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# China's Automotive Modernization

The Party-State and Multinational Corporations

Gregory T. Chin



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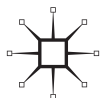
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# China's Automotive Modernization

**The Party-State and Multinational  
Corporations**

Gregory T. Chin  
*York University, Toronto*

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# Contents

|                                                                |     |
|----------------------------------------------------------------|-----|
| <i>Preface and Acknowledgements</i>                            | vi  |
| <i>List of Abbreviations</i>                                   | x   |
| 1 Introduction                                                 | 1   |
| 2 The Chinese State: International and Comparative Perspective | 22  |
| <b>Part I Modernization, Lower Phase</b>                       |     |
| 3 Weak Foreign Automakers, State Coordination Failure          | 51  |
| 4 Shanghai VW: Origins of the Modern Supply Network            | 77  |
| <b>Part II Modernization, Higher Phase</b>                     |     |
| 5 The Automotive Industrial Policy                             | 105 |
| 6 Institutional Inheritances and Policy Effectiveness          | 127 |
| 7 Negotiating Shanghai GM                                      | 155 |
| <b>Part III Implications</b>                                   |     |
| 8 Homegrown Brands and Models                                  | 183 |
| 9 Vulnerabilities: View from the Inside                        | 204 |
| 10 Conclusion                                                  | 224 |
| <i>Notes</i>                                                   | 239 |
| <i>Selected Bibliography</i>                                   | 280 |
| <i>Index</i>                                                   | 291 |

# Preface and Acknowledgements

China's automotive industry has changed profoundly in the 11 years since I started the research for this book. This study focuses on how industrial modernization in the country's leading automotive production centers, Shanghai, Beijing, Guangzhou, Changchun, Hubei province, and Tianjin has generated lasting changes of national and global impact.

The book is foremost a study of the decisions that high-level Chinese officials took in figuring out how best to modernize an outdated passenger car industry. The emphasis is on state policy and the power relations involving industrial planners in Beijing and key Chinese auto enterprises, on the one side, and the major foreign automotive firms, on the other. This accounts for the subtitle, *The Party-State and Multinational Corporations*, in this study of *China's Automotive Modernization*. The changes in the Chinese automotive industry are used as the context to analyze China's industrial redevelopment and integration into the global economy.

This study is somewhat unorthodox in the discipline of political science. It is as much a detailing of the political history of China's automotive industrial development in the post-Mao period as a work of political economy. The book offers a reinterpretation of the role of the state and Chinese Communist Party in the country's automotive modernization over the past three decades, that questions the predominant view that the interventions of the Chinese state have offered little developmental benefit, and or worse, have mainly hindered what would otherwise have been a more natural market-led path to automotive development. This book challenges such a perspective with the argument that the transformation that we have seen in the Chinese auto industry would not have happened without strong state support, to induce foreign automakers to invest in the country in a manner that helped build international competitiveness.

The book is intended as a small contribution linking international political economy (IPE) and Chinese politics. Drawing from IPE, the study examines the "really big question" of the role of the state in global economic change. Influenced by China studies and comparative analysis, the research has rooted the broader systemic analysis in a rigorous examination of a particular national context. The case of the People's Republic is intriguing for how it exhibits some patterns of convergence, and yet

China stands outside many of the more generalizable international trends associated with so-called “globalization” over the past three decades. Most important is the sense that China’s decisions and actions have systemic relevancy and global impact.

I now better understand what scholars mean when they thank their spouse and children for forgiving them for all of their absences, and hope that their children will one day appreciate their work. I thank my children, Danielle and Miles, and our dog Sable, for allowing me the luxury of writing this book. My deepest gratitude is to my wife Lisa for her support throughout this project, in more ways than I could ever explain. This book would not have been possible without her patient love and courage.

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former State Economic and Trade Commission, the Ministry of Finance, the Ministry of Commerce, and key Party policy research units.

Bruce Jutzi, John Morrison, David Murphy, Andrew Smith, and Ambassador Joseph Caron gave their support during my time in the Department of Foreign Affairs and International Trade, and in the Canadian Embassy in Beijing. I am especially grateful to David Spring and Kent Smith during my tenure in the Canadian International Development Agency. They were the epitome of benevolent leadership, and afforded me the opportunity to work closely, on the ground, with senior Chinese decision-makers and government managers, and CCP representatives of all ranks, across China. My special thanks go to Dr Hau Sing Tse, Executive Vice President of CIDA, who strongly supported the completion of my doctoral thesis, and encouraged me to pursue what I enjoy most for a living. Ercel Baker, Yvonne Chin, Brandon and Su Yun Geithner, Douglas and Sarah Heath, Rouben Khatchadourian, Martin Moen, Pierre Pyun, and Andrew Smith shared their commercial expertise.

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A special thanks to the editorial team at Palgrave Macmillan, for guiding the book to publication with utmost kindness. My gratitude to Timothy Shaw, the series editor, for his support, and that of chief editor Alexandra Webster, Renee Takken and Philip Tye.

Finally, I thank Robert Cox and Mitchell Bernard. I am deeply grateful for Bob's mentorship, intellectual generosity, and enduring friendship, over the years. Mitchell always gave his time and energy, no matter how many demands he was facing. Their influence transcends the temporal and the transitory. Lastly, and certainly not the least, I express my special gratitude to B. Michael Frolic. Bernie's support has been indispensable since the beginning. He read the entire manuscript. I am grateful for

our intellectual and personal bond. Any errors in this book are my responsibility alone.

This book is dedicated to my father, Raymond F. Chin. As a young man, he, like his father, made the long journey to Canada, in order to provide a better life for future generations. For this, I am eternally grateful.

GREGORY T. CHIN  
TORONTO

# List of Abbreviations

|        |                                                      |
|--------|------------------------------------------------------|
| AIP    | Automotive Industrial Policy                         |
| AMC    | American Motors Corporation                          |
| ASEAN  | Association of Southeast Asian Nations               |
| ASIMCO | Asia Strategic Investment Corporation                |
| BAW    | Beijing Automotive Works                             |
| BMW    | Bayerische Motoren Werke                             |
| CAMA   | China Automotive Manufacturers' Association          |
| CATARC | China Automotive Technology and Research Center      |
| CEO    | chief executive officer                              |
| CITIC  | China International Trust and Investment Corporation |
| CKDs   | complete knockdown kits                              |
| CCP    | Chinese Communist Party                              |
| CNAIC  | China National Automobile Industry Corporation       |
| CFELSG | Central Financial and Economic Leading Small Group   |
| COD    | Central Organization Department                      |
| GDP    | gross domestic product                               |
| GM     | General Motors                                       |
| GNP    | gross national product                               |
| FAW    | First Automotive Works                               |
| FAW-VW | First Automotive Works-Volkswagen                    |
| FDI    | foreign direct investment                            |
| FOREX  | foreign exchange                                     |
| FYP    | five-year plan                                       |
| JVs    | joint ventures                                       |
| LG     | leading group                                        |
| MIT    | Massachusetts Institute of Technology                |
| MITI   | Ministry of International Trade and Industry         |
| MNCs   | multinational corporations                           |
| MOFCOM | Ministry of Commerce                                 |
| MOFERT | Ministry of Foreign Economic Relations and Trade     |
| MOFTEC | Ministry of Foreign Trade and Economic Cooperation   |
| MOST   | Ministry of Science and Technology                   |
| MOU    | memorandum of understanding                          |
| NDRC   | National Development and Reform Commission           |
| NPC    | National People's Congress                           |
| OEM    | original equipment manufacturing                     |

|       |                                                        |
|-------|--------------------------------------------------------|
| PATAC | Pan Asia Technical Assistance Center                   |
| PSA   | Peugeot SA                                             |
| QSP   | quality, service, price                                |
| R&D   | research and development                               |
| SAIC  | Shanghai Automotive Industrial Corporation             |
| SASAC | State Assets Supervision and Administration Commission |
| SAW   | Second Automotive Works                                |
| SEZ   | special economic zone                                  |
| SOE   | state-owned enterprise                                 |
| SPC   | State Planning Commission                              |
| SVW   | Shanghai Volkswagen                                    |
| TNCs  | transnational corporations                             |
| TRIMs | Trade-Related Investment Measures                      |
| TRIPs | Trade-Related Intellectual Property Rights             |
| UNIDO | United Nations Industrial Development Organization     |
| VW    | Volkswagen                                             |
| WTO   | World Trade Organization                               |

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# 1

## Introduction

In February 2009, China surpassed a slumping United States to become the largest automotive market and producer in the world. This is the latest sign that China has joined the world's great powers after three decades of unparalleled economic growth. China's ascent has depended on growth and exports in a range of industries, from electronics to footwear and apparel; however, its continued rise is tied to strategic industries such as automobiles, steel, petrochemicals, telecommunications, and energy. The auto industry has grown rapidly in China over the past three decades, undergoing a thorough industrial transformation.

Since its inception in the early 1900s, the auto industry has been dominated by the Big Three US firms (General Motors, Ford, and Chrysler), and more recently by Japanese and European automakers. In China, it was designated a pillar industry in the mid 1980s, and then an engine of growth for the entire national economy in the early 1990s. China's auto industry experienced a decade-long boom starting in the mid 1990s as waves of foreign investment poured into the sector. By 2003–4, two Chinese automotive companies had joined *Fortune* magazine's list of the world's 500 largest companies (China First Automotive Works and Shanghai Automotive Industrial Corporation). In 2003, Chery Automotive Company, one of the smaller independents, started exporting passenger cars, a first in China's automotive history. Chery has made export growth a central priority for future development.

China's booming auto industry surprised many when it surpassed Japan as the second largest auto producer in the world in 2006.<sup>1</sup> Its continued rise to the world's number one ranking has generated broader attention. The fact that it has coincided with the US auto

industry entering into its worst crisis ever has generated concern in certain national capitals. However, the groundwork for the tectonic shifts was actually laid in the 1980s, and key developments that took place from the early to mid 1990s – long before the concern over China's global rise.

This book addresses two themes in political economy – the role of the state in industrial development and multinational corporations (MNCs) in developing countries – in the context of the world's fastest rising economic power. It examines the Chinese state's leadership role in pushing foreign automakers to transfer large amounts of investment capital and advanced automotive technology to China. The international transfers have been crucial for remaking a once backward auto industry into one that has modern large-scale assembly capacity, comprehensive local supply networks, current car models, and more recently, a new generation of Chinese car brands and models. The focus here is on how the Chinese Party-state has affected developmental outcomes in this strategic industry, especially how Chinese officials intervened with the 1994 Automotive Industrial Policy to force sophisticated and complete transfers of car technology, and to push the national industry from a preliminary phase of auto modernization in the 1980s to a more advanced stage of modernization in the 1990s. The automobile sector is an optimal sector for examining the two aforementioned themes given that the Chinese state has relied heavily on external sources for investment capital, technology, managerial expertise and technical know-how, and related services, to remake the sector into one that is internationally competitive.<sup>2</sup> The intent here is to understand how contingent (world and domestic) market factors and conscious state mediation were brought together to achieve industrial modernization objectives in China's automotive sector. Chinese Communist Party, government, and corporate representatives made the most of changing international market conditions and China's own growing market potential to draw in more sophisticated and higher value-added segments of the automotive supply chain to China. However, despite China's success in acquiring modern manufacturing capacity, the path taken has also resulted in an auto industry that is characterized by enduring vulnerabilities.

This book responds to two questions: first, do states, and the Chinese state in particular, have the capacity to carry out industrial policy, especially to leverage effectively foreign investment from MNCs for national developmental purposes; second, does the resulting industrial policy change the behavior of MNCs. For question one, we analyze

two competing hypotheses: one is the fragmented authoritarianism and decentralized weak state model; the other is China as a unified and strong state. In Part II of the book, we will show that in China's auto development, especially from the early 1990s onwards, there was much more centralized leadership and coordination than acknowledged in the weak state model. This observation challenges the prevailing wisdom in China studies, which has given a lot of attention to the view of a fragmented, decentralized, and weakened Chinese state. Question one is a question of Chinese political studies. Question two comes from ongoing debates in international and comparative political economy, and here we apply it to the China country case. The tendency of both the proponents and critics of MNCs has been to present the multinationals as somehow beyond state regulatory controls.

This study builds on an established literature on how differing national institutional arrangements mediate challenges of international economic integration through institutional structures and norms, patterns of industrial policy and policy networks.<sup>3</sup> It draws conceptual inspiration from a more recent and select literature in international-comparative political economy that has rethought the link between global-local politics in relations between states and MNCs.<sup>4</sup> Doremus, Keller, Pauly, and Reich have developed an analytical framework for examining how system-level arrangements of power are combined with political forces at the domestic level to exert influence on multinational businesses. They examine how states, understood as institutional structures and polities, can influence and even determine the basic institutional structure of MNCs. Whereas Doremus et al. analyze how domestic political structures in the original home states of MNCs leave a long-term effect on the core structures and strategies of multinational firms, we will examine how the "belief-systems" of modern international corporations have been partially reshaped by the influence of the domestic ideational and normative structures, the collective understandings of strong host states, such as China. We will see how leading MNCs partially internalize the national institutional norms of the powerful new host nations to which they have relocated. This approach gives attention to how the strategies and structures of corporations can and do change as they operate internationally. The goal of this study is to integrate conceptual reconsideration and original research on China's automotive modernization and industrial policy, and to offer a more balanced assessment of the role of the Chinese state, and internal and external factors in China's industrial modernization.



## **Automotive modernization: distinct phases and critical junctures**

We can begin by establishing whether China's auto industry has, in fact, undergone "modernization". What are the main indicators? In 1985, when the first model joint ventures opened in China, the country produced only a total of 5200 passenger cars.<sup>5</sup> By 1993, the total had increased to 220,000 cars, and by 2004, had jumped to 2.3 million units produced.<sup>6</sup> Sales of passenger vehicles increased nearly fivefold between 1998 and 2004, from 484,000 cars to 2.3 million. The main purchasers of automobiles have shifted from government and enterprise purchases to private consumers. From 1978 to 2002, China saw major increases in output, shifts in product structure from truck production toward car production, expansion in the range of products, improvements in product quality, enhanced product development skills, progress in human resource development, increased industry consolidation, and more recently, growing potential for exports of parts and entire vehicles, and Chinese outward investment in overseas auto markets.<sup>7</sup>

The role of MNCs and FDI in China's automotive modernization has been especially striking. Between 1994 and 2003, foreign firms invested approximately US\$12 billion in China, and by early 2005, the total had surged to US\$20 billion. FDI contributed significantly to economic gains in China's automobile industry in several other ways. First, investment from the foreign partners in joint venture automotive firms facilitated new job creation, especially desirable and stable jobs for a large new segment of Chinese workers in the joint ventures.<sup>8</sup> Second, foreign investment in the auto industry benefited the wider Chinese economy as Sino-foreign joint ventures generated strong demand inside China for raw materials, related inputs, and automotive parts and components. By the mid 1990s, 5–6 percent of steel production, 80–90 percent of petroleum products, 14–16 percent of machine-tool production, 50 percent of tempered glass production, 45 percent of tire production, 15 percent of engineered-plastics production, and 15 percent of paint production were the result of demand from the Chinese auto industry.<sup>9</sup>

According to a report (2001) published by the China Automotive Technology and Research Center (CATARC), a top Chinese automotive research center: "Before the reform and opening up to the outside world, the Chinese auto industry was 30 to 40 years behind that of the developed countries, whereas nowadays the level as a whole is

10 to 15 years ... behind that of the advanced countries.”<sup>10</sup> Despite the significant developmental gains that have been made, China’s leading auto assemblers remain, small in comparison to global leaders, lagging behind global leaders in terms of R&D expenditure, and in marketing and in brand development.<sup>11</sup>

In addressing the gains that have been made over the past three decades, qualitative indicators of automotive modernization can be drawn from groundbreaking research on the auto parts producers in China and India, and their integration into global auto supply chains. In a detailed study for the World Bank, the economist John Sutton provides data on China’s auto parts industry that shows that by 2000–1 the manufacturing capacities of Chinese domestic suppliers in the lower to middle value-added segments of the parts and components chain have been brought up to international standards in terms of quality and productivity.<sup>12</sup> Sutton’s case study research has focused on car seats and mufflers. He finds that, for China and India specifically, international transfers of technology, managerial, and other forms of know-how – stimulated by domestic content requirements – have led to a “successful outcome” in these segments, meaning that an “infant [supply] industry” has been “successfully nurtured”.<sup>13</sup> The modernization of China’s auto industry is correlated with, and arguably caused by, the integration of the domestic industry into global supply chains – the internationalization of China’s auto industry.

Another dimension in the shift to a higher level of automotive modernization from the mid 1990s onwards relates to the issue of international standards. A key element of auto modernization is that manufacturing capacities have been raised to a level that is either comparable or much closer to international standards. By 2002, over 1000 Chinese auto enterprises had received ISO 9000 certification, the international standard for quality management, and another 100 had received QS 9000 certification, by then the world’s most demanding automotive quality standard system.<sup>14</sup> The 1990s also saw China making significant progress in establishing its own modern product quality certification systems, such as the China National Accreditation Council for Registrars, China National Accreditation Committee for Product Certification Bodies, China Registration Board for Auditors, and China National Accreditation Committee for Laboratories.<sup>15</sup> By the end of 1999, the Chinese auto industry had developed 56 mandatory standards, marking progress on standardizing vehicle performance

and safety. Engine emission of all domestic-made cars could meet the Euro-I standard, and some newer vehicles could even meet Euro-II and Euro-III standards.<sup>16</sup>

Gallagher suggests that "without the technology transfer from foreign firms, it is virtually impossible that the Chinese firms would have been able to achieve" the gains they made.<sup>17</sup> She writes: technology transfer from foreign companies enabled a complete transformation of China's automobile industry during the 1980s and 1990s. Thun is more circumspect, viewing the contributions of the foreign partners as confined mainly to the assembly plant rather than the development of the entire supply network.<sup>18</sup> Nonetheless, he concedes that some of the foreign partners did transfer technology to the joint venture and taught their Chinese counterparts how to run a modern assembly plant. He acknowledges that foreign investment has been central to auto sector development, and that differences in the "identity, role and strength of the foreign partner" may have some impact on the variation in outcomes of automotive development in the different Chinese regions that he examines.<sup>19</sup>

Chinese researchers have highlighted that the most significant gains in local parts production capacity were from the mid 1990s onwards, which allowed China to make the leap to modern manufacturing of complete cars by the late 1990s.<sup>20</sup> Despite importing close to 200 sets of technology during the 1980s, the Chinese auto industry had not achieved economies of scale in auto production by the early 1990s (except around Shanghai VW), and had only mastered production techniques common to the first stage of indigenizing imported auto technology.<sup>21</sup> This car technology was 10–15 years behind in the product cycle. The domestic industry was still dependent on joint production with foreign automakers for passenger cars, even though the domestic industry had achieved independent manufacturing capacity for trucks, buses, and motorcycles. By the early 1990s, China was still far from having the capability to develop key parts such as the gearbox, engine, and vehicle body, let alone manufacture and design new models of vehicles to a reasonably high standard.

While the domestic auto industry could manufacture and renovate the parts and technology for a range of vehicle types by the early 1990s, including trucks, buses and motorcycles, Chinese producers had not acquired the capacity to build complete cars.<sup>22</sup> This only came in the 1990s, with the relocation of key parts and component producers to China around the mid 1990s. Through the joint ventures and wholly foreign owned enterprises that large foreign parts makers established

in China, the more value-added segments of the auto production chain were extended to the country. By the end of the 1990s, more than 300 Chinese automotive enterprises had undergone technological renovation using foreign investment, and the domestic industry had introduced over 300 “foreign techniques”. Among them were 26 for whole automobiles, 25 for generators, gearboxes, and the integration of main parts, 153 for parts, and 79 for process and R&D.<sup>23</sup> These initiatives explain how a number of Chinese parts and component suppliers, especially in the higher value-added segments, significantly improved their capacities from the mid 1990s onwards. Although the cars produced inside China were still about 5–10 years behind the leading foreign models by the late 1990s, the country had built up significant modern parts-making capacity, reengineered its production systems, and acquired sophisticated assembly capabilities for complete cars. Between 1992 and 1998, the domestic industry saw major increases in unit output levels, and the 2.348 million units produced in 1998 meant that the country could meet the rising domestic demand for cars through domestic supply.<sup>24</sup> By the early 2000s, Chinese parts producers in the lower to middle value-added segments of the parts chain had achieved international market competitiveness. These changes embodied the qualitative shift that China made in automotive modernization, from a lower phase of modernization in the 1980s to a higher phase in the 1990s.

The understanding of automotive modernization in China that guides this book is international and comparative. It distinguishes between differing phases of modernization, and highlights the role of state mediation in bringing about qualitative and quantitative shifts in a two-decade process of auto modernization, that started in the mid 1980s onwards, and transitioned to a more advanced stage from the mid 1990s onwards. It examines the “critical juncture” of the early to mid 1990s, and describes the catalytic role of state intervention in shaping the path of auto development in China.<sup>25</sup> In using the term “modernization”, the author is aware that it has been heavily contested in development studies, comparative politics, and international and comparative political economy. “Modernization” here is intended to be descriptive, and not meant to convey preference or support for all aspects of China’s reindustrialization, or all aspects of China’s complex modernity. There have been downsides to China’s pursuit of automotive modernization, foremost being the environmental repercussions of not seeking a transportation strategy that is more balanced between public and private means of

transportation, and a lack of emphasis on environmentally friendly technology.<sup>26</sup>

### **The argument in brief**

Endogenous factors cast a long shadow over the study of China's automotive development. Eric Thun shows that local institutions, state actors, and firms played crucial roles in sustaining China's auto modernization drive.<sup>27</sup> What is not adequately examined are the key roles that central state authorities and foreign automakers have played, in coordination with local factors, in the modernization process, and especially in initiating transformational processes.

The central argument of this book is that the Chinese state has effectively mediated relations between the world's leading automakers and domestic automotive groups to push foreign automakers to transfer large amounts of investment capital, and advanced technologies, to China. The Chinese Party-state has intervened to influence the content and direct the flows of foreign investment into this strategic industry, resulting in the transformation of a once backward auto industry into one that has modern large-scale assembly and supply capacity, current car models, and more recently, a new generation of homegrown Chinese models. Chinese government officials intervened with the 1994 Automotive Industrial Policy (hereafter the '94 AIP), to ensure effective execution of the AIP and the related measures in the Ninth Five-Year Plan (1996–2000). In essence they forced increasingly complete transfers of auto production technology and know-how to China. In exchange for the transfers, Chinese officials provided assurances that the state would build the necessary infrastructure to facilitate the growth of a passenger car market, and meet the operational needs of a high quality modern supply network, functioning according to just-in-time and lean production methods.

Chinese government and corporate representatives made the most of fortuitous world and domestic market conditions in the early to mid 1990s to extract optimal transfers of capital, modern technology and technical know-how from the most capable MNCs and their affiliated parts producers. The Chinese state played an indispensable role in pushing the country to a higher phase of automotive modernization, using a package of policy and regulatory controls on foreign investment to draw the leading foreign assemblers and their key components suppliers into the country. From the mid to late 1990s, foreign

automakers extended the more sophisticated and higher value-added segments of the auto production chain to China. These developments resulted in the transfer of complete car manufacturing capability, and provided for the eventual birth of a new generation of Chinese passenger cars from 2002 onwards.

The '94 AIP was a watershed policy. It is important to clarify that the causal importance of the AIP was not its effect on the total volume of FDI flows into China auto sector per se. The counterfactual argument could be that the fast-growing Chinese market induced the MNCs to go into China, and gave the Chinese state more leverage – rather than any specific policy instruments or adjustments, or any unique features of the state. Skeptics of state intervention could argue that, rather than state stimulus, the massive inflows of FDI into China's auto sector in the mid and late 1990s were merely the result of the attraction of a sizeable Chinese domestic car market by the late 1990s. Or that the MNCs brought their latest models to China in the late 1990s and early 2000s only because the market was becoming very competitive and it was no longer possible to compete without bringing more modern car models. The counterfactual argument would be that it was mainly market competition that drove MNC behavior not state policy.

While not denying that growing market competition was part of the story, it was only part of the explanation. The significance of the '94 AIP to China's auto development lay not in the increased amounts of FDI that poured into China after 1994 per se, but more precisely in its role as a policy tool for Chinese representatives to force more *complete transfers* of automotive manufacturing capability to China in the 1990s in the final push to large-scale, modernized production.<sup>28</sup> The more limited capital transfers and technology of the 1980s only provided a preliminary foundation for a modern auto supply network in China, and mainly in the Shanghai area. The initial gains were the result of the combined efforts of the Shanghai Automotive Industrial Corporation (SAIC) and Volkswagen, and Shanghai parts suppliers to build a local supply network to feed Shanghai VW with locally sourced parts; to reach the 40 percent local content requirements demanded by Chinese authorities. The Shanghai GM negotiations initiated the transition to a higher stage of auto modernization. The landmark Shanghai GM deal resulted in the introduction of an entirely new range of modern car and truck models, and the accompanying technology and assembly processes. These negotiations also induced most of the world's leading auto parts and components

producers to relocate to China, starting in the early and mid 1990s. Both Delphi and Visteon, the main parts suppliers to GM and Ford, established a substantial manufacturing presence inside China in this period. Other parts and component makers came in anticipation of the finalization of the Shanghai JV deal.

Interviews with key participant-observers on the Chinese side and former senior GM representatives indicate that the higher value-added transfers would likely not have happened without the '94 AIP, and the personal interventions of state officials, such as Zeng Peiyan, to push for more robust transfers. Zeng, Vice Chair of the State Planning Commission, was especially important at the central level, and Lu Jian, CEO of the SAIC and Director of the Automotive Localization Office under the Shanghai mayor, played a crucial role at the Shanghai level. In the hands of these professionally competent and politically effective Chinese representatives, the '94 AIP became a strategic lever to pressure MNCs for more comprehensive investment transfers in the service of the country's auto modernization drive.

The effectiveness of state mediation in executing the '94 AIP, and especially the foreign investment strategy, was preceded by important shifts in the Chinese governance structure in the early 1990s, especially the recentralization of decision making and regulatory authority over industrial planning and policy related to the strategic industries. This recentralization of state power enabled the Chinese state to be more effective in its execution of industrial policy in the 1990s, specifically in wresting concessions from MNCs. This recentralization of centralized state leadership and coordination was aided in the China context by the particular nature of the Chinese Party-state. Selective Leninist means – institutional norms and organizational structure – were reasserted from the early 1990s onwards to provide greater coherence for the modernization drive. Norms of “unified and centralized Party leadership”, “democratic centralism”, and the “correct line”, were combined with the CCP's senior cadre management system to ensure disciplined formulation and coherent implementation of the auto industrial policy. This extended to the coordination of domestic resources and contributions to match the transfers of capital, technology, and technical capability from foreign investors.

Although China has made dramatic gains in automotive modernization, the particular path taken has resulted in a national auto industry that is both modern *and* vulnerable. The domestic industry is characterized by modern manufacturing capabilities, but enduring vulnerabilities, in that national automakers continue to lack product innovation and

design skills, systems integration capabilities, and global brand power. China's entry into the WTO has spurred further growth in the auto sector. At the same time, the requirements of accession could exacerbate existing weaknesses. Chinese authorities, and the auto companies themselves, are now focused on devising measures to strengthen the indigenous capabilities of Chinese automakers, and to transition once again to an even higher stage of automotive modernization. This time beyond the catch-up mode.

## **Multinationals and the state in developing countries**

Is it actually possible to lever MNCs for national developmental objectives, and if so, how to do so? This book builds on a literature which has examined how, and under what certain conditions, states in developing countries might successfully regulate MNCs and channel foreign investment to support national development objectives.<sup>29</sup> This theme follows the tradition in political economy which compares different state institutional approaches to promoting industrial development, through mediating international economic integration.<sup>30</sup> Research that has focused on the constraints which MNCs and foreign investment exert over developing countries has generated some rich empirical and political insights.<sup>31</sup> However, this line of thinking diverts attention away from analysis of the differing conditions that lead states to assume the "political will" to engage with MNCs, or the range of policies or precise detail on the development strategy that states have actually produced to try to regulate the interaction between their countries and MNCs. Nor does the constraints literature give adequate attention to the domestic institutional variables which have played an influential role in shaping developmental outcomes, in both positive and negative cases.

Critics of MNCs have suggested that the state has limited ability to control the behavior and impact of multinationals on the host country, and that MNCs tend to contribute to wage stagnation, inequality, and unemployment. Others are concerned about the "inappropriateness" of the production technology or product mix that multinationals transfer to recipient countries, the role of MNCs in "surplus extraction" through transfer pricing and excessive royalty payments, predatory behavior and manipulation of consumer preferences. The common image of the MNC is of "rootless, massive commercial hierarchies, whose far-flung activities appear to constitute the very sinews of a global economy".<sup>32</sup>



MNC supporters argue for their role as an extra source of capital in conditions of scarcity, and for providing needed skills, technology transfer, managerial know-how, and complementary services.<sup>33</sup> They point to MNCs as contributing to a healthy fiscal and external balance, to their "rationalizing" effect on particular sectors and industries, even over governments which may have to rationalize their administrative structures and institutions and reorient their functions, to support the operations of MNCs. MNCs are seen as the vehicles of increased efficiency, productivity, engines of sustained growth and even sustainable development, generating new employment and effective competition. Proponents further suggest that recent trends in globalization have helped eliminate conflicts of interest that may have existed between profit-oriented MNCs seeking to rationalize global activities within particular industries, and host governments that plan on a national cross-industry basis, and regulate to promote the public good.<sup>34</sup>

From the standpoint of the host government in developing countries, the issue is not whether the MNCs are inherently "good" or "bad", but whether they are useful to the developing country for acquiring scarce inputs and complementary services, e.g. export marketing, from external sources on the best possible terms. The challenge is exploring the possibility for achieving desired developmental outcomes through alternative means of interacting with the present world, including with MNCs. As Helleiner has asked: Can less be paid for that which is useful which MNCs provide? <sup>35</sup> Can the detrimental effects of MNC activities be controlled?

The post-Mao Chinese leadership also saw the policy challenge as whether and how China could use MNCs and FDI to modernize its auto industry, *yet* ensure that 'the Chinese side' did not lose control. Chinese authorities were concerned about the potential denationalization of the national auto industry that could result from the increased role for multinationals and foreign investment. The Party elite put its faith in new state rules and policies on foreign investment, and the regulatory influence they could exert by controlling foreign investment approvals, starting with joint ventures and Special Economic Zones, and later across many sectors of the economy. These measures were specially tailored to China's political situation, and enabled Chinese authorities to contain the economic vulnerabilities resulting from increased exposure and engagement with "foreign capital", while simultaneously allowing the country to benefit from increased international linkages.<sup>36</sup>

China's foreign investment laws for the period in question (1980s and 1990s) required strict joint ownership arrangements, with the foreign side only allowed a minority share, in order to dilute the degree of control which foreign partners could hold inside their Chinese subsidiaries. The state introduced a set of trade, exchange rate, and pricing policies, and a combination of general and sector-specific, and negative and positive incentives to push content localization above the required levels. Investment commissions in developing countries have also wielded significant discretionary powers in the administrative management of FDI.<sup>37</sup> It is useful to go beyond legal or policy statutes, to examine the role of domestic state organizations and institutional norms in shaping FDI flows.

To back up the laws and regulations, Chinese authorities ensured that approvals for foreign invested projects went through three government bodies, starting with the line ministry responsible for foreign investment and trade, which during the 1980s was called the Ministry of Foreign Economic Relations and Trade (and renamed the Ministry of Foreign Trade and Economic Relations in 1992), the State Planning Commission (later renamed the State Development and Planning Commission in 1998), and ultimately at the executive level, the State Council. The key institutional filter in this approval process was the State Planning Commission (SPC). The interlinking of the economic agenda and priorities of the Party and government leadership was secured through the SPC, while the relevant line ministries and the Customs General Administration were assigned the task of following up to make sure that investment is taking place as promised.<sup>38</sup>

## **The Chinese state: fragmented, weak, and decentralized?**

Given the magnitude of change that has occurred in China in the post-Mao period, including in the auto sector, it is not surprising that there has been intense debate in the study of Chinese politics over how best to characterize China's political system. The fall of Leninist regimes around the world, and the radical transformations that have followed in their wake have led to a "paradigm gap". The reforms in China in the economy, politics, and society over the past three decades suggest that the political-economic order is fundamentally changing.<sup>39</sup> Baum and Shevchenko have noted that with no ready-made theoretical or conceptual models available to fill the void left by the apparent demise

of the old Leninist order, "more and more scholars have entered the paradigm sweepstakes".<sup>40</sup>

One concept that appears to have endured, especially for those researching policy making in Chinese economic development, is "fragmented authoritarianism".<sup>41</sup> This is the idea that, in China, governmental structures are fragmented vertically along functional lines, and coordination can only be achieved across different ministries if a coordinating organ has sufficient power. Bureaucratic organs of equal rank bargain intensely and continuously over scarce resources, and in many instances decisions can only be reached and compliance ensured through the intervention of higher authorities. A related body of research, that also presents state power in China as diffused, focuses on the rise of the local state and local institutions. This literature examines decentralization as a central feature of China's economic reform process. It suggests that the decision-making authority of local governments and enterprises has increased significantly in the post-Mao period.<sup>42</sup> The cumulative effects are that localities have great incentives to promote local development, sometimes even by enacting policies that ignore national objectives. The corollary to decentralized authority is weakened national state capacity.<sup>43</sup>

Adam Segal and Eric Thun draw on the fragmented authoritarianism and decentralization hypotheses, and a growing number of studies that reorient the study of political economy to the local level, to argue for focusing on local institutions as developmental tools and local institutional variation in determining "success" in the specific sectors of information technology and automotive.<sup>44</sup> They suggest that local governments do not simply try to reproduce and catch up with development efforts initiated by the central government, but are often the actual architects of growth, designing and implementing development policies which are conducive to local institutional frameworks and specific development needs. They emphasize that it is important to understand that national economies are made up of disparate regional economies, and that recent studies on subnational units in advanced economies have focused on the manner in which micro-agents of capitalist systems, including companies, customers, employees, owners of capital, organize their relationships within a framework of incentives or "rules of the game" set by a range of market-related institutions. The heterogeneity of local development efforts and different regional groups of industrial actors will invariably conceptualize and organize industrial activity in ways that reflect their own pasts and local characteristics. The economic reforms in China have produced a similar "mosaic effect", and

promoted regional variation.<sup>45</sup> The central government expanded both the decision-making authority of local governments and enterprises and their ability to retain the revenue earned within their respective jurisdictions. The result is a system that encourages localities to promote local development, resulting sometimes in local industrial policies that ignore national objectives. Even on issues officially controlled by the center, a local government's interpretation or the degree of compliance with central dictates is often the more important determinant of policy.<sup>46</sup>

Thun applies the fragmented authoritarianism and "local variation within a national whole" approaches to describing China's auto sector development. He suggests: "in the auto industry, this problem of fragmented authority was particularly vexing because investment capital was extremely scarce and the widespread linkages of the industry drew a large number of government offices into the policymaking process. Bureaucratic infighting was more common than coordinated development."<sup>47</sup> He says that, in the auto sector, sufficient coordination across the usually fragmented political system was only possible at the local level, and only seen in Shanghai, which created the Automotive Industry Leading Small Group (in 1987).

While not rejecting the significance of local variation, the view of China's auto development presented here differs from the fragmented, weakened, and constrained central-state and nationally diffused model of industrial development, especially for China's auto policy process from the early 1990s onwards. While "fragmented authority" is an accurate depiction of the structure of decision making and administration in the auto sector in the 1980s, an important policy shift occurred in the 1990s, in which the SPC intervened to restore a greater degree of centralized coordination to China's auto development process, especially in utilizing foreign investment. A more complete understanding of the role of the state in China's auto modernization – especially from the early 1990s onwards – requires returning to an approach that analyzes how a restrengthened SPC, under the leadership of Vice Chair Zeng Peiyan, reached across the rival state agencies, to enforce a significant measure of centralized political and regulatory direction and policy coordination in the country's auto modernization process. This view calls for returning to the concept of a nationally integrated Chinese state, anchored on the concept of the "Party-state". It also calls for once again analyzing how different national institutional structures respond to challenges of industrial modernization, which are often the result of pressures from international economic integration. It places emphasis again on

comparing differences in state structures in industrial intervention in national entities – even while being mindful of local variation within national units – as the most prescient comparisons for understanding China's auto sector development.<sup>48</sup>

The Chinese Communist Party is seen as having various means for maintaining a productive tension between economic decentralization and political coherence in the state structure.<sup>49</sup> Even if some traditional Communist institutions of control have been weakened because of the devolution of centralized authorities, Party and government leaders nonetheless continue to have a range of Leninist means at their disposal for ensuring centralized control, including the economic planning organs through which the Party can exercise economic leadership, specifically the SPC, as well as internalized Leninist norms of “unified and centralized leadership”, “democratic centralism” and the “correct line”, and Leninist senior cadre management systems such as the *nomenklatura*, for ensuring effective execution of political and economic directives. The Leninist institutional legacies provide the Chinese government with a unique “reserve capacity” for coordinating industrial development, and have been brought to bear on the strategic industries. The Chinese government has means at its disposal for dealing with policy deficiencies that are very different from other developing countries, or authoritarian systems.

The traditional concept of the Party-state continues to hold relevancy for capturing important aspects of China's evolving system of governance and economy. Not only has the CCP not disappeared along with other Leninist regimes around the world, it continues to be the predominant political force in Chinese state and society. White's view of the essential character of the Communist state in China still applies: the key institution is the Party.<sup>50</sup> The state is understood here as a complex of interlocking institutions and power relationships that perform vital ideological, political, administrative, economic, and coercive functions. The Party is not above or outside ‘the state’ – it is the essential dynamic component, exercising political leadership: decision making, socialization, social coordination, mobilization and control, and conflict management. The Party is the main ideological agent within the state, charged with the task of controlling the bureaucratic and coercive organs of power; and its power extends through the state to society at large.<sup>51</sup> In the regulation of China's strategic industries, especially those with large-scale foreign invested projects, the roles of the Party and the state bureaucracy continue to be tightly interlinked.<sup>52</sup>

This is not to deny the fact that there is “fragmented authority”<sup>53</sup> in China, or that power inside China appears as a “honeycomb pattern” with a “highly localized, highly segmented, cell-like pattern”,<sup>54</sup> or that decentralization has unleashed influential new actors<sup>55</sup> and empowered local actors with a greater degree of autonomy in some sectors and locales, sometimes even at the expense of central coordination and direction.<sup>56</sup> This study shows, however, that there is more than fragmented authority and decentralized power in the “People’s Republic”, and especially in strategic industries. Powerful forces of systemic integration and coordination are at work inside the pillar industries, although their role is not trumpeted, and they usually function behind closed doors. The Party’s role in influencing economic outcomes continues to stretch from finance to industrial policy, and to trade and exchange rate policy.<sup>57</sup> The reassertion of the primacy of the Party in the affairs of the state, at all levels, has been especially pronounced in the period since the early 1990s. Overemphasis of coordination problems results in missing the important coordination that has taken place in China’s industrial redevelopment during the reform period. Zeng Peiyan and the SPC used the centralized institutional structures of the Chinese Party-state to bring together a broad-ranging group of domestic stakeholders to formulate and execute the ’94 AIP. At the same time, Zeng, his auto policy network, guided by the AIP, also brought about profound changes in China’s auto industry in the 1990s, including making more strategic and targeted use of foreign investment than in the previous decade, and forcing foreign investors to transfer more complete car technology. The issue here is the adaptability of Leninist controls to a changing economic environment, to new forms of international investment partnership, and to growing market dynamics.<sup>58</sup>

In the auto sector, the organs of the Party-state were not passive institutions, buffeted by new market pressures from above and below. They actively intervened to shape incentives and constrain powerful market actors, to influence the content and direct foreign investment flows to desired national objectives. The unique institutional factors of the Chinese Party-state exerted a powerful coordination effect on developmental outcomes in China’s auto modernization drive, especially from the early 1990s onwards. The institutions provided coherence across a fragmented environment of rival state agencies and central–local tensions in the execution of the foreign investment strategy in the AIP. At the same time, Leninist means were not conducive to inducing Chinese state auto executives to make sure that

their companies developed automotive design and innovation skills, and systems integration capacity.

The automotive sector may be an exceptional case study in terms of the degree of reliance on foreign investment; it is the one sector where every major project involves foreign investment and Chinese-foreign corporate partnership. However, this same feature makes it a useful focal point for examining whether and how the Chinese Party-state has been effective in utilizing MNCs and foreign investment for realizing the country's national development goals. It is the sector in which the Party-state has put the most concerted effort into developing and implementing a comprehensive and coordinated strategy for "utilizing foreign capital".

## **Outline of the book**

This introductory chapter has outlined the theoretical and conceptual foundation for the book. Chapter 2 provides a comparative and international perspective on the character and role of the Chinese state in terms of its purposive intervention in industrial modernization. Part I describes the first or lower phase of China's automotive modernization process. Chapter 3 examines the contextual background for China's automotive sector development in the 1980s and 1990s. It discusses the global and domestic context in which the Chinese Party-state began to facilitate the modernization of the national automotive industry, its initial mediation efforts between the domestic automotive enterprises and foreign MNCs in the late 1970s and early 1980s. The focus is on how world economic conditions, external factors, constrained the effectiveness of the strategy of using foreign investment and expertise for rebuilding China's auto industry. The main inhibiting factor was that only weak MNCs were willing to invest in China's auto sector during the 1980s. However, domestic coordination failure in this period also contributed to the unsatisfactory developmental results at this stage.

