.

³⁰*Guizhou nianjian* 1987, 337.

³¹*Guizhou nianjian* 1993, 345.

The biggest beneficiary of this relocation program seems to have been the Guizhou Aviation Industrial Corporation. By the end of 1992, one enterprise belonging to this corporation had undergone transformation, and eight had completed removal of equipment, materials, and 14,500 employees and their families. The enterprises, which were formerly scattered over a large area, were concentrated in Anshun, Pingshun, and Guiyang.³²

Technological Renovation

Another form of assistance offered by the government has been helping to select civilian products. The government has encouraged defense enterprises to select products of an appropriate technological level in order to make the most of their technology and work force. However, in manufacturing civilian products, enterprises, particularly those involved in mechanical or electrical engineering, often need to purchase new equipment. Moreover, existing equipment is often out-of-date, so even when it can be used to manufacture civilian products, quality tends to be low and products lack competitiveness. Therefore, defense industrial enterprises need to invest large quantities of capital in purchasing new equipment.

The government, however, has been ready to help these enterprises carry out the technological renovation necessary for converting to civilian production. To do this, the government first had to make provisions for technological renovation in the national plan, and then provide capital grants or loans for the purchase of new equipment or technology.

A number of enterprises in Sichuan province have benefitted from the technological renovation policy. During the Sixth Five-Year Plan (1981-85), 785 million *yuan* was invested in the technological renovation of defense industries in the province, 1.59 times the amount invested in production-related capital investment. Of this amount, 57 percent was spent on reducing energy consumption, raising the quality of products, increasing production volume, and expanding the range of products.³³

The government has poured large amounts of investment into technological renovation. During the Seventh Five-Year Plan,

³²Ibid.

³³*Sichuan jingji nianjian 1987* (Sichuan economic yearbook 1987) (Chengdu: Sichuan-sheng shehui kexueyuan chubanshe, December 1987), 257.

loans worth 4 billion *yuan* were granted to renovate 296 items of technology and construct 450 production lines for civilian products. During the Eighth Five-Year Plan (1991-95), 6.3 billion *yuan* in loans was spent on the renovation of more than 400 technology items.³⁴

A similar kind of assistance has been provided for capital construction, particularly major items included in the national plan. For example, the government intends small cars to be one of the main product lines produced by Third Front enterprises after their conversion to civilian production. To ensure production efficiency, the Beijing authorities are making provisions in the national plan and providing capital to enable the provinces concerned to construct automobile production zones.

The provincial government has been particularly helpful in Guizhou's capital construction. In 1986, the province found sites, acquired land, and approved plans for enterprises and factories that were to be relocated from remote areas. In addition, the Guiyang city government granted privileged treatment to Third Front enterprises that moved into the city, giving them money to acquire land, exempting them from urban facilities fees, supplying employee residences in the city, and granting them various tax reductions and exemptions.³⁵

Enterprises under the Ministry of Astronautics have made full use of these privileges by deciding that Guizhou is an important center for manufacturing compact automobiles.³⁶ Beginning in May 1988, the ministry decided to invest a large amount of funds to develop Zunyi into a light automobile-manufacturing city. To do this, enterprises were moved into the area and subjected to technological renovation at the same time. By the end of 1992, 188 million *yuan* of central government funds had been spent on this project, or 83.6 percent of the total investment allocated. The entire site occupied 290,000 square meters, 170,000 square meters of which had already been completed. The project featured fifteen items of technology renovation, at a total cost of 290 million *yuan*. Purchases included steel pressing, welding, coating, and heat treatment equipment, gear boxes, and molds.³⁷

³⁴ *Zhorigguo junzhuanmin*, 15.

³⁵ *Guizhou nianjian* 1987, 337-38.

³⁶ *Ibid.*, 484; and *Guizhou nianjian* 1989, 388. Compact automobiles are those under 1,200 cc.

³⁷ *Guizhou nianjian* 1993, 347-48.