Part II examines the transition and evolution of China's automotive sector development as it shifted to a higher phase in the 1990s. Chapter 4 describes how the Chinese Party-state directed Volkswagen toward investing in China in ways that would achieve national developmental objectives. The focus will be on the role of central state authorities in prodding this key MNC to contribute beyond its contractual obligations, and play a direct role in building modern local parts manufacturing capabilities to supply the Shanghai VW

joint venture. Yet Volkswagen also distinguished itself from its two foreign rivals in this period, AMC/Chrysler and Peugeot, by taking on a substantial role, working together with local actors and institutions to build a modern local parts supply network in the Shanghai area. Chapter 5 analyzes the details of the 1994 Auto Industrial Policy, reconsidering its aims and its medium-term relevancy. In outlining a more expansive, yet systematic and targeted foreign investment utilization strategy, the '94 AIP represented a major advance on the more general industrial restructuring plan of the previous 1987 AIP; a more precise and coherent state mediation strategy that pushed the country to a more advanced stage of auto modernization. Chapter 6 examines the political institutional factors that enabled the Party-state effectively to coordinate the implementation of foreign investment strategies in the auto sector. We describe how Leninist arrangements and specific actors in the Chinese Party-state affected the formulation and execution of the '94 AIP, specifically the organizational role of the SPC as the interlocutor of Party and bureaucratic leadership, the senior personnel management system, and the organizational norms of "unified and centralized leadership", "democratic centralism", and "the correct line". These distinctive Leninist features enabled the Chinese state to steer foreign investors toward advanced auto modernization objectives in a coordinated manner, securing transfers of technology required for building complete modern cars in China. Chapter 7 discusses how two previously irreconcilable forces – world leading auto firms and strong state regulation – were brought together to rebuild China's auto industry. Attention is focused on the bargaining dynamics among the main actors in the bidding for the second joint venture assembly partnership with Shanghai Automotive (SAIC). Professionally qualified Chinese authorities and corporate representatives used the '94 AIP effectively to leverage the key foreign auto firms to invest in China. We also learn how General Motors, when facing a strong state with demonstrated ability to cajole international automakers into investment concessions, took bold proactive steps to win the JV bid and push for special investment allowances that gave it decided competitive advantages over its foreign rivals.

Part III examines the cumulative impact of the particular path that China has taken to redevelop its automotive industry over the past three decades. Chapter 8 describes how Chery, FAW, and SAIC built on the bargaining and reindustrialization gains of the 1980s and 1990s, the international transfers of increasingly sophisticated and complete technology and technical know-how, to further advance



China's auto reindustrialization agenda. The efforts of the previous decades, in developing modern auto assembly capacity, building up comprehensive local supply capacity for parts and components, and sophisticated distribution networks, culminated in a new generation of Chinese homegrown brands and vehicle models. Each of these three Chinese auto groups have taken different strategic approaches to "integrative innovation", to creatively integrate international and domestic resources into newly adapted car designs. Chapter 9 reflects on the impact of China's MNC-reliant auto development strategy from the standpoint of limits and vulnerabilities. The main finding is that although China has been turned into a large-scale producer of modern vehicles, a major source of low-cost auto parts, and new "nationally" branded models, the domestic auto industry also displays significant limits in indigenous car design and innovation capability. The massive waves of FDI that poured into China over the past three decades have not led to a full range of technological learning on the Chinese side, which is considered to include technology application, adaptation, design and innovation capacities. While manufacturing skills for the production of complete cars were successfully transferred by the late 1990s, China's domestic automakers have not experienced significant improvements in design and innovation capabilities for car models or production systems. China is still heavily reliant on foreign MNCs for leading-edge automotive design and innovation, and the accompanying design for systems integration. Chinese auto companies have seen limited gains in these crucial areas of corporate competitiveness, in this capital- and technology-intensive industry. In short, China's domestic automobile industry is more modern, yet also vulnerable. The chapter furthermore finds that the terms and conditions of the country's accession to the World Trade Organization could intensify the existing developmental limits in its domestic auto sector.

The concluding chapter returns to the main themes of the book, summarizing the lessons learned that can be drawn from the Chinese case for other developing states, and states in the global economy more broadly. The most important lesson is that the Chinese experience is not repeatable. Similar to Johnson's view on the Japanese developmental state, the main message in this book is that China's experience of automotive modernization would be hard to emulate, if for no reason other than China's industrial redevelopment success has depended on a world automotive industry with cash-flush MNCs. For more than two decades, the world's leading automakers had excess capital to invest in new growth markets, but now the global economy is mired in a downturn

and finance is constrained. Also difficult to replicate would be the situation of a Chinese Communist Party-state which has secured three decades of historically unprecedented market growth, in a country of 1.3 billion people. Nonetheless, some measured developmental lessons can be drawn from China's experience of automotive reindustrialization. We will return to these at the end of the discussion.

# 2

## The Chinese State: International and Comparative Perspective

In the mid 1970s, and the early 1980s, China witnessed dramatic import surges in passenger cars and small trucks. The shift to economic reform unleashed domestic demand for higher-quality cars for the new foreign tourism sector, and trucks for the rural boom. Rising imports were the catalyst behind the Chinese decision to allow machinery building and automotive officials to go abroad and explore possibilities for foreign investment and technology transfers in the late 1970s. State finance considerations, specifically foreign exchange controls, precipitated the decision to “open up” and seek outside investment in capital, technology, and related technical and managerial know-how to help modernize the automotive industry. However, the decision to rely on international transfers of technology was also a result of the post-Mao Party leadership’s acknowledgement that China’s abilities to achieve internally generated technological innovation had deteriorated to the point where drastic measures were necessary. Except for in the defense industries, China had overlooked product design and innovation in most of its industrial sectors. Either the planning system had not provided adequate incentives to innovate, or inadequate resources had been given to improve product designs and modernize factories. Historically, the main function of the enterprises was simple reproduction for meeting basic societal needs. Product design and technological innovation fell to institutes affiliated to industrial ministries, government-affiliated scientific research institutes, or universities, and often not directly linked to the needs of specific enterprises.<sup>1</sup> Only the defense enterprises, operating under the competitive pressure of the arms race, fostered internal design capacity.<sup>2</sup>

To achieve the “Four Modernizations” (in agriculture, industry, national defense, and science and technology), and enable China to

join the “front ranks” of the world by the end of century,<sup>3</sup> the post-Mao Chinese leadership made an about face and decided to seek foreign expertise. These decisions generated two reactions. The first was Hua Guofeng’s short-lived Ten-Year Plan (1976–85). This Plan called for the state to:

... build or complete 120 large-scale projects, including ten iron and steel complexes, nine nonferrous metal complexes, eight coal mines, ten oil and gas fields, thirty power stations, six railroad trunk lines, and five harbours. The completion of these projects ... will provide China with 14 fairly strong and fairly rationally located industrial bases.<sup>4</sup>

The Plan called for huge government spending which China could not sustain,<sup>5</sup> and led immediately to massive imports.<sup>6</sup> The defeat of Hua’s Plan in 1978, and the rise of Deng Xiaoping and his supporters to power, brought a shift in the economic agenda to what Chen Yun called “readjustment, restructuring, consolidation, and improving”. Economic policy was reoriented toward more moderate growth, and balanced state investment between rural development and light industry on one hand, and heavy industry on the other. This meant giving priority to rural development and light industry after decades of overspending on heavy industry. Chen argued that a focus on light industry would result in an increase in the supply of exportable products that would in turn help generate much needed foreign exchange for the country’s development.<sup>7</sup>

Amid these dramatic shifts in economic policy, the automotive sector was not, however, deemed a high national economic priority. The effort to modernize China’s auto industry, starting in the late 1970s, took place in the absence of a concerted national transportation strategy.<sup>8</sup> Although passenger cars were no longer portrayed as symbols of “individualistic bourgeois extravagance”, as they had been during the late Maoist period, the major modes of transportation continued to be rail and water. State investment allocations reflected these priorities. The role of the auto industry was “supplemental”: to provide higher-quality medium and small trucks to farmers, to transport their products to fast-growing rural markets or urban centers, and higher-quality passenger cars for the new fast-growing and foreign-exchange-generating (foreign) tourism industry. But the goal for Chinese economic planners was to achieve these objectives at a minimum cost for the state. The largest share of the investment that was allocated to the auto industry went to upgrading truck manufacturing capacities; much less was given to the car industry.

The aforementioned considerations shaped China's approach to automotive modernization. How does China's approach to automotive modernization compare with the experience of other countries? This book suggests that China's automotive modernization path has shared some of the patterns of coordinated development in the "developmental states" of East Asia. However, there are some key differences. Below we examine the details of the Chinese path in international *and* comparative perspective.

### **The role of the state?**

In the established literature, it is clearly noted that the Chinese state has intervened heavily in the country's automotive development process.<sup>9</sup> There is intense debate over the main intentions of the state and the consequences of its mediation. There is general agreement that the Chinese state has essentially pursued an import substitution strategy, following the examples of Japan and Korea, and Brazil by severely limiting imports, in order to save on the costs (rents) paid to the importing firms and to save scarce foreign exchange. China has combined these import control measures with investment policy and sector-specific industrial policy, to attract foreign investment flows into the country, and direct it toward national reindustrialization objectives.<sup>10</sup>

The Chinese Party-state has used its own version of a "triad" of policies – trade, investment, and industrial policy – to modernize China's "indigenous" auto industry. Tariff barriers, set as high as 180–220 per cent on complete cars before 1986, and reduced four times over the next two decades (in 1994, 1996, 1997, and 2001), have been the most important import control measure. A host of nontariff barriers have also been used to curtail imports, including restrictive import licensing on a number of products, import quotas, other regulations including foreign exchange controls, trade and marketing monopolies for state trading companies, technical barriers to trade such as standards and technical requirements, and the designation of only six ports to import complete cars. These protectionist measures allowed for significant overpricing of cars, creating huge profits for domestic and foreign investors.

The key investment policy has been the requirement that foreign investment proposals must go through a review and approval process either at the central or provincial levels of government, depending on the size and nature of the project. Foreign investment for (complete)

car projects and key component manufacturing projects exceeded the US\$30 million investment approval limit that was monitored by central government authorities, specifically the State Council, the State Planning Commission (SPC) and the Ministry of Foreign Trade and Economic Cooperation (MOFTEC). This review–approval process enabled central authorities to “favour, limit, restrain or prohibit” FDI in different sectors, depending on national development priorities. This centralized investment approval authority enabled central authorities to override and contain some of the interjurisdictional competition for FDI between provinces, or at least to ensure that the largest flows of FDI into China’s automotive sector did not further exacerbate the existing “miniaturization” problem in the auto industrial structure.<sup>11</sup>

The trade and foreign investment policies outlined above were not specific to the auto sector, and could be seen as measures that were complementary to the auto industrial policy. The same goes for a list of other related measures such as tax policy, that can affect imports, export incentives and rates of personal consumption (including car purchasing), macroeconomic and fiscal policies that affect industrial growth rates, and even what Adam Smith called “public goods policies”, specifically in areas of defense, law and order, and physical infrastructure. The defining policy for the automotive modernization drive has been the sector-specific industrial policy. In the details of the AIP, one can see how the Chinese Party-state created the regulatory and institutional arrangements to select investment only from the world’s leading automotive firms, and to control the content and direction of the FDI flows.

### **Industrial policy**

The Chinese state has intervened directly in the process of automotive development through direct and indirect policy instruments and regulatory levers. The conventional wisdom is that the efforts of the Chinese state to intervene in the country’s auto development, to direct the process, have been a failure. According to Yasheng Huang, for example, the failure of Chinese auto industrial policy lies in the inability to foster industry consolidation.<sup>12</sup> He argues that China has attempted to restructure its automotive industry using an approach that was closely modeled on the Korean policy of the 1970s. Huang sees industry *consolidation* as the primary goal of the ’94 AIP, and argues that its failure is seen in the continued existence of small-size Chinese firms which lack economy of scale features; that even the largest

Chinese firms still operate below minimum efficient scale. Eun and Lee argue similarly that automotive industrial policy “failed in China” to control new entries or reorganize capacity among the existing companies, and that “the central government finds it difficult to conduct effective industrial policy given the strength of local governments”.<sup>13</sup> Chinese scholars Lu Feng and Feng Kaidong have criticized China’s automotive industrial policy for favoring large-scale state automakers and their joint venture assembly facilities with foreign automakers, which have not proven themselves capable of fostering indigenous intellectual property, design or innovation.<sup>14</sup> They propose that the Chinese government should consider shifting its support to the more dynamic and market-responsive independent companies such as Chery and Geely. A Chinese research group at the Development Research Center affiliated to China’s State Council criticized the effects of the AIP by suggesting that:

the restriction on market access, the restriction on models, variety, and specification of automobiles, have meant that competition is not complete despite the fact that country had more 100 car plants. Restrictive consumption policy had prevented existing market demand from being unleashed, and prevented China from moving to producing at maximum capacity.<sup>15</sup>

A variant of the criticism is that the impact has been “mixed”, but leaning more toward the negative.<sup>16</sup> Noble et al. argue that “the [Chinese] government chose the wrong path to [vehicle] development, focusing on technology development in autarkic and isolated state-owned enterprise rather than on the provision of incentives to market-based companies”.<sup>17</sup> They note that the AIP “reiterated the call for long-run consolidation into three or four groups”, but that “decades of industrial policies failed to realize the consolidation of the assembly industry”.<sup>18</sup> They do recognize, however, that: “The main effect of the policy was not domestic consolidation but a competitive rush by foreign auto assemblers and parts firms to enter the Chinese market and to establish a favourable position before China entered the WTO”, which did have the effect of “increasing competition and prompting greater efficiencies in the joint ventures”.<sup>19</sup> The foreign investment outcomes are presented as unintended, side consequences of the AIP, rather than as the core impact of this policy.

The logical conclusion of the above critiques is that state authorities should rely less on trying to mediate the integration process, and more

on market-based development options. There is little doubt that a combination of other factors including "the availability of a large domestic market, the presence of a population of existing component suppliers to whom enhanced production capabilities could be transferred effectively, and the impending moves toward a more open trading environment, have been key to the growth of China's auto sector".<sup>20</sup> One Chinese planner, who was involved in formulating the 1994 Automotive Industrial Policy, explained that "sustained market development over two decades has definitely been vital in attracting the attention of MNCs; and that, without actual market growth or the perception of real potential growth, the MNCs would not have been interested in China, no matter how sophisticated the industrial policy".<sup>21</sup> It would be misleading only to emphasize the role of the state. However, there is also historical evidence that, similar to Brazil, had it not been for government mediation to impose market access and foreign investment conditions on MNCs, and play them off against each other, the leading foreign automakers would not have invested in large-scale manufacturing capacity, or complied with domestic localization objectives.<sup>22</sup> GM, Ford, and Toyota would have chosen to continue supplying cars to China through imports. The MNCs were compelled to invest by Chinese regulatory measures, which greatly accelerated the speed and overall diffusion of automotive modernization.

An alternative literature challenges the conventional view on the role of the Chinese state in automotive development. Chang argues that the "bargaining between the Chinese government and various automobile TNCs regarding the selection of a partner to produce the 'people's car'", is the clearest example of how the state can intervene with "strategic industrial policy" to force MNCs to compete for "attractive host countries"<sup>23</sup>:

Lured by the prospect of being the first mover (or at least one of the first movers) in what may soon become one of the biggest passenger car markets in the world, many TNCs (including the German luxury car makers Benz, BMW, and Porsche, which emphasizes that its founder, Dr. Porsche, was the original designer of the proverbial "people's car", Volkswagen) were putting forth fiercely competitive bids.<sup>24</sup>

He suggests that the Chinese government had "unique bargaining power" to "play one TNC against another to extract greater concessions", and that even other developing countries that "cannot expect to have



China's level of bargaining power can still extract substantial concessions from TNCs".<sup>25</sup>

In the most recent literature on China's auto sector development, Thun notes that the regulatory power of the Chinese central government to approve the creation of a new assembly joint venture, the partners involved, the terms of the deal, and the model that would be produced,

*gave the central government an unusual amount of leverage over both foreign and domestic firms. The result was an industrial policy of sorts. With respect to the foreign side, the central government played the multinationals off of each other. It would announce that it was going to approve one final assembly joint venture, and foreign firms, desperate not to be locked out of one of the last great auto markets, would claw over one another to get the contract.*<sup>26</sup>

He adds: "The size of the Chinese market gave the Chinese an *unusual degree of leverage* over foreign auto companies. The *challenge* from the Chinese perspective was *knowing what demands to make*, and being able to take advantage of the opportunities that were created."<sup>27</sup> Neither Chang nor Thun recall that when Beijing initially held out the lure of the China market to the world's leading automakers in the late 1970s and early 1980s, to try to get them to invest in China, the top tier of automakers did *not* reciprocate. It took Beijing nearly two decades to build up its bargaining strength with MNCs. However, both scholars draw our attention to the importance of state intervention and the significance of the AIP for shaping eventual developmental outcomes.<sup>28</sup>

In *China Shifts Gears*, Gallagher notes that "in 1994, the Chinese government imposed 'localization' requirements on the Sino-foreign joint ventures, which forced them to use a certain percentage of Chinese-made parts in their automobiles".<sup>29</sup> Gallagher and Sutton respectively concur that the local content requirements in the AIP put huge pressure on the foreign automakers because most Chinese suppliers were unable to meet the standards of the foreign firms, and the only way to respond positively to the localization requirements was for the foreigners to work closely with Chinese suppliers to improve the quality of their products.<sup>30</sup> They add that once local Chinese suppliers learned how to produce internationally acceptable parts and components, they began to export them to other markets, allowing them further to expand production and lower unit costs.

This study is guided by the understanding that, in developing countries, state intervention in industrialization does not just lead to two possible outcomes: success or failure. The results are more complicated. Khohli has found that in some developing countries, the state's economic role in driving late-industrialization has been associated with rapid industrial transformation and enhanced equity (e.g. Japan and Korea). In other cases, in contrast, governments and bureaucrats have plundered the economic resources of their own societies, failed to stimulate growth, and facilitated the transfer of public wealth into private hands of unproductive elites (e.g. Nigeria). In still other cases, state intervention is associated with mixed outcomes, where the state has helped to solve some economic problems, while ignoring other problems and creating new ones (e.g. India and Brazil).<sup>31</sup>

The terms and conditions for foreign investment utilization, contained in the '94 AIP, were a crucial part, and arguably *the* most important part of this policy, in terms of developmental impact. This dimension of the AIP has been inadequately examined in the scholarly literature to date. How to use foreign investment was a crucial issue in China's automotive modernization process. In the AIP, Chinese officials and state planners gave priority *not only* to measures for encouraging industry consolidation and rationalization in the immediate period. Rather, the strategy for "foreign capital utilization" was an integral part of the overall approach to modernizing the sector that was outlined in the AIP. The details of state mediation for utilizing "foreign capital" in pursuing China's auto modernization before, during, and after the formulation of the AIP, form the substance of this book.

The study of *purposive* state intervention in economic development, using industrial policy, is of interest to those who have examined the role of the so-called "developmental state" in East Asia and elsewhere. The writings of Johnson, Amsden, Wade, and Woo have analyzed how *state-directed* and *purposive* intent is transferred into successful state intervention in the economy to guide market development and national corporate growth, rather than simply relying on market-led growth.<sup>32</sup> Their research examines the changing nature of state power and domestic institutions amid changing world economic conditions, and is grounded in comparative politics and comparative political economy analyses of domestic institutional adaptation.

The focus of this book differs from the developmental state literature in that a central tenet in much of that literature is how the state

intervenes to “keep out” foreign investors while aiding domestic efforts to selectively draw in advanced outside technology, and thus leaving more developmental space for endogenous forces to pursue industrial modernization through export-oriented catch-up.<sup>33</sup> As Johnson highlighted:

MITI made every effort to suppress imports of finished goods, particularly those that competed with domestic producers, but it urgently sought imports of modern technology and machinery. The problem was to keep the price down and to “untie the package” in which such foreign technology normally came wrapped – to separate foreign technology from its foreign ownership, patent rights, know-how arrangements, proposals for joint ventures, capital participation, voting rights, and foreign managers on board of directors. The Foreign Capital Law dealt with this problem. It established a Foreign Investment Committee and stipulated that foreign investors wanting to license technology, acquire stock, share patents, or enter into any kind of contract that provided them with assets in Japan had first to be licensed by the committee.<sup>34</sup>

Chang argues that such “untying” of technology from its foreign ownership was essential in the selective adoption strategies of Korea and Taiwan for dealing with MNCs and FDI. He suggests that the “most important policies toward [MNCs] employed by Korea and Taiwan were *restrictions* on entry and ownership”.<sup>35</sup> FDI in industries supplying critical intermediate inputs using sophisticated technology was encouraged, compared to consumer durables industries. When entry was allowed, joint ventures were encouraged, preferably under local majority ownership, and 50 percent foreign ownership was prohibited except for a narrow band of manufacturing industries that was deemed of “strategic” importance. Other crucial measures, according to Chang, were ensuring the “right” kind of technologies were acquired and on the “right” terms; enforcing strict content requirements to maximize technology spillovers.<sup>36</sup> Localization targets were set and imposed. Most important was that Korea and Taiwan achieved developmental gains because their governments emphasized “building local managerial and technological capabilities, and [used] TNCs in a selective, strategic manner to accelerate that process”.<sup>37</sup>

If Johnson’s depiction of the (im)balance of domestic and external factors, and emphasis on highly selective gatekeeping and manipulation

of external factors in a “developmentalist” scenario is generalized to the entire “developing world”, one is led to Amsden’s assessment that:

The huge task of economic development fell on the shoulders of Third World **nationals**. The initiative to move from underdevelopment to development was not taken by multinational firms, international banks, US technical assistants, or the US Treasury, no matter how much each portrayed itself retrospectively as the catalyst. Whatever role these foreign agents ultimately played ... they were not the first risk takers ... Nor were the bush whackers that collaborated with colonial rulers ... Instead, the movers and shakers, the new, foreign educated cadre of risk takers, public and private, were the military men and business managers, teachers, distributors, engineers, technocrats, and other professionals.<sup>38</sup>

By emphasizing the taming of external factors as a key explanatory variable, this aspect of the developmental state literature shares a similar research agenda with Keohane and Milner, who propose that preexisting domestic institutions may allow actors to *resist* the pressures of internationalization, allowing political leaders more range of policy choice in responding to internationalization than has often been assumed in the globalization debates.<sup>39</sup> The tendency in this literature is to emphasize how domestic institutions can “block”, “freeze”, or “channel” openness, to allow for “protection” of national developmental interests.

At the crux of China’s automotive modernization phenomenon have been international transfers of capital, and technology and the related technical and managerial know-how that have introduced modern technologies and new systems of production to the Chinese auto industry. This book highlights the importance of *international* transfers of finance and technology, and the particular duality of the Chinese Party-state, mediating between foreign auto companies and the domestic enterprises, and balancing between heavy reliance on external resources while trying to maintain national controls and directions. Pempel has pointed to such nuanced balancing when he describes the developmental state as a “Janus-faced entity”, mediating between the outside world and domestic society.<sup>40</sup> It is further highlighted in his critique of the tendency in the developmental state literature to treat “national interests” as given, existing in a realm devoid of world politics, the strategic goals of superpowers, the actions of MNCs, foreign aid, and

so on. He adds that the developmental state is unthinkable apart from its relationship to the external world. Similarly, Haggard and Cheng, and Cumings have, respectively, analyzed the roles of foreign capital in the East Asian NICs, while Ravenhill has gone some distance to show that even the catch-up modernization in the Japanese and South Korean auto industries was not as devoid of foreign investment and external involvement as conventionally understood in the developmental state literature.<sup>41</sup>

Some preliminary comparative observations are useful for situating the Chinese experience – in the automotive sector – in relation to the key forms of state mediation that have been analyzed in the developmental state of East Asia, and cases of state intervention elsewhere in the developing world. As Chalmers Johnson has written, “any social science worthy of the name, it seems to me, must deal with both the generalizable and the particular without ruling one or the other out of court.”<sup>42</sup> The evidence from my research suggests that China, in pursuing automotive modernization, has successfully emulated aspects of developmental state behavior as seen in Japan and South Korea, especially in ensuring coordination in the industrial development process. However, important particularities in China’s automotive modernization differ significantly from core characteristics of the developmental state, and require us to acknowledge the specificity of the Chinese case. These particularities are seen in the key contributions of external factors and the complicated role the Party-state played in mediating international transfers of capital, technology, and related technical and managerial know-how, to shape outcomes in China’s automotive development. It took the Chinese Party-state almost two decades to figure out the optimal foreign investment utilization strategy, and put the institutional pieces in place, to effectively leverage MNCs for China’s national developmental objectives.

## Finance

Finance is the tie that binds the state to industrialists. According to Skocpol, “a state’s means of raising and deploying financial resources tell us more than could any other single factor about its existing (and potential) capacities”.<sup>43</sup> Examination of financial resources provides the best possible general insight into the *leverage* a state is likely to have for realizing any sort of goal it may pursue. Building on this understanding, Woo-Cumings highlights the role of finance as the nerves of the developmental state.<sup>44</sup> Much of the research on the developmental state in East Asia, and also Europe, has centered on the national

structure of finance. Johnson suggests that state control of finance in economic policies in Japan, South Korea, and Taiwan was *the* most important aspect of the developmental state, followed by other dimensions such as labor relations, the autonomy of the economic bureaucracy, the combining of market incentives and command structures, and the existence of large-scale business groupings.<sup>45</sup> Zysman describes the importance of credit-based financial structures in France and Japan as facilitators of industrial policy; that in a credit-based scenario, firms rely on bank credit for raising finance beyond retained earnings, and thus are highly responsive to state policy that affects interest rates and other financial policies.<sup>46</sup> Woo-Cumings herself has analyzed the empirical details of the South Korean financial structure, and persuasively argued that it has enabled the Korean state, operating in the economic abundance generated by Cold War politics, to channel capital to Korea's *chaebol*, or mega business groupings. Some of this finance was subsidized through generous foreign loans or low interest rates. Nonetheless the financing was managed and strategically directed by the Korean state, and in the process, allowed the Korean state to secure its own power by fostering political interest groups that could be molded into a developmental coalition that was responsive to state direction.<sup>47</sup>

China's automotive modernization path, especially the financing arrangements for remaking the passenger car industry in China, has looked very different from this defining feature of the development state. Rather than large amounts of state finance being strategically directed to supporting domestic auto producers, reliance on foreign financing, which is part of large foreign investment packages has, in many respects, been the defining feature of China's development path over the past three decades. Despite allowing some foreign investment, and US automakers (General Motors and Ford) to become involved in joint ventures in Japan and Korea during their formative growth periods, the state in both those countries made sure to keep the share of foreign ownership and control limited.<sup>48</sup> In the China case, there has been heavy reliance on direct foreign financing in China's auto industry, and the state has focused on how to effectively channel the foreign capital flows to new corporate subsidiaries that have been formed with preferred domestic companies. In car manufacturing, the emphasis has not been on domestic state investment or domestic bank loans as the main source of industrial finance.<sup>49</sup> The auto industry received only 1.5 percent of total state investment for Chinese industry during the 1986–90 period (Seventh

Five-Year Plan), a period which coincided with the creation of the first group of joint ventures (JVs).<sup>50</sup> This amount was a further drop compared to the previous five-year period (1981–85), when the auto industry only received 2.8 percent of total state investment in industry.

China's main auto groupings have not been able to rely on the generous allocations of state funding that enterprises in South Korea and Japan received. As already discussed, the initial decision to allow auto officials to go overseas and seek foreign investment for auto modernization was precipitated by capital shortage and resource scarcity, as well as technological and innovative backwardness. The China National Automobile Industry Corporation (CNAIC), which became responsible for coordinating the overall development of the domestic automotive industry during the Sixth Five-Year Plan period (1981–85), was perennially short of funds. Yang notes that CNAIC's lack of operating funds hampered its effectiveness in providing oversight and directing interfirm relations.<sup>51</sup> It lacked the financial capacity to use its oversight mandate to push its pet projects, or direct individual enterprises toward long-term developmental goals such as pursuing product specialization, standardization, or enterprise reorganization for larger economies of scale. CNAIC was constantly looking for ways to increase and improve its own revenue streams. It tried a number of schemes including attempting to take away the marketing and lucrative sales of spare parts from First Automotive Works (FAW) and Second Auto Works (SAW), which were the most profitable and strategic segments for these key state auto groupings. Rather than seeing CNAIC as a source of state financing for pursuing competitive growth opportunities, or any other support, instead SAW viewed CNAIC as parasitic.<sup>52</sup> Such perceptions weakened CNAIC's influence, and led to it evolving into a "combined management company" operating in a netherworld that was neither effective in central government coordination nor supportive of local administrative control. The situation in China was a far cry from the developmental states of East Asia.

Rather than providing supportive financing for the growth and modernization of Chinese auto enterprises, including their joint venture operations, CNAIC focused on exerting directive influence using, for example, its approval authorities over foreign exchange (FOREX) spending in order to influence enterprise investment decisions on technology imports.<sup>53</sup> In 1986, SAW and FAW "won" their independence from CNAIC, and were brought under the direct supervision of the State Planning

Commission (SPC). But this did not necessarily mean more state financing. SAW and FAW relied mainly on “contractual cooperative production agreements” with the local government hosts, and the financing from these production agreements to cover their investment capital needs. Moreover, due to the still largely planned nature of the Chinese industrial system in the 1980s, the state auto companies looked to the state not for “financing” but for direct inputs into production. These inputs were still based on each enterprise’s state allocation plans that were worked out with central and local planning authorities. When they needed financing or inputs for above-plan production, the Chinese assemblers had to come up with innovative solutions, including counter-trade with their suppliers. This method was not especially useful for supporting fast growth and rapid response to new market opportunities. It was useful mainly for overcoming shortages in supplies and to control the quality of incoming inputs. For the first decade of the reform period, the state auto groupings, including their JVs, still operated in a hybrid plan–market scenario, which combined elements of state planning for production under the plan, and a growing portion of above-plan production for transactions that increasingly reflected market values.<sup>54</sup> The focus of central authorities in this scenario was on managing constant supply disturbances within the planned supply system rather than providing large-scale and coordinated state financing to individual national champions. Some enterprises were able to expand more effectively and rapidly than others due to their abilities to operate in the market-half of the environment, making for unpredictable production expansion for state planners. This mixed production scenario persisted until the 1990s, when Chinese auto companies made a decisive shift in their operations to market dynamics. With this shift came adjustments of state support, with more emphasis placed on state financing. But even this was not until the period of the ’94 AIP and Ninth Five-Year Plan (1996–2000).

The one time (1983) when CNAIC did pay for technology transfer, it was for the “Heavy Duty Group” project, to purchase product and manufacturing technologies from Styre-Daimler-Push to initiate a range of heavy truck production.<sup>55</sup> The relatively limited financing that was provided to Chinese auto companies for technology transfers came mainly from local governments or whatever foreign exchange earnings the enterprises themselves could achieve. There was limited if any coordination at the national level, except on the terms for approving local usage of foreign exchange. Chinese parts producers also



noted that, for decades, central authorities and local decision makers made assembly an investment priority. Parts supply, in contrast, was always seen as an adjunct instead of in a strategic role in investment plans. Investment for the parts manufacturing that was needed to keep up with assembly, therefore, always failed to materialize. This “assembly bias” carried over into the reform period, and when local authorities did provide some financial support for the auto sector to import technology and establish JVs, most went again to the assemblers, while minimal financing was given to suppliers for modernization.<sup>56</sup> Chinese parts suppliers have had to rely instead on a diverse range of foreign sources of capital, and establishing JVs, in order to modernize their operations. Their partners extend beyond the US, Europe, and Japan, to include the Asian NICs, specifically auto suppliers from Hong Kong, Taiwan, and South Korea. The local financing that did take place did not resemble the strategic interventions of the developmental state. Rather, they lacked strategic coordination and efficiency. It resulted in unnecessary duplication in technology transfers – except arguably in Shanghai.<sup>57</sup>

During the 1980s, the initiative for technology transfers often came from local authorities, who had to obtain special trading status as well as discretion to dispose of a limited amount of foreign exchange. Some local authorities established umbrella organizations to help pool funds to the local auto companies to launch modernization projects. Shanghai, as discussed in detail in Chapter 4, coordinated investment by assuming the responsibility for aggregating tax revenue from sales of the Santana that would be used specially for renovating the local auto supply industry in the Shanghai area that fed Shanghai Volkswagen (SVW). While this method of local investment coordination was tried with varying degrees of success in other locales, including Sichuan, Hubei, and Liaoning, as well as the other locales in which the Model JV assemblers resided (Guangzhou, Beijing, Changchun), Shanghai was the most effective in developing such investment financing provisions and coordination. CNAIC never developed the capacity to macro-coordinate the technology transfers, the development of interfirm relations or the modernization of the industry as a whole.<sup>58</sup> Focusing on the Shanghai municipal government in auto modernization, Thun argues that its role was that of a “local” developmental state. However, his argument is really only applicable to Shanghai. Our purpose here is to better understand how a larger portion of the national automotive industry was modernized, and account for the central–local coordination on a national scale.

The entry of foreign equity investment into automotive assembly in China was the most significant event for the auto sector over the past three decades, as it was for the rest of China's industrial sectors. As already discussed, Sino-foreign JVs were a more cost-efficient way to gain technology transfers than paying for technology imports and licensing. Such experimentation was spearheaded by two municipal governments, Shanghai and Beijing, starting in 1983. Joint ventures were seen by Chinese strategists as a low-cost conduit for Chinese auto producers quickly to enter into manufacturing more modern vehicles, relying on the designs and production processes of foreign partners, instead of having to develop their own innovation and manufacturing capacities. Both FAW and SAIC had proven that it was very difficult for the backward Chinese automakers to redesign even inefficient engines for mid-size trucks, through acquisition of foreign technology and then reverse engineering. Leading officials in the First Ministry of Machine Building pitched that JVs were an easier and more cost-efficient way for the Chinese to mobilize capital for developing and diversifying their production. From their overseas reconnaissance, these officials had gauged that there were many idle plants available in the world, since assemblers in mature markets had experienced a decade of slumping sales. It was believed that it would be relatively easy to persuade foreign auto companies, and their bankers, to include some of these idle facilities as part of a Chinese JV deal.<sup>59</sup> Thus, instead of having to build from scratch, major cost savings could be achieved on the Chinese side by shipping secondhand equipment and facilities, and producing cars whose product cycles had already come to the final stage in the mature markets. The belief, or hope, was that such technology could be acquired at a bargain price. Finally, it was suggested that JVs would have major spillover effects in transferring technological know-how. Foreign investors would be obligated to teach their Chinese partners how to improve product quality and build and maintain brand image.<sup>60</sup>

Research indicates that the Chinese state auto companies did receive a "one-time off-record state financial allocation" to help establish the JVs, but the exact amounts have not been published for the public record. What is known is that most of the investment on the Chinese side for establishing the JVs was not cash but in kind, i.e. in the form of land, existing facilities, and equipment. Some of the Chinese funds reportedly went into purchasing complementary technology and new equipment that was needed to upgrade the equipment that the Chinese side provided for the JV projects. In the first three Sino-foreign JV

assemblers, only Guangzhou contributed cash directly to the project, which amounted to \$4.3 million (the total value of the project was \$52 million), and most of the Chinese contribution was in land and buildings. The foreign partners provided a much larger portion of the cash contribution in the first group of JV assemblers, and the JV projects that followed.

Even when the Chinese side had contractually agreed to make financial contributions to the JVs, Chinese state banks were slow in providing financing to the assembly plant and its suppliers, for example during the initial period of SWV's operations.<sup>61</sup> Beijing Auto Works and Guangzhou Auto Company did receive foreign exchange bailouts in the 1980s to help resolve foreign debt disputes with their own foreign partners in the JVs. But this is very different than state financial allocations which are strategically targeted to help domestic auto companies to grow rapidly and exploit global export opportunities. The SPC did provide special funds on two occasions in 1988 and 1989, to help out the so-called "Three Bigs and Three Small's" (FAW, SAW, SAIC and Beijing Auto, Guangzhou Auto, and Tianjin Xiali) in the 1988 AIP, during a recessionary downturn that may have been caused by the government's own deflationary policy in the late 1980s. But again, this was crisis financing. The preferred approach was that of the early 1980s when the state took a hands-off approach and left state automakers to fend for themselves, through a recession. Some JV assemblers took the step of including financial institutions in their JV partnership, such as Shanghai VW<sup>62</sup> and Guangzhou Peugeot,<sup>63</sup> were better able to weather financial crunches, but only early on in their operations.

Financial support from the central state for the JVs increased in the 1990s, but still constituted only a relative small percentage of state investment in industry.<sup>64</sup> State investment in the auto industry was RMB 6 billion for 1991–92, 12 percent of the planned investment total for the Eighth Five-Year Plan period (1991–95),<sup>65</sup> with the allocations directed mainly at the two big new JV projects at FAW and SAW. By the early 1990s, the overall situation of central state finances was in ever-worsening shape. Even as the government called for the need for more centrally controlled industrial policy in the early 1990s, the financial resources of the central state were heading toward an historical low point. By 1992, fiscal revenue was 14.2 percent of GNP, having dropped from 31.2 percent in 1978. Two Chinese scholars warned of a crisis in the capacity of the Chinese state, and eventual risks to social stability

and national disintegration, unless the trend was reversed.<sup>66</sup> A national overhaul of the fiscal system was launched in 1994, but it would take almost three years to bring significant results, and in the mean time, resources remained limited at the center.<sup>67</sup>

It was only in the budget for the Ninth Five-Year Plan (1996–2000) that specific financial provisions were made to help the JV assemblers meet certain developmental targets. Also in the 1990s, Chinese authorities allowed Chinese state parent companies in the JVs to issue shares on the stock exchange to raise capital and not to rely only, or as heavily, on bank lending as the source of industrial finance. This was profoundly different from the situation of state-financed industrialization in the East Asian developmental states. While some analysts have referred disparagingly to the Chinese strategy as “industrial policy on the cheap”, others have suggested that FDI inflows surged into China because insolvent state firms were weak and could not capitalize on new opportunities without foreign investment.<sup>68</sup> In contrast, one Chinese planner explained the path taken was a conscious response of Chinese authorities to the financial realities that China was facing at the time:

The major contributors to the import surges that China faced in the early to mid 1980s were televisions and automobiles. The government only had two options: rely on imports; or aim to modernize the domestic industry to meet the rising domestic demand, by introducing foreign technology and expertise into the system. It chose the latter option.<sup>69</sup>

Rather than relying on domestic state funding to remake the car industry, the Chinese government instead relied heavily on utilizing foreign capital to finance the new projects, and the details of the JV agreements clearly reveal that the situation was not what is conventionally understood as “cofinancing”.

Whereas the state in Japan and Korea ensured the compliance of the national corporations with the state’s national developmental agenda by using its financial levers and controlling the supply of finance to create a “socialized bond” among corporate elites to the state, in China, in the auto sector, it was a different dynamic. The Chinese state did not provide vast amounts of national investment to remake the industry, it did not have recourse to this financial “bond” to ensure the responsiveness of the state auto enterprises to state direction. The Chinese Party-state was dealing from a much smaller domestic financial base

than in Japan and Korea, and its investment allocation decisions in the 1980s did not favor the auto industry. In the first phase of auto modernization, the Chinese government could only rely on its centralized control over foreign investment approval on large-scale projects, and the reserve capacities of Chinese Communist Party's disciplinary norms and structure, to ensure that the senior executives in China's state auto companies responded to national coordination objectives.<sup>70</sup> This meant that central coordination capacity weakened immediately after the JV deal was signed and the Chinese start-up contributions were secured. It was not until the auto sector became fully entrenched as a pillar industry in the 1990s that the Chinese state began to direct larger amounts of investment to the auto industry, and related upstream and downstream industries. The domestic financing in the 1990s allowed the SPC to begin cultivating some of the "socialized bonds" with state corporate executives that were characteristic in the Japanese and Korean cases.

Yeo and Pearson have analyzed the role played by the Party in influencing business management decisions in the leading Chinese auto groupings.<sup>71</sup> In a close examination of FAW and SAIC, they note that the Party's role in personnel appointments has been, and continues to be, very important. They write:

Candidates for the top offices in FAW are first nominated by the Party Committee of FAW, and then the Central Organization Department (COD) carefully screens their career backgrounds to see whether there are problematic issues for the appointment. The cadre evaluation process of the COD is conducted to appoint not only party and governmental officials but also senior managers of the large state enterprises. After that, the organization department makes an official recommendation to the CCP Central Committee and central government's Ministry of Personnel.<sup>72</sup>

More recently, the State Assets Supervision and Administration Commission (SASAC) has been given formal authority to appoint top executives as well as the board members of management in centrally owned state-owned enterprises (SOEs). However, the COD's decisions on personnel selection are the most important. Yeo and Pearson stress: "We can expect that senior managers, themselves carefully vetted by the central party-state, will pay close attention to the national guidelines." This extends also to Shanghai Automotive, which is not centrally owned. Nonetheless, its senior managers try to act according

to central direction, as their future promotion is evaluated on national developmental indicators.<sup>73</sup> Party controls are therefore a guiding force in the regulatory regime between the state and the Chinese automotive groupings.

### **Technology transfer**

Due to the heavy reliance on the mixed ownership arrangements of the JVs, the Chinese state went much further than its counterparts in either Japan or Korea in accommodating the interests of foreign investors. Yet at the same time, it monitored the automotive companies as closely as possible to make sure that codecision making was the norm in the management of the JV operations, including decisions on technology transfer. Chinese officials noted in interview that their interventions had to strike a fine balance: ensuring that national developmental and individual enterprise interests were being served, while at the same time, avoid overregulating to the point of discouraging the “enthusiasm” of the foreign investors, or creating disincentives for them to invest or transfer technology to their Chinese subsidiary.

Numerous studies have shown that technology is tacit (not explicit), proprietary, and often expensive.<sup>74</sup> The acquisition of technology for economies in catch-up mode is an especially complicated process. Even after a host government has settled on an FDI-oriented modernization strategy, there are still a number of challenges to be met in ensuring technology transfer. There is evidence to show that the presence of MNCs alone is not enough to ensure technological transfers. Indigenous organizational forms and corporate strategies in developing countries may clash with the characteristics of technological and organizational change – “localization”, “cumulativeness”, “firm-specificity”, and “appropriateness” – and hinder opportunities for transference and host learning.<sup>75</sup> Sometimes, local path-dependency, including “backward” but stable forms of local economic organization, may inhibit the learning process.<sup>76</sup> Other local constraints on technology transfer include the recipient’s capacity to absorb technology, the ability to learn by doing, the costs of acquisition and deployment, and related uncertainties, including political conditions.<sup>77</sup> Other factors that inhibit efficient technology diffusion include the existence of transaction costs, especially market failures due to imperfect information.

Another stream of research has shown that MNCs have been resistant – or lack sufficient incentive – to transfer a full range of technology to establish complete networks of local suppliers overseas. They have chosen instead to keep the higher value-added segments of the value

chain in their home markets. The empirical studies of the investment behavior of Japanese multinationals inside the Asian region in the electronics and automotive sectors have been particularly illustrative. Doner found that Japanese automakers' overseas operations in Southeast Asia continued to rely on their Japanese *keiretsu* networks for key auto components.<sup>78</sup> Some have argued that the establishment of Japan-centered regionalized production networks in Asia have enabled Japanese manufacturers to protect their international competitiveness amid intensifying global competition, even while they internationalize a part of their operations (labor-intensive, low-skill segments) to take advantage of lower production costs in less developed economies.<sup>79</sup>

The potential for technology transfer "failure" points to the need for government intervention in a developing country to creative incentives for international technology transfer in foreign investment deals. Lall and Latsch have found that successful technology acquisition in developing countries is a complex evolutionary process that usually requires (but is not limited to) active state involvement in selecting and planning which technologies to acquire, the sequencing, and the choice of state policy to provide incentives for learning.<sup>80</sup> Such understanding builds on Schumpeter's views of the centrality of technological change within economic development, when "new combinations" of factors of production arise "discontinuously", from the mixture of technology, capital, and labor. The goal is "industrial mutation" in which *intentional* changes are sought to overcome initial "backwardness" though *conscious learning*.<sup>81</sup> Industrial policy emphasizes the role of conscious state economic planning to support conscious learning and behavioral adjustment.<sup>82</sup>

Overcoming difficulties in acquiring appropriate and advanced technology has been essential to the success of China's foreign capital utilization strategy for automotive modernization. The Chinese Party-state has not left the international diffusion of technology, managerial know-how, and related skills to chance. Authorities have been aware that efforts to strategically utilize "foreign capital" for promoting national automotive modernization have been tried elsewhere in the developing world, in Latin and Central America, in Southeast Asia, and some countries in Africa, and that the results are strongly influenced by country-specific and path-dependent learning processes. Beijing has made sure to inject managed competition into the evolving domestic auto industry in order to provide incentive for Chinese automakers to apply the transferred technology and technical and

managerial know-how. Party-control levers have been used to influence the performance of the managerial leadership in the big state auto companies. Institutional mechanisms for ensuring Party discipline and coordinated and strategic mobilization do not exist as such in Brazil, Argentina, Mexico, Southeast Asia, or India. The Party-state has added a layer to the mix of incentives to induce technology diffusion from the MNCs: moral or normative suasion for foreign corporations to support the Chinese leadership's commitment to the transition to a market economy, and the country's climb out of poverty and "economic backwardness".

## Summary

The experience of state mediation in China's automotive modernization has thus been shaped by the specific type of state in contemporary China, the nature of relations between state and society, and world conditions. The political strategies and domestic structures of the Chinese Party-state are different from the "fragmented-multiclass states" of Brazil and India – as well as those in Western democracies, either the Anglo-American or German/Italian versions, or statist Japan and France.<sup>84</sup> The essential character of the Chinese Party-state has been different from Brazil, which has been prone to narrow elite coalition politics and became dependent on foreign capital in the auto sector. In India, the effectiveness and efficiency of state intervention have been constrained by the gap between the state's ambitions to direct a self-sustained industrialization path, and the need to maintain political stability and legitimacy amid a diverse and relatively politically mobilized society.<sup>85</sup> In contrast to Brazil and India, the Chinese case is seen as an example of "strong" state capacity, especially its ability to define clear and focused developmental goals, and to mobilize national efforts in the service of these goals.<sup>86</sup>

In pursuing industrial modernization in the auto sector, the Chinese state did not rely on a limited range of policy instruments as in the two Anglo-Saxon states of the United States and Britain.<sup>87</sup> Instead, policymakers in China shared with the statist models of Japan and France a tendency to rely on a broad range of policy instruments which can be brought to bear on particular sectors of the economy and individual firms.<sup>88</sup> In the automotive sector, the policy model of the Chinese Party-state in the 1980s and 1990s shared some similarities with Brazil's efforts to provide a secure and protected environment



for foreign automakers to make a profit while generating growth, and, most importantly, to transfer capital, technology and related technical know-how, and managerial expertise to China. At the same time, it shares the French approach (up to the mid 1980s) that it is acceptable for the state to intervene directly to impose desired economic and social outcomes, when necessary, and not simply set macro-conditions for growth. Most important is that the scope of acceptable intervention extends to the investments of foreign MNCs in the country. In so doing, the Chinese state, similar to the French state, has mediated between national producers and international investors to promote industrial modernization and force a restructuring of a critical industrial sector. As in the French case, described by Zysman, the Chinese state has grown increasingly sophisticated in its dealings with MNCs, and was effective in negotiating with multinationals in obtaining substantive and symbolic goods.<sup>89</sup>

Similar to the state-centered policy model of Japan, the locus of decision making in the Chinese policy model lies primarily in the political realm.<sup>90</sup> Even more directly than in the Liberal Democratic Party-dominated Japanese model, the Chinese Communist Party – through the state – organizes the society it controls. The inheritance of the Leninist approach to societal transformation, including a focus on “system-building”, has meant a state that concentrates on rapid development of society, and mobilization of resources.<sup>91</sup> Relations between state and society are structurally organized along elite-designated priorities. In Leninist terminology, it is the “commanding heights” strategy. Emphasis is placed on controlling decisive points and sectors in a given social subsystem, and on structuring a society that is based on tacit trade-offs and exchanges. In return for performance in key sectors, and on priority policy items, members of society are “allowed” to manipulate nonpriority sectors for their more individualized benefit.<sup>92</sup> At the system level, the advance toward an increasingly market-oriented Chinese economy has blended with government-led efforts to designate pillar industries with each Five-Year Plan, thus placing a continuing emphasis on state planning, and on the role of the Party-state in regulating market competition. In the Chinese policy model, the Party-state has the combined roles of organizing and mobilizing state and society, national resources, and mediating foreign resources, for the national project of creating global-competitive “national champions”.<sup>93</sup> The novelty of the evolving Chinese Leninist experimentation lies in the ongoing effort to recast two seemingly irreconcilable objectives in national enterprise

development: attaining global market-competitiveness and maintaining political reliability.

The Chinese policy model shares similarities with the Japanese statist model in giving less causal primacy to mass preferences on priority issues than the Anglo-American or the West European models, and assigns even less influence to formal electoralism on key decision making than in the Japanese model. Unlike the interest group and democratic models of Anglo-Saxon society, interest groups are not perceived as autonomous agents exerting pressure to shape state policy, but subsidiary agents of the state. It is important to note, however, that even during the 1980s and 1990s, some concessions have been made to upward pressure from local stakeholders in the national automotive policy-making process.

The other aspect of state-society relations relates to the nature of policy networks. In terms of policy strategizing, and the domestic structures of decision making, the Chinese case is quite different from the three advanced industrialized models: German/Italian, Anglo-American, and Japanese. The Chinese model does share elements with the Japanese scenario in the sense that CCP and state officials hold predominant positions in relation to the business community, with key enterprises, and the policy networks tightly integrated. The Chinese automotive policy network is different from those in the Anglo-Saxon countries where the coalition between business and the state has been relatively unfavorable to state officials, and policy networks linking the public and the private sector are fragmented in contrast to Japan or China.<sup>94</sup>

China has increasingly pursued an international economic integration strategy that is analogous to that of Japan – focusing on extracting maximum benefits from the international economy rather than concerning itself with building *global* hegemony.<sup>95</sup> The differences in the economic policy models between China and Japan have narrowed in the sense that technocratic Party cadres have played increasingly important roles in economic policy making in China instead of apparatchiks; and business groups, especially domestic business interests, have increasing influence on government policy making through their lobbying activities. The first trend is seen in the prominent role played by the competent and technically qualified economic cadres that led the internal consultation process for the Chinese auto policy review in the early to mid 1990s. In the Chinese politics literature, these changes are studied under the themes of China's evolving Leninist structure and the Party's institutional adaptation and reform.<sup>96</sup> Despite such changes, some profoundly unique characteristics

remain in the Chinese model – especially the organizational coherence of “the Party”.

The Chinese policy model is rooted in normative foundations that are distinct from the Japanese or French developmental statist, Anglo-American, or German–Italian models. One element is the ideological foundation of underlying mistrust of the world capitalist system, or a potentially “hostile” world. The Chinese Communist “opening up” strategy (*kaifang*) strikes a careful balance between Deng Xiaoping’s reform promotion policy line, and Chen Yun’s cautions about linking to the world economy.<sup>97</sup> Chen agreed that it was a “correct step to abandon the closed-door policy”, and that China should make careful use of foreign loans;<sup>98</sup> however, he also warned that the Chinese government must retain full control over China’s interaction with international corporations and banks: “Foreign capitalists are capitalists. They never do business for profits lower than the average profit which can be had in international markets ... Capitalists will not do business for profits lower than average.”<sup>99</sup> Chen stressed the importance of combining state planning and the market (with the latter as supplemental to the former), financial balances, centralized control and coordination of state investment, and avoiding disaster and economic crisis. Chen placed emphasis on promoting exports in areas of China’s comparative advantage, and “controlled opening” to foreign tourism in order to earn foreign currency. He stressed that China needed to build up foreign currency reserves that could be used to pursue national modernization. Similar to the developmental state, the post-Mao Chinese policy model is normatively based on combining commanded targets with market incentives. In this respect, it is no longer the Stalinist plan-irrational ideal type that Johnson referred to, when contrasting with the developmental state type. However, the Chinese policy model goes far beyond the “developmentalism” of the developmental state, in its foundational belief in the necessity of the state to contain the inherently negative characteristics and consequences of capitalist market economies. The other distinct political features of the Chinese policy model are the organizational and normative features of the Chinese Party-state system which have provided the means for forging *political* consensus in the execution of ’94 AIP, especially the foreign investment utilization strategy.

The Chinese state has shared the purposive intention of promoting industrial development in ways similar to the developmental states in East Asia. However, it has been a “different kind of developmental state.” The primary example was its heavy reliance on foreign investment instead of domestic investment to finance the modernization of

the auto industry. It also shares elements of the centralized decision making that is seen in authoritarian states in developing countries yet it has Leninist state organizational inheritances that are specific. The Chinese government has had political institutional means at its disposal for intervening to address policy deficiencies in industrial development that are different from the rest.

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# **Part I**

## **Modernization, Lower Phase**

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# 3

## Weak Foreign Automakers, State Coordination Failure

This chapter examines the context in which the Chinese Party-state began to facilitate the modernization of China's automotive industry in the late 1970s and 1980s, focusing on the state's efforts to mediate between the domestic enterprises and foreign MNCs in the initial period of reform and opening. It describes the domestic considerations behind the decision to seek "outside" resources and expertise for auto modernization. Primary attention is given to analyzing how world economic conditions – exogenous factors – constrained the effectiveness of the strategy. Dramatic changes in the organization of manufacturing activity in the mid 1970s, euphemistically called "post-Fordism", were reshaping the world automotive industry at the time. These changes in production organization, resulting from innovations at the level of the firm, emanating from Japan, and interfirm rivalry between MNCs were the defining trends of the global context. However, weakened internal coordination, on the part of the Chinese state, in engaging the MNCs also contributed to developmental outcomes.

A combination of external constraints and domestic coordination failure left the Chinese state in a weak bargaining position vis-à-vis the foreign automotive firms, in the negotiations over the first group of JVs from the late 1970s to the mid 1980s. The main argument is that decisions of foreign firms and interfirm rivalry were the main forces shaping the range of developmental options of the Chinese Party-state in pursuing auto modernization. Domestic coordination failure was a second factor determining outcomes. The bargaining outcomes in this first round of negotiations with foreign auto firms were disappointing for the Chinese side in terms of the foreign *partners* that were finally secured for each of the JVs, and the *content* of the



FDI that was transferred. Chinese authorities, at different levels of the state, had taken active roles in promoting China as a site for foreign investment in automotive manufacturing. However, the world's leading carmakers, Toyota, General Motors, and Ford, decided not to invest. Only a group of "second level" companies agreed to invest: American Motors Corporation (AMC), Peugeot, and Volkswagen (VW). Chinese authorities tried to convince these firms to make large-scale capital investments in JV projects, appoint capable managers to the projects, bring their latest technology, design and develop new car models collaboratively with their new Chinese partners. They also wanted the JV to export a portion of their product so that it could earn foreign exchange that could be used for self-sustained growth. The end result was quite different from what Chinese authorities intended. The foreign partners in two of the three new projects made only minor financial contributions. All three foreign firms decided to produce outdated models in China, although it is important to note that the Santana model that Volkswagen offered to build in Shanghai was less obsolete than the models offered by AMC and Peugeot. In all three projects, the foreign partners decided that there was no export potential to foreign markets.

In outlining the initial conditions, both domestic and global, in which the Chinese state embarked on its modernization drive, we can establish the baseline for a more systematic understanding of the "before" and "after" in China's automotive modernization, and the contextual markers that allow for identification of key agents and critical junctures in the modernization process. The view of the Chinese state presented here runs contrary to the now popular image of the Chinese Party-state, that is, of a Chinese government able to mesmerize foreign business by dangling the lure of the "China dream".<sup>1</sup> Pearson, in her pioneering study of joint ventures and foreign investment in China, writes of a Chinese state whose "bargaining strength" is rooted in the country's "socialism".<sup>2</sup> Thun, as already mentioned, sees the biggest dilemma for Chinese authorities (in negotiating with the foreign multinationals) as knowing what to ask for. What has not been addressed in these studies is the historical evolution of the bargaining power of the Chinese Party-state, beginning in the late 1970s. Instead, the view of the Chinese state that is described for this early reform period in question, is more akin to the "fractured" or "weak state".<sup>3</sup>

This historical clarification is relevant for analyzing China's developmental evolution, and for identifying the key lessons to be drawn from the Chinese experience in mediating economic internationalization. The

Chinese state had to overcome significant exogenous or world order constraints and its own internal coordination problems in order to eventually achieve the intended modernization outcomes. Initial operating conditions presented major challenges to all three JV auto projects, and the specific arrangements that were put in place in two of the three JV agreements placed them on a troubled path from the outset. The troubled outcomes reflected the weak leverage of the Chinese state and the inadequacies of the foreign partners in these early ventures. Beijing Jeep and Guangzhou Peugeot were built on weak alliances and problematic arrangements from the start, and they resulted in product types that did not meet the demand requirements of Chinese consumers. These weak JVs became constraints on effective and efficient international transfers of technology and related know-how, and parts localization. The strategy of using foreign companies to facilitate the modernization of the PRC's domestic car industry would be saddled by two weak JVs.

### **National interests and intentions**

The decision to loosen trade restrictions on foreign auto imports in the mid 1970s and early 1980s exposed the inherent weaknesses in China's domestic auto industry. The resulting surges in vehicle imports gave clear indication that China's existing automotive production system was unable to meet the domestic demand that was unleashed by the economic reforms. Entrepreneurial farmers wanted more reliable small and medium-sized trucks to ship their for-profit product to the rural markets that were springing up across the country, and for their shipments to urban consumers. Better quality passenger cars were needed as taxis and tourism vehicles, as opening gave rise to a lucrative tourism industry. Chinese authorities had to make a basic decision: to rely on increasing imports to supply the rising domestic need, or push to modernize China's own domestic auto industry. The former option was not sustainable, especially considering how fast the rate of auto imports was growing. The only reasonable option was to push to modernize the domestic auto industry.

At this stage, Chinese economic policy makers did not attach great importance to the auto sector *per se*. The auto industry was not treated as an "engine of growth" for the entire economy. It was merely a supportive industry, a supplement to other economic development priorities at that time. The emphasis in the early reform period (late 1970s and early 1980s) was agricultural development and rural industry. However,

better quality small trucks were in high demand for transporting produce and rural product to newly reemerging rural markets and to urban consumers, and more reliable small trucks were needed to support light industry. Quality passenger cars were in demand for the fast-growing tourism industry. Chinese leaders saw these sectors as capable of earning foreign exchange, which was in short supply and much needed for further modernization.

In the late 1970s and 1980s, the auto industry was a facilitator, rather than an "engine of growth" for the entire economy. Chinese authorities agreed to allow automotive officials to explore the possibilities for attracting foreign investment to remake China's auto industry. Chinese automotive officials began touring modern auto manufacturing facilities as they broke out of the isolationism of the Cultural Revolution period. Senior Chinese auto officials visited Germany in 1978 to seek investment and cooperation partnerships with Volkswagen. Chinese automotive authorities also lobbied Toyota to establish production facilities in China. Deng Xiaoping himself visited Ford headquarters during his landmark visit to the US in 1979, and personally recommended to Ford executives that they should become more involved in China.<sup>4</sup>

Beijing initially took a two-track approach to remaking the auto industry. The decision for trucks was to keep foreign investors out, and to target technology imports for licensed upgrading. For cars, officials realized they had to partner with foreign companies because of need to meet foreign tastes, for the tourism industry. Track one focused on turning around the largest state automakers, FAW and SAW, and track two became the foreign-invested model JV experiments. Starting in the early 1980s, central authorities, led by CNAIC, began reorganizing the domestic automotive industry from many small firms spread throughout the country, producing low-quality vehicles and parts, with low productivity, operating on too small a scale, with little if any production relations between them, into larger industrial groups. This process involved the promotion of a new division of labor within China's state auto sector, shifting the industrial structure from small and numerous vertically organized enterprises toward enterprise groupings that are larger, and horizontally and vertically integrated into groupings. FAW and SAW were the main beneficiaries of the central government's efforts to centralize the industry. Many automobile enterprises were shifted away from local governments and rearranged into "enterprise groups". FAW undertook expensive efforts, during the 1980s, to introduce new

technology and Japanese-inspired lean production methods into its outdated Fordist–Stalinist production systems.<sup>5</sup>

## **Weak bargaining power**

In pursuing the second track of modernization, its “foreign capital utilization strategy”, the Chinese state encountered serious challenges. Large MNCs did not rush into China immediately after the government lifted restrictions on foreign investment in the early 1980s. Large-scale investors hesitated to relocate because the rules governing foreign investment were rudimentary and opaque. The privileged place of the state sector in the Chinese economy also discouraged foreign investors from relocating. Most of the FDI into China in the 1980s came from overseas Chinese from Hong Kong, Macau, Taiwan, and Southeast Asia, and mainly went into small-scale labor-intensive export-processing industries. The Special Economic Zone experiment faltered in its initial period, and did not attract FDI in knowledge- and capital-intensive industries, as authorities intended.<sup>6</sup> The state had to modify its regulations to improve the investment environment for large MNCs.

In the automotive sector, attracting FDI from the most preferred foreign firms turned out to be much harder than anticipated. The nature of the bargaining that took place between the Chinese state and the MNCs cannot be adequately described by using “strong state versus weak” categories. The Chinese Party-state appeared strong in that it was able to “simply inform” the MNCs regarding which Chinese enterprises would be their partners.<sup>7</sup> The Chinese government could play this matchmaking role without having to do any significant brokering. The foreign automakers accepted that the Chinese partnering decisions were beyond their control. They also recognized that they were working from limited information and were reliant on the Chinese side to determine the optimal partnering arrangement.<sup>8</sup> Chinese authorities were also able to control the number of vehicle models that would be built at each JV project.<sup>9</sup>

Chinese decisions regarding JV location and vehicle type appear to have been made according to state planning priorities, rather than any form of systematic market analysis. Internal lobbying by the automotive SOEs also reportedly had an influence on the government’s partnering and vehicle type decisions. Both Beijing Automotive Works and the Shanghai Automotive Works lobbied central authorities to take part in the new foreign invested-related opportunities. However the

legacies of the command-control system meant that the final decisions on partnering and vehicle type were implemented without resistance from the Chinese SOEs. As one state planner explained:

In this early period (early- to mid-1980s), China was still a planned economy. Production, consumption and distribution were all planned. Everything in the auto industry was determined according to planned measures. There was no competition, no market. How many vehicles to produce; what and how many to distribute, and to which organization, was all planned.<sup>10</sup>

Chinese authorities took a command-control approach to the JV negotiations, in designating partnerships and vehicle types.

However, to achieve its broader foreign investment goals, the Chinese state would have to tightly coordinate between its various central and local interests, to ensure a unified and coherent set of negotiating positions. The negotiations covered a range of items including the desired amount of foreign investment capital, the details on advanced technology transfer, the transfer of research and design, and managerial skills. As we will see below, the Chinese side suffered a number of coordination failures during the negotiations over the first group of JVs. The relevant state organs did not collaborate to the degree needed to adequately frame and force through a nationally unified set of bargaining objectives.<sup>11</sup> Here, the Chinese side resembled the “fractured” and “weak state” that Hongying Wang has described: that despite its apparent command-control strength, the Chinese state was also remarkably weak in its inability to uphold an effective set of laws, rules or regulations, or to reduce transaction costs for foreign investors or protect foreign business interests.<sup>12</sup>

In contrast, the foreign firms had a more targeted and narrow set of corporate objectives. The bargaining conflicts between the two sides were largely resolved in favor of the MNCs’ position (discussed in detail below). The Chinese side was unable to directly alter the interests of the MNCs, or to influence the structure of incentives within which foreign firms were making decisions. Despite the organizational advantages of the Chinese side in this first round of negotiations, Chinese authorities were unable to force the MNCs into making concessions that would aid national developmental objectives of the Chinese state.

In gauging the relative bargaining strength of the Chinese state and MNCs, Chinese government analysts present a view that China started from a position of weak bargaining power, and eventually turned into

one of strength.<sup>13</sup> State planners note that, contrary to the expectations of Chinese automotive officials, in the 1980s the Chinese side was surprisingly weak in the negotiations with the MNCs. Once formal negotiations actually commenced in the early 1980s: “We were quite surprised by just how weak our leverage was over the foreign auto companies.”<sup>14</sup> One National Development Reform Commission (NDRC) strategist highlighted the importance of “world conditions” as the primary cause of the weak bargaining position of the Chinese side:

First, we [Chinese negotiators] were not able to convince the top-ranked automakers, Toyota from Japan, or GM or Ford from the United States, to invest in China for the first group of JVs. Second, the foreign auto companies that finally agreed to come – AMC, Peugeot and Volkswagen – were all relatively weak in terms of their global ranking. Third, it took seven years [1978–83] to work out the joint venture deals, and even then, we did not get much of what we had asked for in the final agreements.<sup>15</sup>

One Chinese auto strategist noted that, “If the Chinese state had a lot of bargaining power, the negotiations would have been concluded much more quickly.” He further stated: “It only makes sense to speak of the Chinese government as having strong bargaining power after Volkswagen became successful in Shanghai.”<sup>16</sup>

The weak bargaining position of the Chinese state during the first round of auto JV negotiations was, however, only partially determined by the world order conditions already described. The other factor was pioneering innovations, championed by Japan’s leading automakers, in the social organization of production and key technologies, including semiconductors and robotics. These so-called “post-Fordist” innovations were geographically concentrated in Japan, and in a range of related sectors from electronics, display technologies, precision machinery, transportation equipment, and materials manufacturing.<sup>17</sup> China’s disappointing initial bargaining outcomes with the automotive MNCs is correlated to Japan’s rise as a global center of innovation, and the internationalization of Japanese production in a number of key industries.

## **Post-Fordism and developing country automotive producers**

China embarked on its FDI-oriented car industry modernization drive in very challenging global circumstances. The timing of Beijing’s decision to

integrate into the world auto industry in the late 1970s and early 1980s coincided with important qualitative shifts in the globalization of the automotive industry.<sup>18</sup> This period saw the rise of Japanese automakers, coupled with their outward push into international markets, especially that of the United States and also Western Europe. The emergence of Toyota, Nissan, and Honda as major international competitors, and their expansion into global markets, was the single most important phenomenon affecting the world automotive industry in the 1970s and 1980s. The impact of the Japanese advance in the automotive sector was strongly felt by the major American and Western European firms. For decades, US firms had dominated the industry and the rise of the Japanese automakers was a rude shock to them. The crisis for US and European automakers came first with rising imports of small and fuel-efficient Japanese cars into the US market in the 1960s and 1970s, followed by large-scale investment in manufacturing facilities in the US in the 1980s, and Europe in the early 1990s.

The outward symptom of the crisis of the American and European automakers was weaker sales in their home markets and abroad, large losses of manufacturing jobs in Western Europe and North America, the closure of many plants, mergers, acquisitions, sell-offs, the increased role of small firms, burgeoning foreign investment from Japanese firms constructing factories across North America, and the introduction of a wide variety of employment practices, including temporary and part-time labor. US automakers had to close plants, rethink strategies, and even consider entering into partnerships with Japanese automakers. By the early 1990s, Japan held close to 25 percent production capacity inside the continent.

The source of the crisis was innovations in the organization of production and distribution, and technology, pioneered by Japanese automakers called "post-Fordism". The competitiveness of Japanese automakers was rooted in "lean production"<sup>19</sup> methods that were pioneered by Toyota, and other post-Fordist innovations of Japanese automakers in flexible modes of organizing automotive manufacturing. The new work organization combined flexible labor, flexible machines, flexible firms,<sup>20</sup> and just-in-time assembly line production. Post-Fordism had emerged gradually over a three-decade period as Japanese corporations applied advanced American Fordist techniques to Japan's particular postwar context.<sup>21</sup>

The rise of the Japanese automobile producers, and the new wave of technological and organizational innovations, significantly raised the threshold for any developing country seeking to establish a viable

domestic automobile industry.<sup>22</sup> The innovations involved using state-of-the-art microelectronics and flexible manufacturing systems, as well as the complete restructuring of component supply. They brought considerable unit cost and lead-time advantages for Japanese automakers. According to Jones and Womack, and their MIT research team, the

completely new standards of organizational efficiency established by the Japanese pulled the rug out from under the feet of the developing countries. The Japanese had figured out how to reduce the number of hours needed to assemble a car or build an engine, while also shifting the competitive focus from the cost of the factors of production to finding productivity improvements by improving efficiencies through recombining the sequencing of production into an integrated whole for the entire operation. Even the South Koreans, with a \$1 an hour wage in 1980, could not produce a comparable vehicle for the same costs as the Japanese with a \$7 an hour wage rate.<sup>23</sup>

Hence, it would be difficult for other car corporations in the developing world to produce entire units (cars), more efficiently, and for export. Moreover, cost reductions brought by the new technology meant a further lowering of costs. Thus low-cost labor locations would have little to offer to the international vehicle corporations.

The ability of Japanese car producers to achieve continuous technological advance while also achieving steady reductions in costs meant that world markets were increasingly dominated by Japanese producers. This left little potential for emerging economies and their nascent industries. The MIT team argued that for developing countries, the recent waves of technological transformation, especially the innovations in production technology, computer-controlled production, and much more flexible automation advanced by Japanese automakers, "mean that the product cycle is not coming their way".<sup>24</sup> Yet "going it alone" also did not work. Jones and Womack advised developing countries to, instead, make intelligent use of the multinationals to get the maximum transfer of social and technological knowledge.<sup>25</sup> However, they also stressed that developing countries would have to accept that their grandiose visions of producing massive fleets of finished cars for exports were no longer realistic. Third World auto producers should merely aim to occupy one or a few links in a global supply chain. While governments in North America and Western Europe responded with trade protectionism, the logical strategy for Third World car producers, especially those with large



domestic markets, should be to lower restrictions in the hopes of luring MNCs into bilateral and trilateral joint ventures.

The Japanese-inspired technological innovation and organizational changes in production meant that only standardized vehicle systems (lighting, braking, suspension, and steering) and minor mechanical components (starters, radiators, springs and wing harness), and parts requiring simpler manufacturing techniques would be produced in low-cost labor locations in the future. The MIT research team predicted that few new auto manufacturers would emerge in the near future due to the heavy initial investment required, and the increasing complexity of car design and manufacture. They also suggested that developing countries had few options but to forge stronger partnership links with Japanese producers, especially to learn the new production organizational methods and systems, as well as pay attention to technology transfer.<sup>26</sup> Fortunately for China, it did not have to rely on its export competitiveness alone to attract foreign investment for its auto sector. It could hold out the potential of its domestic market. Chinese authorities were eager to attract Japanese investment. They were also interested in GM and Ford as foreign partners. What happened?

## **Interfirm dynamics**

The bargaining processes between MNCs and host country governments or firms are "notoriously difficult to model persuasively".<sup>27</sup> However, studies have helped identify some common factors, negative and positive, that affect a country's ability to bargain successfully with multinationals.<sup>28</sup> A list of the determinants of host country government's (or firm's) bargaining "success" includes skill, information, political will, alliances or competitiveness with other hosts, domestic organization, and competition among firms.<sup>29</sup> A fundamental source of strength in host bargaining is domestic market size, especially for import-substituting industrial activities.<sup>30</sup> Strange adds: "While the bargaining assets of the firm are specific to the enterprise, the bargaining assets of the state are specific to the territory it rules over."<sup>31</sup>

The bargaining power of the recipient government is likely to increase if the investment is aimed at servicing the domestic market rather than export markets. The host government can regulate the domestic market.<sup>32</sup> The bargaining strength of recipient governments is weak when the foreign investment is in unskilled labor-intensive manufacturing for export, because there are numerous competitors to be host. Internal political factors also constrain the bargains that can be struck by recipient

countries, such as interest group divergences or competition.<sup>33</sup> Changes in the underlying determinants of relative bargaining strength should also be accounted for, including new resource discoveries, technological change in competing industries, world prices for imports and outputs, and political changes. Some of the determinants are difficult to anticipate, especially political change. Studies by Moran, Streeten, and Vernon respectively, have shown that the host country's bargaining strength is usually weakest when it is seeking to attract multinational corporate activities to its country, before foreign firms have made investments in the country.<sup>34</sup> The recipient country is in a weak position if there is doubt about whether there will actually be opportunity for profitable activity. In brief, the parameters and content of state-MNC bargaining are conditioned by a range of factors including which country, which industry, and the timing of the bargaining and world market and interfirm competition factors. The negotiations between the Chinese Party-state and the rival MNCs over the first group of Model JVs, discussed in detail below, are illustrative of the source of state bargaining weakness.

### **Top MNCs say no**

Chinese authorities were keenly interested in securing Japan's largest auto companies as JV partners at the start of their outreach.<sup>35</sup> Inside China, there was clear demand for Japan's quality passenger cars. Japanese cars were main contributors to surging Chinese auto imports in the mid-1970s and early 1980s. Chinese machinery industry officials argued that it made sense to try to encourage Japanese carmakers to locate production facilities in China, in order directly to supply the growing Chinese domestic demand. This would help "kill two birds with one stone", easing foreign exchange pressures for the Chinese side, and helping China to make the leap to advanced technology and modes of production organization. Chinese authorities were aware that Japan had surpassed the US, for the first time, in 1980, to become the top auto-producing country in the world, and that Toyota had become a formidable competitor to American and European automakers.

Japanese automakers had already established an initial presence inside China in the early 1970s, as exporters of passenger cars and trucks, by licensed production, and suppliers of complete knockdown (CKD) kits, spare parts, and components. Japanese automotive shipments were infrequent in the early 1970s, but increased rapidly as China opened to the outside world in the late 1970s. These imports, while relatively small compared to Japanese exports elsewhere, nonetheless brought

major returns to Japanese producers, Japanese trading companies, and their Chinese counterparts which controlled this area of trade. In the early reform period, importing did not carry the (multiple) risks of investing in production inside China.

In engaging Japan's leading automakers, Beijing came up against a confident group of carmakers, who had developed a strategy of selective technology transfer across the Asian region. Japanese automakers appeared unwilling to transfer their leading-edge technology to auto producers in neighboring Asian countries. This was seen first in South Korea,<sup>36</sup> and later in Southeast Asia, where they resisted host government requests to build complete car manufacturing capacity inside specific countries.<sup>37</sup> Instead, Japanese automakers established transnational, *regionally diffused* production networks that were spread throughout the entire Southeast Asian region. Doner writes that such a regionalized approach allowed Japanese assemblers to capture economies of scale benefits that could not be achieved by producing entire units within these small market national jurisdictions. The approach of Japanese carmakers became a point of contention with Malaysian officials in the 1980s, when the Malaysians began promoting their Proton national car project.<sup>38</sup>

Chinese authorities were taken aback when the biggest Japanese automakers rebuffed their overtures.<sup>39</sup> The big Japanese automakers were focused on the US market and increasing their share in European markets. Smaller producers, such as Suzuki and Daihatsu, which had also signed technology licensing agreements in return for the right to export vehicles to China, showed interest in larger-scale manufacturing, but the larger automakers, namely Toyota and Nissan, were more cautious.<sup>40</sup> The latter questioned the size of the Chinese auto market, and its growth potential. Toyota saw the Chinese market as "small and unpredictable", and saw no export potential due to substandard worker quality and inadequate local managerial capacity.<sup>41</sup> Japanese automakers were wary of the foreign investment controls of the Chinese government, such as the 50 percent foreign ownership limit (on assembly operations), as well as the rules such as the JV could only produce one car model or one type of part, and could only partner with one Chinese company.<sup>42</sup>

The calculations of Japan's leading automakers need to be understood in the context of their global business strategy. The pessimistic forecasts for China, combined with their optimism for the US market, meant that Japanese automakers preferred to continue exporting to China, while investing heavily in the United States. The US market had

already proven itself capable of absorbing large numbers of vehicles, thus making it worthwhile for Japanese producers –including the traditionally cautious Toyota<sup>43</sup> – to establish large production facilities in the US. Beyond market forecasting, what ultimately triggered Japanese automakers to focus on the US and push forcefully into America were political forces that were brought to bear on Japan.<sup>44</sup> The success of the Japanese exports had prompted US companies to call for government import controls. The Reagan administration began imposing measures across a range of sectors in the early 1980s. The US government imposed sanctions on textiles, steel, and consumer electronics, and warned that cars would be targeted, given the importance of the auto sector in the US economy. The key moment came in May 1981, when President Reagan strong-armed the Japanese government with the threat of retaliatory trade measures, to accept a limit of auto exports of 1.68 million vehicles per year to the US.<sup>45</sup> This policy had the effect of import substitution, similar to developing countries when they erect barriers to imported goods (using tariffs or quota limits) to force foreign companies to relocate their production facilities to the protected market. Japanese carmakers were essentially forced to invest in the US if they wanted to protect their market share and continue their future growth in the prime US market. Buoyed by their other comparative advantage of a strong and rising yen, Japanese automakers invested in new assembly plants in North America with gusto in the 1980s.

In 1984, around the same time as China finally signed its new JV agreements with American Motors, Peugeot, and Volkswagen, Toyota launched what would become its successful Nummi JV with GM in Fremont, California, turning around what had been a declining GM plant, and set for closure.<sup>46</sup> The 1980s witnessed an explosion of Japanese transplants, including those of the components industry. By 1991, Japan's main assemblers had built 12 assembly plants in North America, and 250 component suppliers had relocated across the Pacific.<sup>47</sup> Rather than entering into China, Japanese automakers formed a number of new international JVs with US automakers, including the aforementioned GM and Toyota in California, Ford and Mazda in Michigan, and Chrysler and Mitsubishi in Illinois. Toyota, Nissan, and Honda built new plants in Kentucky (Georgetown), Tennessee, and southwestern Ohio, respectively. Starting in the late 1980s, Japan's largest automakers began to establish large-scale production facilities in Western Europe.

The decision of the Japanese Big Three not to invest in China was also affected by Sino-Japanese bilateral relations at that time. The early 1980s

witnessed important shifts in the attitude of Japanese big business toward China. Chinese authorities suspended or adjusted numerous contracts for massive industrial purchases that China had signed with Japanese suppliers under Hua Guofeng's short-lived Ten-Year Plan, after Mao's death (September 1976).<sup>48</sup> Sino-Japanese economic relations cooled significantly during this juncture. A slew of trade and investment disputes emerged.<sup>49</sup> For example the Baoshan Steel Mill contract disturbed Japanese business, and seriously damaged investor confidence in China. In this period, popular sentiment inside China also became antagonistic toward Japan. Subtle Chinese government messaging registered concerns over Japan's rising international power, and there was talk among Chinese students of "Japan's new invasion of China".<sup>50</sup> These developments heightened the sense of business risk for Japanese investors.

Only smaller Japanese companies, such as Isuzu and Suzuki, developed technical exchanges and joint ventures, and entered into licensing agreements for light trucks and small passenger cars with Chinese partners in the 1980s.<sup>51</sup> But Japan's Big Three decided not to invest in China. What added insult to injury for Beijing was that, soon after rejecting the advances from China, Toyota announced it was expanding into Taiwan. After conducting research on Taiwan's export and internal market potential, and its manufacturing capacities, Toyota decided to enter into negotiations with local authorities in Taiwan, to build a new state-of-the-art assembly plant.<sup>52</sup> Although Toyota saw the new Taiwanese facility as useful mainly for evading bilateral quota agreements on Japanese car imports that had been signed between the Japanese and US governments, Beijing was not pleased by the decision. Chinese authorities responded to the double rebuff by raising tariff levels on automotive imports, aimed squarely at the Japanese automakers. These measures greatly reduced the presence of Japanese auto companies in the Chinese market for the next two decades. For Beijing, rejection at the hands of the large Japanese automakers left lingering resentment that they would not soon forget.<sup>53</sup>

The "Japan factor" also affected Beijing's efforts to reach out to the world's two largest automakers at the time, General Motors and Ford. Chinese authorities had quietly approached the US Big Two in the late 1970s about investing in manufacturing in China. General Motors was attractive to Chinese authorities because it was the world's largest automobile company in terms of output, and GM executives noted that "Chinese planners had a soft spot for 'bigness'".<sup>54</sup> Chinese automotive officials were also interested in Ford, which was the most internationalized automaker in the 1970s. However, the threat from Japanese automakers

impinged on the American Big Two. They were preoccupied with figuring out how to protect their prized home market and their international markets. Similar to the Japanese automakers, the large US producers also discounted the actual size and growth potential of the internal Chinese car market. China was not seen as a viable export base for either parts production or complete units in the Asian region, due to poor workmanship, inadequate production facilities, logistics systems, and infrastructure. When the Big Two expanded in the Asian region in the mid-1980s, both GM and Ford chose to invest instead in South Korea, which had already built up a fast-growing automotive industry, had an established record of partnering with the Japanese, and demonstrated industrial growth capacity.<sup>55</sup>

Beijing's desire to play a strong role in determining the content and direction of FDI flows also raised the level of risk for the foreign automakers. In approaching GM and Ford in the early 1980s, Beijing came up against two US auto giants which had just successfully pressured the governments in the world's leading industrial economies to make concessions to their corporate interests. GM, Ford, and Chrysler had demanded protection from the US and Canadian governments in response to the Japanese threat, and were given favorable bargains from a variety of host national and local governments, including the UK, Illinois, Missouri, New York, and Canada when the firms threatened to relocate or close their facilities.<sup>56</sup> The US Big Three responded to the Japanese threat by threatening to relocate. This had strengthened their hand in reducing labor costs and lobbying for government subsidies. Thompson has shown that, from the late 1960s to the early 1990s, increased capital mobility, or the threat of capital flight, was accompanied by increased government investment incentives to the auto companies in return for maintaining key production sites in the UK, the US, and Canada. The result was intense bidding wars between governments as they competed for the investment. The Chinese state had little to offer to the foreign auto firms in the way of subsidies or other financial incentives. In the 1980s, Chinese authorities could only hold out the lure of a potential domestic market. Even this came attached with strong regulatory and heavy national developmental conditions.

Chinese authorities, state planners, and negotiators learned a lesson from these first discussions with the top-ranking automakers: that it would be very difficult to lure the world's leading automakers to invest in manufacturing in China without the prospect of a sizeable domestic automobile market in China. Even the perception of "market potential" was not enough.<sup>57</sup> As one NDRC industrial planner,

who was part of the drafting team for the 1994 Automotive Industrial Policy, noted:

Many analysts believe that one reason why China has been so successful in developing its auto industry and attracting FDI has been because of its so called “trump card” – our big domestic market. Without a large market, foreign capital will ignore you. However, China did not always possess this advantage. In fact, the Chinese government had to build this large market.<sup>58</sup>

Chinese officials learned that they had a long way to go in turning the country into an attractive site for investment from the world's leading automakers, let alone to export cars to foreign markets. What potential was there, for China, to utilize foreign investment to remake the domestic auto industry?

### **The risk-takers**

Chairman Mao had a saying of “throwing the net wide, to catch a few fish”. Although the world's leading carmakers showed little interest in investing in China, another group of automakers were interested, and decided to take on the risk of investing in automotive assembly in China during the first wave of Model JVs. AMC, Peugeot, and Volkswagen were the companies that chose to invest and partner with China. All three were pressured by developments in the world automotive industry – specifically the powerful rise of Japanese producers, and in turn, their own relative declines – into making a risky “great leap” into China. It was not the romanticized lure of the untapped China market, nor the bargaining power of the Chinese state that pulled them into China. It was mainly global push factors of international competition – and desperation – that propelled them into China. This group of second-level automakers did not have the corporate capacity to fight a rearguard battle against rising Japanese rivals to protect their hold on their traditional markets.

### **AMC and Peugeot**

Hindsight is 20–20. We now know that AMC was mired in major financial problems, and had been for a while by the time it entered into China. Of all the foreign firms negotiating JV deals with Chinese authorities at the time,<sup>59</sup> AMC was the quickest and first to reach agreement on a JV deal in May 1983, after four years of negotiations. In contrast, the Volkswagen JV agreement was reached after six years of long and difficult negotiations.

Prior to inking the deal with Beijing Automotive Works (BAW), AMC had reported major losses for three years running,<sup>60</sup> and its management knew there was little chance for it, as America's distant number four automaker, to recover through growth in its traditional markets. Todd Clare, AMC's Vice President International, who oversaw AMC's China operations, was aware that sales volumes in the US were set to remain stable at about 15 million units per year; and that the Western European market was already saturated. This meant that AMC could only increase its share in the mature markets by "stealing another firm's market share – a zero sum game".<sup>61</sup> Among the emerging markets, the Latin American economies had limited growth potential, and AMC did not have a presence in the fast-growing Asian region. AMC executives saw an opportunity to sell shareholders the idea of expanding into China as a "land of limitless potential" that was still unexplored by other automakers, and where AMC could exploit first-entry advantages.