The government has also assisted military industries by helping to market their civilian products. As noted above, friction between military industrial enterprises and local governments has made it difficult for the former's products to compete on the local market, thus hindering their development and threatening their survival. The government has adopted a number of different solutions for this problem, including gradually devolving authority over some military industrial enterprises to local governments. For example, control over military electronics enterprises has been entirely devolved to the local level.³⁸

Conversion and the Central-Local Relationship

The comprehensive reforms of the defense industry system described above have had a positive impact on central-local relations, particularly after the Beijing government began systematically directing defense conversion in the mid-1980s.

The Central-Local Relationship During Initial Conversion

During the initial period of defense conversion prior to the mid-1980s, more tensions were created between defense industrial enterprises and localities. At that time, Beijing did not have any specific program in place for implementing conversion. As a result, defense industrial enterprises, which had been no more than extensions of the central bureaucracy for more than thirty years and had no expertise in converting to civilian production, were forced to do anything they could to survive. PRC sources contain vivid descriptions of the plight of these enterprises; as one writer described, "At that time, it was basically a case of doing anything one could. Some nuclear arms factories produced soft drinks, air fields produced chicken coops, mirrors, dressing tables, etc."³⁹ Examples such as this underline the fact that the choice of civilian products for almost all defense industrial enterprises entirely depended on short-term market demand.

This kind of short-term behavior was a source of the tension with local governments. Prior to recent reform, the "dual economy"

³⁸The China Zhenhua Electronics Industrial Corporation is an example of devolution.

³⁹Sun Zhenhuan, *Zhongguo guofang jingji jianshe* (The development of China's defense economy) (Beijing: Junshi kexue chubanshe, 1991), 28.

system did not allow defense industrial enterprises to get involved in local markets, but once they were permitted to do so, they soon disrupted the established market balance, producing redundant civilian products that had long been the preserve of local small state enterprises. In general, the localities felt threatened by defense conversion.⁴⁰

Localities were particularly angered by the defense industrial enterprises' flouting of Beijing's decree to produce civilian products on a similar technological level to their defense products. In order to survive, defense industrial enterprises opted for low-tech products that could easily be produced by the civilian sector. This inevitably created tensions between localities and the defense industry.

The Impact of Decentralization

Beijing's reforms since the mid-1980s have helped to ease these tensions, as these reforms have involved the devolution of administrative power over defense industrial enterprises to the localities where the enterprises are located. The provinces have thus been encouraged to assist in the marketing of civilian products manufactured by defense industrial enterprises. Furthermore, Beijing has requested that civilian products manufactured by defense industrial enterprises should be incorporated into the local economic plan. A 1990 pronouncement concerning the relationship among local governments, defense industrial enterprises, and the economic plan stated: "The policy of military-civilian integration . . . is not simply the concern of the departments of science, technology, and industry for national defense; it is the joint responsibility of all departments and all localities."⁴¹

Under the influence of this pronouncement, Guizhou province issued a supporting decision entitled the "Decision on the Gradual Strengthening of Military-Civilian Integration Work." It contained the following proposals: (1) science, technology, and industry for national defense should be integrated with the local economy; (2) local government departments should actively support and accurately guide military industrial enterprises in carrying out structural adjustments, helping them choose good production projects and drawing

⁴⁰For a case of electronic products, see Dai Zhenlong et al., *Chongqing junzhuanmin yu diao jingji fazhan* (Defense industry conversion in Chongqing and regional economic development) (Chongqing: Chongqing chubanshe, October 1995), 18.

⁴¹*Zhongguo junzhuanmin*, 5.

up plans for developing civilian products; and (3) the local government should enhance its supervision and coordination of civilian product manufacturing by military industrial enterprises, and important civilian products should be included in the national, ministerial, and provincial plans.⁴²

This kind of arrangement has been very important for enterprises just beginning to convert to civilian production. It has been especially difficult for enterprises to win a share of the market when they are producing technologically advanced and distinct products. Since they do not produce on an economic scale and their costs are high, they must rely on administrative assistance to find markets for their products if they are to survive.