At the press conference to announce AMC's plans for a new JV in Beijing, Joseph E. Cappy, AMC's Executive Vice President, stated that, "For American Motors, [Beijing Jeep] has meant not only an entry into the Chinese market, but the establishment of a strategic manufacturing base in the Pacific rim of Asia."<sup>62</sup> He added that AMC was "committed to the long-term viability" of this Chinese venture, and planned to reinvest the profits earned from the venture to increase AMC's equity share from 31.35 to 49 percent. US media hailed AMC's China venture as a potential saviour of the US automobile industry, against the "Japanese invasion".<sup>63</sup> This publicity temporarily cushioned AMC's demise, as the announcement of the new JV brought a two-week 40 percent surge in AMC's stock value.<sup>64</sup> The real weaknesses of AMC came to the fore, however, just as the final details of the JV deal were negotiated, and it was not before AMC took an increasingly predatory approach toward its China-based subsidiary JV, bleeding it to try to save its home operations in the US.

By the time AMC started production in Beijing in 1984 it was already going bankrupt, three years away from a takeover by Chrysler. The firm was in deep financial trouble in 1979 when Renault bought a 46 percent stake in the company. AMC's financial contribution to Beijing Jeep was actually quite small, totaling only US\$8 million in cash and \$8 million in technology. Of the total equity investment of US\$51 million, BAW actually provided a much larger 69 percent equity contribution (valued at \$35 million), although most of the contribution was in land, existing facilities, and equipment. AMC accepted a minority stake in the JV, for a 20-year term.



The main goals in the JV negotiations, for the Chinese side, were to convince AMC to agree collaboratively to develop a new Jeep model, specifically for China, to transfer the existing technology to produce a recent Jeep model, and to export some of the vehicles to foreign markets, so that the venture could earn foreign exchange, and become self-sustainable in terms of future operations and growth. In hindsight, AMC's move to China was a desperate, last-ditch high-risk gamble on the part of America's down-and-out automaker to revive itself. Wanting to close the Chinese JV deal as quickly as possible, and to present itself to the public (and shareholders) as having moved boldly to capture first-mover advantages, AMC promised to design a new canvas-top military-type vehicle model, all the related components, and a new production line, and to do so together with its new Chinese partners. However, AMC started to backpedal on these promises just as the deal was being finalized. It demanded to be allowed to assemble an outdated Jeep model (BJ212s) for the first five years so that it could have an ensured revenue stream using the old technology and equipment. AMC said it would eventually introduce the more contemporary Jeep Cherokee XJ model, but that it needed to push back the development of the new vehicle to an undetermined future date "when both sides deemed it appropriate" (the words that appeared in the formal JV agreement). AMC stated that it would need to rely heavily on imports of CKD kits from its US operations for the start-up, but exact end dates for this concession were left undetermined. After tense deliberations, the Chinese side basically gave in, and reluctantly agreed to allow the JV to start, especially after both sides had given the project such a large amount of media attention. Shortly after the launch of Beijing Jeep, BAW established a technology research center to demonstrate its commitment to designing a new vehicle together with AMC. But AMC never contributed any engineers to the new center, leaving it to be staffed by a small group of Chinese engineers.

The fact that Chinese authorities approved such a JV deal as its first major foreign-invested automotive project inside China, with meager contributions from the foreign partner, indicates weak bargaining power. Chinese authorities and BAW representatives had also tried to negotiate with Toyota to partner with BAW, but as discussed above, these talks failed.<sup>65</sup> What the Chinese gained in the JV deal with AMC was a partnership with America's troubled fourth-ranked automaker, which was losing market share fast in the United States, and whose gas-guzzling Jeeps and other models were not attractive to US consumers. AMC had shrewdly covered its risk, and delayed the costs of localizing parts

production by getting the Chinese to agree that parts for the Cherokee would be “gradually localized”.<sup>66</sup>

The troubled US automaker exported CKD kits from its American factories, and had its China-based JV subsidiary pay for the kits in foreign exchange. This meant asking its Chinese partner, BAW, to pay for the kits, in a scenario in which BAW had no independent capacity to earn foreign exchange. AMC was essentially “bleeding” the JV, and more specifically, the Chinese side, of foreign exchange. During the first year of Beijing Jeep’s operations, central authorities had already intervened, without AMC knowing, to bail out Beijing municipal authorities and BAW a few times, so that the Chinese side could pay AMC for the imported CKD kits. Seeing only an endless drainage of foreign exchange (FOREX) reserves, and a parasitic foreign partner, Chinese central government authorities turned off the FOREX tap on BAW in mid 1985. Since BAW had no capacity to earn foreign currency on its own, the central-level decision meant that payment ceased on the CKD kits from the US.

In late 1985, only one year after its opening, AMC halted operations. By 1986, two years after the launch of the JV, the two sides were locked in a bitter dispute over the accumulated FOREX debt. AMC issued a formal letter of complaint to the Chinese central authorities, and threatened that it would pull out from the JV, and go home, if the matter was not resolved. The threat elevated the matter up to the level of China’s top leaders. Chinese Premier Zhao Ziyang felt it could harm international perceptions of China as a site of foreign investment, which he and other Chinese leaders were working hard to improve. He decided that it was necessary to resolve the dispute, and sent then Vice Chair of the State Economic Commission (and future Chinese Premier) Zhu Rongji personally to supervise the dispute settlement meetings. Under Zhu’s direction, the central government agreed to provide a one-time FOREX payment to AMC, but demanded that the two partners undertake major changes in their business agreement to prevent similar FOREX problems from reemerging in the future. They also made AMC agree to specific import limits, new tariff rates on imports, and concrete targets for the localization of production. By 1989, AMC was acquired by Chrysler, and this included its equity holdings in Beijing Jeep. Beijing Jeep continued to flounder for the next decade, due to limited domestic demand for its products, and in no small part because of neglect by its American parent. The experience of intervening to stem the FOREX drainage and managing the crisis in this JV partnership taught Chinese authorities a number of bitter lessons that would be transferred to other and future JV projects.

Peugeot SA (PSA), the second foreign automaker to enter into a JV partnership in China, was also not a top-ranked firm. The French automaker was mired in financial trouble prior to entering into the JV in Guangzhou in 1985. Peugeot experienced a major slump from 1980 to 1984, which led to an accumulated debt of 8.5 billion French francs, and questions over the future of the firm.<sup>67</sup> PSA strengthened its financial management at the top of the corporation, and made major cuts to its money-losing international operations. These moves helped stabilize the French automaker by minimizing overall risk, but it also meant that the company was excessively focused on the European market. For PSA, 88 percent of its sales were inside Europe. However, industry experts forecasted that Europe's world market share, which then stood at 32 percent, was set to decline. Jacques Calvet, PSA's CEO, decided to turn to Asia, a region that the French auto group had previously neglected, and to make China the locus of its Asian expansion.

The driving force, on the Chinese side, in the negotiations over Guangzhou Peugeot were local Guangzhou officials, who had proactively contacted Peugeot. Negotiations started in 1980.<sup>68</sup> While the central authorities were interested in pushing for a new model, Guangzhou officials conceded to the French that it would be too expensive to try to develop a new model, did not try to negotiate for a new vehicle model, and agreed that, if the French built a brand new production facility, Peugeot could transfer its existing assembly lines to assemble import CKD kits for the Model 504 pick-up truck and Model 505 station wagon. The JV deal contained an agreement that both sides would gradually strive for increased local content as the project progressed. The agreement, signed in March 1985, entailed \$55 million in initial capital. Peugeot took only a 22 percent equity share. Other foreign partners included the National Bank of Paris, which took 4 percent equity, and the World Bank's International Finance Corporation, which took 8 percent. On the Chinese side, Guangzhou Automotive Corporation held 48 percent equity, the majority share, the new venture capital firm of the Chinese government, China International Trust and Investment Corporation (CITIC) held 20 percent equity, and the Industrial and Commercial Bank of China took 4 percent equity. In finalizing the JV agreement, Guangzhou exercised greater autonomy from central authorities than either Beijing or Shanghai. In particular, it fended off the influence of the China National Automobile Industry Corporation. However, in so doing, Guangzhou cut itself off from relying on support from the political center when it got into financial trouble later on. The lack of central-local coordination in the negotiations of Guangzhou Peugeot

was another indication of the Chinese state's weak bargaining capacity vis-à-vis auto MNCs, in the initial reform period.

Unlike Volkswagen, which made thorough preparations for its entry into China, and decided to establish the base for a longer-term partnership in China, Peugeot's China strategy contained a number of ill-advised decisions. These included Peugeot's agreement to build a new assembly facility in Guangzhou, but to assemble outdated models. Peugeot convinced its Chinese partners and local government authorities to agree to start with building its 504 and 505 models, essentially its "Third World" models, which it supplied to African and Arab markets. It decided to leave the production of more contemporary models for a later date, "if the necessary capital was available to fund the expansion". Chinese consumers in Guangdong province, who had access to a heady supply of smuggled Japanese cars, showed little interest in Peugeot's old 504 and 505 models.<sup>69</sup> Low demand for Peugeot's outdated models meant that the new production facility never operated at full capacity, and the pace of localization was slow.

The other fateful decision was that both sides relied on importing CKDs for the first period, versus agreeing in principle to build local supply capacity as a priority for the partnership. Like Beijing Jeep, Guangzhou Peugeot ran into major FOREX trouble very soon after the start of operations. The partners in Guangzhou Peugeot thought that they would be able to avoid FOREX shortages since it had two foreign financial institutions and one Chinese investment firm involved in its five-way partnership. However, appreciation of the French franc in 1986 led to tension over the price of the imported CKD kits. The JV contract stipulated that Guangzhou Peugeot would pay the fixed price of 47,000 francs in 1985, and the price would increase to a fixed price of 53,580 francs in 1986. However, from 1985 to 1987, the value of the franc rose 110 percent against the Chinese renminbi. This meant an increase in the RMB price of the CKD kits, from US\$5060 in 1985 to US\$8500 by the end 1986. The Chinese demanded that Peugeot lower its CKD price, but the French would not agree. This disagreement led to six months of intense negotiations. Eventually, the two sides agreed on a price of 48,000 francs, and CKD orders resumed in 1987. This FOREX crisis at Guangzhou Peugeot turned out to be another hard lesson learned by the Chinese side in partnering with foreign firms.

PSA held off from producing a more advanced car model in Guangzhou, Citroën's ZX, until 1992–94, but by then it was too late to reverse the French automaker's situation in southern China, where its reputation had already been sullied from a decade of mishaps. Peugeot pulled out of

Guangzhou in 1997 and sold its factory and the other holdings to Honda Motors. Both the French and the Chinese sides acknowledged that the Guangzhou project had failed. While a French analyst places the blame on “ever present and incompetent [Chinese] administration”,<sup>70</sup> Thun has shown that municipal officials had neglected the JV, failing to provide the necessary institutional and policy support for the JV to succeed. It would be misleading to blame the failure of Guangzhou Peugeot on excessive meddling from Chinese government authorities. The cause was more likely negligence or lack of proper nurturing from both the Chinese and French corporate partners. The attention of Guangzhou municipal authorities was diverted elsewhere, including speculating on real estate and commercial development deals, and giving its support to new private-sector-driven industries.<sup>71</sup>

### **Volkswagen**

VW's entry into China was not driven by desperation, as it was for AMC and Peugeot. The latter both faced serious threats to their survival, were mired in financial trouble, and saw new sales in China as a way to extend the life of their outdated technology and models. This was exactly what Womack and Jones warned against, when they noted that developing countries need to avoid becoming producers of obsolete technology and car models, in their pursuit to build complete units. The Volkswagen experience was different from the other two MNCs. VW's approach to China was very different from the other two foreign automakers. VW was also facing serious challenges to its international sales when it chose to invest in China. Surging Japanese automakers had consciously targeted their own products to compete against the Beetle in the United States and elsewhere.<sup>72</sup>

VW also faced a growing challenge from Japanese imports in its European home market. The reality for VW was that Toyota had started making major gains in the US market as early as 1965 with the Corona car model. The Corona was designed to appeal to US car buyers who wanted an affordable, two-door hardtop, minus the shortcomings of the Volkswagen Beetle. It was under \$2000 in price, had a quiet engine with twice the horsepower of the Beetle, offered options such as air conditioning and automatic transmission, and had more space in the back seats, making for a more comfortable ride for adults.<sup>73</sup> Starting from sales of only 6400 units in 1965 (a distant twenty-first on the list of foreign imports), by 1969 sales had risen to 130,000, putting Toyota second only to front-running VW, and its Beetle. By 1970, Toyota's share of the US import market had climbed

to 13 percent, its marketing area covered the East Coast and Midwest, and it had expanded to offer a fuller product lineup which included a more spacious, four-door Corona.

Nissan, Japan's second largest automaker, was determined to pursue the large California market despite earlier setbacks in the US. It decided to upgrade its servicing and parts availability, and in 1968, premiered its new Datsun 510 in the US, with a new 96 horsepower engine. Sales of the high-performance 510 took off immediately as an inexpensive alternative to the BMW 1600.<sup>74</sup> Nissan followed the 510 with the Datsun 240Z, which debuted as a Japanese sports coupe. Rising demand for both models catapulted Nissan into the third largest importer to the US in 1978, behind Volkswagen and Toyota.

Honda Motors, Japan's third largest automaker, was the biggest winner of the gasoline shortages resulting from the Arab oil embargo of 1973–74. It actually displaced VW as the third largest importer to the US in 1978. The dual (leaded and unleaded) gasoline capacity of the Civic engine gave it a sales advantage during the US fuel shortages. The CVCC engine (compound vortex control-led combustion), pioneered by Honda, could meet the new American emissions standards without using a catalytic converter. The result was a Civic car model that Honda started exporting to the US in 1973 that was fuel-efficient, inexpensive, and attractive, and had dual gasoline capacity. With the success of the Civic, Honda rapidly shifted its attention away from the Japanese market to North America. By the end of the 1970s, 60 percent of Honda's exports were going to the US alone, consuming 40 to 50 percent of the company's total output. Even prior to building its Ohio plant, Honda had already become very focused on the US market, and its future models, such as the bigger Accord and the CRX sports coupe, were designed specifically for US consumer preferences.

What was disturbing for VW was how Toyota and Nissan had honed in on displacing the Beetle from the top spot among imported economy cars in the US market, and then successfully used a strategy of shifting upscale, and developing a full line of car models, using periodic design changes to further expand inside the US car market. All three Japanese automakers used their low-cost production methods and competitive pricing to fight for and maintain their market gains. Profits from exports helped fuel Japanese expansion plans as their firms moved from the West Coast base to all areas of the US, along the way pouring millions into warehouses, dealer-training programs, and new office buildings.<sup>75</sup> From 1970 to 1971, Nissan signed up more than 300 dealers, to expand its dealer

force by 50 percent, to more than 900 in total.<sup>76</sup> The advance of the Japanese carmakers sent VW on a precipitous fall in the US. Japanese firms had successfully recast their image from makers of cheap, flimsy boxes on wheels to sporty, high-performance, attractive cars. They did so at the expense of VW first, and later, the giant American automakers. VW was forced to rethink its entire "international" strategy.

For VW, the move into China was therefore largely driven by a fundamental challenge to its international competitiveness from the Japanese. One Chinese planner suggested in an interview:

We believe that China, in fact, has saved VW. VW had lost out to the Japanese on the U.S. market. Their decision to come to China turned out to be really beneficial for them. They have made huge earnings in China. We can see this in the fact that the largest share of VW's profits, globally, came from its China investments.<sup>77</sup>

While this observation may be accurate, VW also made a number of important decisions about how it approached its investment in China. These decisions, in combination with directive intervention from central government authorities, and the institutional support provided by local Shanghai actors, would result in the successful corporate and sector developmental outcomes that were achieved in the Shanghai area in the 1990s.

## Conclusion

External economic factors, specifically shifts in the world automotive industry and the specific circumstances and international strategies of particular foreign auto firms, strongly conditioned the range of options that the Chinese state had in implementing its JV strategy for automotive modernization. During the first round of negotiations between the Chinese state and automotive MNCs in the late 1970s to the mid 1980s, world order factors imposed constraints on the Chinese state's foreign capital utilization strategy. Even though the Chinese state has shown more capacity than smaller states in engaging with MNCs, and has been relatively successful in trading market access for technology in its bargaining with multinationals, it had to devise strategies and tactics to overcome existing international constraints and transfer some of its potential size advantages (population) into real market incentives for foreign investors.

This chapter has examined how and why the bargaining power of the Chinese state over automotive multinationals, and its ability to extract concessions from foreign automakers for national developmental gains, was quite limited during the first wave of Model JVs in the early to mid 1980s. This runs counter to the common image of a Chinese state with strong bargaining power found in both the academic and popular literatures. The strongest factor in limiting the bargaining strength of the Chinese state vis-à-vis the foreign auto firms was the rise of the Japanese automakers, and the consequent shifts in the world automotive industry. Post-Fordist innovations gave Japanese automakers major advantages over their international rivals, especially with the onset of oil shortages, and this period witnessed surges in Japanese auto imports to the United States and Europe. Rising American and European protectionism induced Japanese automakers to internationalize their manufacturing into these markets. US and European automakers then had to scramble to respond.

These changes in the world auto industry made it more difficult for automotive producers in developing countries to catch up with the leading innovators. The same developments caused the big automakers from Japan and America to focus on each other, leaving them unresponsive to the investment outreach efforts of the Chinese state. China's still small and unpredictable domestic auto market could not grab the attention of either Japan's leading carmakers, specifically Toyota, Nissan and Honda, or those of the United States, namely GM and Ford. None of these companies chose to establish manufacturing facilities inside China during the first decade of opening.

After seven years of difficult negotiations, Chinese authorities finally reached JV agreements with three second-level foreign automakers, establishing Beijing Jeep (AMC), Guangzhou Peugeot, and Shanghai Volkswagen. Even these weaker auto firms would not agree to Chinese demands to design and develop new car models for China, or to export a portion of their output, in order to earn foreign exchange. In tracing the actual agreements that were reached, and analyzing the content of the foreign investment in each of the three JVs, we see that Chinese authorities were unable to gain concessions on key Chinese objectives. In hindsight, it is evident that both AMC and Peugeot hoped to make handsome profits from their old technology and car models, given the absence of other international competitors inside China. They sought special status from the government, and mobilized local officials to lobby central authorities on their behalf



for import allowances, tax reductions, foreign currency provisions, loan priorities, and tax exemptions.

The lack of coordination on the Chinese side, between central authorities and local representatives, in negotiating with the foreign auto firms, further weakened the abilities of the Chinese state to get the MNCs to agree to transfers that would support national developmental outcomes. The fact that central government representatives were not included in the partnership arrangements in two of the three JVs – AMC and Guangzhou Peugeot – meant that central authorities did not have a regular hand in monitoring the operations of the JVs. Central regulators were left trying to influence the JVs from the “outside”. The exception was in Shanghai VW, where the central government was represented in the ownership group by the China National Automotive Industry Corporation, and arguably, the Bank of China.

The limited capacity of the Chinese state to direct foreign investors and channel foreign investment toward national development objectives reflected a “fractured or weak state” in negotiating with MNCs in capital-intensive sectors.<sup>78</sup> However, important changes were soon to take place both in the world automotive industry and inside China, starting in Shanghai in the late 1980s, and these changes would fundamentally alter the power dynamics between the Chinese state and the automotive MNCs by the mid 1990s. In the next chapters we examine the developments that took place over the next decade, whereby the Chinese state overcame its internal coordination problems and built up its capacity to bargain strongly with MNCs, specifically targeting the same group of leading automakers who had rejected it in the 1980s. In this period, China learned how to formulate a coordinated policy to effectively leverage foreign investors for Chinese national development objectives. This discussion starts in Chapter 4 with the case of Shanghai Volkswagen. In hindsight, it was highly fortuitous for VW to be partnered with SAIC, and to have the opportunity to establish its JV subsidiary in Shanghai. VW also took a very different approach from AMC and Peugeot to investing in China. The German automaker was much more responsive to the mediating efforts of the Chinese Party-state than either of its foreign rivals. The next chapter examines these issues in detail.

# 4

## Shanghai VW: Origins of the Modern Supply Network

A compelling case can be made that domestic (“endogenous”) factors, specifically local companies and local institutions, have been the main factors in sustaining China’s automotive modernization. Thun argues that local Chinese parts companies played *the* key role in building up the local supplier capacity to feed the final assemblers, and that the Shanghai municipal government provided coordination and institutional support for this process, enabling local companies to capitalize on the opportunities presented by the growth of the Shanghai Volkswagen (SVW) JV.<sup>1</sup> The Shanghai municipal authorities deserve a large measure of credit for building the foundations of a modern local supply network by reacting swiftly to warnings from central authorities that SVW would be shut down if localization did not increase to 40 percent in a short amount of time.<sup>2</sup> This book builds on Thun’s findings regarding the contributions of local institutions and actors, but suggests that it would be misleading also not to give due attention to the crucial role of the central government and external (“exogenous”) forces in spurring the modernization of China’s automotive industry.

This chapter describes how the preliminary foundations of a modern automotive supply network were built in the Shanghai area, starting with the opening of SVW in 1985, and especially from 1987 onwards. It focuses on how the Chinese state prodded Volkswagen into investing in China in a manner that would meet national developmental objectives. The progress achieved in building a modern local parts network that could supply quality automotive parts and components to SVW from the late 1980s to the early 1990s is understood as the focal point of the first phase of China’s automotive modernization. The interventions from the central state to force the MNCs to localize were

especially important in the SVW case because Volkswagen was not contractually obligated (in the terms of the JV agreement) to build the local supplier network. The German automaker had made sure that it was explicitly stated in the contract that local parts provision was the responsibility of the Chinese side.<sup>3</sup>

Even prior to being prodded by the Chinese state, Volkswagen had taken a very different approach to investing in China, in contrast to its foreign rivals – American Motors Corporation and Peugeot – which entered the country around the same time. All three foreign rivals faced similar initial challenges when they first entered China.<sup>4</sup> The central authorities had pressed for a similar set of demands with all three JV projects, requesting transfers of modern technology, and managerial expertise, to help close the gap between the automotive industry in China and the foreign automakers, and where possible, promote industrial “leapfrogging”.<sup>5</sup> However, the foreign carmakers responded differently to the domestic demands, and these differences mattered in shaping outcomes in each of the three locales. Although SVW was *not* classified as a “national level project” (i.e. a project directly under the administrative purview of the central authorities and allocated preferential financing from the national budget, or the budget of the Five-Year Plan), Chinese authorities at both the central and local levels gave strong backing to the Shanghai JV. This was due in large part because they could see that VW was willing and able to make the desired investment in the auto project.

The sections below will examine the significance of the relations *between* external forces, the Chinese state, the local corporate partner, and local supply firms. The argument rests on two findings: first, that it is highly unlikely that local actors would have been able to achieve the modernization gains in building a local modern supply network in the Shanghai area without the direct support and even guiding role of Volkswagen AG; and second, that VW would likely not have made its contributions that helped kick start parts localization in the 1980s without the prodding from central authorities. Local actors and institutions were then essential in sustaining the modernization drive.

### **Central government pressure, VW responsiveness**

Some scholars have suggested that the central government continues to suffer from major economic coordination failures, and still demonstrated “limited ability” to develop strong business groups or

determine outcomes in individual company cases.<sup>6</sup> They claim it has not been able to direct and monitor the allocation of state capital to avoid problems of moral hazard; or to prevent local production facilities from springing up, across China, in haphazard fashion. They have described a “seemingly hapless central government”.<sup>7</sup> While outcomes at two of the three JVs – Beijing Jeep and Guangzhou Peugeot – were illustrative of how decentralization had weakened the inability of the Chinese state to direct the development process for particular outcomes, in contrast at Shanghai VW the political center did steer Volkswagen toward creating a modern local auto supply network in the Shanghai area.

According to the German executives chosen by VW to represent the German automaker in the SVW “50/50 mixed” management team, central authorities did apply significant and sustained pressure on the decision making of the foreign partners, and on the JV partners. The state interventions became more intense in the late 1980s. This pressure, combined with the strategic principles underlying VW’s approach to China, resulted in desired outcomes for all sides involved. Central pressure was focused on two points of national development: (1) the localization of modern parts supply; and (2) foreign exchange (FOREX) controls. In the previous chapter, we examined how lack of localization had led to FOREX crises, and work stoppages in Beijing Jeep and Guangzhou Peugeot, and inhibited the modernizing potential of these projects, even as limited as this potential may have been.

### **Supply localization**

In the mid 1980s, 90 percent of China’s auto industry was geared toward the production of trucks and buses, not cars. The country’s automobile industry was highly fragmented with over 120 automobile factories and 2500–3000 supply companies. All these companies lagged far behind in terms of technology and management, and their operations were not geared to profit making. Stefan Messmann, the former head of VW China and Asia, notes that a supply industry – in a modern sense – did not exist in China when VW started the JV project in the mid 1980s.<sup>8</sup> If SVW, or any of the JVs, were to reach the local content requirements Chinese authorities had requested, major gains would have to be made in parts localization.

Central authorities pressed Volkswagen representatives to contribute to parts localization. The center’s efforts were made more complicated by Chinese Premier Zhao Ziyang’s efforts to push ahead

on decentralizing economic decision making and giving more power to enterprises. Nonetheless, as former VW executives noted, "leading representatives from a number of key central organs were not shy in making their requests known to the VW staff in Shanghai, especially on the need to build local supply capacity, but as well to help in other areas of managerial expertise".<sup>9</sup> A group of central state organs applied the pressure. The steadiest source of pressure was CNAIC, which played a dual role with regard to SVW. It was both a partner in the JV and a regulator. CNAIC was essentially given ministerial authority over automotive policy when central leaders gradually deregulated management authorities over certain industries. The main regulatory authorities for the auto sector had previously been the Ministry of Machine Building. However, in the case of SVW, CNAIC also had the advantage of being a partner, though a minor equity holder. CNAIC gained a seat on SVW's Board of Directors because of its ownership share, attended meetings of the Board, and directly monitored the progress of the new JV, and the corporate plans and major decisions which the JV Executive Committee (Ex Com) proposed to the Board for review and approval. In late 1986, CNAIC President Chen Zutao told the German executives at SVW that Volkswagen must help the JV to build the local capacity in order for the JV to meet its localization requirements.<sup>10</sup> When the German management team told Chen that local content was not their responsibility, as stated in the JV contract, but rather the responsibility of the Chinese side, Chen replied: "You have been here for more than one-and-a-half years, and have localized just two percent of brought-in parts. *You must reach 80 percent local production by 1991.* I didn't sign the contract, but I make sure the terms are met, dutifully. We both need to make progress."<sup>11</sup> Chen continued to press VW to build local supply capacity until he was removed from his position, after reportedly falling out of favor with the Chinese Premier, and later Party General Secretary, Zhao Ziyang.

In early 1987, Zhu Rongji, Vice Chair of the State Economic Commission, and fresh from resolving the dispute between AMC and BAW over FOREX and CKD kit imports, warned Volkswagen executives and SAIC heads that: "If the quota of parts made in China does not increase to 40 percent in a short time, we will close Shanghai Volkswagen."<sup>12</sup> He then followed up with a personal phone call to Shanghai party secretary and mayor, Jiang Zemin, alerting him to the fact that: "We have to be aware of the bitter lesson – we have practically made no progress in localization in three years."<sup>13</sup>

The State Planning Commission (SPC), home of China's state planners who kept a close eye on domestic macro-industrial trends and key enterprises, also added its weight to pressuring the German management team at SVW. SPC Vice Chair Huang Yicheng impressed upon the German executives:

We have two main difficulties: one is economic and the other foreign currency. The process of nationalizing the Santana is too slow. The responsibility for this does not lie entirely with Volkswagen, but also with us. I would say quite openly that the partners in Shanghai have sold the Santana fairly well, but are under no pressure to push nationalization.<sup>14</sup>

Huang added further, "We have a project in Tianjin. Thirty percent of the parts and components are produced locally, and we are looking to achieve 60 percent by the end of the year." The SPC Chair was drawing on the localization of Japanese technology at Tianjin Automotive to shame the German partners into taking a more proactive role. These tactics built on earlier interventions from the SPC, when it told VW that "it should not feel as though it needed to confine itself to Shanghai suppliers only, when looking for local suppliers, and that the Germans should instead 'look national', to find the best partner in China". Irrespective of whether VW was contractually obligated, or not, to help build local capacity for the Santana, or whether the comparison with Tianjin Xiali was appropriate, central authorities repeatedly emphasized to the VW management that they were expected to step up on localization. Although they had one hand tied behind their backs due to the decentralization drive, Chinese regulators put effective pressure onto VW to localize. Even though Zhao Ziyang continued to push for decentralization, it was becoming increasingly evident to Chinese planners that the scale and complexity of capital- and knowledge-intensive sectors such as automotive, required the state to be more directly involved in guiding the development process, especially if international transfers of technology and related know-how were to be secured.

### **VW in the quadruple alliance**

In the text of the SVW JV agreement, Volkswagen was only responsible for its share of in-house production, which meant setting up a modern press shop, body shop, paint shop, and assembly line, and achieving

production capacity of 30,000 units. VW also agreed to establish an engine plant for 100,000 units, and to produce the basic Santana parts and components, in-house. This was all supposed to be completed by 1989. The new JV itself was only contractually responsible for providing about 20 percent of total added value for the project, to be drawn from its own earnings once the plant was up and running. The Chinese side was responsible in the contract for about 80 percent of the total added value for the project, including the localization of imported parts. During the JV negotiations, Shanghai representatives promised to develop this local supply industry, step by step with the growth of SVW. It was not envisaged that the new JV itself would have to generate the funds to finance the localization process, which was targeted to rise from a rate of 25 percent in the first year of the JV to 80 percent by the seventh year, as demanded by Chinese authorities.

The realities that the German managers faced, on the ground, with the start of operations, would soon expose them to the fact that, although the contract stipulated that the German side was not responsible for building local capacity, the reality was that the Chinese side was far from able to meet local supply requirements. There would be no way for VW to take a hands-off approach to the parts localization issue if local capacity was going to be built anytime soon. Posth recalls that from the immediate start of operations (August 1985), the JV management found it extremely difficult to keep to the schedule on modernizing the plant bequeathed by Shanghai Automotive.

In November 1985 VW told the Chinese that, despite not being contractually obligated to help build local parts supply capacity in the JV, it would provide some support to its Chinese partners to localize parts supply for the Santana. The VW management issued a list of priority Santana parts which VW would help SAIC's suppliers to localize, and map out the necessary steps for making this happen. Posth recalls that Dr Carl Hahn, VW's CEO, believed that VW should do so in order to ensure that the Chinese would keep themselves committed to VW, and not look to the Japanese.<sup>15</sup> As German managers became more involved, they realized that their Chinese partners (SAIC) were "not making any headway ... in establishing a modern automotive supplies industry in Shanghai".<sup>16</sup> The Chinese second managing director at SVW explained:

You have to understand that technically, the Chinese automotive supply industry in 1986 was 30 years behind that of the auto supply

industry in Europe, Japan or the USA. At this time, Chinese suppliers produced parts and components for trucks, and not for cars. What we needed was a paradigm shift, not only in parts design, but also in technology. Initially, there wasn't a single supplier capable of producing even a single part for the Santana.<sup>17</sup>

The director added, "At the time, we joked that China could only produce the antennas and the tires for the Santana, and that we would have to import everything else."<sup>18</sup>

Facing repeated calls from central authorities for VW to get more involved in helping to address the local supply challenge, the VW management began to put more effort into building local supply capacity, intervened more fully to coordinate local stakeholders, and was pulled more deeply into the mix, even into mediating tensions between suppliers who had the backing of central authorities and those proposed by SAIC. Posth recounts: "Based on our initial experiences, these [local] companies had to drastically reorganize themselves from a technical and commercial point of view. They had to do this in a way that allowed them to move towards mass production, step-by-step."<sup>19</sup> The local Chinese suppliers had to completely review every single part of their business, and how they would produce and then feed their parts up to SVW. This review process ranged from technology and controls to production, quality assurance, logistics, materials management, and staff qualifications.<sup>20</sup> Posth explains that "it would have been impossible" to make the improvements in the supply system "without importing equipment, and the benefit of licenses and other know-how. This required heavy capital investments and matching pools of foreign currency – both of which were in short supply in China, in this period."<sup>21</sup>

One of VW's main contributions was made in late 1986, when the German management team formulated a "work-flow" plan for the localization process that encompassed the first steps in the process of assembly. This work-flow plan provided a systematic representation of the individual steps that had to be completed in the supply chain, and the issues that had to be tackled at each step. With VW's plan, the local stakeholders understood more clearly "how complicated the localization process would be, not only from a technological point of view, but also from a production organization standpoint, even in manufacturing the simplest of parts locally. It became apparent just how many coordinating processes were required when involving stakeholders in an optimal way."<sup>22</sup> Posth recalls that VW's formulation of this work-flow plan came in response to the "order" they received in November 1986 from CNAIC President Chen



Zutao, that the JV “must” localize the parts that were being imported for the Santana within three years’ time. Chen’s insistence was rooted in the FOREX crunch that Chinese authorities faced from 1985 to 1987, and was part of the package of import control measures that the central authorities introduced beginning in 1986 to stem what had turned into a major drain on foreign currency holdings.<sup>23</sup>

In agreeing to help meet the local content requirements, the VW management however insisted that all parts supplied locally to SVW must meet VW quality standards. The Germans explained that compromising the quality of parts would negate the export potential for the product. It would have been impossible for the Chinese side to achieve VW’s quality requirements from scratch. SAIC then took the lead in enrolling hundreds of companies from the Shanghai area, reaching out to thousands of companies across China.<sup>24</sup> In particular, the creation of the “Shanghai Santana Localization Community” in 1987 provided key institutional support for building a comprehensive supply base in the Shanghai area.<sup>25</sup> Shanghai collected a “automotive component tax” (*qiche lingbujian shui*), on the sales of Santana vehicles, which from 1988 to 1994 amounted to over RMB 5 billion. The funds were managed by the local government’s Auto Localization Office, to assist local supply companies that required capital to import technology, and to establish partnerships with foreign investors.<sup>26</sup> Posth writes:

It has been the progress in local content production, reaching, after some difficulties, 93 percent in the Santana production, which brought about the real breakthrough for the company. Again, it was Zhu Rongji, who in 1987 as successor to Jiang Zemin became the mayor of Shanghai and who gave highest priority to the further development of Shanghai Volkswagen and its supply industry. In the same year, this led to the foundation of the “Shanghai Santana Localization Community”. From that, Volkswagen created a solid structure for a successful future development of the VW project which the competing pioneers were not able to match any longer.<sup>27</sup>

While the contributions of endogenous factors were critical in sustaining the localization drive, external factors, specifically VW’s contributions, were essential to creating the initial foundations on which Mayor Zhu Rongji and local Shanghai actors could build to push ahead with forming a comprehensive, consolidated, and modern supply network.

Messman notes, when all sides initially agreed that VW's quality standards would be used as the benchmark, VW had, in reality, committed itself to playing a lead role in a "two-step" local supplier development program:

First, VW worked closely with SAIC to jointly identify potential local suppliers. Because of its 50–50 co-determination partnership with the Shanghai-based automaker, VW had little choice but to rely strongly on SAIC's suppliers, but it wanted to make sure that SVW had the best suppliers in the bunch. Second, the JV partners also had to work closely together to decide whether VW and its supplier group would transfer technology directly to the local supply company in a licensing arrangement, or actually match the local Chinese supplier with one of VW's suppliers in a joint venture or co-production partnership. In each case, the level of effort on the German side would be different with respect to ensuring successful absorption or adaptation of the German technology. In the latter cases, the German engineers had to then become directly involved in supporting an active transfer of technology, to support Chinese companies on-site with advice and training, to absorb the method of mass production of parts and components, itself led by technological and commercial calculations.

VW's contributions to building local supply capacity in China included its indispensable outreach efforts to its broad network of German suppliers. Many German supply firms were hesitant about the risks of entering into China. Posth notes that it was "not easy" for them to see that, although their involvement in such technology transfer initiatives did carry some risks, over the longer term, these partnerships would also bring them new business opportunities.<sup>28</sup>

The German SVW staff recognized that money and technology alone would not be the determining factors of success at SVW in the long term. What was imperative was ensuring a systematic process of technology transfer that was sustained and coordinated, involving on-site training, led by German parts production specialists, who would become intensively involved in on-site learning-by-doing exercises together with the Chinese workforce. According to Messmann:

VW and SAIC together played the role of "match-maker" in establishing the supply network. This was the only way to reach the 95% localization rate requirement! At the start of the JV, one of

the few things that SAIC actually could do was help VW identify potential local suppliers, and help with the match-making. But this, it did well.<sup>29</sup>

To meet VW standards for parts and components, the German side also had to become deeply involved in “time-consuming sampling and testing procedures”.<sup>30</sup> Most of this testing was conducted in Wolfsburg, because neither SVW nor SAIC had the necessary equipment nor qualified experts for such testing.<sup>31</sup> Often, the testing for each part took over a year, and in the summer of 1985 alone, it meant testing coolants, upholstery, horn, steering wheel, radio, and oil filter. The entire qualification process for the Santana took close to four years to complete. For the German staff at SVW, this meant they had to sit through countless roundtable meetings on coordinating the local capacity-building process, together with representatives from central government, local Shanghai authorities, SAIC, and representatives of Chinese and German automotive supply companies.

The news of Zhu Rongji's appointment as the new Party secretary for Shanghai, and later mayor, gave a sense of urgency to all involved in SVW to finally agree to implement a systematic program for building a modern local supply base. All of the main stakeholders met in January 1987, for the first time, to discuss the most important aspects of the localization plan. They developed an organizational model, with three working groups, to coordinate and promote localization throughout China. The Chinese side asked to meet with the German staff each month, so that they could “fully exploit the experience of German experts”.<sup>32</sup> The German and Chinese members of the SVW Executive Committee worked together to sort the parts into categorized groups, and listed potential local suppliers for each category. The Germans taught the Chinese methods for improving efficiencies, i.e. to save money and effort, for example, by grouping parts made from the same materials, or in similar ways, or identifying key suppliers in the nationwide search which had factories with capacity to produce numerous parts for SVW. This would mean that SVW could start by purchasing one part, and gradually expand its sourcing depending on quality, cost, and reliability of the supplier. The VW staff kept close tabs on their Chinese counterparts to make sure that quality was not sacrificed for short-term expediency or other reasons in parts procurement. Posth remembered that the Chinese side was constantly tempted to “make do with lower quality requirements, arguing that parts needed to be adapted to reflect local conditions”.

## **Social organization of production**

To support the parts localization drive, and especially to create an integrated supply network, VW transformed the organization of production, which together with advanced technology, lay at the core of building the competitiveness of the new JV. Such changes were particularly significant in the automotive sector where quality and safety standards are paramount, and where recent innovations, that increased flexibility and cost competitiveness, were also crucial to longer-term success. VW, AMC, and Peugeot faced similar challenges in introducing new systems of production organization in their new Chinese subsidiaries, in transferring new production practices to their Chinese management counterparts, as well as to the rank-and-file workers. The Chinese workforce lacked time-work discipline, and were unproductive, from the standpoint of international standards, and their skills had not evolved with advances in world industry.

A key difference between VW and its foreign rivals was the importance that the VW team in China placed on human resource training. As Messmann explained:

We [the VW team] believed it was essential to ensuring successful technology transfer. Technology transfer without technical assistance is impossible. The reason why the Chinese wanted to establish joint ventures in the automotive sector was all about technology transfer. However we [VW] were clear that successful technology transfer was preconditioned by a number of factors, with technical assistance and human resource development being the most critical.<sup>33</sup>

In October 1985, just one year after the JV contract was signed, VW brought 36 VW training staff to Shanghai, to provide training under the management of Hans-Joachim Paul, who before going to China, was division head of the VW factory in Kessel.<sup>34</sup> However, the German team in Shanghai knew this was not enough to turn the old Shanghai Automotive and Tractor Corporation facilities and its staff into a modern plant. On a trip back to VW headquarters in Germany, Posth took the opportunity to lobby the top brass that SVW needed to establish a proper training program for its new employees in Anting (the location of SVW), and not only rely on short-term, low-budget on-the-job training, as suggested by the most senior education policy advisor for the VW group.<sup>35</sup>

Posth convinced Dr Hahn of the training vision for SVW, and gained the CEO's support to make the necessary investments in staff education in Anting. With Hahn's support, Posth drew on VW's strong international experience in developing local skills, and on its training models for ensuring successful supply localization in its subsidiary operations across Europe and Latin America. Neither Peugeot nor AMC had such a comprehensive international training system to draw on.<sup>36</sup> In March 1986, SVW also gained the support of GTZ (Germany's public foreign aid corporation), for a subsidy of 3.5 million German marks to help establish the training center in Shanghai.<sup>37</sup> The German executive team at SVW implemented Germany's "dual educational system" at the Anting training facility. Because this system was used by VW around the world, the German staff could compare the performance of the Chinese trainees with their peers worldwide. This feedback was useful to ensure that the training had been thorough and produced the desired modifications in the mindset of Chinese workers who had previously worked in central planning. On September 1, 1986, the first group of 60 young Chinese workers started vocational training programs, based on the German training system. The German management found that the younger Chinese trainees learned very quickly, and rapidly internalized new labor norms and practices. Posth recalls that they were placed in the top positions worldwide.<sup>38</sup>

Rather than focusing on retraining an "already mature workforce", VW also introduced a program for recruiting new young workers that started with recruiting them from high school or technical/vocational schools, and giving them three-year courses, which included classroom lessons and practical training in areas such as machinery, welding, and forging.<sup>39</sup> The trainees were placed on the assembly line only after successfully completing this training. Trainees were expected to transfer their newly acquired knowledge to the rest of their team members.<sup>40</sup> A few exceptional workers were selected for two-year management training in Germany. Upon returning to China, they were made assistants to managers, to gain further hands-on management training experience. A number of these managerial assistants were then promoted to managerial positions.

By investing in mid- to longer-term training in Germany for Chinese managers, the German staff at SVW ensured that a segment of their Chinese counterparts would develop a better sense of international standards, and could internalize the new expectations and methods for organizing the manufacturing process introduced by the German

side at SVW. The foreign managers at Peugeot and AMC had found it extremely difficult to overcome problems in labor relations, especially in instilling an understanding of time–work discipline, and linking pay to performance.<sup>41</sup> VW's training in Germany proved especially useful in socializing the Chinese staff to one of the most dramatic changes in work practices being introduced in the post-Mao period: linking pay to work performance. As a senior Chinese engineer and managing director of the SVW factory explained, "at Shanghai VW, we pay for the job and will only promote according to performance. If workers do well, they will get more wages, and will stand a better chance of being promoted."<sup>42</sup>

After the German and Chinese JV partners worked out a detailed three-year plan for localizing parts production (1987), the Chinese side also agreed to VW's proposal to use Germany's Senior Expert Service (SES) to provide systematic and hands-on training for the network of suppliers in the Shanghai area. SES was originally formed as a public–private partnership to support mid-sized German companies when they entered developing countries, helping them set up local production facilities. It managed a roster of retired German experts, as a repository of technology transfer professionals for automotive suppliers. SES helped place retired German executives and professionals at favorable rates for VW's China projects. This gave SVW a "qualified, but low-budget alternative to sending current VW staff from Germany, or providing personnel training in Germany, for the entire network, while allowing SVW to access retired Volkswagen staff for the main part of building up the local supply network".<sup>43</sup> The demand was so great on the Chinese side, for the foreign guidance and expertise, that SES established a special office in Wolfsburg (VW headquarters) during the period when the supply arrangements for the Santana were being localized in China.<sup>44</sup>

### **FOREX measures**

VW's corporate strategists had anticipated that China, not unlike other Communist countries in the Eastern bloc, faced a "chronic lack of foreign currency", and they anticipated that the FOREX problems would only intensify as unanticipated hard currency needs would emerge as they went about putting SVW into full operation.<sup>45</sup> China was a relatively poor, developing country, and foreign currency was scarce. Setting up factories with foreign partners initially consumed much more "hard cash" than was brought in. Anticipating such challenges,

VW developed a strategy for mitigating the FOREX risks, and built it into the JV contract. In so doing, VW again set itself apart from its foreign rivals in the first group of JVs. Chinese authorities dealt with the FOREX concerns by pressuring the foreign automakers to localize their parts supply, and insisted that the JV must be able to generate foreign exchange, and achieve payments balance over the longer term.

One of the most important features of the SVW JV agreement was VW's offer to build engines in China, and to export some of them to its global network. This turned out to be a major advantage for SVW because, by exporting engines built in China, the JV could generate FOREX, enabling it to reduce its burden on Chinese national FOREX reserves. Posth explains:

Modernization would cost money – not just Chinese *renminbi* but foreign currencies such as German marks and US dollars. The joint venture's foreign staff would be paid mainly in foreign currencies. New machines for the modern production facility could only be ordered abroad. Further, almost 100 percent of the supplies and parts needed to produce the Santana would have to be purchased in Wolfsburg for the time being [at the outset] ... Exporting engines would give Shanghai Volkswagen a continuous flow of dollars that was needed to modernize the ongoing production.<sup>46</sup>

This FOREX scheme was reportedly one of the main reasons why the Chinese chose VW over Citroën as SAIC's first JV partner.<sup>47</sup>

Nonetheless, SVW soon encountered "countless financing difficulties" – especially cash shortage challenges and shortages in foreign currency – with its start of operations. VW had originally agreed to procure some of the expensive equipment from local suppliers. However, after SVW actually opened, and both sides set about putting together the production facilities on the ground, the poor quality of local equipment became readily apparent, and VW discovered that the JV had a number of unanticipated equipment import needs. This meant importing 60 percent of the production equipment originally set for domestic procurement. This would take up a large share of the budget. It soon became obvious to VW managers that the total investment of 500 million German marks that had been agreed to in the 1984 feasibility study was not going to be enough to cover actual start-up and operating costs.

At the same time VW realized that the JV would need more imported equipment than originally planned for (September 1985), the Bank of

China (BOC), a key financial partner on the Chinese side, informed VW that it might not be able to meet the cash flow guarantees it had made when signing on as a partner. VW and SAIC had anticipated that changes in exchange rates could increase the costs of production, and believed it was important to include the one Chinese state bank that had been allowed to engage in foreign currency business transactions, to join the team. For its equity in the JV partnership, the BOC had promised to provide a guaranteed (maximum) quota of 800 million German marks to the JV, for investments and to help cover operational expenses, such as importing CKD sets. The BOC had guaranteed that it would convert the equivalent of 800 million marks from *renminbi*. The news stunned the VW staff. BOC representatives blamed the new restrictive credit policy (and tightening up on FOREX transfers), which were related to an illegal importing scandal in Hainan involving Japanese and Chinese smugglers, and had drained government coffers of billions in FOREX.<sup>48</sup>

As FOREX and other financing challenges deepened, the German VW staff in the JV began proposing necessary adjustments to the operating budget and the corporate business plan, including production targets. The German managers also highlighted how RMB-US-German exchange rate fluctuations and inflation in Germany had brought depreciation in the value of the Chinese currency, which meant rising costs of production for SVW for imported inputs. While the German management at SVW focused on coming up with a strategy to deal with the budgetary shortfalls, the Chinese management stuck to its state-driven plans, ignoring the need for adjustment related to changing costs. The Germans learned that setting production targets was a sensitive matter for the Chinese side because volume had to match state planning. Any changes required approval from the central authorities in Beijing. Things came to a head in early 1986, when the SVW Executive Committee had to reach agreement on production targets for 1986, so that the plan could be presented to the second Board meeting of SVW. The agreement that was reached was that Posth, the lead German manager at SVW, would go to Beijing to try to convince the central authorities of the proposed changes to production volume.

VW executives recall that they wore out their shoes, traveling from one government office to the next, in Shanghai and Beijing, trying to convince their Chinese partners of the need to modify their investment program.<sup>49</sup> Lobbying by the German staff in SVW was difficult because of the ideational and normative gulf between the VW staff and the Chinese



authorities, especially those in relevant decision-making positions and planning departments in Beijing. Rather than taking a market-driven approach, the central authorities insisted that SVW's volumes match Beijing's planning. Central authorities, such as Chen Zutao, CNAIC President, were hesitant to deviate from the approved investment plan under the Seventh Five-Year Plan (1986–90), regardless of changes in the exchange rate or inflationary pressures. Eventually, after much lobbying, the central authorities agreed to allow SVW to adjust its investment programs for exchange rate and inflation-related changes that affected the cost of production, but major business decisions would still require final approval from the political center.

In making the necessary adjustments in SVW's investment program, the German VW staff at SVW had to work with their Chinese counterparts to develop a sustainable financing strategy for SVW and strategies to deal with the fact that local Chinese automotive suppliers did not have sufficient capital to handle the modernization drive. One strategy was the engine production agreement. For the German side, prices for imported parts had to be set at a level to allow German suppliers to make a profit. SVW's three-year localization plan was divided into: (1) Which parts should be produced first in China? (2) How to organize the required tests? (3) What was the schedule for introducing locally sourced parts? (4) How would foreign suppliers be involved?<sup>50</sup>

Proper handling of FOREX and other corporate financial considerations meant that the SVW management, on both sides, needed to have financial management skills. For the German management, this issue was "one of the biggest gaps that needed to be addressed in building the capacity of their counterparts, and one of the biggest challenges in building the JV":

The major weak point of Chinese management at that time [1980s] was financial management. Even more so than the technology gaps. The financial sector, as we understand it, did not exist in China in this period, and [corporate] finance as we understand it did not exist at all in China. Coming into the JV, the mindset on the Chinese side was not that of corporate finance in a market environment but that of state planning. State enterprises were ordered to produce x quantity of y products by receiving the raw material for the production, and were asked to deliver it to such and such selling company, receiving only the amount of money to

pay salaries. No financial transactions existed in the state-owned companies. However, this changed with the introduction of joint ventures and later wholly-owned foreign companies, and eventually private companies.<sup>51</sup>

VW “trained” two parties on the Chinese side on the basics of corporate finance: local government authorities, who controlled the approval of investment increases for the JV project; and their Chinese managerial counterparts in SAIC. The uptake of the Chinese management on the importance of the norms and principles of modern corporate finance proved much quicker than with the state officials. SAIC managers were involved in pressuring VW for cost reductions on imported parts and supplies as prices increased due to inflation in Germany, however they were not as strident as government authorities. The SAIC management staff did not perceive themselves to be the ultimate defenders of China’s national developmental interests. The SAIC executives and staff were eager to learn from foreign experts whom they respected, who “walked the mile together with them”. It was not difficult to teach the Chinese management the importance of mastering the skills of financial analysis, to think and act to some degree as a corporate financier, including understanding the company from detailed analysis of its accounts.<sup>52</sup>

The training that VW provided Chinese management and related staff focused in the initial period on the basics of managing working capital, current assets, and short-term financing, including cash flow management.<sup>53</sup> Other financial skills that were learned in the first stage of SVW were the fundamentals and disciplines of receivables collection, inventory management and managing returns.<sup>54</sup> These financial management skills were essential for building a coordinated and sustainable supply network, especially a JV that had a range of international, domestic, and JV parts suppliers. The training eventually expanded to cover all aspects of corporate finance, including different approaches to valuing a firm, the major types of financial securities, equity, debt and options, in addition to managing equity capital and bankruptcy avoidance. Volkswagen provided training on finance both in Germany and on-the-spot in China.<sup>55</sup> Items that were not of immediate concern to managing cash flow, such as buying and selling companies, mergers and acquisitions, were left till later.

VW transferred its model and practices in financial organization and control to its new Chinese JV partners in Shanghai. Training focused

on accounting methods for tracking the financial operations of the firm, and monitoring for progress at various levels of operation. For the whole firm, and for senior management, this also meant how to conduct investment reviews and other “big picture” corporate finance practices, including investment decisions (capital budgeting), financing decisions (capital structure), and payment decisions (dividend policy). The transfer of these skills became essential for the life of the JV, as the preparation of investment decisions was the responsibility of the JV in the first instance, to be then sent back to VW headquarters and Beijing for final approval.<sup>56</sup> The effort that VW put into helping SAIC and Chinese suppliers to develop the skills needed to formulate investment proposals was essential to overcoming the previous mindset of receiving production orders from state planning authorities, and for managing FOREX flows. At the same time, the VW management team understood the importance of continuing to placate the planning needs and statist regulatory ambitions of Beijing. By managing the FOREX challenge more effectively than its rivals, VW gave SVW a chance to develop itself into a highly profitable and sustainable corporate entity, and built the base for a modern local supply network in the Shanghai area.

### **Explaining VW's China strategy**

VW came into China with an approach that was quite different from its foreign rivals, even without the prodding of Chinese authorities. How do we explain the foresight in VW's China strategy? One of the main reasons was the character of the top corporate executives at VW. Former lead German executives in China stressed that Dr Carl Hahn, VW's Chair and CEO, was the key factor for explaining why VW took a different approach than its foreign rivals, and why the German auto company was able to lay a solid foundation for long-term corporate success in China. Messmann notes that “Dr. Hahn was the main architect and champion of VW's internationalization strategy of the 1980s and 1990s, and it was Dr. Hahn who believed strongly that we [VW] needed to go into China.”<sup>57</sup> Hahn is credited with turning VW into a “truly global company, not only international and regional in reach, but truly *global* in the sense of expanding to Asia, and especially China. Prior to VW's entry into China, its operations in Asia were minimal. We were in Mexico, Brazil, South Africa, and focused on Europe and the United States.”<sup>58</sup> Hahn had to convince the VW

Board that going into China was worth the risk, to overcome the thinking that China was only a “potential” market rather than a real market opportunity.

The Chinese and German managers in SVW recall that at an early stage, “Dr. Hahn recognized China was the market of the 21st century”, and believed it was important for VW “to gain a foothold in China and secure first-entry benefits”.<sup>59</sup> Hahn pushed harder to complete the deal with the Chinese when he took over as CEO in 1983. Prior to Hahn’s leadership, the talks with the Chinese were “rather haphazard”, but he reinforced the strategic focus to set up China as a “beachhead for Asia”. In his global vision, VW’s efforts with the Chinese would aim beyond China, and enable VW to compete against regional players in Asia, specifically the Japanese and Koreans, and capture a share of their home and regional markets. Unlike the Japanese and American auto executives, Dr Hahn saw that one of China’s strengths was manufacturing, and that China could become the key launch pad for VW into the Asian markets.<sup>60</sup>

Equally important, he clearly grasped the national developmental and strategic goals of the Chinese authorities, and how to respond accordingly. Jiang Tao, who headed the Chinese team for the pilot project in Shanghai that was the precursor to SVW, stressed that the success of the venture lay in the fact that, although the Chinese and Germans had different interests, they shared a common set of goals.<sup>61</sup> Hahn’s role in devising a corporate investment strategy that met the national modernization objectives of the Chinese authorities was crucial for the longer-term success that VW experienced in China. Hahn decided from the outset that VW would introduce “its most current model (of that time) to China”: the Santana model,<sup>62</sup> and that “although VW needed to go into China, it only made sense if it did so with its latest model and technology”.<sup>63</sup> VW also decided to “go big”, which met the goals of state planners and FOREX control concerns, by committing to produce 20,000 cars per year by 1988, and 100,000 per year by 1992. The JV agreement also called for the transfer of the technology, training, and equipment for local component supply to reach 90 percent. Finally, VW agreed to produce 80,000 cars at its facilities in China, to be exported to Germany and elsewhere, if quality requirements were met.

Messmann notes that “none of the other foreign automakers, not GM, Toyota, Renault, Peugeot, were willing to produce their latest models in China. They knew full well that the Chinese are very capable, and would develop technology out of the international

transfers to build their own industry, and eventually to export to Asia and globally.”<sup>64</sup> AMC went into Beijing with its outdated Jeep model. Peugeot assumed that the demand for family and private cars would remain small for the foreseeable future in China, and went into its Guangzhou JV with an outdated Peugeot 504 pick-up truck and 505 sedan.<sup>65</sup> Ninety percent of the technology that Peugeot transferred to China came from obsolete models, including engines, stamped body parts, and axles.<sup>66</sup> However, it demanded that the transfer of this obsolete technology be accepted as 22 percent of Peugeot’s investment share (in the form of licenses, equipment, engineering, and knowledge).<sup>67</sup> Peugeot also delayed the start of production of its car models until 1988, due to the time needed to build a greenfield production facility in Guangzhou. It only agreed to reach a maximum target of 30,000 units per year by 1993. Not surprisingly, the central authorities did not give strong support to the French JV, as seen in the difficulties that Guangzhou Peugeot experienced in getting additional tariff exemptions on component imports in the late 1980s.

In contrast to its rivals, VW’s decision to produce the Santana, and agreement to take on technology transfer and build local capacity for 90 percent local supply, had two upsides. On the one hand, these decisions put VW in an advantageous long-term market position relative to its two foreign competitors. Even from the start, VW’s Santana was much preferred to the outdated military Jeep model that AMC brought to Beijing, and the old Peugeot models.<sup>68</sup> On other hand, VW gained the trust and confidence of its Chinese partners and state authorities within its transfer commitments. The VW executive team was well aware of the “inherent risks in transferring their latest technology to China, but they believed it was necessary to do so in order to ensure the success of the venture, and even if their competitors chose not to”. VW executives pinned their hopes on building a “strong long-term partnership” in China, and on the belief that “the Chinese would have a long memory, and remember their friends”.<sup>69</sup> Unlike GM and Toyota, VW was a willing partner; and unlike AMC and Peugeot, it was an able partner.

Hahn and other senior VW executives went to extra lengths to demonstrate the priority they placed on their Chinese venture by maintaining a constant presence in China. They built up a solid relationship with central and local authorities, which paid dividends when the JV encountered problems that warranted high-level Chinese political intervention. The lead executives and head offices of VW’s foreign rivals

did not do so. Peugeot CEO Jacques Calvert only visited China for the first time in 1994 (eight years after Guangzhou Peugeot's opening), and only then to negotiate the sale of its holdings in the Guangzhou JV to Honda. In contrast, Hahn visited China on more than five occasions, including being present in person for the launch of SVW, and bringing with him German Chancellor Helmut Kohl and even the previous Chancellor, Helmut Schmidt.<sup>70</sup>

VW grasped the political-cultural and normative importance of enrolling the German state into its efforts, and top German leaders and their government officials also responded as needed. The German state, at both the federal and local levels, maintained steady and continuous support for VW's Chinese venture, whereas the French and American governments were largely absent. The German government and their Chinese counterparts were deeply involved in the relationship-building process for SVW.<sup>71</sup> In contrast, French leaders maintained a foreign policy of supporting Taipei, which included sales of French military equipment and fighter jets. French leaders, including François Mitterrand, made very public statements criticizing Beijing's handling of human rights. In contrast, German leaders, Dr Hahn, and other VW executives emphasized the importance they attached to their venture and investments in China. Hahn made sure to always reinforce how China fitted into VW's global and long-term strategy; that VW saw China as a "partner". Equally important, Hahn selected managers for the Chinese subsidiary that had the ability and will to deliver, and to push to realize his vision.

Finally, the corporate team at VW could draw on its vast international experience and broad global overseas operations. It accumulated knowledge on how to transfer manufacturing capacity to build successful overseas production and assembly facilities, and supplier networks. For example, a thorough understanding of the financing needs of wholly VW-owned facilities in its developing country operations in Brazil (São Paulo) and Mexico (Puebla), and VW's knowledge of the specific needs of jointly owned production ventures in the Eastern bloc informed VW's engine production and export strategy. This reduced the tension between the JV firm and state authorities, and allowed VW and SAIC to get beyond fighting to survive, and to focus on building the venture and deciding how to develop their investment over the longer term. Having a well-integrated global network meant that VW could appeal to the export ambitions of Chinese authorities, by suggesting that parts for the Santana, assembled in South Africa or Brazil, could come from China.

Posth noted: "The Chinese really liked this export perspective. Export brought foreign currency into the country; currency that they urgently needed to modernize their economy."

In successfully managing its corporate international relations, VW could draw on its deep reservoir of corporate diplomacy to formulate the appropriate messaging for the Chinese audience. The VW executive demonstrated sensitivity to normative and cultural coding specific to the Chinese authorities. VW's lead China managers stressed that "in their minds, they were clear about what they understood to be the principle of the partnership: helping China pursue its industrial policy in a well-understood, mutually beneficial relationship".<sup>72</sup> Such was not the approach of either AMC or Peugeot. The Chinese already, even in this early stage of "opening to the outside world", had experienced their "fair share of unpleasant experiences with other companies that cared little for Chinese interests and situations". Dr Hahn instead placed strong emphasis on "well-understood mutual benefit".<sup>73</sup>

## Going big

Shanghai actors and institutions played key roles in building the foundations of a modern local supply base in the 1980s and early 1990s. In response to threats that SVW would be closed if local content rates did not increase significantly within a three-year period, in early 1987 Shanghai authorities promptly deployed a group of leading local officials to push ahead and support SVW in constructing a modern local supply industry. The head of this group was Huang Ju, later Party secretary and mayor of Shanghai, succeeding Zhu Rongji, further promoted in 2002 to the Standing Committee of the Politburo. Posth identifies 1987 as the key year when the Chinese side "regrouped their efforts to make progress on the issue of localization". In that year, Lu Jian also took over as Managing Director of the SVW Board of Directors while also being Vice Chair of the Shanghai Economic Commission.<sup>74</sup> This was important because it meant that Zhu Rongji had a direct ally inside the State Economic Commission line system (*xitong*), "whom he could trust with pushing on with the localization drive". Lu's "unusual double role" gave the Chinese-German project the impetus it needed and special comparative advantages relative to Beijing Jeep and Guangzhou Peugeot.<sup>75</sup> Huang and Lu are said to have taken on their new tasks with

much confidence and they spread the atmosphere of optimism in the localization drive.

By the time Zhu Rongji arrived in Shanghai in 1987, local actors could build on the pioneering efforts. Zhu's arrival in late 1987 gave a sense of urgency, new focus, and momentum to the localization process. Both central authorities and external forces played key roles in triggering the drive to build a modern supply industry and production network in the Shanghai area. Primary attention has been given to the causal linkages between exogenous and endogenous factors, especially the mediating role of the state at the central level, in stimulating willing foreign automotive firms to become involved in China.

VW, unlike AMC and Peugeot, responded positively to regulatory pressures and the national developmental demands of Chinese state authorities. For any MNC, localizing production has potential upsides *and* downsides, and costs and benefits. Content localization carries quality control risks, as well as efficiency and standardization concerns. The experience of Japanese automakers in the 1980s and 1990s highlighted these concerns. Localization of production and building close linkages between local suppliers and final assemblers into production networks, if successful, provided a more cost-efficient strategy for regional market penetration than trade in entire vehicles. VW understood clearly that localizing production would also foster support from government officials. It contributed to the local economy, provided jobs, and raised the profile of officials responsible for the foreign-invested project. What was involved was a trade-off between the final quality of the product, and potential cost-efficiency gains and political returns from host authorities.<sup>76</sup> VW was willing to take the necessary measures to manage this trade-off. Neither AMC nor Peugeot could do so, or were not willing.

VW grasped the importance of appealing to the industrial modernization ambitions and developmental ideals and norms of the Chinese state. This meant putting a concerted effort into transferring technology and related technical know-how to foster local industrial capacity, strategizing from a longer-term business developmental mindset that focused not only on capturing immediate returns, but building the foundations for a sustainable corporate entity. VW insisted on maintaining its quality standards in the JV, which pressured the Chinese side to improve performance. VW helped localize parts production and directly supported SAIC in creating a nationwide distribution and service



network. At the level of the firm, from the start, VW and SAIC placed emphasis on cultivating “cross-cultural management” approaches, on “fostering and reinforcing mutual trust, mutual understanding and mutual benefit”.<sup>77</sup> German managers noted that both sides made sure these management principles were not hollow slogans but a reality in daily routine. VW played a critical role in transforming the managerial mindset of its Chinese partners, and transferring to Chinese staff the financial management and FOREX management skills needed to build a sustainable modern supplier network in Shanghai in particular, and eventually, in all of China.

One implication of VW's success in Shanghai – as part of the quadri-lateral alliance – was that it provided a powerful demonstration effect of the feasibility of achieving a high level of profitability in partnership with Chinese state enterprises. SVW's success preconditioned the development advances in the mid 1990s, by increasing China's bargaining leverage vis-à-vis the world's leading auto MNCs. This demonstration effect was necessary to overcome the stigma attached to China, that it was a less worthwhile site for investment in auto manufacturing, a strongly held view among the world's leading automakers in the 1980s. SVW demonstrated that profits from auto sales inside China could be used to underwrite plant and business development costs inside China, and support rationalization in other parts of the foreign auto company's operations, including in its home market. For Japanese automakers, VW's successful results in Shanghai ran counter to Japanese automakers' money-losing ventures in other parts of Asia, for example Mitsubishi's losses in Malaysia's Proton project. SVW's success showed that a major foreign automaker could compensate for sales losses in its home market by establishing a presence in China.<sup>78</sup> Whereas GM and Ford chose to invest heavily in new plants in Mexico, close to the US border, where its low-cost output could be exported nearby to the US,<sup>79</sup> the large profits that VW was earning in Shanghai made America's leading automakers take notice.

What VW's behavior in China revealed to Chinese policy makers was the importance of having a strong and capable foreign partner that could enter into the country, strategizing from a longer-term perspective; and, when called upon, could exercise greater flexibility than the weaker foreign auto firms in meeting developmental demands from the state. Chinese officials saw that larger and more capable MNCs possessed a level of resources that made them more willing than the weaker foreign firms to consider the industrial developmental requests of the host state, and to find solutions that were “win-win” (*shuang ying*) for both sides.

As Messmann noted, “What the Chinese government learned from the experience of Shanghai VW was the importance of ‘going big’!” In the next chapters, we will examine how the Chinese state transferred the lessons learned from the Shanghai case, and changing world automotive conditions, into leverage in its negotiations with the world’s leading automakers in the 1990s.

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**Part II**  
**Modernization, Higher Phase**

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# 5

## The Automotive Industrial Policy

The ultimate aim of the 1994 *Automotive Industrial Policy* (hereafter the '94 AIP) was to remake the Chinese auto sector into a modern and complete auto industry, and transform it into a pillar industry (*zhizhu chanye*), an engine of growth and modernization for the entire economy. The '94 AIP also revealed that the Chinese government would rely strongly on foreign investment. However, its call for the formation of an "independent" (*zizhu*) auto industry indicated that Chinese authorities would continue to pursue national self-reliance as a longer-term goal. While central leaders, local leaders, and leading auto executives no longer clung to an autarkic version of self-sufficiency, they did not abandon the idea of building a strong national auto industry, which included homegrown brands (*zizhu pinpai*) and indigenous models.

Achieving the goals of the '94 AIP meant pushing beyond the initial local manufacturing gains of the 1980s and early 1990s that came with the first group of JV assembly projects, moving upwards to produce complete cars inside China with a high level of local content, including the most complex and higher value-added components. The AIP outlined the regulatory measures for achieving consolidation in the industry, and for making more effective use of foreign investment. The former has received significant attention, especially from critics who have argued that the government failed to achieve the rationalization and consolidation it desired. The latter dimension has been underappreciated in the scholarly literature.

Chinese authorities formulated new strategy and tactics for dealing with the foreign automotive MNCs in the early 1990s, and these became the regulatory conditions for foreign investment contained in the '94 AIP. The AIP provided a more detailed and precise

set of regulatory conditions for targeting the world's leading MNC assemblers as JV partners; incentives to induce MNCs to make the desired transfers; and a more liberal set of investment conditions for foreign parts manufacturers to relocate to China. The immediate to mid-range purpose was to channel foreign expertise and investment toward strengthening local supply capacity inside China. The overarching purpose was to draw on international transfers to build a modern and self-reliant national automotive industry, with a "made in China" label displaying Chinese national brands.

The '94 AIP was reinforced by policies in the Ninth Five-Year Plan (1996–2000) that provided further support to the consolidation and foreign investment utilization goals of the AIP. The advances that were achieved in building the foundations for a modern supply network around SVW from the mid 1980s to the early 1990s were the first stage of China's post-Mao auto modernization drive. The strategizing for the '94 AIP was the transition to a second more advanced stage.

### **Recentralization, rationalization and consolidation**

In the late 1980s, a number of Chinese industrial strategists studied the industrial experience of the advanced industrialized economies in Europe and the US during their "catch-up" phase, as well as the source of Japan's developmental success, which they saw as rooted in the Japanese *zaibatsu* model.<sup>1</sup> One Chinese journal, *Economic Theory and Economic Management*, reported in 1989 that:

Study and discussion of the development and present situation of Japan's enterprise groups is of very great theoretical and practical significance for the development of China's enterprise groups ... The development of Japan's enterprise groups has from beginning to end received policy and economic support and assistance from the Japanese government ... Now, China is facing a crucial period of economic system reform and economic takeoff, and enterprise groups should also play an enormous role in the development of China's economy ... Japan's experience in this area is worth using as a reference. *There must also be specialized government departments to plan and formulate industrial policies, apply persuasion, and guide the industrial direction of enterprises (especially enterprise groups), as well as supervise and promote the implementation by enterprises of the state's economic policy.*<sup>2</sup>

Chinese industrial planners were impressed by the Japanese state's ability to facilitate the fast growth of large Japanese corporations, to the point of rivaling the world's largest manufacturers from the US and Europe. The Japanese had succeeded in developing *global* business capability, with strong internationally accepted brands, enormous financial capacity, and massive R&D and product innovation capacity.

Chinese planners honed in on the fact that, rather than pursuing rapid and full-scale economic liberalization, the Japanese government had fostered oligopolistic competition. Industrial planners, in this period, drew inspiration from two types of non-mainstream economic theory.<sup>3</sup> Chinese planners continued to be influenced by Marxist economic theory, especially the idea of the tendency toward concentration and centralization of industrial power and seeking economies of scale.<sup>4</sup> Increasingly they also studied the concrete policy experience of countries in pursuing catch-up and late industrialization, and their focus on building national economic and industrial power.

They were aware that Japan's Ministry of International Trade and Industry (MITI), the key economic planning ministry, had encouraged mergers between leading firms in core industries, and facilitated the growth of large-scale national manufacturers by drawing selectively on foreign technical expertise, using import controls to keep out foreign competitors, and pursuing export markets. Chinese authorities also knew that other Asian neighbors, Taiwan, South Korea, and Singapore, had each drawn lessons from the Japanese experience and pursued active industrial policies, and fostered large-scale firms by providing preferential financing, intervening in upstream heavy industry, and using trade barriers to provide a protective environment for the growth of national industry.<sup>5</sup> Economic planners also knew that China, for both domestic political considerations and state investment constraints, could not follow the same route as its regional neighbors. The lesson that they drew from the experience of their East Asian neighbors, and that of the United States and Germany in their catch-up industrialization phases, was the need to foster large-scale and modern corporations and oligopolistic competition inside China's national automotive industry.

The opening for the planners to push for a more coordinated process of state-led development came in the immediate aftermath of the 4 June 1989 Tiananmen crisis. Factional struggle within the Party elite in the late 1980s and early 1990s worked in the favor of calls for more centralized state-led development, as championed by the planners. The early 1990s were marked by a temporary reassertion



of command-type control measures, by those who argued that the decentralization of the 1980s had generated economic distortions and irrationalities, which were detrimental not to their bureaucratic interests per se, but to the industrial modernization objectives of the Party and the Chinese nation. The criticism of Zhao Ziyang's reform policies produced a political consensus at the top of the Party to reorient toward economic recentralization, after a decade of decentralization.<sup>6</sup> In the aftermath of the Tiananmen crisis, the forces of "conservative" reform in the Party reinforced the "readjustment and improvement" (*zhili zhengdun*) policy line. The views of Chen Yun, Li Xiannian, Yao Yilin, and Li Peng prevailed. However, their calls to restore the predominance of the planned economy were no longer viable, either socially or economically.

By 1992, Deng Xiaoping personally weighed into the inner Party debates, calling for a return to rapid market reform and economic internationalization. Deng's views won out over the more cautious reformers, and China returned to deregulation, decentralization, devolution of pricing to market mechanisms, and investment and trade liberalization. While Deng pushed the Party and government back onto the rapid reform path, the more conservative economic reformers and their industrial planning allies pushed for reestablishing more centralized state control over strategic industries. They succeeded in reestablishing state planning in the strategic industries at the economic core of the Party's normative agenda. This struggle took a toll on the personal relationship between the old revolutionaries and political allies, Deng and Chen.<sup>7</sup> A compromise was struck between the two sides, in which a different balance between state and market would hold for nonstrategic sectors versus the commanding heights of the economy. The champions of strong planning had used a period of economic crisis to reassert state controls over the economy.

With political backing from Chen Yun, Yao Yilin, and Song Ping, Premier Li Peng and Vice Premier and SPC Chair Zou Jiahua promoted a recentralization agenda for the strategic industries, built around the idea of focusing state investment on a select group of pillar industries, which would become the foundation for sustained growth.<sup>8</sup> They advocated regrouping large state enterprises into national champions that could eventually compete in an integrated world economy. They had to accommodate the public financing and fiscal reforms then being championed by the newly appointed Vice Premier, Zhu Rongji, who had the personal backing of Deng Xiaoping, and had been brought back from Shanghai to lead the difficult fiscal and monetary reforms of the early

1990s.<sup>9</sup> This meant allowing primary decision-making authority on monetary policy to transfer from the SPC to the People's Bank of China, which Zhu brought directly under his command in 1992.<sup>10</sup> The push to recentralize investment authority in the strategic sectors was presented as complementary to Zhu's efforts, and he temporarily acquiesced to the strategic industrial recentralization drive at the commanding heights (though Zhu would turn on the SPC by the late 1990s).

Even as Deng officially defeated Chen Yun's economic policy line of the "planned economy being primary, and the market economic supplementary" at the Fourteenth Party Congress (1992), the proponents of strong state planning had turned the tide in favor of recentralization of state finance and investment for the most vital segments of the national economy. By this point it was not just Chen Yun, Yao Yilin, and Li Peng, the older group of conservatives, but also a younger group of "neoconservative" economic thinkers, including Chen Yuan, the son of the elder Chen Yun, who were rallying behind state planning for the strategic industries. Rather than speaking in terms of the "commanding heights of the economy", these neoconservatives spoke about the need to create strong "pillar industries" and "national champions".

The reform decisions of the 1990s were not a simple "either/or" choice of market versus planning. While the conservatives had failed to restore the primacy of the planned economy, the economic neoconservatives, backed by their elder allies, succeeded in advocating for the state to remain an "indispensable actor" in economic development, not simply a "passive actor" – especially for strategic industries.<sup>11</sup> The economic neoconservatives called for a new policy synthesis: to develop the scope of the domestic market (which included breaking down local protectionist barriers and reducing government interference in enterprises), while at the same time recentralizing state authority over the economy. Chen Yuan argued that China should use the power of the state to readjust the country's industrial structure.<sup>12</sup> Market forces alone could not be relied on to bring about such an economic system, and the state should have a strong role to play in guiding China's immature market economy, to guide the transition process itself. Chen, like his father, decried the consequences of the decentralization reforms of the 1980s and called for a "new centralization"; but unlike the older conservatives, one that was different from the old planned economy.<sup>13</sup> Influenced by the experiences of the fast-growing East Asian neighbors around China, he believed that the Chinese government should use strong and clear industrial policy, to direct

resources to strategic industries but in a context of an increasingly market-oriented economy.

Chen further suggested that "China must develop as an economic great power that is not dependent on any other country or group of countries".<sup>14</sup> His views concurred with the Minister for Machinery Industry at the time, He Guangyuan, who advocated that China needed to have a "modern and pillar" auto industry, and to make sure that it had its own national models and brands. He called for a two-stage strategy: in the first stage, from 1994 to 2000, to focus on building up the foundations of the sector such as improving efficiency and technology; in the second, from 2000 to 2010, the Chinese auto industry should catch up with the most advanced international levels, develop self-reliant indigenous R&D capacity, and have fostered a group of internationally competitive national auto companies.<sup>15</sup>

The economic neoconservatives argued that the experiences of other late-industrializing countries showed that only the state could undertake the necessary functions to regulate market growth for the national good, especially ensuring stable and sustained growth; that the nation's development could not be left to the "whims of the market". Chen argued that China should participate in the international division of labor and economic exchange, but insisted that China could not take the development path of small countries; it must have a complete and fairly advanced industrial system. Fewsmith notes that the neoconservative vision emerging in the post-Tiananmen period drew selectively from Western economics, but combined it with a clear preference for strong state direction of industrial development.<sup>16</sup> What made the younger Chen's arguments especially forceful was that he had developed a reputation of having strong financial expertise, from his time inside one of China's more innovative investment banks. He later directed state financing to the pillar industries atop the China Development Bank.

Backed by the conservative reformers and the economic neoconservatives, state planners argued that the pillar industries were unlike labor-intensive low-technology sectors or the new high-technology sectors because they used production technologies that require major fixed investments, including large capital and advanced technology and equipment needs. The auto industry had to maintain large fixed costs, which meant "sunken" assets,<sup>17</sup> and China could ill afford the waste caused by either under- or overinvestment. It needed to avoid the "blind investment" (*mangmu touzi*) and "construction duplications" (*chongfu jianshe*) that resulted from the uncertainty of unregulated

market competition.<sup>18</sup> These industrial development preferences, together with the norm of “orderly competition” (*youxu jingzheng*), were institutionalized in the auto sector with the '94 AIP, and its call for 2–3 “large national enterprise groups” and 6–7 “key vehicle manufacturers”.<sup>19</sup>

China's auto industry, in the early to mid 1990s, was not a sector that could be simply categorized as “growing out of the plan”. Rather, a normative preference for centralized state direction, coordination, and regulation of the auto industry was reinforced. Deng's Southern Tour in the summer of 1992, the Fourteenth Party Congress in the same year, and the first session of the Eighth National People's Congress in 1993 marked China's official turn to a “socialist market economy”. However, this period also gave rise to a strong role for state planning in the pillar industries. The '94 AIP aimed to remake China's automotive sector by consolidating production and directing foreign investment.<sup>20</sup> The decentralization reforms of the 1980s had devolved a large share of fiscal and tax authorities to local governments, giving rise to an explosion in the number of local auto producers and assemblers: from 58 in 1982 to 114 in 1985 alone. China lacked economies of scale. There were 124 assemblers in 1994 with an annual output of just over 10,000 units. In the early 1990s, the Chinese auto industry was characterized by:

1. Proliferation of plants and fragmentation of investment;
2. A chaotic situation of ministerial and local approvals;
3. Duplication in technologically backward projects and outdated technology imports;
4. Sluggish development of core state enterprises/assemblers and slow progress in upgrading local contents production for foreign-designed vehicle assembly in these core Chinese enterprises.<sup>21</sup>

The '94 AIP provided a two-stage approach to streamlining the transport vehicle sector. From 1996 to 2000, the first stage, the state would support consolidation into 2–3 large national enterprise groups – comparable in size to South Korea's *chaebol* – and 6–7 key vehicle manufacturers (and 8–10 internationally competitive motorcycle manufacturers). Other first-stage targets included:

- Motor vehicle production of 3 million units, including 1.5 million passenger cars<sup>22</sup>
- Annual capacity of 300,000–500,000 units each

- Consolidation of the existing 3000 parts and component manufacturers into 300 companies, which would serve as major domestic suppliers, and become product developers, for original equipment manufacturers (OEMs)

From 2000 to 2010, the second stage, the state would support the formation of 3–4 large, *internationally competitive* conglomerate groups. Other targets for the second stage included:

- Total vehicle production capacity of 6 million units, including 4 million passenger cars
- Annual production capacity of over 1 million units each
- 5–10 internationally competitive component groups, which together form a supplier base for OEMs, the after-sales market (repair service and replacement parts), and export markets

The '94 AIP also called for more stringent safety, pollution-control and energy-saving regulations for automotive products, and "gradual" implementation of international automobile safety and environmental protection approval standards.<sup>23</sup>

A package of measures was introduced to help realize the targets. The AIP announced that, beginning in 1996, the 8–9 enterprises in the two categories of "large national enterprise groups" and "key manufacturers", and that were willing to raise their local content to government required levels (discussed below), would qualify for differentiated rates of preferential support in the following areas:

1. Exemption of adjustment taxes in fixed-asset investment;
2. Priority arrangements in share issues and stock market listings;
3. Priority access to bank credits;
4. Priority arrangements in utilizing foreign investment;
5. If approved, the financial companies of these enterprises could engage in an expanded scope of business;
6. Enterprises producing economy cars or key parts have preferential access to policy loans.

To support advances in research and development (R&D), the '94 AIP provided a set of "growth allowance" incentives that were specifically linked to the capacity and willingness of the leading auto groups to make R&D investments. The AIP stipulated that enterprises with unit

outputs of over 300,000 vehicles in 1995 and willing to allocate no less than 3 percent of sales revenue for R&D would receive central government support to expand their scale of operations to more than 600,000 vehicles by the year 2000. Enterprises with output over 150,000 vehicles in 1995 and willing to reinvest 2.5 percent of their revenue into R&D would receive government support to reach unit outputs of over 300,000 by 2000.

One of the main differences between the 1988 AIP and the '94 version was that parts manufacturing received significant attention in the second AIP. Chinese strategists recognized that not only was the existing subsector unable to meet the demands of the assemblers, but that modern and complete local parts and component production capacity was crucial for developing indigenous complete car production and OEM capacity – for China to develop its own national car brands.<sup>24</sup> The AIP listed 60 auto parts and components for mass production, for preferential development during the Ninth Five-Year Plan period (1996–2000). The list of parts was divided into three groups:

- Groups 1 and 2 consisted of 25 key auto parts and components specific to the passenger car industry:
  - Group 1 consisted of the high-tech components: engine management systems (or gasoline engines), antilock braking systems, and safety air bags
    - \* One foreign partner was supposed to be chosen to work in a consortium of Chinese companies to develop domestic production facilities
  - Group 2 included filters, pistons and piston rings, radiators, shock absorbers, and steering systems
- Group 3 consisted of 60 parts and components that were already in production inside China but not on a mass scale:
  - Included carburetors, distributors, mufflers, seating, and spark plugs
    - \* The government would contribute funds and encourage foreign participation to develop these parts and component segments
    - \* The government would support 3–5 leading domestic manufacturers to reach a goal of about 300 large parts suppliers by the end of the 1990s

Most analysts have assessed the merits of the '94 AIP in terms of industry consolidation and rationalization objectives. What has been passed

over in the scholarly debate is there were two objectives in the '94 AIP – production consolidation and directing foreign investment – and together they formed an integrated strategy for automotive modernization. NDRC planners highlighted in an interview that:

Rationalization of the auto sector is the long-term goal in the strategy. We see this evolving incrementally over time. We have a number of considerations to balance off in deciding the pace of industry consolidation and rationalization. Including social stability considerations related to plant closures and managing unemployment levels. However, the other main goal of the '94 AIP was devising means to better manage foreign-investment and the foreign-invested joint ventures.<sup>25</sup>

The long-range strategic considerations for Chinese planners were whether they could intervene to enroll MNCs into the parts localization drive, and induce them play a constructive role in oligopolistic competition inside China's national automotive industrial structure. The challenge was whether the state could mediate between its largest and most dynamic domestic auto groups and MNCs, and use "foreign capital" to remake China's largest auto industry into one that consists of large-scale, modern, internationally competitive, and eventually self-sufficient *Chinese* automotive corporations, and a strong and innovative parts and components subsector.

### **Foreign investment strategy: continuity and change**

The '94 AIP had 13 chapters and 61 clauses. Chapter 6 was dedicated to foreign investment regulations. In terms of continuity with the 1988 AIP, the '94 AIP maintained the ownership requirements in assembly projects, in short, that the equity ownership of the foreign partner in a JV must not to exceed 50 percent; and that the foreign partner must be willing to make a significant commitment to parts localization, technology transfer, and supporting local R&D. It also raised the requirements substantially on technology transfers, and provided a more detailed set of investment, financial, tax, and R&D incentives than in the '88 AIP. The terms and conditions in the '94 AIP reflected the process of learning, adaptation, and adjustment which Chinese industry strategists underwent in the early 1990s.