The central government has attached great importance to co-operation between defense industrial enterprises and local authorities, particularly in converting to civilian production. As one Chinese source put it:

We know from experience that when local leaders pay attention to an enterprise and include its civilian products in the local economic development plan, when military industrial departments actively rely on the localities, and when important problems can be promptly discussed with the local government, military-civilian integration is more successful. At present, enthusiasm for the development of civilian products by military industrial enterprises is low in some localities; this is a structural problem and a problem of economic interests.⁴³

Inclusion of defense industrial enterprises in local planning systems solves both of these problems at one stroke.

Integrated Development

A second point that should be noted about reforms since the mid-1980s is the use of the national economic development plan. Beijing incorporated civilian products produced by defense industrial enterprises into its plan in order to make full use of these enterprises' human and technological resources as well as separate their products from the products of local civilian enterprises. This has both eased the tensions which had arisen during conversion before the mid-1980s and helped develop the local economy. It has also helped defense enterprises to at least maintain their existing technological levels.

⁴²Guizhou nianjian 1992, 335.

⁴³Zhongguo junzhuanmin, 21.

The above-mentioned example of Guizhou province becoming a manufacturing base for automobiles smaller than 1,200 cc is an instance of this policy. The then-Ministry of Astronautics encouraged the conversion by concentrating its subordinate units in Zunyi and organizing them to manufacture auto components. It was estimated that the number of small sedans produced by these automobile plants was zero in 1991, five in 1992, and 520 in 1993; the corresponding figures for minibuses were zero, 1,659, and 1,999.⁴⁴ These products were all sold through the local government's marketing system.

In line with the above idea, Beijing has also assigned some important national construction projects to defense industrial enterprises, particularly those demanding high technologies. This policy is actually equivalent to the import substitution policy, which prohibits imports of major construction items and instead contracts them to domestic enterprises. In this fashion, two goals can be achieved: defense industrial enterprises will survive and these enterprises' technological capabilities will be upgraded. A typical instance is the granting of the contract for the Qinshan nuclear power plant to the relevant nuclear corporation.

Enterprise Conglomerates

The third point about the reforms is that they have included the formation of enterprise conglomerates. Despite the introduction of the manager/director responsibility system, in each enterprise conglomerate, superior units, particularly the head offices of the Beijing and provincial capital conglomerates, still wield great influence over resource distribution. The superior units map out labor regulations, set up annual production targets and consequent profit remittance targets, appoint high-level personnel and draft personnel policy, make final decisions on developing civilian products, and approve bank loans for technological transformation,⁴⁵ while the subordinate units seek contracts from the superior units.

The powers wielded by the superior units of enterprise conglomerates have demonstrated that the old *kuaikuai* system remains

⁴⁴ *Guizhou nianjian* 1992, 334; *Guizhou nianjian* 1993, 346; and *Guizhou nianjian* 1994, 341. In addition to the Guizhou car industry, which has the brand name "Hang-tian," the NORINCO system also produces small automobiles in Chongqing, Sichuan province, with the brand name "Auto," the first generation of Japan's Daihatsu.

⁴⁵ Interview with officials of defense industrial factories which are undertaking conversion.

influential, despite the devolution of administrative powers to the provincial level. The head offices in Beijing and the provincial capitals decide which civilian products should be produced, while local governments and local enterprises passively accept the decision. To some extent, the *kuaikuai* system has been transformed into enterprise conglomerates and actually gained momentum, although it is not as rigid as before. This has serious implications for central-local relations, as enterprise conglomerates can integrate local economies into the national economy. The core enterprises contract out the manufacture of civilian product components to local enterprises, and if necessary, provide technical assistance or even a certain share of the capital required. This kind of cooperation prevents central-local relations from worsening.

The astronautics system in Guizhou has also had a similar effect of central-local economic integration. In producing compact automobiles, the core company of the Guizhou Astronautics Industrial Conglomerate provides its local satellite plants with technology, equipment, and management expertise in producing more than 170 different automobile parts, including windcreens and ignition coils. Moreover, the company has undertaken joint investments worth 110 million *yuan* with local governments, including township enterprises in the automobile production zones, thus expanding the production of automobile parts and other related products.⁴⁶ Trends such as these are conducive to central-local integration.