### Joint venture requirement and 50/50 ownership

The '94 AIP maintained the requirement that foreign automakers could only invest in assembly production inside China through a JV, and that the Chinese share could not be less than 50 percent. Clause 32 stipulated that the Chinese share could not be less than 50 percent in Sino-foreign JVs assembling engines, completed cars, and motorcycles. This clause specifically stated that foreign automakers investing in China in complete car projects and projects in three key auto components – motors, air bags, and ABS – could not exceed 50 percent equity holdings.<sup>26</sup> Why did the Chinese government maintain this equity ownership breakdown? Pearson notes that the JV and 50/50 equity requirements were state control measures, and a result of the policy consensus that was forged in the early 1980s between the more radical reformers in the Party elite, such as Zhao Ziyang, and the moderate reformers, to gain consent from the latter for foreign investment in China's industrial structure.<sup>27</sup> During the 1980s, the concern of the moderate reformers, such as Chen Yun, was to ensure that planning remained primary while the market was supplemental, and the debate was over preventing China from taking the "capitalist road", and being "controlled by the foreign capitalists".

By the early 1990s, the rationale for JVs and 50/50 equity holding had evolved to reflect the changing balance of state and market in the Chinese approach to regulation. In interviews, NDRC researchers noted that because of important changes in the nature of the Chinese economy since the early 1990s, the 50/50 equity shareholding arrangement was about ensuring technology and know-how transfers but also meeting broader regulatory concerns. The Chinese government had begun to adjust the bureaucratic and planning functions of the state, in order to support the transition to an increasingly market-oriented economy.<sup>28</sup> However, Chinese planners held firm to the insistence on the no less than 50 percent Chinese equity holding decision, arguing that giving up further ownership control would mean giving up the Chinese state's capacity to regulate the sector for the public good, to provide stable growth for the auto industry, and meet broader social welfare needs:

The Chinese side and foreign capital each want to control more than 50 percent. Our reasoning for keeping the 50 percent limit is that, if foreign investors control more than 50 percent, then the market will be out of control (*shichang shikong*). Ultimately,



China's economic growth is rooted in the transportation and accommodation (*jiao he zhu*) of the common people, and the Chinese government must maintain its ability to steer and guide developments in these two areas of the economy that affect the common people's lives.<sup>29</sup>

The inclusion of the minimum Chinese 50 percent ownership clause in the '94 AIP was not just a "policy game or strategic game-playing on the part of Chinese authorities". The AIP also maintained the exclusion of foreign participants from distribution and sales. Sales platforms would continue to be fully controlled by Chinese companies. Foreign automakers had to continue to rely on their Chinese SOE partners for these parts of the business operations, and make use of the distribution and sales platforms of their Chinese partners in order to sell inside China, and realize returns on their investment.

Chinese policy makers tried to strike a subtle regulatory balance by enacting the "shared equity, shared control" principle:

The Chinese government will not allow foreign investors to control and carve up this big cake at their will. The leadership realizes that this sector is key for China's future growth. We cannot allow foreign capital to control us. At the same time, if the Chinese partner holds too many shares, it will dampen the enthusiasm of the foreign partners. For example, in Citroen's investment in the Second Automotive Works [Dongfeng-Citroen], Citroen originally only held a minority stake [25 percent share] in the JV. As a result, it was not that interested in the joint venture, did not pay the necessary attention to it, and the joint venture suffered. This also had a negative effect in delaying the development of the Chinese partner too. The Chinese company felt the negative impact too. Right after China's WTO accession, Citroen asked to increase its ownership share to 50 percent, and we agreed.

The planner concluded by saying: "Now we take the middle way (*zhongyong, zhezong*), where both partners have a final say."

The decision to maintain the JV and 50/50 ownership requirements was about more than ideological consensus and factional struggle, or ensuring national or regulatory controls. Chinese authorities had also become more aware of development facilitation reasons for preferring JVs over wholly foreign-owned projects. The advantage of having SOEs partnered with foreign MNCs was *state power*: "It could be used to discipline a foreign partner or generally to promote national goals."<sup>30</sup>

In drafting the AIP, Chinese policy makers considered the optimal partnership strategy, and decided to reaffirm the approach of large-scale JVs. According to Chinese planners, the real challenge was not simply getting foreign companies to invest in China, but forging a “serious developmental partnership”. The size advantages of large-scale Chinese state automakers as partners to the large foreign automakers included using their larger base of resources to generate further growth. Other competitive advantages were a larger firm’s research capacities that allows for product adaptation and development, and the introduction of new products:<sup>31</sup>

*Only* when the gap in capacity between the company in the recipient country and that of the multinational corporation is not too large can the recipient country ensure that it will benefit from foreign investment. Only then will the necessary transfers occur, and learning happen. It is important to ensure the proper scale of the partnership; that the Chinese partner has the capacity to match up with its foreign partner, in this case, large-sized foreign automakers.<sup>32</sup>

Requiring shared ownership (JVs) in automotive assembly brought advantages of size, and managed competition, to bear on China’s automotive industry. However, it was also crucial to determine *which* Chinese partner could actually manage the relationship with a particular foreign multinational. Could the Chinese enterprise meet the partnership commitments and requirements over the longer term, and thus maintain its credibility? Could it hold the foreign partner to its commitments, and where possible, extracting maximum benefit for development objectives? This explains the support to the largest 8–9 Chinese automakers in the 1994 AIP.

### **Foreign partners: only the best**

Chinese policy makers also reconsidered how to further improve the partnership arrangement on the foreign side. A preference was shown for world-leading automakers. No longer would any foreign partner do. Clause 28 stipulates that, in utilizing FDI to establish a new assembly facility, the (large-scale) Chinese auto group must choose a foreign automaker with the following characteristics:

1. Have its own product patent and trademarks rights [read: must have a “famous brand”].

2. Own product development and production technology, and have a product technology index that conforms with the current legislation in its country of origin [read: must have their own technical expertise, world-leading and export-ready technology].
3. Own an independent international sales network [read: must have a global sales network, export-ready].
4. Have superior financing ability [read: must be financially strong and have capacity to raise further financing].<sup>33</sup>

The message of Clause 28 was that only world-leading automakers need apply.

Chinese authorities had learned from their negative experiences with Beijing Jeep and Guangzhou Peugeot in the 1980s and were determined not to repeat them.<sup>34</sup> They learned that only the top rank of MNCs were capable of meeting the state's longer-term development goals.<sup>35</sup> The AIP set minimum production output criteria for new JV assembly projects: 150,000 for passenger cars with engine capacity below 1600 cc, 100,000 for light trucks, 50,000 for vans, 10,000 for heavy trucks, and 200,000 for motorcycles with engine capacity below 150 cc.<sup>36</sup> To reinforce the "go with the best, and go big" strategy, the SPC followed up the AIP with state financing policies for the auto sector in the Ninth Five-Year Plan (1996–2000). The Ninth Five-Year Plan states that the government would establish an automobile industry trust fund to support passenger car and parts producers. The China Development Bank<sup>37</sup> specifically would underwrite investment for key automotive projects, with RMB5.6 billion in loans, and help develop the automotive financing branches of the large-scale Chinese state auto groups.<sup>38</sup>

The requirement that foreign partners must have strong financial capacities and be export-ready indicated that the Chinese side wanted to avoid a repeat of the FOREX problems that afflicted Beijing Jeep and Guangzhou Peugeot. They wanted to avoid the foreign automakers who would treat their Chinese subsidiaries as "foreign exchange cash cows", to be milked for short-term returns on (minimal) investment. Partnering with MNCs with deep financial pockets would also open the possibility for further foreign investment and project expansion in the future.

The preference for export-ready foreign automakers, and for promoting the development of Chinese parts suppliers that were export-competitive,

was vital, especially as China was aiming to gain entry into the World Trade Organization.<sup>39</sup> The SPC followed on the '94 AIP with product export promotion policy in the Ninth Five-Year Plan (hereafter "FYP"), covering 1996 to 2000. The Ninth FYP called for establishing a system for automobile products exports, and an exclusive fund to create the export base. It stated that the Export and Import Bank of China (EXIM Bank) would offer export loans to exporters with a sufficiently large amount of auto exports, and that these export companies should focus on earning foreign currency. It provided quick refunds on value added tax during the domestic distribution process, once the exporter had reached the required amount of exports to qualify for a rebate. An "international market exploration fund" would be established to encourage, support, and promote the export of Chinese automobile products in international markets.

The other shift in the conditions for Sino-foreign partnering was that foreign automakers could henceforth partner with two different Chinese partners in establishing a JV assembly company, as long as each company produced a different model.<sup>40</sup> The Chinese side realized that the one-to-one JV partnership principle inhibited foreign investors from increasing their investment in China, and that "this problem was particularly prevalent for the MNCs that were saddled with a low-performing SOE".<sup>41</sup> The downside of the one-to-one partnership scheme was that the low-performing Chinese partners (such as in Beijing Jeep and Guangzhou Peugeot) had little incentive to improve their performance. They had taken the path of least effort, and were heavily reliant on their foreign partners for inputs, and the actual management of the JV. As one planner explained:

If the Chinese auto structure is also overly-controlled and the JV situation was over-concentrated, this created problems. We came to realize that if each foreign company was partnered with only one Chinese partner, this would make it too easy for the foreign partner to control the Chinese partner. At the same time, if the Chinese SOE knew that its foreign partner was locked into the arrangement and basically could not escape the joint venture without exiting the China market, then it had little incentive to improve. In this bilateral monopoly situation, both sides could exploit the arrangement, and projects become increasingly complicated and delayed, and rarely lead to rapid "leaps" in technological capability.<sup>42</sup>

In the 1990s, most of China's state auto groups could not match the financial contributions of their foreign partners, especially if the foreign partner wanted quickly to increase total investment in the project. According to one Chinese planner, "However, if two large-scale Chinese companies are partnered together with one foreign partner, they can jointly bear the burden in terms of the capital needed to match investment increases from the foreign partner. So we allowed the foreign companies to partner with two Chinese companies."<sup>43</sup> The same official adds:

Foreign companies complained that the Chinese government only allowed JVs with 3 major Chinese companies for a long period of time. But this was necessary to ensure that the JVs could operate effectively. Only when a country's domestic industry is comparatively equal with the foreign investors can they ensure that they will benefit from FDI.<sup>44</sup>

While the '94 AIP loosened the one-to-one JV partnership restrictions to allow MNCs to partner with two Chinese SOEs on assembly projects, Chinese authorities did not grant the MNCs unlimited partnering rights:

If we had allowed the foreign companies to establish joint ventures with three Chinese partners, this would have led to eighteen JVs, which is too many, since China already had over 100 companies involved in the assembly of automobiles at that time, and the sector was already fragmented with small companies throughout the country. The Chinese industrial structure was already too decentralized, and lacking efficiencies of concentration and economies of scale.<sup>45</sup>

The process of deregulating foreign investment controls in the 1990s was a cautious process of liberalization: "Allowing each foreign automaker to partner with more than two Chinese partners would have, and could have, led to excessive duplication of models and excess diffusion of technology." The objective instead was "managed" market competition in China's automotive industry.<sup>46</sup>

### **Parts localization**

Despite the limited gains in promoting content localization in two of the three early JVs, Chinese authorities remained undeterred in their desire

to “force” localization. They retooled policy and regulatory levers to provide even stiffer localization requirements in the '94 AIP. Auto ventures had to start production with 40 percent local content, and in doing so, could qualify for 37.5 percent import duties on parts. Automakers that reached 60–80 percent local content rates could import parts at 30 and 20 percent duties. “Requests” (*lixiang*) to establish a new JV assembly project had to include a localization plan for the first and second year of operations.<sup>47</sup>

The formal approval process consisted of four stages: (1) *lixiang* (request); (2) *heshi* (verification); (3) *bei an* (put on file); (4) *shenpi* (approval). The review and approval process involved three levels of the state, the Ministry of Foreign Economic Relations and Trade, the SPC and finally the State Council (executive branch). While the provincial-level government could usually approve parts and components JVs, and the SPC engine and light and heavy truck JV proposals, only the State Council could give approval for JVs producing or assembling whole automobiles.

Once the JV had entered into operation, monitoring teams on parts origin determination from the First Ministry of Machinery Industry (or its successor after the FMMI was merged) were dispatched to the enterprise to inspect and verify whether localization requirements were being met. Since localization rates related to tariff reduction, the Customs General Administration also sent inspection teams to the JVs to determine whether reported localization rates were in compliance with the regulations, or whether there was fraudulent activity, in which case, to determine the level of financial punishment that would be applied.

Similar to the 1988 AIP, which introduced differentiated tariff rates on imported vehicles and completely knocked-down and semi-knocked-down kits in order to encourage increasing local parts inputs, the '94 AIP also outlined differentiated tariff rates for local content, but with more detailed gradations. There were three levels for passenger cars (40, 60, and 80 percent), commercial vehicles and motorcycles (30, 70, and 90 percent), and major automotive parts (50, 70, and 90 percent). For passenger cars, local content rates in the 60–80 percent range would qualify for a tariff rate of 32 percent on imported parts; 48 percent tariff rate for 40–60 percent local content; and 50 percent tariff rate for less than 40 percent local content. Central regulators then backed up the localization requirements in the '94 AIP with local content policy in the Ninth FYP (1996–2000). That Plan reiterated that new passenger car projects should not be started unless the unit parts (i.e. engine and transmission) and related parts were available at the start of the project, and that the

local content rate for the vehicle as a whole must exceed 40 percent at the launch of the JV.

The 40 percent parts localization requirement was difficult for most JVs to meet, let alone the 50 percent localization rate required in the 1988 AIP, for engines and whole vehicles.<sup>48</sup> With the exception of SVW, the rate of assimilating imported technology and developing local parts capacity in the other JV assemblers had been unimpressive. It had taken over 5 years (1992) for all three model JVs to reach 50 percent localization. Yet the average product cycle of car models at that time was around 3–4 years, making it difficult for China's automakers to escape from producing outdated models, even when in a JV partnership, unless there was a major increase in the rate of parts localization. To counter these difficulties and further encourage the development of the parts industry, the AIP did not place any ownership limitations on foreign investors for most segments of the parts industry. Even wholly foreign-owned ventures were allowed. The exceptions were for the most high-value and high-tech components, specifically antilock braking systems, engine-management systems, and safety air bags, in which foreign ownership could not exceed 50 percent.

The SPC followed on the '94 AIP by outlining specific support for the parts industry in the Ninth FYP (1996–2000). The parts industry would receive no less than 40 percent of total government investment in the sector. The government would provide a low-interest fund to support 25 "preferred" key projects in parts production for passenger cars. The government would also exempt or reduce the investment tax for the parts producers involved in the 25 key projects, and promote these companies as preferred recipients of foreign investment. Central authorities would encourage local governments, relevant line ministries and foreign parts suppliers to invest in these preferred parts producers. Approval would only be given for a new complete car assembly project if it had a 1:1 investment rate between the assembly operations and parts production. It called for simplification of the approval process and reduction of the approval time for new parts production projects with a total investment of less than RMB2 billion. Feasibility studies for new parts production projects would be approved by local government authorities or by relevant line ministries.

Localization requirements in the '94 AIP and the Ninth FYP were aimed at "managing the desire of foreign automakers to establish their own production facilities inside China, and deterring them from

establishing new supply chains outside China, and instead, persuading them to establish complete parts and components and assembly facilities inside China".<sup>49</sup>

The crux of strategy in encouraging parts localization was that the Chinese government wanted to "lengthen the industrial value chain and extend it to China" (*tui chang gongye jiazhi lian dao Zhongguo*). The basic strategy was that car production must start with parts; therefore the first part of the '94 IP calls for 40 percent parts localization. We knew that in Southeast Asia, for example, the Japanese had developed the parts industry without a whole vehicle being produced and assembled in one country. The parts localization requirements in the IP are therefore the "stick", and the low tariffs and tax breaks on imported parts after 40 percent parts localization, the benefits, are the "carrot". We can see the Chinese government's strategy of combining administrative and economic regulatory measures to mediate the internationalization of the automotive industry and induce parts localization. These policies have greatly enhanced the modernization of our automotive industry. Without these policies, it would have impossible for China to create its own brands, for example, the Chery and the Mery.<sup>50</sup>

The more relaxed regulations for investment in the parts industry, the fact that a critical mass of foreign automakers was present in China by the early 1990s, and that state pressure was put on the world's leading MNCs to bring their traditional parts suppliers with them into their new ventures in China, lured the world's leading auto parts companies to China. By the mid 1990s, AlliedSignal Inc., Robert Bosch GmbH, Cooper, Dana Corp., Delphi Automotive Systems, ITT, Lucas Varity Inc., Rockwell, Siemens, TRW Inc., Tenneco Inc., United Technologies Corp., Valeo, as well as leading Japanese and Korean parts companies, had all invested in parts and components ventures in China.<sup>51</sup> Within a few short years, Delphi alone would have more than a dozen JVs inside China, and one wholly owned enterprise, and be producing engine-management systems (an exception to the '94 AIP restrictions), wire harness, electric systems, driveshafts, brake systems, steering gears and columns, generators, and brakes. The Asia Strategic Investment Corporation (ASIMCO), founded in 1994 as a Beijing-based US investment company by Jack Perkowski, had raised \$250 million from international investors by the late 1990s,



to finance 13 Chinese auto parts factories.<sup>52</sup> Holding an average of 58.5 percent equity, ASIMCO became involved in the production of components ranging from brake systems, compressors, diesel nozzles and injectors, friction materials, fuel pumps, gears, horns, ignition coils, jacks, motorcycle wheels, gears, motors, oil seals, piston rings, precision castings, rubber seals, and valves.<sup>53</sup> The Chinese auto parts industry experienced major productivity gains as a result of the boom in foreign investment.

The AIP maintained stiff import controls in order to further encourage foreign investment. Foreign actors were barred from engaging in distribution, sales, services trade, or retail financing, and foreign investors were forced to focus on manufacturing and design. This package of positive and negative localization incentives encouraged the large MNC assemblers to bring their parts suppliers with them to China. They generated "follow-thy-leader" effects on the parts suppliers, and spurred the world's leading MNC assemblers to integrate their traditional parts suppliers into local Chinese supplier networks.

## **R&D**

The 1988 AIP had requirements for foreign support for technological research and development. Clause 31 in the '94 AIP significantly upgraded and clarified these requirements. It established that JVs must meet the following conditions:

1. A technological R&D center must be established within the new company, and the new center must be able to develop designs for product changes and new models.
2. It must be able to make products equivalent to current technology standards (early 1990s).
3. It must intend to export products and achieve foreign currency balance.
4. Chinese parts producers should receive equal consideration as parts suppliers (nondiscrimination against Chinese parts suppliers).

The '94 AIP states that the Chinese government will support joint R&D on vital projects.

These requirements reflected the continuing challenges which China faced in persuading foreign automakers to transfer their world-standard automotive technologies, a problem that was not unique to China. JVs in Korea, with foreign partners from the US and Japan, have had similar

histories, where foreign partners refused to supply their Korean partners with state-of-the-art technologies, and restricted the overseas marketing of vehicles produced in the JV.<sup>54</sup> In China, foreign partners in the JV had initially resisted introducing technological upgrades in car models after the first investment had been made, and access to the previously protected domestic market was secured.

Volkswagen had little incentive to bring new technology to its Shanghai JV because the older technology was already allowing it to make substantial profits at the SVW venture. In fairness, in the early 1990s, VW opened its second major JV in China, with FAW in Changchun, and was already introducing its newer model Golf, and then Jetta models into the Chinese market at the new plant in the northeast. However, VW raised further concern on the Chinese side when it announced in mid 1991 that it was seriously considering establishing a new JV in Taiwan, and thinking of inviting Taiwanese parts producers to the mainland to help boost the export competitiveness of its two Chinese plants.<sup>55</sup> Chinese authorities read VW's plans as indicating that the German automaker was considering other options to supply its future expansion into other Asian regional markets, and even looking to Taiwan.

The AIP stipulated that the Sino-foreign JVs should hire and train local engineers. Despite the training programs that VW and other foreign auto companies had established to train Chinese engineers, the sector continued to suffer from a shortage of Chinese engineers with the necessary skill level to match the foreign automakers. The persistent shortages led to "poaching games" among the various automotive JVs. The result was that the salaries for qualified local engineers escalated at a rate upwards of 50 percent per year, and average length of job tenure was less than four months.<sup>56</sup>

The experience in the first wave of automotive JVs also suggested that *both* foreign assemblers *and* local authorities were prone to "short-termism", in other words, overrelying on technology imports to achieve short-term profits, at the expense of creating indigenous automotive design and innovation capacity over the long term.<sup>57</sup> Domestic automakers were prone to "rent seeking", without putting enough attention into building up their R&D capacity; R&D would not bring profits in the short term.<sup>58</sup> High tariff walls and nontariff barriers allowed domestic prices to be set far above the cost of production, which allowed for major profits, for the better performing JV assembly partners. Domestic assemblers tended to ignore R&D in order to focus on acquiring and introducing new technology, and increasing domestic production levels. Local governments, feeling

pressure to spur local industrialization and growth, also funneled local state financing to importing technology-embodied machinery.<sup>59</sup> The result was a surge in machinery imports, although lacking coordinated integration into the industrial structure, and a general neglect of R&D. The R&D requirements in the '94 AIP, specifically the demand for new JV assembly projects to include an automotive R&D technology center, were meant to reverse these troubling trends, and inherent vulnerabilities in China's automotive modernization path.

# 6

## Institutional Inheritances and Policy Effectiveness

This chapter examines how Leninist arrangements in the Chinese Party-state affected the formulation and implementation of the 1994 Automotive Industrial Policy (hereafter the '94 AIP) – especially the foreign investment utilization measures. As Zysman has written:

The capacity of any state to implement particular policies and to have an impact on domestic economic outcomes is systematically affected by the patterned set of institutional relationships in the economy, the structured institutional setting in which it attempts to act. The specific capacities – distinctive competencies, difficulties, and weaknesses – of each network are thus the focus. The structure and operation of the state have a profound effect on its economic strategy both at home, abroad, and its strategy of linking the domestic to the external.<sup>1</sup>

Two elements of the Chinese state institutional network pertaining to the execution of the '94 AIP are the focus of this chapter. The first is the organization of the state, both the formal institutions and processes of power within the bureaucracy relating to the auto industry, and the relationship of the bureaucracy to the locus of political power in China, the Chinese Communist Party. The second is the relationship between domestic stakeholders in the Chinese auto sector, i.e. the Chinese automotive groupings, and the state bureaucracy at both the central and local levels. We examine those factors that influenced policy choices and the execution of foreign investment strategies in the '94 AIP. The main outcomes have been the Chinese Party-state's effective coordination of the implementation of foreign investment

strategies in the auto sector; its mediation between the main national auto group companies and the leading foreign automotive corporations and their traditional suppliers; and the attainment of national industrial goals.

In analyzing automotive policy leadership and coordination in the 1990s – the causal impact of specific actors, decision-making processes, organizational structure and institutional norms, and the internal workings of the Chinese Party-state – we learn how the Chinese state mediated between the foreign automakers and priority domestic auto groups. How it intervened to steer foreign capital toward targeted auto modernization objectives, securing transfers of advanced technology for building complete cars in China. Leninist features of the Chinese Party-state shaped the execution of the '94 AIP. Once China's top leaders agreed on the need to recentralize state control over strategic industries, to arrest the breakdown in industrial planning and make better use of foreign investment to develop capital and technology-intensive sectors, reworked Leninist institutions provided Chinese economic decision makers with means to recentralize coordination and guide industrial redevelopment.<sup>2</sup> The central leadership worked through the organizational structure of the Party-state, specifically the functional role of the State Planning Commission (SPC), and the Party's control over the senior executives in the Chinese automotive groups, to push through a coherent auto industrial policy, which contained a number of regulatory innovations, especially for using foreign investment. To be exact, Zeng Peiyan drew on the organizational advantages of the SPC to build the necessary auto policy network of stakeholders for the execution of the AIP, demonstrating "artful strategy on the part of the political entrepreneurs at the top of the CCP".<sup>3</sup>

Distinctive Leninist features of the Chinese Party-state supported the execution of the '94 AIP, especially its foreign investment strategy, even as the Leninist arrangements themselves were undergoing modification in response to China's increasing commitment to market economic principles. The Communist Party's guidance of auto development was exercised mainly through the policy and regulatory levers of the SPC, as well as the Party's control over leading local officials and senior executives in the Chinese auto companies. The internalization of the CCP's norms of "unified and centralized leadership", "democratic centralism", and the "correct line", in combination with the CCP's control over the appraisal, appointment, and removal of "leading cadres" in senior state positions, strongly influenced the behavior of decision

makers in the auto sector.<sup>4</sup> At issue was the effective adaptability of Party control in a changing economic environment, including the Party's responsiveness to growing market dynamics and new international economic participants.<sup>5</sup>

## **Leninist organization: strategic planning and policy coordination**

How did particular Leninist organizational features of the Chinese state provide coherence and coordination in moving China to a more advanced stage of auto modernization in the 1990s? How did leading Party and government officials use Party and bureaucratic structures to integrate local authorities and enterprise groups into the process? Do specific institutional features of the Chinese state account for central-local coordination in the implementation of the '94 AIP? Two factors were particularly important. First, Party elites and government leaders exercised their leadership over planning and coordination of the national economy through the SPC, and consciously influenced the pattern of investment, competition, and exchange between sectors and in the organization of particular industries and even specific enterprises.<sup>6</sup> Second, Leninist norms of Party organization and senior personnel control measures ensured centralized and coordinated execution of the '94 AIP.

### **The State Planning Commission (SPC)**

The SPC (today's National Development and Reform Commission<sup>7</sup>) played an important leadership function for line ministries, and subcentral state economic organs. The SPC's "leadership" role was broader than conventionally understood, as it actually encompassed the roles of comprehensive leadership, guidance and coordination relationships (*lingdao, zhidao he xietiao guanxi*) with other economic organs of the state.<sup>8</sup> The Planning Commission was a unique Party-state interlocutor because the top economic priorities and planning of the CCP leadership were reflected in the agenda and operations of the SPC.<sup>9</sup> In the language of the CCP, the "concentrated and unified character of China's economic planning is manifested in the functions of the SPC".<sup>10</sup> Through the SPC, the senior Party leadership and leading economic cadres in the government directed the course of industrialization; yet the Planning Commission also provided Party elites with insulation from the sociopolitical reaction to the dislocations caused

by their industrialization decisions. Centralization of power in the Planning Commission provided for unified and concerted action while its partial autonomy from the rest of the economic bureaucracy meant that it could initiate and direct events through its policy instruments. Industrial policies, multiyear plans, and foreign-investment approval authorities allowed the SPC to intervene directly in the affairs of particular industrial sectors and enterprise groups, and even on specific industrial decisions.

The unity of Party economic priorities and those of the state bureaucracy were fused in the SPC's most important planning and policy-making forums such as the Chairman's Conference (*zhuren bangong huiyi*). Participants included: the SPC Chair, vice chairs, departmental director generals, and relevant economic and technical specialists. These conferences: (1) discussed and reached consensus on key economic problems in formulating and implementing the long-, medium-, and short-term national economic plans; (2) discussed and drafted reports and documents used to advise the country's most powerful economic decision-making body, the Party's Central Financial and Economic Leading Small Group (*Zhongyang caijing lingdao xiaozu*); (3) reviewed and approved investment proposals for the government's key capital construction projects; (4) disseminated the directives of the most senior leaders downward to relevant senior officials in the SPC, and formulated preliminary options for implementing the directives.<sup>11</sup> The tight connection between the SPC and the Central Financial and Economic Leading Small Group (CFELSG) allowed the SPC to play a leadership role in relation to the economic line ministries of the State Council, and state economic organs at the subcentral level. The Party leading group (LG) was composed of the most senior economic cadres in the Party's Politburo and the State Council, and usually has five to seven members. Due to the small size of this LG, it relied on the SPC to provide staff support, with the Chair of the SPC usually acting as the Deputy Director of the Office of the LG. During the 1990s, Zou Jianhua and Zeng Peiyan were important members of the LG and its office. Over its 40-year existence, SPC heads have always been vital members of the LG.

The continued link between state planning, policy making, and managing political competition can be seen in how the SPC drafted the initial parameters for the national economic plan, working from the general priorities and guidelines provided by the CFELSG, and how it conducted forecasting and other measures to achieve desired outcomes. The initial plan went down to the subcentral levels for their planning inputs, and their draft plans were fed back up to the national SPC,

which compiled them, negotiated with subcentral representatives, and adjusted the national plan. It is then given to the CFELSG for review and approval. After approval was granted, the State Council convenes a National Planning Conference, usually in November, presided over by the SPC Chair, and participation by the Premier and Vice Premiers. The provinces were represented by the Party secretary in charge of the economy (usually the governor), as well as the heads of key economic organs, especially the provincial planning organs. The ministers and vice ministers of the economic ministries of the State Council participated as delegates, as did the departmental heads and some divisional chiefs of the SPC.<sup>12</sup> About 300 people attended. After further revisions to the plan, the SPC forwarded it one more time to the CFELSG for final Party approval. As a formality, the SPC Chair presented the national plan on behalf of the State Council to China's parliament, the National People's Congress (NPC), or its Standing Committee, for official passage into legislation. After approval from the NPC, the State Council transmits the national plan (as an internal document) to the subcentral levels, and line ministries for implementation. At all levels of the system, there was tight interlocking of Party priorities and bureaucratic planning.

The National Planning Conference presented an opportunity for ministries, localities, and large-scale state enterprises (through their Party and governmental representatives) to lobby for greater investment, capital construction, labor power, and material allocations.<sup>13</sup> Although the general trend during the 1980s was that the localities gained strength, which moderated the influence of the SPC, and allowed for the growth of market forces, even then the SPC had the final word. In the early 1990s, state economic controls were focused on the "strategic industries", and the SPC took over an enhanced leadership function in coordinating the development of these pillar industries. The reassertion of the SPC's planning and coordination "leadership" role for the automotive industry began gradually in 1986 when FAW and SAW gained their independence from CNAIC and were brought under the direct supervision of the central government, under the SPC. In 1987 the central authorities came to realize that a sector-specific strategy was needed for the auto industry. The SPC classified it as a "pillar industry" for priority planning and regulatory attention. It then took the lead role on the Chinese side in negotiating with the foreign automakers for the second group of JV assemblers which led to the formation of FAW-VW and SAW/Dongfeng-Citroën in the early 1990s. The SPC's growing clout over the auto sector was demonstrated



in 1991, when the transportation sector was identified as a key priority area for the Eighth Five-Year Plan (1991–1995), and FAW–VW was designated a “key national project” under the plan, which meant special financial allocations.

The state economic plan and economic policy are closely intertwined, and the SPC used its authority to coordinate across a number of sectors. Transportation was first made a “priority” in the Seventh Five-Year Plan (1986–90), and the auto industry was singled out in 1988 and given its first industry-specific policy at that time. The Eighth Five-Year Plan (1991–95) was the watershed when the transportation sector, and specifically the auto industry, was designated a pillar industry to help drive the entire national economy. This was followed by the Ninth Five-Year Plan (1996–2000), which stipulated that new passenger car projects should only be started if the unit parts (i.e. engine and transmission) and related parts were available at the start of the project, and that the local content rate for the vehicle as a whole had to exceed 40 percent at the launch of the JV. The plan stated that approval would only be given for a new complete car assembly project if it had a 1:1 investment rate between the assembly operations and parts production.

The Ninth Five-Year Plan continued to reverse the previous bias that had been shown to assemblers, to the detriment of parts producers. It promised Chinese parts producers that during the period of the plan, they would receive no less than 40 percent of total government investment in the sector. The plan also promised a low-interest fund and preferential support for FDI to 25 “preferred” projects in parts production for passenger cars, and investment tax exemptions or reductions. It called for simplification of the approval process and reduction of the approval time for new parts production projects with a total investment of less than RMB2 billion. It stipulated that the feasibility study for new parts production projects could be approved by local government authorities or the relevant line ministry. The integration of five-year planning and the auto industry policy illustrates the more methodical leadership the SPC provided for China's auto development, and how its interventions, starting in the early to mid 1990s, resulted in fundamental advances in the country's automotive modernization.

### **SPC leadership of the auto policy group**

The behavior of the Chinese Party-state – its capacity to coordinate the process of automotive modernization – cannot simply be inferred

from its organizational structure. Scholars have portrayed the post-Mao Chinese state as fragmented or weak, advancing images of a Chinese state that is paralyzed by hierarchical and functional barriers, formally centralized but informally incapacitated by central-local tensions and interbureaucratic contestation at the central level.<sup>14</sup> The understanding of the Chinese Party-state presented here diverges from the view of a fragmented and weak state, and describes how state officials were able to refashion new strategy and tactics to attack particular problems.

Second-generation post-Mao economic planners in the SPC and relevant line ministries associated with the automotive sector recognized how the changing international environment in the world auto industry, and the internal growth of China's domestic market, had created new opportunities that were presented in the early 1990s. They developed new strategy and tactics to engage the multinationals. Prior to the early 1990s, the efforts of the Chinese state to mediate between international and domestic automakers had been stymied by both international and domestic market factors. American and Japanese automakers had little interest in China. Figuring out how best to respond to these structural conditions, and avoid partnerships with weak MNCs, became the order of the 1990s.

The second generation of post-Mao economic leaders had learned from rejection at the hands of the top American and Japanese automakers in the 1980s, and the problems at Beijing Jeep and Guangzhou Peugeot in the first phase. From the early to mid 1990s, leading figures in the SPC, such as Vice Chair Zeng Peiyan and Vice Premier and SPC Chair Zou Jiahua, gave key direction to China's automotive modernization drive, leading it to a more advanced stage.<sup>15</sup> Zeng, in particular, was a pivotal figure. He instructed the relevant officials in the SPC to establish a broad-ranging joint committee or joint council (*lianxi huiyi*), involving all the key domestic stakeholders, to "jointly" carry out the auto policy review and draft new policy and regulations. These two "senior economic cadres" provided the fusion of Party and government leadership for the joint committee.

The SPC served as the lead unit (*qiantou danwei*) for this policy consultation body, and brought together representatives from the newly formed State Council Production Office,<sup>16</sup> the Ministry of Machine-Building Industry, the Ministry of Electronics Industry,<sup>17</sup> the China National Automotive Industry Corporation, the Ministry of Finance, the People's Bank of China, and other relevant line ministries including the Ministry of Communications (i.e. transportation), Ministry of

Public Security, the large Chinese state automotive companies, Customs General Administration, the National Environmental Protection Agency, and the State Office for Inspections. Departments inside the SPC that took part in the joint consultations included the Automotive Division (*Chiche chu*) of the Department of Machinery-Electronics, Light Industry and Textiles (*Jidian chingfang si*), and the departments responsible for economic planning, foreign investment approval, and large-scale national projects. Local government representatives and some auto industry researchers were also invited to participate in the internal consultations.<sup>18</sup>

Zeng took personal responsibility to lead this auto policy group through the review process, which culminated in the formulation of the AIP. He also oversaw the implementation of the AIP after it was issued. Zeng was well qualified to play this role, and held a powerful and broad mandate in his portfolio of responsibilities. In addition to his 20-years' work experience in the Machinery Ministry, prior to joining the SPC, Zeng's academic training in electrical engineering made him well suited for understanding China's developmental needs in the automotive sector, especially as the electronic functions in a car (electronic sensors, diagnostic and navigational systems) doubled by the 1990s and contributed as much as 35 percent to the cost of a vehicle. As Vice Chair of the SPC, Zeng was involved in the SPC's review process for large-scale foreign-investment project proposals, and he met with foreign auto executives on behalf of the Party and government.<sup>19</sup>

Zeng Peiyan became a member of the Party's powerful CFELSG in 1992, and was soon named Deputy Director of the Office for the LG. Due to his specific Vice Chair responsibilities inside the SPC, which included macrocoordination of national investments between industrial and infrastructure development, he was able to bring his combined planning mandates to bear on the automotive review and AIP drafting process. At the same time, he made sure that he and SPC officials conducted a thorough and comprehensive consultation process. He emphasized that the SPC must listen, and be perceived as listening, to the views and wishes of the numerous stakeholders whose interests would be affected by the new AIP, both in the key centers of auto production, and across the central ministries and state organs.

A Chinese planner who took part in the policy review in the early 1990s, and the drafting of the '94 AIP, noted that this process was "a major

coordination challenge". It was "very difficult" to build interbureaucratic and central-local consensus, and "strike the balance point" (*jiao pingheng dian*) between the competing sector interests of different ministries and departments, on each and every issue.<sup>20</sup> Zeng believed that the SPC should make full use of its traditional comparative advantage in economic planning, specifically its long-established ties with state enterprises and sector representatives that came from consulting with them in the comprehensive planning process. He noted that such consultations were becoming more difficult as China's economy had grown more complex. It now included both foreign and domestic corporate actors. However, Zeng recognized that effective implementation of the AIP required forming a strong and inclusive policy consultation group, but with strong SPC leadership.<sup>21</sup>

The automotive "joint committee" provided the centralized organizational mechanism through which the SPC could incorporate a sufficient number of diverse stakeholder interests, to overcome the collective action challenges that could plague horizontal and vertical coordination in the Chinese governance system.<sup>22</sup> Chinese officials compared the functional similarities of *lianxi huiyi* to the Party leading groups in the sense of providing senior-level leadership and coordination for bureaucratic apparatuses on functional issue areas.<sup>23</sup> One official observed: "If you are called to attend, you should show up – be well prepared, and ready to discuss!" Joint committees are seen as increasingly useful for working out a division of regulatory responsibility and administrative labor for policy implementation. According to an NDRC researcher,

the importance of the 1994 AIP was symbolized in the fact that it was issued by the State Council, as a strategic government policy document that was sanctioned by the Party leadership, and represented the consensus view of all of the stakeholders that had been involved in the consultation process for the '94 AIP.<sup>24</sup>

Former senior executives of GM and the members on their negotiating team for Shanghai GM noted that Zeng was "*the key guy*", the "bottleneck point" in the negotiation chain on the Chinese side. He had a reputation as the main decision maker on any major decision related to the auto industry at that time. Zeng did not come to the negotiating table at the "Shanghai level", but rather at the macro-planning level where the automotive industry met national

development objectives. He came to each set of discussions with “one eye to pushing for more and comprehensive parts and components localization, and the other eye to infrastructure”. His concerns were “futuristic” and the product of the SPC’s functional role in comprehensive economic planning. Zeng emerged from the 1998 bureaucratic reshuffle which shifted the mandate over the auto sector from the Machinery Ministry to the SPC as “*the person holding the coordination mandate for state investment in areas of infrastructure, technology and industry. Everything had to go through Zeng!*”<sup>25</sup> What is suggested here is that Zeng effectively leveraged all of these interrelated mandates, united under his watch. He “pushed in a coordinated way” for the world’s top auto companies to “make a strong commitment to help build a comprehensive supply industry in China”, in exchange for the Chinese government agreeing to make the massive investments in infrastructure that were necessary to support the auto industry. The former head of GM’s China Office noted that this state investment in the road and transportation network was vital for establishing a “fully modern local supply network” that could meet just-in-time, flexible, and lean production demands.

Lu Fuyuan also played a pivotal role in the auto policy group, initially as deputy general manager of the China National Automobile Industry Corporation (CNAIC), and then Vice Minister of the First Machinery-Building Ministry (responsible for the auto sector). He advised Zeng and made sure that the Machinery Ministry worked in close coordination with the SPC in the sector review and drafting the AIP. Lu was a key actor among a group of automotive officials who recognized in the early 1990s that international and domestic conditions in the industry had changed in China’s favor, and that foreign automakers had become very interested in China.<sup>26</sup> In the period of the early to mid 1990s, Lu and other officials in the Machinery Ministry and the Automotive Industry Division of the SPC spent significant time poring over international industry reports and international media coverage better to understand the latest trends in the world automotive industry.<sup>27</sup> Foreign auto executives were visiting China regularly, and requesting to meet with Chinese auto officials to discuss investment and cooperation possibilities more frequently. In the media, these same executives were referring to China as the “last great market”. The intense competition over the JV bidding to partner with FAW (and to a lesser degree with SAW) in the late 1980s and early 1990s had already shown Chinese officials that world market conditions had changed in

China's favor. Even GM had put in a bid, and Toyota and Ford gave serious consideration to bidding. They recognized that they had a unique opportunity to strike some favorable foreign investment deals if the Chinese state could take a coordinated approach.<sup>28</sup> They believed that they needed to improve on the country's first Automotive Industrial Policy (1988), which had called for rationalizing the auto industrial structure around the so-called "Three Big, Three Small"<sup>29</sup> (*San Da, San Xiao*) scheme. Any new auto industrial policy would need to include a well-thought-through "foreign capital utilization" strategy – a strategy that went beyond the basic objectives in CNAIC head, Rao Bin's original call in 1984 to turn the auto sector into a "modern and pillar industry", with the "core goal to produce a new generation of modern products; that is, to be able to produce automobiles in the 1990s equivalent to the international quality standard of the 1980s".<sup>30</sup>

Other backers of the auto policy group were Minister of Foreign Trade and Economic Cooperation (MOFTEC) and later Vice Premier Li Langqing, and SPC Chair and later Vice Premier Zou Jiahua. Both Vice Premiers gave their support to Zeng Peiyan and the SPC for the auto policy review process, and even participated at different moments in the review and formulation of the '94 AIP.<sup>31</sup> Prior to being appointed Vice Premier in 1991, Li had a deep reservoir of experience on the foreign trade and investment finance files, and was known in the government as the champion of "reform and opening".<sup>32</sup> However, Li also had formal academic training in automotive engineering, and maintained an interest in the development of the sector. In the mid 1960s, he had been the chief engineer at the First Automotive Works in Changchun, and kept in touch with FAW over the years as he rose through the ranks of the Foreign Trade Ministry. Li brought considerable technical knowledge of China's domestic technological and production capacities in the automotive sector to the review process, especially regarding the gap between China's automotive industry operations and international standards. As MOFTEC minister, Li also met with many senior executives of the foreign auto companies. NDRC researchers noted that Li made sure that the representatives of the different ministries brought into the policy group understood that he gave his strong personal backing to Zeng and the SPC.

Senior GM executives said they also met with Li Lanqing in Beijing. These meetings (usually over dinner or lunch), and those with other top leaders including Jiang Zemin and Zhu Rongji, were cordial. What

initially surprised the US auto executives was that the conversation often revolved around the geopolitical implications of an investment project between GM and China on US-China relations more broadly, rather than on the details of the proposed auto project. Chinese leaders would address sore points in the negotiations over the proposed Shanghai JV deal by drawing attention to major issues of principle related to foreign investment and China's national development, and leave the resolution of details to officials and corporate representatives at the lower levels.<sup>33</sup> The foreign auto executives initially found this style of business engagement and the discussions on geostrategic issues "unusual for business discussions", but the successful contenders quickly grasped that such meetings with the "chain of mandarins" were a vital part of the negotiating process in China on projects of this magnitude, and a reflection of Beijing's formalistic, top-down, approach to governance on all matters, including the auto industry.<sup>34</sup> These observations highlighted the fact that a Leninist "chain of command" was in operation on the Chinese side, and had a powerful influence in shaping outcomes in the auto sector.

The fourth leader backing the auto policy network was Zou Jiahua, Vice Premier (1992-97) and the SPC Chair during the early 1990s.<sup>35</sup> Zou was a strong advocate of foreign-invested auto projects, and had made a number of visits to SVW, Beijing Jeep, and Guangzhou Peugeot in the 1980s, first as the Minister of Machine-Building and Electronics Industry, and later as SPC Chair and then Vice Premier.<sup>36</sup> Zou studied mechanical engineering in China and the Soviet Union, and had developed a reputation as a trusted insider on the industrial files that were linked to the country's national security and military industrial complex. Zou was appointed Vice Premier in 1991. Party leaders saw Zou as offering a "friendly face" to foreign nations and foreign investors, which was especially useful following the Tiananmen crisis (June 1989). Zou was sent to Germany in October 1991 to meet with VW and work out the final details to seal the FAW-VW deal.<sup>37</sup> The executive who led the GM negotiating team for the Shanghai GM negotiations states that Zou was one of the major power brokers at the top of the Chinese system and one of the toughest enforcers of the rules and regulations for foreign investment.<sup>38</sup> Foreign auto executives soon realized that they had to develop an effective strategy to respond to Zou. Local Shanghai authorities counseled GM to meet with Vice Premier Li Lanqing and SPC Vice Chair Zeng Peiyan to seek help in managing internal Chinese politics and central-local interests at the top of China's government structure.

While local “risk takers” in leading corporate and government positions did take on a huge task in sustaining the automotive development process in China,<sup>39</sup> senior central government officials, who doubled as senior Party economic cadres, took personal responsibility in leading the sector-wide planning process for the AIP, helping to identify strategic priorities for foreign capital utilization in moving the country’s auto modernization to a higher phase in the 1990s. Central leaders set the tone for the auto policy review and drafting process for the AIP:

These leaders were instrumental in providing a calming influence. They told us that even though the world’s leading automakers were eager to invest in China’s auto industry and approaching us from all directions, we needed to maintain our cool and calm in the automotive policy review exercise and in drafting a new automotive industrial policy.<sup>40</sup>

These central officials had learned from earlier periods when “China had rushed too quickly to sign technology import contracts and other investment agreements with foreign partners, and then had to turn around and cancel or postpone a large amount of these contracts. They also had not forgotten when China eagerly reached out to the leading foreign automakers only to be rejected”.<sup>41</sup>

After the ’94 AIP was issued, Zeng, Li, and Lu continued to play important roles in ensuring that the new AIP would take effect as planned. They had support from China’s top leaders, including Jiang Zemin and Zhu Rongji.<sup>42</sup> These Party and government strategists drew comparative lessons from the success of the SVW project, as well as the arrangements for the FAW–VW (Changchun) and Dongfeng–Citroën (Hubei) projects in 1991 and 1992. While it would be inaccurate to suggest that this group represented an “automotive faction” in the Chinese economic leadership,<sup>43</sup> the group of economic officials and auto strategists around the ’94 AIP did possess the technical and policy skills needed to direct and coordinate the advanced automotive modernization efforts of the 1990s. They had a deep reservoir of sector-specific knowledge and experience. They knew how to strike the balance point between relying on international finance, investment and trade policy and Chinese domestic economic development priorities. They had gained a clear sense of the limitations of the previous AIP (1988), the existing JV and investment laws, and recognized that a new policy lever was needed to push for localization of the higher value-added segments of the production chain,



including electrical components which had become the “brain” of the more advanced car models in the 1980s. This group of strategists had a keen appreciation of the usefulness of a selective “gatekeeping” function, and allowing access only to the bigger players – as well as the need to give regulators “real teeth” to push for more advanced auto modernization aims.

### **Local–central coordination: Leninist norms and cadre management system**

The execution of the '94 AIP was not a situation of Shanghai or Guangzhou each promoting their key auto enterprise groups, local auto supply base and local development, and implementing local industrial policy while ignoring national objectives.

It was not a situation of local governments exercising a wide range of discretion in interpreting or choosing whether or not to comply with directions from central authorities on the automotive policies.<sup>44</sup> When asked to participate, local actors made sure to join in the policy consultations organized by the SPC for formulating the '94 AIP. They sought Beijing's guidance when working out the details on their new JV agreements in the firm-level negotiations with the MNCs.<sup>45</sup> Why did they do so? Several major studies of China's economic reforms have explained how Leninist means of control, especially the Communist Party's *nomenklatura* and senior cadre management system, provide the basis for upholding a balance between economic decentralization and political coherence.<sup>46</sup> The power to appoint and remove senior officials allows the center to monitor and sanction subordinate officials and executives, providing career incentives for local actors to comply with central decisions. Yeo and Pearson have shown how such Party controls helped ensure that senior executives of China's centralized and decentralized state auto groups complied with the decisions of the political center.<sup>47</sup> It is suggested here that local compliance with central policy coordination was the result of the motivations provided by the senior cadre management system, as well as the internalization of Party organizational norms at the level of individual local decision makers and auto executives, especially the values of unified and centralized leadership,<sup>48</sup> democratic centralism,<sup>49</sup> and the requirement to follow the “correct line”. The senior Chinese auto executives are also leading Party cadres.

Beijing demonstrated discretionary authority by allowing for some leeway for localities to propose additional initiatives, once they had

made sure to conform to central directives on the basic terms and conditions of the JV arrangements. In so doing, Beijing was following the principle of democratic centralism that "Party organizations at a higher level shall frequently listen to the opinions of lower organizations and Party members in general and solve their problems without delay. Lower Party organizations shall ask for instructions from and report on their work to higher organizations" and that "lower and higher organizations shall keep each other informed, and support and supervise each other". Effective application of these organizational principles and norms cultivated *esprit de corps* between central and local Party cadres in implementing the '94 AIP.

The specific way in which central and local Party, government and corporate leaders managed central-local tensions and channeled energies toward national ends can be seen in the example of Lu Jian's interventions in the negotiations over the second JV assembly partnership in Shanghai. Lu Jian was President of SAIC, Vice Chair of the Shanghai Municipal Economic Commission and director of the Localization Office of the Automobile Industry Leading Small Group, directly under the Mayor's office, a body that included the directors of every government office that was related to the city's automobile industry.<sup>50</sup> The Localization Office dealt with the Shanghai parts suppliers on a daily basis, and was essentially the head office for the Shanghai auto industry.<sup>51</sup>

The hierarchical structure of supplier-assembler ties in the Shanghai auto industry meant that Lu's influence, as a leading local cadre, ran all the way down to the bottom tier of parts suppliers.<sup>52</sup> Lu would have made sure that corporate decisions up and down the local hierarchy conformed to Beijing's basic directives, even while allowing for some degree of local interpretation. The Localization Office was *the* key Party-bureaucratic organ to ensure unified and coordinated vertical and horizontal management of industrial development for the local auto industry.<sup>53</sup> Lu, wearing the combined Party, municipal leader, and state corporate hats, had the backing of Shanghai leaders to turn Shanghai's auto industry into one of the six pillars of the Shanghai economy. American executives involved in the negotiations over Shanghai GM identified Lu Jian as the principal interlocutor with the Shanghai authorities. They focused on convincing Lu of the importance of the GM bid. Lu was also the primary interlocutor for Beijing, helping to integrate the needs of local officials and entrepreneurs with central-level plans and priorities.

Lu gave his backing to the GM bid in the internal Chinese decision-making process at both central and local levels. At the same time, he made sure that negotiations were managed in accordance with Beijing's demands that any new car manufacturing JVs must have a major commitment from the foreign partner to support comprehensive parts and component localization. He pressed GM (and the other leading foreign contenders) for these gains, explaining that Shanghai officials were growing frustrated with the fact that their longtime German partner had been unwilling to make new investments to upgrade the Shanghai JV operations, and was focusing instead on the new FAW-VW JV in Changchun. Lu persuaded GM's senior executives to go to Beijing to establish the baseline of FDI concessions for the negotiations, and to clear up any major issues in the bargaining process. GM representatives returned to the local level (after seeing the political center) to work out the details of capital, technology, and related transfers in the Shanghai GM deal.

GM executives noted that a large reason why they "succeeded" in winning the second Shanghai JV competition was because of the "expert coaching" they received from Lu Jian on "how to talk with Beijing":

He appreciated how much effort we put into the negotiations and the way we went about making our bid. From his visit to GM's new plant in Eisenach (Germany), which was designed and operated according GM's adaptation of Japanese lean production, he could see that GM was capable of building a major world-class production facility in a transition country, whose economy was undergoing reforms from the central planning system. He could see that we could make this happen, and we bargained over how that new modern facility would look in Shanghai. That gave Lu confidence in our bid.<sup>54</sup>

Lu coached GM on the "tone and approach that GM needed to take to Beijing to demonstrate serious intent and reassure central decision-makers of their commitment to China".<sup>55</sup> He gave GM's executives a "clear sense of what were the non-negotiables for the political Center, and where there was room for bargaining". In Western parlance, this was a "good cop/bad cop" routine. Both levels of the Chinese state were unified and coordinated in their positioning, and had a *de facto* division of labor for the negotiations. There was no breaking ranks; the Chinese

positioning from Beijing to Shanghai was coherent and integrated. This is not to suggest that the national developments and corporate ambitions of Beijing and Shanghai were identical. However, local cadres made sure that the details of their JV negotiations were synchronized with central authorities on major principles and objectives for foreign capital utilization. After Beijing had reviewed a local or foreign corporate request, in depth, and had made a clear decision, there was no more debate, and no resistance.

The “give-and-take” within the Chinese system was not just “the local level giving and Beijing taking”. Beijing also made concessions, for example on GM’s demand that the new JV use GM’s “QPS” (quality, price, service) system for sourcing and procurement, including the right to resort to procuring internationally if Chinese suppliers were truly unable to meet the requirements of the QPS system. In the spirit of supporting Chinese national developmental objectives, GM informally offered to look first to Chinese suppliers, but wanted the right to resort to global sourcing if needed, and in so doing, the JV would not be penalized with import tariffs nor quota controls in “exceptional” cases. Shanghai authorities and SAIC representatives also pressed central authorities on behalf of GM’s demands for partial control over the distribution, retail, and service segments of the business. Beijing “gave” on both items, but only after GM promised to build a complete supply network inside China, and had agreed that local procurement would be the norm if Chinese suppliers came close to matching the quality and price of foreign suppliers.

Another example of coordination between the center and the local was when Shanghai authorities directed GM executives away from further confronting Beijing on the right to produce a small truck-like transportation vehicle, which GM’s China Office had identified as having major growth potential. Such dual rural–urban use vehicles would appeal to a broad segment of the Chinese market. GM executives had set their minds on gaining the rights from Beijing to make such a vehicle, in exchange for producing a range of vehicles in China, not just one model. Repeated efforts to press Beijing had not worked and GM’s negotiators wanted to escalate their advocacy tactics. Shanghai authorities intervened to steer GM away from further confronting central authorities, promising that they (the local authorities) would “quietly gain the rights from Beijing”, using SAIC’s broader production network that extended into other locales and provinces. Shanghai authorities asked GM to be “patient for a few years, but we will make it happen”.<sup>56</sup> GM executives noted that SAIC subsequently delivered on its promise, and

within two years, the two JV partners were producing a small multi-utility truck in neighboring Jiangsu province. This part of Shanghai GM's business quickly became the most profitable part of its operations, and the main driver behind GM's climb to number one ranking foreign automaker in China in 2006 and 2007, successfully catching up to VW in a five-year period in terms of total sales, and then surpassed the German automaker.

After the start of operations at Shanghai GM, Lu Jian and SAIC's executives continued to "coach" GM on how to maintain good working relations with central decision makers. What appeared to GM as coaching, to political scientists is central-local state coordination in foreign capital utilization. This in no way suggests the absence of central-local conflict. There were tensions, and at times, major differences of opinion on what future path should be taken, and the details for proposed steps. According to one planner:

The process of drafting the '94 AIP was very difficult. Credit should go to political leadership, especially from Zeng Peiyan, and building a comprehensive consultation process. This was essential to the success of the execution of the AIP. With backing from top economic leaders as well, we were able to reach consensus on all of the key issues.

Local cooperation and the role of leading local cadres were also key. Lu Jian's role was critical to ensuring local-central coordination on the execution of the foreign investment strategy in the '94 AIP.

Such mutual coordination between the center and the local was not unique to the SAIC example. There were similar situations of overcoming conflict and ensuring coordination between central authorities and local representatives in the Guangzhou Honda case.<sup>57</sup> The issue here was ownership share, with Honda wanting to take a majority, i.e. a controlling equity share in the JV. Honda made the case that it was willing to transfer its highly respected and innovative production systems to China. However, it would only do so if it could have managerial control. Honda argued that most advanced managerial skills were especially necessary for achieving success in the Guangdong and southern Chinese market, because of the higher quality demands in this regional market. The experience of Guangzhou Peugeot showed that there were significant local constraints to success. According to Honda's representatives, the quality needs could only be

achieved through Honda's leadership and management. Guangzhou authorities backed Honda's proposal and accepted the basic rationale for majority foreign control. From the perspective of central authorities, making such a concession would mean allowing an exception to the established 50/50 JV equity share rule. The central authorities and Guangzhou representatives reached an accommodation aiming to make the most of Guangdong's export competitiveness. The central authorities offered to grant Honda a majority share in the JV on the condition that Honda guaranteed that a sizeable percentage of its unit outputs would be exported.<sup>58</sup> This would help generate FOREX for the JV, and enable China to finally make its first foray into exporting modern passenger cars. Honda accepted the conditions.

Such central-local coordination and mutual accommodation on "foreign capital utilization" have facilitated gradual progress in industry concentration, in terms of percentage of unit outputs from the 8-9 largest auto groupings in the national total, even if progress on consolidation (reducing the total number of individual firms) has been slower than expected. The gains in concentration offset, to some degree, the lack of immediate progress on consolidation. State planners and auto officials can point out that, overall, the trend has still been toward rationalization of the sector, and competitiveness of the largest domestic corporate entities in the Chinese auto industrial structure. Most important to Beijing, industry concentration and gradual consolidation were not leading to labor unrest in the sector.

### **Leninist adaptation: improved mediation**

The '94 AIP, supported by the Ninth Five-Year Plan (1996-2000), laid out a clear, precise, and coherent set of positive and negative incentives for domestic and foreign auto companies. However, the ability of the Chinese state to reorganize and redirect its domestic auto industry also depended on whether the nation-state would be able to control the evolution of domestic industry. Its efforts were made difficult by the devolution of economic decision making to localities and to enterprise managers in the 1980s. The Chinese automotive groupings which had partnered with the foreign automakers had already lived through a number of challenges by the early 1990s, and they lobbied Beijing for policy and regulatory adjustments.

By the early 1990s, the second generation of post-Mao economic strategists realized that attitudinal and regulatory adjustments at the

political center were needed if China's auto industry was to make the transition from command control, isolationism, and protectionism, to increasing market-orientation and internationalized operations. Modifications to the Chinese Leninist system, in the '94 AIP, enabled the state to mediate more effectively between China's largest state automakers and the world's leading auto firms. The failures in China's JV experiments from the mid 1980s to the early 1990s revealed the scale of difficulty in turning the large-scale Chinese state automotive groups into the "Toyotas" and "Hondas" of China, despite the foreign partnering. China had not succeeded in creating national champions in the sector that were capable of conquering export markets.<sup>59</sup> It had become apparent that China's starting point for joint venturing in the 1980s had been lower than that of Japan in the 1960s or South Korea in the 1970s, and that their planning predecessors had not been as well informed about world trends on their own-needs, in the first round of JV bargaining as their Japanese and Korean counterparts. Moreover, China's modernization needs in the 1980s were extensive, ranging across all aspects of modern auto production. Chinese decision makers and negotiators, at the time, did not think in terms of the specific needs of the modernization and could not target specific segments of the production chain, or specific technologies and technical know-how when bargaining with the MNCs. They needed everything.

The next generation of strategists realized they had to understand the logic of profits, markets, and competition, and the appropriate strategic measures and tactics for effective state intervention. Unlike previous state planners, this group understood that limits also had to be placed on state power in order to have a properly functioning market system. They understood the need for regulatory *restraint* – the boundary line where state power had to be restrained in order to avoid creating disincentives for MNCs and market competition.<sup>60</sup> The pattern of mediation suggests that the Chinese state demonstrated greater competency in its market-oriented system in the 1990s than in the 1980s.<sup>61</sup>

Three examples of state intervention in the early to mid 1990s related directly to the '94 AIP are illustrative of effective state mediation in this period. First, authorities realized that the institutional approach to facilitating foreign investment in labor-intensive industries in the Special Economic Zones (SEZs) and the rural townships of the coastal south were not conducive to spurring FDI in capital- and technology-intensive industries, such as the automotive industry. Debates in the

late 1980s asked whether it was worth the public cost and effort to create a modern passenger car industry in China, and whether the consequences of promoting automotive development, such as traffic problems and huge capital requirement to build highways, were a reasonable trade-off.<sup>62</sup> Some economists countered that the creation of a modern parts and supply industry would have important multiplier effects: that factories which provided steel, electronics, and glass would share in the growth, and also have to improve their output in order to meet the needs of modern car producers.<sup>63</sup> By the early 1990s, the SPC began to portray the auto industry as a growth engine, noting that the car industry in the US fostered “backward linkage” to other industries that contributed nearly 60 percent of the value in the vehicles produced. A shift in perception, from seeing the auto industry as a supplemental industry to an engine of growth for the entire economy, underpinned a new level of commitment to automotive modernization.

However, the lack of success in attracting foreign investment for strategic or pillar industries had revealed that it was necessary to revamp investment policies. The early 1990s saw a marked change in preferential investment policies from regions (SEZs and coastal developmental zones) to industrial sectors. The new targets for foreign investment in the early 1990s were the energy, transportation, raw materials, and agricultural sectors. In addition, a focus was placed on attracting more investment from large MNCs. Beijing offered these firms greater access to the domestic Chinese market than previously.

The minimal success in remaking the country’s vehicle industry in the 1980s taught Chinese planners that the problems of China’s auto industry could not be remedied simply by spending state money to import more modern technology. The first wave of JVs also taught Chinese officials that success in the auto industry depended on being able to keep up with rapid technological innovation and continuously shifting consumer tastes:

Colour televisions and automobiles have different development paths. For colour televisions, the Chinese government allowed technology to be introduced but did not allow foreign capital to gain access to the domestic market. Entire production lines were imported and set up for domestic manufacturing. The rationale was that it was a relatively affordable option for China to import entire production lines to modernize the television industry, and support research and development to upgrade the product, but that such imports of



entire plants and equipment was not feasible for automotive industry. China would have to rely on both some technology imports and give foreign capital access to the domestic market, and get them to transfer their technology and expertise. It has been much more difficult for China to develop its automotive industry and bring it up to world standards. The modernization of the television industry required a major one-time one-off import of technology. But it has been much more difficult and complicated with the auto industry. And once foreign capital is given access to the domestic market and allowed into the country, then there is the danger that it will gain control over the whole sector.<sup>64</sup>

By the early 1990s, Chinese strategists recognized that the "golden age" of the developmental state (in which technology changed more slowly and could be purchased and borrowed with relative ease) had passed.<sup>65</sup> China could not afford the costs of importing to meet ongoing upgrades, in order to keep pace with evolving international standards and constantly changing consumer preferences in the auto sector.<sup>66</sup> By the early 1990s, the global spread of post-Fordist innovations had made the challenge of catching up and keeping pace in automotive innovation more difficult. Planners agreed that it would be impractical and financially imprudent for China to remake its national automotive industry via pure import substitution. The only sensible option was continuing with the JV strategy, making more strategic and precise use of foreign investment.

Second, while state planners maintained co-ownership controls on the JVs, for the next group of JVs they shifted to targeting only the world's top automakers. They saw that only the most capable MNCs could engage in the comprehensive localization for complete car transfers. They were now striving to bring a "complete end to importing CKD kits" and only providing the low-value inputs.<sup>67</sup> By the late 1980s, it was clear that the reliance on CKD imports led to higher import costs and limited technology diffusion; served to impede progress in parts localization; and deferred indefinitely the localization of higher value-added components and complete car production. Only VW had responded to state pressures to reduce parts imports and increase local content rates. This was not the case with either AMC/Chrysler or Peugeot, which remained reluctant to transfer new technology and technical know-how. Chinese authorities realized that the strategy of "playing on the contradictions in the capitalist world market" by

utilizing “maverick firms” that would trade with anybody had not worked. The downside of partnering with maverick companies could be seen in Beijing Jeep, where the first foreign managers “weren’t in the mainstream of the global automotive industry and weren’t familiar with the latest trends in manufacturing”. Despite their high salaries, they “were not at the top of their game”.<sup>68</sup> Chrysler and Peugeot were industry followers, not leaders.

The experiences of SVW were another matter. Dr Stefan Messmann, the former head of VW’s China/Asia operations, and senior negotiator for the FAW–VW agreement noted: “They [the Chinese] learned to go big. That only strong multinationals, were capable of dealing with Chinese partners. The smaller ones were too afraid.”<sup>69</sup> These observations concur with Susan Strange’s observation that a defining attribute of a “shrewd” competition state is its ability to choose the right partners among competing firms. Depending on sectors, markets, and circumstances, this may be a leading firm or a follower.<sup>70</sup>

Negotiations over the second round of JVs with FAW and SAW, which started informally around 1988, also reaffirmed the importance of “going big”, as well as highlighting the possible benefits of expanding the number of Chinese partners which foreign investors could have, from one to two. Chrysler CEO Lee Iachocca was particularly vociferous in making the case that Chrysler should be awarded the right to partner with FAW because it had endured in the Beijing Jeep partnership despite inheriting a mess from AMC.<sup>71</sup> However, Iachocca was not willing to commit to the levels of technology transfer that VW, the eventual winner, agreed to, including staff training for the Chinese workforce, and establishing a research center in China. The central authorities decided instead to go with VW, a proven performer in China. In the winning bid (1990), FAW and VW agreed to establish a new production facility, with a total investment of RMB8.9 billion (US\$1.1 billion), and FAW holding 60 percent equity share and VW 40 percent.<sup>72</sup> For VW, this second JV was seen as necessary for preserving its first-mover advantages inside China. To win the bid, VW agreed to build a new state-of-the-art assembly facility, which would have an output capacity of 150,000 vehicles per year, and produce engines and gears. VW initially agreed to build the Golf model at the new facility, a family car. The FAW–VW contract further stipulated that 28 percent of Golf components had to be supplied by FAW parts suppliers.

Another benefit of “going big” was that VW also agreed to sell FAW the technology license for the Audi 100 platform, and allow FAW to

produce a derivative of the Audi model as the resurrected *Hongqi* ("Red Flag") model.<sup>73</sup> This would help FAW make the "great leap" into passenger car production, in an increasingly competitive Chinese market. The derivative Audi model would be called *Hongqi-Mingshi* (2200cc), or more colloquially, "small Red Flag". FAW's senior management decided that its newly acquired Changchun Automotive Research Institute would develop the plan to mount a Chrysler CA488 engine in the Audi, integrating it with the 016 model transmission licensed from VW.<sup>74</sup> These two product adaptations helped bring the local content ratio for the new *Hongqi* to over 80 percent by 1994. FAW also agreed that its newly revamped *Hongqi* assembly facility would assemble some Audi 100 CKDs for the domestic Chinese market. For the Chinese, this was seen as a reasonable concession as the price of the new small Red Flag would make it competitive to the authentic Audi 100. A series of local mergers and acquisitions with local engine producers enabled FAW to quickly increase its engine output capacity for the new *Hongqi*.<sup>75</sup> Sales of the "small Red Flag" were sustained by direct government purchases at all levels of the state during the 1990s. Direct links to the political center clearly had benefits for FAW.

Securing the technology to rebuild the *Hongqi* meant that the leading Chinese automotive group had successfully rejuvenated a "China-owned" brand that could be held up as an example of the regenerative powers of 'socialism with Chinese characteristics'. VW had understood Beijing's motives, and how to respond. At the same time, its executives astutely drew limits as to how far they were willing to go in conceding to Chinese demands. VW did agree to sell the Audi design to FAW, and even to send German engineers to China to help FAW to integrate properly the Audi technical designs and technology. However, it avoided getting directly obligated to FAW with its "mix-and-match" adaptation scheme for the *Hongqi* Audi derivative. The Germans refused to help mount the Chrysler engine inside the Audi model. In the FAW negotiations (and those for the less attractive SAW), SPC officials played a crucial role on the Chinese side, setting the agenda and priorities for bargaining with the MNCs, and coordinating among the relevant line ministries, and with the Chinese enterprise group itself. SPC sized up the relative capacities of the various contenders, and tried to strike the best deal for the Chinese enterprise group. The result was partnering VW with FAW, and sending Citroën-Peugeot into the Chinese interior to SAW (Hubei province). The challenges that FAW faced with its technology "mix-and-match" efforts taught central authorities that they should push for more comprehensive "complete car" transfers.

Third, the group of strategists around Zeng in the early 1990s understood when to show greater restraint in centralized state control and when to loosen former command-type regulatory controls over the JVs. Economic planners came to realize that the Chinese majority equity control requirements which had helped the Chinese side to maintain codecision-making control in the new JVs may have also cost the JVs bigger gains in technology transfer. Both AMC/Chrysler and Peugeot proved resistant to transfer technology to a subsidiary in which they held only minority ownership and decision-making control. In the '94 AIP, the central authorities also agreed to raise the amount of foreign equity ownership allowed in a JV assembly project to 50 percent. The central authorities responded positively to SAIC's advocacy to end the "one foreign partner only" principle and allow the Chinese SOE to establish a second JV assembly partnership. Loosening the restraints on foreign partners allowed the Chinese auto companies to jostle their foreign partners for more concessions.

SAIC's executives explained to the central authorities that they were willing to compete inside China's increasingly market-oriented economy but that they faced competitive disadvantages that were extra-market, for example, the preferential treatment given to the new FAW and SAW JVs in the early 1990s. Shanghai representatives drew attention to the fact that the central-level was favoring the two state auto giants, who also happened to be under the direct supervision of the SPC. They delicately noted that when FAW-VW was designated a "national project" under the Eighth Five-Year Plan (1991–1995), it was allocated special funds from the central budget for its start-up. SAIC said it was not asking for additional state financing. Rather what it needed was "policy opportunity" (*youthui zhengce*) – that all Beijing had to do was grant SAIC more regulatory room to seek foreign investment, and that it would succeed in attracting the investment. The fact that Shanghai authorities could appeal to two recent former Shanghai Party secretary and mayors in Jiang Zemin and Zhu Rongji, was a great help to Shanghai. For a Party leadership that was trying to push China's state-owned enterprises to "go big" and become more market oriented, it was hard to continue ignoring SAIC's pleas as well as its profitability. Beijing responded by allowing SAIC to establish another JV assembly venture, with a second foreign partner.<sup>76</sup>

The decision of the central authorities to allow Chinese auto groups to partner with two or more foreign partners was an important regulatory shift. One planner explained that the decision involved combining two traditional Chinese military strategies: *yi da zhi da*, which translates

literally as “using big to control big”; and *yi zhi yi*, which has been translated to mean “use one foreign barbarian to control another foreign barbarian”. The first strategy, when transferred to the modernization of the Chinese auto sector, meant using larger and stronger Chinese enterprises to partner with the more powerful foreign auto companies in order to avoid domination by the foreign partner and to ensure transfers of capital, technology, technical and managerial know-how. This was a continuation from the 1980s strategy. However, the second strategy (*yi zhi yi*) represented a shift in Chinese thinking in the 1990s, and reflected lessons learned from the 1980s. The second strategy was originally developed during the Warring States Period (500–256 BC),<sup>77</sup> a period of rival kingdoms when small states sought to protect their existence or improve their individual situation by playing off larger threatening states against each other. When applied as foreign investment utilization strategy, it meant pitting the powerful foreign companies against each other, keeping them distracted and pre-occupied in a state of permanent rivalry, and thus limiting the amount of control or domination that any one particular MNC could exercise on the weaker Chinese partner, and allowing for easier directing by the Chinese state.

The decision to allow large Chinese automakers to partner with more than one world-leading assembler was not explicitly addressed in the '94 AIP; however, it turned out to be a crucial accompanying policy shift. The same planner noted:

Starting in the 1990s, the Chinese government allowed Chinese automotive companies to find multiple partners. Unlike the restriction on the foreign auto companies in the '94 AIP that they can only partner with two Chinese companies, the Chinese government did not, and has not since placed limitations on the Chinese companies in finding multiple foreign partners. In fact, this was encouraged, and we now see that Shanghai Automotive Corporation has numerous foreign partners, with VW and GM being the largest.<sup>78</sup>

Chinese companies have been allowed and even encouraged to have many foreign partners. Otherwise, there is no pressure on the foreign companies to invest more or transfer advanced management skills and technology to their partnership in China. For almost ten years, Volkswagen had no pressure to transfer more advanced technology to its Shanghai JV. The JV was making huge

profits for VW even with the outdated Santana B series technology. Then Shanghai Automotive, VW's Chinese partner, formed another partnership with GM in 1998. After that, Volkswagen changed its position. One of the most important outcomes of this new joint venture Shanghai GM, was production of the Buick luxury car, because it forced VW to decide to produce the Passat at Shanghai VW, after holding off with the outdated Santana for so long.

It was further explained that:

Volkswagen also did not face internal competition at the FAW-VW joint venture in Changchun until FAW formed a second JV partnership with Toyota. But once VW was faced with increasing competition in both Shanghai and Changchun, it increased its investments significantly in China, and only then did it bring its best technology and cutting-edge models.<sup>79</sup>

The above reflected the new understanding on the part of Chinese state authorities in the early 1990s that restraining their controls over the number of foreign partners for the Chinese auto companies could help create useful competition between the MNCs, and bring increased leverage for the Chinese side.

Another important example of new market-oriented restraint in the early 1990s was the government's decision to encourage small car production, and allow the domestic Chinese auto market to grow by removing regulatory measures which had "artificially suppressed" personal car purchasing.<sup>80</sup> Newspaper articles reported that many Chinese cities had already achieved standards of living that could support such a private car market. Industry analysts argued that improved domestic capacity to produce small cars would have the dual positive effects of stemming imports and creating export opportunities.<sup>81</sup> Lifting of government measures that kept domestic car demand "artificially low" became seen as crucial to supporting the JV assemblers, and encouraging them to raise the quality of their output. This change in the state position on private car purchases, and a desire to encourage investment interest from foreign automakers (and their parts suppliers), led SPC officials to leak informally that both FAW and SAW would be raising their annual production volumes to 150,000 vehicles within a three-year period (1990–93).<sup>82</sup>

These examples of Chinese state intervention provide a lens on how the Party-state began to mediate more effectively between the core enterprise group and the international automotive manufacturers in the early to mid 1990s, and after the '94 AIP was issued, to secure national development goals.

# 7

## Negotiating Shanghai GM

The impact of the '94 AIP was immediate. It affected the investment strategies of world-leading automakers and the flow of foreign investment into China's automotive sector.<sup>1</sup> In 1994, the Chinese authorities formally opened the bidding for a second JV in Shanghai with SAIC. The efforts of the Chinese authorities to spur competition between the potential bidders had already started prior to the official launch of the AIP. Indications were that Ford and Toyota were well into the negotiating process with Chinese authorities by the time the official bidding started. As prospective bidders prepared their formal bids in 1993, they had to figure out how to invest in building up local parts supply capacity. The most serious contenders even went so far as making preliminary investments to demonstrate their serious intent to Chinese authorities. Prior to the official announcement of the AIP, information had started to leak out through "informal" channels in 1993, especially regarding local content requirements. This fueled the rivalry between the top MNCs, got them to focus on China, and to prepare for the formal announcement of the AIP.

Foreign companies were told they would have to transfer technology, even detailed design blueprints and specifications for cars, as well as production equipment. Emboldened by their knowledge of world market trends in the auto sector, and secure in the view that China had come to be perceived as the "last great market", Chinese authorities relied on their strengthened policy levers and negotiating skill to deliver the developmental goods. The Chinese side knew it was in a stronger bargaining position than during previous rounds of negotiations with MNCs, especially vis-à-vis the world's leading automakers – who were the preferred partners under the new AIP.



This chapter examines how China's automotive modernization progressed to a higher stage as a result of the terms and conditions in the Shanghai GM deal. Chinese authorities pushed GM to transfer comprehensive technological capacity to China. At the same time, GM figured out that it was in its longer-term interests to support building a modern local supply network to feed its new JV. GM worked with its key component suppliers to relocate to China, and produce sophisticated and higher value-added components inside China. In exchange, GM insisted that Chinese authorities build the highways and roads to facilitate new car purchasing and ensure steady logistics and distribution networks, especially if GM was to introduce just-in-time production systems to the new facilities.

These negotiations involved two seemingly irreconcilable forces: the world's largest and most powerful automotive firms and a strong state that was determined to enforce strict regulations on foreign investment for auto sector development. The discussion below describes how these forces were brought together. Well-coordinated and professionally competent Chinese state officials and corporate representatives utilized the '94 AIP to leverage the world's leading automakers to invest in China in a manner that was directed to the country's national developmental objectives. The AIP provided macro-micro coordination by offering a set of institutional incentives that directly affected the decision making of the foreign auto firms. Chinese authorities also intervened personally to leverage foreign investors for specific national development objectives. Central authorities and local state and company authorities "coached" the most promising foreign bidders on how to engage the political center (*zhongyang*), and directly pressed the foreign firm to make "the necessary" concessions in the final negotiations.<sup>2</sup> Zeng Peiyan, Chair of the State Development Planning Commission, and Lu Jian, the head of SAIC, were the main coaches at their respective levels of the Chinese system.

We also discover that the GM executive team, when facing a host Chinese government which had gained significant bargaining strength and demonstrated ever-increasing ability to cajole the leading automakers into making investment concessions, took bold and proactive steps to cultivate their competitive advantage over their lead rivals. The GM management team devised an international strategy that combined market and China-specific extra-market factors to outbid Ford and Toyota, and win the rights to form the second major JV assembly partnership with the Shanghai Automotive Industry Corporation (SAIC). Having received local corporate intelligence that they were coming

from behind in the bidding competition, due to their late decision fully to commit to the bid, GM management put a sustained effort into convincing national authorities and local corporate representatives that they were willing to commit significant resources to localize supply capacity. This advocacy involved regular personal intervention from GM's most senior executives. The GM executives were not alone. Intense competition arose in the bidding process, and the Shanghai GM deal established dramatic new benchmarks against which other aspiring investors would be measured. GM took an active role in building a comprehensive local supplier-assembler network that was concentrated in SAIC's immediate sphere of influence, but the reverberations were felt across China's entire auto supply industry. GM built on the foundations that VW had set up previously.

### **Exercising leverage: playing off foreign firms**

In the early 1990s, Chinese officials were aware that interest in China was intensifying among the world's leading auto producers, as they reviewed their existing auto policies and began formulating the new AIP.<sup>3</sup> As they prepared to launch formal bidding for the second JV with SAIC, they made sure to enroll as many as possible of the leading auto-makers into the bidding for Shanghai's second major auto JV. There is strong reason to suggest that when Beijing and Shanghai initiated informal discussions over the second JV partner for SAIC, they were initially favoring Ford. The central authorities preferred not to go with Toyota for historical reasons – past tensions between China and Japan, and due to Toyota's recent rebuffing of Beijing's investment outreach efforts. The preferred choice was one of the big American companies. Before GM entered into serious discussions with the Chinese authorities, Ford had already been engaged in regular contact with officials in Shanghai and Beijing about its interest in a major manufacturing partnership in China. Ford had already held a number of meetings with Chinese authorities in the early 1990s to discuss various possibilities and scenarios for a major JV. Alex Trotman, Ford CEO and President, had taken a serious interest in China, oversaw the development of a long-term corporate blueprint for China, and registered Ford's serious intentions on his visits to the country.

GM was slow off the mark in getting into the serious bidding for the second Shanghai JV. From 1977 to 1987, GM had restructured most of its operations in its core arenas, implementing a massive investment program of over \$50 billion.<sup>4</sup> This also included reducing its presence in

Africa and Asia, and reducing global supply lines. Still reeling from the dual competitive blows of the Japanese export surge in the 1970s and the start-up of Japanese plants in the US, new CEO, John Smith Jr., who took over in 1992, pushed ahead with GM's transformation in its core areas, and mapped out a bold new internationalization plan for a major expansion of GM's global operations.<sup>5</sup> Smith adopted a doctrine of global focus for broader markets, and global outsourcing for lower-cost labor to respond to profit pressure. With support from senior executives such as Delphi's President J.T. Battenberg III, he promoted this strategy to the parts and components suppliers inside the GM system.

Disadvantaged by comparatively high production and labor costs in its core operations, and losing money on the majority of the vehicles sold, GM continued to push ahead aggressively to downsize, closing 29 factories and making further job cuts. These measures resulted in a startling financial recovery in the company's North American operations. Smith and the GM team realized, however, that the recovery would be short-lived if GM did not expand beyond its traditional core. For GM, the US market had become a mature replacement market, and future growth would have to come from elsewhere in the world. Thus, limits to long-term growth in its traditional home market, in essence, had pushed GM into pursuing more fully globalized operations.

After spending the 1980s protecting and consolidating their established markets (North America and Western Europe) against surging Japanese competitors, repositioning themselves inside their mature markets, both GM and Ford turned their attention in the early 1990s to the emerging markets, looking for new channels to expand their global manufacturing, supply, and retail networks. The first key internationalization project under the new Smith regime was not in China but a landmark investment in East Germany – another Communist transition context. Louis Hughes, who took over as Chairman of GM's Adam Opel in 1989 in Europe, then President of GM International Operations, explained that the reunification of Germany that same year was "the opportunity of the century".<sup>6</sup> Hughes had learned that VW was planning to make a major push into East Germany, and he convinced GM to move quickly not to abandon the newly opened Eastern bloc market to the German automaker. Hughes headed the negotiations that landed the purchase of the automobile plant in Eisenach, East Germany, and then set out to transform the Eisenach facility from a run-down plant filled with apathetic workers into a state-of-the art production facility for GM, incorporating cutting-edge lean production methods pioneered by the Japanese. The Eisenach Opel plant was intended to be GM's response

to the Japanese challenge, while also becoming the market leader in newly liberated Eastern and Central Europe. GM invested DM1 billion in automation to refurbish the East German plant, and Hughes implemented lean production management and manufacturing programs, refusing to cut corners or to accept half-measures in implementing a lean production system. Representing an advance on GM's Nummi JV with Toyota in California, the Eisenach plant quickly became the model of lean manufacturing for GM, not only in Europe, but for its entire world operation. Production increased from about 60,000 Wartburgs in the Communist period to 160,000 Opel Corsas and Vectras by the mid-1990s. In 1995, the *New York Times* reported that "Eisenach has been rated as the most efficient plant in Europe, with production of 59.3 cars a worker each year."

However, GM realized that there were limits to growth even with such a world-class operation in Europe. By the early to mid 1990s, the locus of world attention in the auto industry was shifting to Asia, as the entire East Asian region enjoyed a prolonged boom, and auto markets in the region were projected to grow by 40 percent, and constitute 30 percent of the world market in ten years' time. Networks of Japanese auto producers were already well established and held a commanding presence in the rest of Northeast and Southeast Asia.<sup>7</sup> China was the one East Asian market in which Japanese automakers had not made major inroads and it was the largest potential market in the world.

By the early 1990s, GM already had 12 investments in China, but none of them coordinated with each other, including two manufacturing JVs. In 1992, GM had taken a 30 percent share of a US\$100 million JV in Shenyang municipality (Liaoning province) in the Jinbei (Gold Cup) GM Automotive Company JV. The company started assembling GM's S-10 pickup truck, but a new national austerity drive in early 1994 limited government purchases and sales dried up.<sup>8</sup> With Jinbei, GM learned about the perils of having a suboptimal local partner in China, and the consequences of being locked into producing one vehicle type (utility vehicles) for which there was limited demand. When Hughes visited Jinbei in 1993 he witnessed the state of affairs at GM's Shenyang plant.<sup>9</sup> Jinbei GM was shut down in 1995 due to poor returns and the Chinese partner's internal problems, and was not reopened until 1998, after the launch of Shanghai GM when it began to produce Chevy Blazer SUVs.

On the same trip to China, Hughes also made a visit to Shanghai to meet with SAIC representatives, who expressed interest in GM putting in a bid for the second JV in Shanghai. With SAIC and SVW, GM saw a very different Chinese partner; one who could help GM succeed in

China. SAIC had already proven it could achieve success and profitability with VW. GM understood that SAIC could be the champion that the American automaker would need for China, to distinguish between the practical and the impossible, who would help GM navigate the Chinese approvals system and save time, both in establishing the JV and afterward. A good Chinese partner can save time by pointing out

which projects are going to get approved; what can be done, and what can't. A good partner is a critical course of good information. Good partners can facilitate the brokering needed to finalize the deal or at least direct foreign investors toward those who are holding up the process, in short, the specific officials that grant approvals.<sup>10</sup>

With SAIC, GM saw it would have a partner who had demonstrated an ability to extract superior concessions and incentives for its existing JV with VW, and could streamline and speed up the approval process.