The China Northern Industries Company (NORINCO) system in Chongqing city has had a similar program. The ordnance industry in Chongqing suffered at the beginning of economic reform, as unemployment was high and production capacity was underused. On the other hand, the city was under heavy pressure to develop its economy. The interests of the two sides converged, and when NORINCO decided to produce automobiles for its subordinate unit (Chang'an Industrial Company), the city government, perceiving that the automobile industry had widespread linkages and would be able to upgrade the technical level of local small state enterprises, took the initiative in coordinating with the ordnance system to develop the automobile industry, offering preferential treatment to the Chang'an Industrial Company. The city was also enthusiastic about introducing

⁴⁶Guizhou nianjian 1994, 341.

foreign investment to the automobile industry.⁴⁷

Conclusion

Economic reform since 1978 has exerted pressure on both the defense industry system and the localities. The defense industry has been faced with the task of converting excess production capacity to manufacture civilian products, while localities, particularly those in the Third Front region, have suffered from the development gap between the hinterland and the coastal areas as well as chronic problems encountered by regular state enterprises. Their interests converged when the *kuaikuai*-oriented defense industry system proceeded with a systematic program of state-guided conversion to civilian production, and civilian enterprises in the Third Front region cooperated with the relevant defense industrial units.

This kind of cooperation has had the unexpected effects of integrating local economies with the national economy and helping solve the chronic problem of central-local relations that has long been a serious concern for the central leaders. Although it may be a slight exaggeration, local economies in the Third Front region have depended heavily on the *kuaikuai* system to drag them out of poverty.

However, this political economy-based integration theory still contains inconsistencies and requires further observation. The first problem is that when enterprise conglomerates were initially formed, the localities, worrying that the center would use the conglomerates to keep local enterprises in line with the national economy and as a consequence boost its own power, were unenthusiastic about the move.⁴⁸

The second problem involves differences between defense industrial units and local enterprises in technical management capabilities. The local governments were forced to accept decisions made at the Beijing or provincial capital head offices without any input by local enterprises' technical and management personnel. This could have

⁴⁷Mr. Dai Zhenlong, deputy director of the Economic Commission of the Chongqing city government, made relevant statements at a conference on China's New Business Opportunity in Chongqing, co-sponsored by the United Nations Development Program and the China Association for the Peaceful Use of Military Industrial Technology, Chongqing, October 31-November 2, 1995.

⁴⁸Folta, *From Swords to Plowshares?* 64.

allowed core defense industrial enterprises to contract production orders to fellow enterprises within the same system, regardless of whether these enterprises were located in other provinces or not, and thus hinder integration.⁴⁹

The third problem is connected with competition between local governments and the defense industry system. In order to boost economic development, local governments, taking advantage of their newly-devolved power, have placed pressure on defense industrial enterprises, demanding that they purchase components from local enterprises. However, these enterprises' superior units have ordered them to place production orders with enterprises within their own system. This kind of competition is another version of struggle between the *kuaikuai* and the *tiaotiao* which is not favorable to integration.⁵⁰

The fourth problem is a shortage of funds for core enterprises. Conversion is a difficult task, and it requires many resources, including sufficient funds. In order to make management more conscious of this, Beijing has requested enterprises to seek loans from state banks after a conversion project is approved instead of appropriating funds without restriction.⁵¹ This new policy has substantially increased the financial burden on converted core enterprises, as shortages of funds have inevitably affected their ability to provide assistance to local enterprises, thus hindering integration.

⁴⁹Berthelemy and Deger, "Conversion of Military Industries," 28-29.

⁵⁰Dai, "The Local Government's Role in Conversion," 120.

⁵¹Beijing has instructed that if a conversion project is within the national plan and approved, the state banks will provide a loan of 40 percent of the total needed amount, local governments will provide 30 percent, and the converted enterprises will raise the remaining 30 percent themselves. Few converted enterprises can afford such a high loan percentage, because Beijing does not regard defense industrial products as commercial products, and defense industrial products are priced very low.