Hughes flew to Detroit after the China trip, to report to CEO Jack Smith. Working together with then President for North American Operations, Richard Wagoner, they developed GM's new strategy for China. They presented it to the Board of Directors and (GM) President's Council, to gain full backing for the plan that would make China the focal point for GM's global planning for the 1990s, and allow GM to push into the dynamic Asian region in a bold manner.<sup>11</sup> Smith outlined the market development rationale (in a report in 1997 entitled "GM's Thinking on China"):

- China's strong growth rate would make it the second largest economy in the new millennium
- While still poor, its per capita income could double every eight years, with growth at a high 9 percent per year
- High level of personal savings – nearly 50 percent of income – would generate internal funds for needed capital investment
- A very young workforce with 45 percent of China's 1.2 billion population under the age of 26, which results in a youthful subpopulation greater than the total population of the United States, Japan, Germany, Great Britain and Canada<sup>12</sup>

Key members of the Board and President's Council, including J.T. Battenberg, Delphi's President, gave strong backing to the plan. The importance of the growing China market, especially amid a global slowdown in the sector, also did not escape the newly autonomous parts

producers. Market factors should not be underestimated in stoking the interest of the world's leading automaker for a major push into China. The unified support across GM's senior executive, Board, and key advisory bodies, helped ensure that GM could take the necessary strategic action, and have corporate backing, from top to bottom, and across the various branches of this corporate giant.

After spurning China's initial advances in the late 1970s, Ford had also come around by the early 1990s. Ford had survived the attack from Japanese imports and investment in the North American market in the 1980s, and even managed to expand in Western Europe, particularly in Britain. In 1992, Ford opened a representative office in Beijing. When Ford's newly appointed Chairman and CEO, Alex Trotman, visited Beijing in autumn 1994, he outlined Ford's car and component production plans for China for the next five years. In 1995, the world's second leading auto producer and third largest industrial corporation opened the Ford Motor China Limited office in Beijing, and in the same year bought a 20 percent share in Jiangling Motor Corporation in Guangxi province, and licensed technology to China for the production of small buses.

Ford, Toyota, and GM knew that SAIC was the most advanced passenger car maker in China, and one of the most profitable Chinese state enterprises overall. It was also known to have the strongest local parts supply base in the country, and a well-developed distribution and service network. This was largely due to the efforts of local Shanghai authorities and local institutional supports.<sup>13</sup> Having witnessed VW's success in China, and recognizing the importance of the local partner, the foreign multinational rivals were eager to win the rights to partner with China's most profitable automotive company.

### **The negotiations**

The '94 AIP and the internal deregulation of the foreign partnership controls on leading automotive groupings (*qiche jituan qiye*) provided the macro-level regulatory backing for central authorities, a globally ambitious SAIC, and supportive Shanghai authorities, to pursue a more comprehensive agenda of technological upgrading and corporate development at the micro-level. Beijing's regulatory guidelines set the basic concessions that the world's automakers would have to comply with in order to gain access to the Chinese auto market. Shanghai had clear backing from China's central leaders in negotiating the details of the second JV project. In the section below, we discuss how GM became conscious of their need to soothe Beijing's concerns by emphasizing

how the project would contribute to national developmental objectives, while at the same time keeping close relations with Shanghai representatives to hammer out the details in the final agreement.<sup>14</sup> GM targeted the *globalizing* ambitions of Shanghai, while it appealed to the national developmental objectives of the central authorities. Shanghai's global ambitions created the opening for GM to push for a more ambitious agenda of business transformation for its Shanghai subsidiary.<sup>15</sup>

Armed with the foreign investment requirements in the '94 AIP, buoyed by new confidence from the reality of the emerging car market, and secure in the knowledge that VW was making substantial profits in its Chinese operations, the Chinese side carefully plotted its course for engaging foreign bidders for SAIC.<sup>16</sup> One state planner explained:

From the late-1980s through the mid 1990s, the Chinese auto market grew rapidly, as more and more *laobaixing* [the masses] wanted to purchase cars. Recognizing this trend, the interest of the world's leading auto companies for gaining access to the Chinese market and for investing in China, also increased rapidly. At this point, however, Chinese planners and industry strategists maintained their calm and cool, remembering their earlier experiences in trying to attract foreign capital to invest in China.<sup>17</sup>

Quiet confidence on the part of state planners transferred into "steady and calm support" for the Chinese negotiating team. According to GM negotiators, the Chinese side used the tactic of the local government playing the "good cop" and the central government the "bad cop".<sup>18</sup> Thun found this tactic was so effective that the GM side spoke of the "Ford shadow", even after SAIC and GM had been engaged in exclusive negotiations. GM had the sense that if it did not make the concessions that the Chinese wanted, the Chinese would resume negotiations with Ford.

The foreign investment requirements in the AIP established a minimal set of conditions. Through its policy tools, Beijing shifted the terrain of negotiations, establishing a more precise and demanding baseline of concessions than had previously existed. While a number of foreign firms submitted formal bids, the main competition was between Ford, GM, and Toyota, with Nissan also making a serious bid.<sup>19</sup> The bids from these four automakers met the basic criteria for future foreign JV partners as stated in the '94 AIP. They each had their own world-class expertise. Each had a famous brand. Each had a global sales

network (to allow for “made in China” exports). Each had relatively strong financial capacities.

Negotiations occurred at two levels on the Chinese side. SAIC executives and local Shanghai authorities negotiated the details of the corporate partnership and transfers. Central authorities held discussions with the foreign rivals to impress upon them the necessity of making an investment arrangement that would meet the country’s industrial modernization and societal development needs.<sup>20</sup> At the central level, discussions between GM’s top executives and the relevant Chinese government authorities, such as Vice Premiers Li Lanqing, Zou Jinhua, and minister Wu Yi, related to how the potential foreign investment had to adhere to, and support, China’s national developmental principles. They often highlighted how a potential US-invested project would contribute at the level of “high politics” to the improvement and strengthening of US–China relations, to the geopolitical relationship. Discussions with SPC Vice Chair Zeng Peiyan were more focused on the details of the investment agreement, the nature of the transfers, and most important, how the foreign investment and transfers would support the enormous public investment in infrastructure to which Chinese authorities were committed.

GM, Ford, and Toyota all made bids that provided for the required levels of parts localization, and 50/50 equity ownership. However, Toyota dropped out in early 1995 because it was unwilling to agree to the scale of technology transfer demanded by the Chinese government.<sup>21</sup> Ford had more staying power, and along with GM, made competitive technology transfer proposals which included offers to establish major new R&D initiatives and new partnerships with Chinese engineering counterparts. In September 1995, Jack Smith flew to China to personally announce GM’s founding of an engineering institute at Shanghai Jiaotong University. He emphasized how this R&D partnership was a clear demonstration of GM’s commitment to invest in China’s educational institutions, and support building vehicle and component production and design capacity.<sup>22</sup> In the same year, Ford also agreed to set up a C3P laboratory at Jiaotong University, a state-of-the-art training center for advanced, integrated applications of computer-aided design, manufacturing and engineering (the 3 “Cs”) and product information management (the “P”). In 1996, Ford “donated” the \$1 million C3P facility to the university.

Not only did SAIC entertain bids from GM, Toyota, and Ford, it made it clear to each bidder that it was also, simultaneously, in negotiations with the other bidders and was seriously considering counteroffers.<sup>23</sup>



The GM executive team became highly focused on winning the JV bid with SAIC. They saw the Shanghai automaker as the "best automobile company in China".<sup>24</sup> Realizing that they were coming from behind in the bidding process, the GM team knew that they had to make up for lost time in relationship building with the Chinese side. The key members of the executive team made sure to line up the entire corporation, starting at the top with GM senior management, the Board and the main decision-making and advisory committees, for a coordinated push into China. GM's internal coordination also meant that the Chinese side would be facing a GM "united front" in the negotiations, and could move to respond to Chinese demands in the negotiations in a quick and decisive fashion.

To strengthen its visibility for the negotiations, GM opened a China Office in Beijing in 1994 to liaise directly with central government decision makers, and to consolidate its 12 disparate car-related projects inside China, which until then, had operated in an uncoordinated fashion. It named Rudy Schlais, a committed and entrepreneurial GM Vice President with previous experience managing JVs in China, to head the office as President of GM China Operations.<sup>25</sup> Whereas a divisional GM Vice President typically had 50,000 employees under their responsibility, the China Office had only 25 people on staff.<sup>26</sup> To appoint a GM Vice President to lead such a fledgling operation was a powerful sign of GM's intent to win in China. Schlais was fully empowered by the GM senior management to negotiate and he immediately took charge. To respond seriously to the requirement in the '94 AIP for 40 percent localization at the start of operations, Schlais put together a small steering committee (SC) that consisted of Don Hackworth (GM global manufacturing operations), Peter Hanenberger (chief engineer for GM International Operations<sup>27</sup>), J.T. Battenberg (Delphi President), and the GM research division.<sup>28</sup> This SC met frequently to figure out the details of building local supply capacity, and the specifics of the technology transfers to China. According to Schlais, the committee helped bring the strength of the GM team together under one umbrella, focused on the single objective of building a viable supply base in China. The China Office and the SC, under Schlais' leadership, ensured that there would be no fracturing between GM's various divisions, that GM spoke with "one voice" in its China negotiations; and increased its visibility in the negotiations.

Building on the counsel of the GM China Office management team's hard-learned lessons from previous JVs in China, the GM senior executives developed a unique strategy for negotiating with the Chinese side for the Shanghai bid, and reached agreement with Lu Jian on operating

principles for the future JV.<sup>29</sup> Rather than focusing solely on the minute details of the deal, and give-and-take on the minor details of technology transfers, the approach would be to focus on reaching consensus with the Chinese side on “the conditions for both parent companies to achieve ‘success’”; the conditions that “both sides, each side, could live with”, foremost for GM being the principle that the JV must enable GM to make a profit, regardless of changing regulatory or other conditions in China.<sup>30</sup> This meant that the Chinese side and GM would together absorb some of the potential risks in China’s unpredictable and evolving market. Rudy Schlais and key members of the GM negotiating team effectively communicated this principle to the Chinese side. They explained that GM was ready to make large concessions. They knew that they had the backing of Smith, Hughes, and Wagoner, who had lined up support across the top of its management team and within the corporation, and that the only way to go into China seriously was for the “long haul” and to aim to “win big” – to establish a presence for long-term success in the world’s fastest-growing and ultimately largest auto market.

For the Chinese, this style of negotiating made total sense: it appealed to the Chinese sentiment of establishing “win-win” conditions (*shuang ying*). Such an approach allowed the two sides not to get stalled in the negotiations or bogged down over minor concessions. It also enabled GM to establish an overall scenario that would ensure profitable operations regardless of unpredictable changes in China’s transitional context and regulatory environment. Phil Murtaugh, GM’s face in the negotiations, hashed out many of the details of the deal with the Chinese side, Schlais ensured that the overall arrangements in the deal would meet GM’s broader strategic objectives.<sup>31</sup> The latter was the main interlocutor with GM’s senior management, and the lead GM representative, on the ground inside China, whom the Chinese side would need to go through.

### Attitudinal shift

China’s economic planners and auto officials had long admired GM, the world’s largest carmaker, from afar. As one former GM executive stated, “GM’s size helped us in the negotiations. Size matters to the Chinese leaders.” Chen Zutao, former head of the China National Automotive Industrial Corporation, was known for his deep admiration of GM. Chen is said to have favored the company because of its size and management abilities.<sup>32</sup> Zhu Rongji, China’s future Prime Minister, as Vice Chair of the State Economic Commission (the coordination organ responsible for macro-micro coordination on the implementation of the central plan),

wrote seven pages in a book (1983) on modern management, admiring the details of GM's large corporate management system.<sup>33</sup>

However, these negotiations also marked the increased leverage of the Chinese state in negotiating with the MNCs. A shift in the attitude and rhetoric in the way that the senior executives of the world's leading auto producers described "China" could be seen in the early 1990s. Ford CEO Trotman started making regular visits to Beijing to deliver Ford's bidding. This was a marked change in attitude from Ford's previous approach to Beijing's investment outreach efforts. GM also shifted from spurning China to taking the most aggressive approach in bidding for the second JV partnership with SAIC. GM no longer questioned the actual size of the Chinese market or the backwardness of the Chinese workforce. GM now went in the completely opposite direction.

Similar to Dr Carl Hahn (VW Chairman), GM CEO Jack Smith started visiting China almost every other month to personally deliver the message about the importance which GM, "the entire corporation", attached to its future activities in China.<sup>34</sup> Louis Hughes visited China in the intervening months, and between the two senior executives, GM established a steady and sustained senior management presence in China, ready and willing to discuss matters of principle or details of the deal any time the Chinese side wanted. In 1996 alone, Smith went to China six times, including meeting with Party General Secretary and Chinese President Jiang Zemin.<sup>35</sup> Smith met with Zeng Peiyan six times during the period of the negotiations. Hughes met with Zeng even more. Hughes and Schlais noted in interview that the regular visits and sustained presence of GM's most senior executives sent a clear message to Beijing and Shanghai about GM's seriousness: "that the GM leadership was ready and willing to meet with China's leaders to work out the terms of the JV deal, anytime that Beijing wanted to discuss". This message and the steady presence of GM's top executives also empowered Rudy Schlais as the leader of the negotiating team, on the ground, with the perception that he could access the senior decision makers in the firm, at any moment, if a decision had to be made in the course of bargaining.

Smith and members of the GM senior executive were present in China for the grand opening at Shanghai GM in December 1998, and Smith personally drove the first automobile – the Buick *Xin Shi Ji* (Century) luxury sedan – off the assembly line. At the signing ceremony for Shanghai GM, Chairman Jack Smith declared, "This project is a critical element in GM's total network."<sup>36</sup> This statement was accurate. It also reflected the message that GM executives wanted to reinforce with Chinese authorities.

GM's top executive had drawn a nonmarket lesson that VW had grasped a decade earlier: it was important for GM to represent itself as working in the interests of China's national development goals.

GM scheduled the ceremonial opening of the JV in Shanghai to coincide with US Vice President Al Gore's state visit to China in 1997. Senior GM executives, supported by US ambassador to China, James Sasser, made sure that Gore attended the ceremony and witnessed the signing for the massive US\$1.52 billion deal, to symbolize the American government's political support for the project.<sup>37</sup> The support, in person, of the second-ranked leader of the United States, and the senior management of the world's largest automotive producer at the official opening of Shanghai GM ensured that GM was not only acting, but *perceived* by Chinese leaders to be acting in alignment with the country's interests. It reassured Beijing and Shanghai authorities that GM was approaching its partnership in China with the necessary *gravitas*.

GM further demonstrated its commitment by taking the unusual gamble of starting construction on an assembly plant in Pudong before formally closing the deal. Phil Murtaugh, a member of the GM negotiation team and the successor to Schlais as Vice President for GM China, explains:

We made a decision to work out a joint venture contract and build a plant simultaneously. We started both in January 1996 and it took us a year to negotiate the agreement. By that time there was steel on the site and we had spent more than US\$100 million. It was a fairly high-risk approach. GM has never built a plant on this scale this fast in its entire history.<sup>38</sup>

GM also tapped into the desire of local Shanghai authorities to become a global player in the auto industry. Louis Hughes, at a presentation in Shanghai to the mayor and the city's seven vice mayors, highlighted much to the satisfaction of the audience that it was GM's goal to make "the automotive business in Shanghai globally competitive".<sup>39</sup> Hughes contrasted GM's approach to the foreign partners in the troubled JVs (i.e. Beijing Jeep and Guangzhou Peugeot), stating that the onus was "not only on Shanghai or on China" to ensure the conditions for business success, but that "foreign investors must have a strategic plan and the willingness to form a long-term partnership with China".<sup>40</sup> Hughes added that GM would instead take a "comprehensive approach", based on the understanding that it was "unwise to simply enter China and start manufacturing products; that a long-term commitment and considerable

dedication is required". This, Hughes explained, is because "four key stakeholders" are typically involved in any JV project: the foreign company, its Chinese partner, the Chinese government, and the supplier base.<sup>41</sup>

GM's strategy included bringing its "crown jewels" to China, rather than outdated models and technology. At the same time, GM's senior management told the Chinese that the wave of mergers and acquisitions in the global automobile industry in the 1980s and early 1990s had driven many smaller firms out of business. Hughes explained to the Chinese that the most important growth in the modern auto firms' operations were in engineering, design, and marketing, and not just in the size of the assembly line. Success in the globalized automotive industry was therefore increasingly determined by a combination of quality, the breadth of model range, and low total systems costs.

Hughes explained how GM – working "in cooperation with China's top political leadership" – developed a "strategic roadmap" to build a foundation for a "win-win situation for both China and GM". This strategic roadmap was based on "five principles" that would "govern all that GM does in China":

First, we are committed to investing in China for the long-term. Second, that commitment means we will bring state-of-the-art technology to China and establish transfer and training programs to keep the technology current. Third, GM China fosters local management, talent and know-how. Fourth, we will develop both complete vehicles and components in China. Fifth, GM will help integrate China into the global market.<sup>42</sup>

Hughes directly addressed the main concerns behind the '94 AIP, soothing Beijing's national developmental concerns, and stimulating Shanghai's global corporate ambition. GM's approach captured the attention of Chinese leaders,<sup>43</sup> and enabled it to outflank Ford.

## **GM's winning bid**

The *New York Times* reported that Chinese officials had already "unofficially" selected GM in 1995, after the world's leading automaker agreed that it would establish a new \$1 billion state-of-the art assembly plant, and produce a cutting-edge mid-range luxury sedan at the Chinese factory.<sup>44</sup> Thun notes that the Chinese side prodded GM in the negotiations by hinting that they would restart discussions with Ford if unsatisfied with GM's concessions. However, by late 1995, the head

of Ford's China operations, Vaughn Koshkarian, starting referring in public to the Shanghai bid as "only one of many options that Ford had in China, and that Ford would establish an assembly plant at some point".<sup>45</sup> While not conceding defeat, the Ford team realized that they had fallen behind in the competition, and their rhetoric started to emphasize the importance of taking a gradual approach to China.

One of the strengths of the GM bid was the offer to build a massive new state-of-the-art factory in Shanghai based on its Eisenach plant in former East Germany. GM flew Lu Jian and a team of SAIC representatives over to Eisenach to visit the plant, and promised to build a large new facility in Shanghai, which would utilize advanced lean production methods. The fact that GM could show that it had successfully built and operated a highly successful, state-of-the-art, auto manufacturing facility in a Communist transition context proved convincing to Shanghai authorities and SAIC senior decision makers, including Lu Jian. Ford could not replicate this demonstration effect.<sup>46</sup>

GM agreed to arrangements that far exceeded the "minimum requirements" for foreign investment outlined in the '94 AIP. GM's bid featured the aforementioned concessions plus an agreement to increase production capacity to 300,000 vehicles per year, producing a mid-range luxury car modeled on a Buick luxury sedan (which Chinese buyers were said to favor). The negotiations then shifted to the specifics of the deal. These negotiations mainly involved the two firms, with SAIC reporting to Beijing on key issues. Details such as the site location for the plant, the cost of the product for buyers, the cost of production, and the amount of profit that GM could hope for, were worked out in the negotiations between the firms. The specific schedule for introducing local components was worked out together with both the central authorities and local representatives. In 1996, right after SAIC and GM signed an MOU, GM undertook a major research investigation into the state of China's automotive component products and production processes, and reported to Chinese authorities that 98 percent was 10–15-year-old technology. GM executives said that the new facilities they planned to build in Shanghai would sweep away most of this outdated capacity.<sup>47</sup>

GM and SAIC formally closed the deal in late 1997. GM agreed to build a mammoth new \$US1.5 billion, 50/50 JV called Shanghai GM (Figure 7.1). It agreed to transfer its leading Buick models to China, as well as the advanced production and soft technology for what would eventually be a full line of modern vehicles, to build entire new production lines, customize vehicles for the Chinese market, establish new research



*Figure 7.1* US\$1.53 billion, 2.56 million square feet (230,000 square meter) Shanghai GM plant<sup>48</sup>

development facilities, exceed the localization requirements in the '94 AIP, and encourage its affiliated parts and components producers to increase their presence in China. Similar to VW before, GM agreed that Chinese engineers and managers would work alongside GM colleagues at the JV. GM met, and in many cases exceeded, all of the foreign investment requirements of the '94 IP.

Technology transfer and transfers of technical expertise were again at the heart of the negotiations, just as they were for the JV negotiations with VW, AMC, and Peugeot during the 1980s. Initially, SAIC wanted not only the general specification drawings of the vehicle models that would be produced in Shanghai, but also online access to the databases of GM's technology development center in Michigan, and for GM to agree to transfer computer-assisted design capacities to a new technical development center to be established in Shanghai as part of the JV agreement.<sup>49</sup> GM did not meet all of these requests, but gave serious counteroffers on most items (vehicle export demands being the main exception). GM offered to transfer the technological know-how for a complete line of vehicles in China, starting with luxury cars, and then smaller family-sized fuel-efficient cars, and including SUVs and minivans (see Figure 7.2).<sup>50</sup> GM also agreed to customize vehicles for the Chinese market, an objective that Chinese authorities had been pushing for since the negotiations for Beijing Jeep.<sup>51</sup> Pointing out that technology transfer is not a "one-way relationship", GM offered to work "cooperatively with Chinese researchers to develop technologies for future use in GM's global manufacturing business".<sup>52</sup>



Figure 7.2 Production line at Shanghai GM<sup>55</sup>

Louis Hughes delivered the message on behalf of GM's senior management that it would meet the foreign investment requirements in the '94 AIP, and was aware of local concerns over insufficient technology transfer in their existing auto JVs:

Many companies have decided ... to bring outdated technology and products to China. We believe this is shortsighted. At General Motors, we think that transfer of technology is a good investment. Why? Because China will eventually be like every other market in the world – extremely competitive. Customers will demand current technologies and current products. Someone is going to deliver products to meet these demands. Those companies who have not brought their latest technology will be left out in the cold.<sup>53</sup>

Hughes also emphasized that GM “insisted that Chinese authorities ensure progress in the protection of intellectual property rights as the condition for continuing such cooperation in product research and development”.<sup>54</sup>

### **Building modern component supply capacity**

For the Chinese side, the crux of the negotiations focused on, first, transfers of technology and managerial capacity, and second, the willingness of the foreign MNC to take a lead role in fostering a modern and



high-quality parts supply network. The former head of GM China notes that it was relatively easy to reach agreement on technology transfer because Jack Smith had made sure that all parties in GM's senior management team and advisory Boards were onside with the idea that GM would have to transfer advanced technology and car models to China in order to secure its position for the long haul. The GM executive team had made sure to gain the support of Rick Wagoner, the President of the core North American operations, and J.T. Battenberg, Delphi's President for the strategy. The most challenging issues in the negotiations related to Chinese demands in the AIP for localizing parts production, and the personal request from senior SPC officials such as Zeng Peiyan for GM to build modern key component supply capacity in China.<sup>56</sup>

For the SPC, the key concession requested by Zeng was that all serious bidders agreed that, in exchange for the Chinese government to invest massively in infrastructure, to build a modern and sustainable parts and component industry to supply the new Shanghai JV, and assist the Chinese in designing and building their own vehicle models.<sup>57</sup> GM agreed to help China build modern and internationally competitive automotive design and manufacturing capacity, to feed Shanghai GM, and to transfer the knowledge for China to be able to design and build modern cars five years after the start of the project. This meant building a fully modernized local parts and component supply network. However, GM benefited from the fact that VW had already "trained" their Chinese partners for over a decade by the time Shanghai GM commenced operations, and that Shanghai GM could tap the SVW network of local suppliers. GM executives noted that there were serious quality and delivery problems with the local suppliers, and that GM still had to do significant work to upgrade the quality and reliability of local parts production in the SAIC network. They emphasized that much work had to be done to build local supply capacity especially for the higher value-added components, and that the major foreign partner in the Shanghai area had not transferred complete car production capacity despite the high level of content localization that was claimed at their JV project.

The mandated local content requirements in the '94 AIP were going to present a serious challenge. The necessary logistical infrastructure did not exist. An effective supply system, with strong quality control and product delivery reliability, required all suppliers to be adequately connected to the assembler, and GM would need to establish an in-country purchasing group. GM management knew that it had to bring a multifaceted team to China, including experts in metals, electrical and mechanical components, with supporting engineers to build the supplier network.

The GM team anticipated that it would need to find local suppliers, and coach them in order significantly to improve their quality,<sup>58</sup> while ensuring cost effectiveness. The management team knew that its respective divisions, which were used to working quite independently, would have to work closely together to coordinate and execute seamlessly to, first, win the bid, and second, to implement the project. Hughes, Wagoner, and Battenberg, in particular, had to work closely together on the China strategy to ensure that the transfer of car and plant design was well coordinated.

Being a late entrant to the China market, GM chose to meet the new investment requirements in the AIP head-on. However, it did not simply acquiesce to all the Chinese demands. It also pushed for fundamental changes in the regulatory environment, the scope of business operations, and the terms of doing business inside China. Knowing that its chief rival, VW, had shifted to a status quo approach in its Shanghai operations, choosing largely to maintain its existing arrangements in Shanghai despite the growing pressure from the Chinese side, GM took the approach of proactive newcomer and late entrant, pushing for significant changes in business operations in exchange for its concessions. In so doing, it transformed the terrain of interfirm competition, putting itself in an advantageous position, against which the more established "early entrants" would have to race to catch up.

GM executives later said that the biggest start-up challenge they faced when setting up Shanghai GM was meeting the localized parts requirement levels at the start of production.<sup>59</sup> Hughes explicitly acknowledged in his speech to Shanghai's leaders: "as a minimum requirement to gain approval to start regular production, a company must reach 40% local content overall, plus reach 60% on three of five major subsystems: body, engine, transmission, front suspension, and HVAC [heating, ventilation, and air conditioning]".<sup>60</sup> Schlais' team figured out the localization strategy, and by 1997, Hughes could pledge that GM's new project would meet the localization demands, at its initial launch: "another first for China". For GM, the main requirement for building a local supply network was that the Chinese would make it a *contractual obligation* to adhere to GM's "QSP system" (quality, service, price). Louis Hughes, the champion of the Eisenach plant, explained that the QSP system was essential to establishing necessary quality standards for the lean production system that it planned to introduce into China.<sup>61</sup> In his speech to the Shanghai leadership, he explained that GM, in its international operations, made purchasing decisions based on a standard process of supplier evaluation, with a specific budget for every component based on the worldwide

average purchasing price for the component. This sourcing system was important for securing market competitiveness. Hughes impressed upon the Shanghai leadership that utilizing GM's global QSP system was essential for fostering a "world-class automotive industry in China and Shanghai".

In exchange for the right to source globally using its QSP system, GM promised strongly to encourage its affiliated parts suppliers such as Delphi Automotive Systems to increase their involvement in China. Jack Smith had already done a lot of the work in bringing in J.T. Battenberg, the President of Delphi, on board for GM's big push into China.<sup>62</sup> Delphi already employed 3500 people in Shanghai and was the only automotive components supplier engaged in mass original equipment manufacturing (OEM) exports. The two Delphi JVs in China gained QS 9000 status, the "globally recognized indicator of a high quality supplier", and Delco Electronics, which had merged with Delphi in early 1997, had established 11 joint ventures and 2 wholly owned manufacturing plants inside China. This meant that Delphi's total investment in China in 1997 exceeded US\$250 million. Playing to the export desires and foreign currency concerns of Chinese authorities, Hughes added that Delphi had already reached US\$50 million in exports from China. Its goal was to reach US\$250 million in total export value by 2000. Hughes said that Delphi's growing activities in China were a clear indication of how the GM "Group" as a whole was assisting automotive development in China.

While GM executives stated that they were taking concerted measures to ensure that GM's "associated" key parts and components suppliers were increasing their presence in China, and transferring leading technology and managerial and innovation capacity, they also emphasized that GM was "not willing to tie itself to any supplier, including Delphi, if it did not meet its global sourcing standards". GM also increased the presence of Bosch and VDO, its European suppliers, inside China.<sup>63</sup> Hughes explained that GM's purchasing teams used global resources to find the best suppliers in the world to deliver the best product or services possible. Business was not automatically awarded to the supply companies under the Chinese parent company (SAIC) or the American parent company (GM), or to suppliers that have a long history with the original equipment manufacturer. The application of GM's QSP system for purchasing meant that GM's own supply divisions, including Delphi and Delco, had to compete with other suppliers, and their performance would be measured against the three basic QSP criteria.

GM knew that it was coming face to face with the long-standing practice of special connections and ties of mutual obligation (*guanxi*) built into the Chinese supply system. Schlais spent countless hours in intense discussions with Jiang Yuren, Shanghai Executive Vice Mayor, and other leading representatives of the Shanghai Auto Localization Committee over components and parts suppliers for the JV, the baseline for evaluating supplier selection, especially as it related to local suppliers, and the importance of keeping an “even keel” and balance between technology, quality, and price.<sup>64</sup> Phil Murtaugh, the “face” of GM in the day-to-day negotiations with SAIC, also spent many hours in closed-door meetings with SAIC counterparts, and notes that “sourcing was the most contentious issue”<sup>65</sup>:

At the time, SAIC had a very large supplier base and we had vested interest in sourcing with our companies. That was the most contentious decision. Very early on, we worked out a sourcing principle that we would source on the basis of quality, service, technology, and price, and we would put out multiple bids.

SAIC, together with VW, had gradually cultivated the top local suppliers through the longer-term purchasing arrangements that had been worked out with SVW. Shanghai GM made sure to secure the right to procure from the local suppliers in the SVW supply network, yet stipulated that it would only do so if the local supplier could match the QSP purchasing requirements. At the same time, the supplier standards and practices that GM was demanding were higher and more flexible than those of SVW.<sup>66</sup>

Hughes stressed that GM and SAIC needed to approach the issue of supplier development in a “flexible manner”. This meant setting up JVs and establishing technical licensing agreements which would allow advanced technology to be brought to China through multiple channels. It would also mean spurring competition between suppliers inside the Chinese market and from global sources. Hughes emphasized, “We think competition is healthy and good since it drives up quality and drives down price. Competition thus helps to create a strong automotive industry throughout the world and so it can be in China.”<sup>67</sup> For GM, this meant that while the American auto giant would encourage Delphi to increase its presence and production in China, it was not willing to tie itself to this or any other supplier if it did not meet GM’s global sourcing standards. GM explained that when it owned its own group of supply firms, including Delphi, their competitiveness suffered because

business was allocated to parts firms within the group without using objective benchmarks.<sup>68</sup> This was a message to SAIC, which owned a number of its main suppliers. By purchasing from outside of the group, GM exposed Delphi to healthy competition, and this strengthened the entire GM group over the long term. Delphi was already competing against other international and Chinese suppliers according to the QSP criteria, to supply not only GM's JVs in China, but the entire vehicle market in China, and even global markets. To meet the localization requirements, GM's China Office oversaw the creation of 12 new parts and components JVs, as well as technology transfers and the "coaching" required for operating in the local supply chain.

### **R&D center**

The other key commitment was to help establish the Pan-Asia Technical Automotive Center (PATAC) (Figure 7.3), an "advanced joint venture technical center and a fully independent engineering joint venture facility".<sup>69</sup> Its main purpose was to develop indigenous auto design and engineering capacity and to assist any domestic auto company to modernize its capacities. It was established as a separate US\$50 million JV with the Shanghai authorities. Equity in PATAC was split equally between the two partners. In principle, PATAC was free to provide engineering and design services to other auto companies in China and elsewhere; however, it soon became tied mainly to providing engineering support to SAIC, including its major JVs with VW and GM. Shanghai GM has relied on



*Figure 7.3* Pan Asia Technical Automotive Center<sup>73</sup>

PATAC for product engineering and validation, and most of PATAC's business has been with Shanghai GM. Eighty percent of the work of PATAC's 400 engineers in 2002 was done for Shanghai GM.<sup>70</sup>

PATAC was originally envisioned as including a training center that would groom as many as 1000 Chinese engineers a year.<sup>71</sup> It was touted at its opening as being the "first of its kind in China for the automotive sector".<sup>72</sup> GM originally saw PATAC as being especially important for supporting automotive companies inside China, and companies in the Asia-Pacific region.

In helping to build local supply capacity, GM also worked out arrangements for its affiliated parts producer, Delphi Automotive Systems, to establish two R&D centers, in Beijing and Shanghai respectively. Finally, GM agreed to support university-based applied research projects to further help develop local R&D capacities in China's academic institutions. GM invested close to US\$2 million in such projects from 1996 to 2000.<sup>74</sup>

The results of GM's efforts in building local parts and components capacity began to show just two years after the plant opened, when Shanghai GM launched a compact sedan, the Buick Sail. This car, based on the German Opel Corsa, targeted private consumers in the growing middle class, and was intended to compete in the price range of the VW Jetta, Citroën/Dongfeng Fukang, and Tianjin Xiali 2000. Two versions of the Sail were introduced to the Chinese market: a compact sedan and a hatchback called the Sail-RV. The Sail had dual air bags and antilock brakes as standard features, a first for a compact car in China.<sup>75</sup> Even though the design work for the Corsa, which GM was already producing in eight locations around the world, was "90 percent done", Shanghai GM had to modify the suspension, engine calibration (because of Chinese fuel grade), exterior styling, grille, headlamps, and side fascia. By 2000, PATAC had developed enough product-adaptation capacity to do most of these modifications by itself. Shanghai GM started manufacturing the Sail in 2001 with 70 percent local content, the highest level ever for the start of a JV in China.<sup>76</sup> Both of the automobile models that Shanghai GM introduced were more advanced than those being produced by SVW, and other Sino-foreign JV competitors at that time.

GM, responding constructively to the regulatory guidance of the Chinese state and working together with SAIC and local Chinese suppliers, advanced the process of automotive modernization in China, especially by modernizing the local supply capacity of the country's auto industry. The implementation of GM's QSP system for sourcing had a

deeper impact on China's entire auto industry, producing a fundamental transformation of the local supply industry. The introduction of the QSP system led initially to conflict at purchasing meetings, as SAIC continued to be, or gave the strong impression that it was, under substantial pressure from state authorities to increase the capacity utilization of the supply firms under its group. GM officials impressed upon their new Chinese partners that global competition in the automobile industry had changed the terrain of competition, and that quality and lowering total systems costs, as well as increasing the breadth of model range, had become the keys for global success.

GM made sure to respond to the requests of the central authorities, and was willing to make reasonable business commitments to enable China to achieve many of its national developmental objectives. The key senior executives made sure to foster unity inside their own ranks, and across the entire corporation, so that GM could deliver on a massive, historically unprecedented scale in China. GM successfully leveraged the global ambitions of SAIC executives and Shanghai leaders to promote greater business transformations than the Chinese side had originally intended. Similar to VW, GM made sure to strike a "win-win" deal for all sides in the quadrilateral alliance. Domestic concern over China's impending WTO accession, specifically anxiety about the increased competition which Chinese automakers would be facing, also helped weaken Chinese resistance to a paradigm shift.<sup>77</sup> The Shanghai representatives came to accept the changes promoted by GM as necessary for fostering a globally competitive auto industry, and helped lobby Beijing on the requested changes. The shift in outlook is reflected in the words of Hu Maoyuan, SAIC's current CEO, who has explained that the main strategy for ensuring the success of SAIC's 73 JVs with 50/50 ownership, in a country where most others have failed, is to "put the interest of our joint venture first, not the interests of the parent company".<sup>78</sup>

The new objective benchmarks set by GM for sourcing have had important implications for fostering modern automotive supply networks in China, and in the Shanghai area more specifically. GM's purchasing demands forced local component suppliers to upgrade themselves through foreign partnering.<sup>79</sup> As Thun notes, one of the largest suppliers in the SAIC group had formed a JV with a global supply firm in 1994, but it had to undergo a major upgrading process in the late 1990s to secure the business for the new vehicle models introduced at Shanghai GM, and for those later added to the line of models at Shanghai VW.<sup>80</sup> More elaborate and sophisticated foreign supply-level partnerships

were needed in order to meet the higher quality and delivery demands of the GM QSP system. Rather than simplify its design blueprints for transfer to Chinese supply firms (which put a “glass ceiling” on the development of Chinese supply firms), GM pushed for major improvements in the manufacturing abilities of local supply firms. Some local supply companies (e.g. seat and muffler producers) have taken it a step further, and have developed their own parts design and innovation skills.<sup>81</sup> However, this has not yet occurred in the highest value-added segments of the production chain. Many of SAIC’s largest suppliers had to upgrade their capacities in the late 1990s, forming new partnerships with foreign companies, in order to learn the skills needed to fit into a more fully modernized, lean production process: from guaranteeing product quality, at a competitive price, and the ability to be flexible and modify their product according to changing consumer preferences, and the ability to deliver “in-time”.

To gain access to the fast-growing China auto market, and as a new part of its global repositioning for the next century, and an increasingly globally integrated world economy, GM agreed to historically unprecedented transfers of capital, technology, and know-how to China, in the massive 1998 investment package that came to be Shanghai GM. In the Shanghai negotiations, the Chinese side successfully played off one American firm against the other, especially GM versus Ford. Toyota was allowed to participate, which whetted its appetite, but was then left to stand on the sidelines, further stoking its interest – in an ironic situation of “payback”. These dynamics were all the more noteworthy if one recalls how the same group of American and Japanese firms had spurned China’s advances in the 1980s. Under the new Smith leadership team, and armed with an integrated and forward-looking international strategy, GM went in a completely different direction, to win the rights to form the second major JV in Shanghai. The GM team made sure that its entire top executive, full operations, and top American political figures gave the necessary public support and personal attention to the negotiation and establishment of the JV, as was required in China’s unique political and normative context.



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**Part III**  
**Implications**

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# 8

## Homegrown Brands and Models

The year 2003 was a watershed in China's automotive modernization, when the ratio of the output of MNC branded cars in China's total output of passenger cars started on a downward trend, dropping from a high of 90 percent in 2002, to 76.4 percent in 2003, 66.71 percent in 2004, and 57.44 percent in 2005.<sup>1</sup> This shift was mainly due to the rapidly increasing production levels of two of China's smaller independent automakers, namely Chery (Qirui) and Geely (Jili). The trend appeared likely to continue when in 2005, FAW and SAIC, the two most successful large Chinese automotive groups, announced ambitious plans to produce their own nationally branded car models. SAIC intended to produce 200,000 units of national models per annum by 2010, and FAW had a target of 800,000 national cars by the end of the Eleventh Five-Year Plan (2006–2010). Foreign observers were stunned at the Shanghai Auto Show in spring 2005, by the wide array of new independently designed car models and concept cars on display from Chinese firms such as Chery, Geely, and First Auto Works. In terms of sales, Chery had shocked both foreign and domestic observers when it announced that in 2003, it had sold 90,387 cars, more than a threefold increase from its start of sales in 2001, had already increased its production capacity to over 350,000 cars per year, exported 1200 cars that year, and was building an overseas production facility in Iran in 2003 that would have 50,000 vehicle production capacity. The rise of these Chinese homegrown brands, and their increasing sophistication in product quality, exterior style and even engine development, signaled that the Chinese auto industry has passed a major threshold in modernization.

Exactly how the Chinese automakers developed these “new” car models is a matter of debate. Chinese analysts tend to classify the strategy as “integrative innovation” (*jicheng chuangxin*), in which Chinese

companies “creatively integrate international and domestic resources into a newly adapted design”.<sup>2</sup> Foreign analysts have tended to ascribe the rise of the Chinese carmakers to intellectual property theft, that the rise of the Chinese independents in particular is just another example of violations of copyright in “a land where copying, from DVDs to goods on supermarket shelves, is rife”.<sup>3</sup> The issue of how China actually designed and developed these models is only part of the story. The aforementioned Chinese auto companies could announce such ambitious plans for mass production of new homegrown brands and models only because of the painstaking modernization gains that were made in the Chinese auto manufacturing base during the 1980s and 1990s. While Chery, SAIC, and FAW had garnered a lot of attention as new threats to US, Japanese, and German automakers by 2005, the groundwork for these developments was actually laid much earlier, and especially from the mid 1990s onwards.

By the turn of the new century, the largest Chinese automakers were no longer producing cheap, poor quality, outdated models, locked on a path of producing “Third World models”. While they had spent the 1980s doing so, the country made major advances in auto modernization from the mid 1990s onwards. The Chinese state, together with select domestic auto groups, had begun to bargain hard with the MNCs for transfers of capital, technology, and technical know-how. It was able to do so by developing a set of policy tools which allowed it to make the most of changing global market conditions, including China’s own fast-growing internal market, to effectively negotiate with the MNCs to shape the content of the international transfers, in ways that enabled Chinese automakers to move up the technology ladder. Such skillful negotiation required the state to work in a coordinated and concerted fashion. China possessed advantages in this regard because of the character of the Chinese Party-state.

Building on the content localization gains of effective foreign investment utilization, the large Chinese automakers pursued a mix-and-match strategy of technological upgrading and product adaptation to create “new” models, and then moved to mass production. They have only been able to do so because of the modernization gains described in the previous chapters, a two-decade process of developing modern automotive assembly capacity, building comprehensive local supply capacity for parts and components, and sophisticated distribution networks. This chapter describes how Chery, FAW, and SAIC built on the bargaining and industrial transformation gains of the previous period – the international transfers of increasingly complete and sophisticated

technology and technical know-how, and other localization gains – and made the most of new opportunities further to advance the auto modernization agenda, culminating in the latest generation of Chinese homegrown brands and models.

### **Chery: Chinese mavericks**

Chery and Geely, the smaller “independents”, are known as the mavericks of the Chinese automobile industry.<sup>4</sup> The independents have taken a different approach to building modern auto manufacturing capacity than the big state companies and their JVs, but they have also relied heavily on the modernized local supply capacities and the new supply and distribution networks that have been fostered by the big JV assemblers. From their inception, the independents focused on developing their own brands, on refining their own product technology, using various means – some more controversial than others. They had enticed the engineers and R&D staff over from the larger state automakers, developed “new” car models under their own control through joint efforts with local parts producers, have outsourced some aspects of R&D for product development to foreign companies, have made sure to secure the intellectual property rights (IPR) for the new components, and engaged in reverse engineering. Given that the independents had limited investment capital in their start-up periods, reverse engineering existing models and components offered major cost advantages for quick catch-up in putting together new models, while the local supply base that the larger state automakers have created could be drawn on for sourcing parts and components. Both Chery and Geely produced their initial car models through a combination of reverse engineering and design modification.

The genesis of Chery started in 1996, when local officials and a group of aspiring auto parts suppliers in Wuhu City in Anhui province (central China) successfully lured a “native son” back to Anhui to head up the company. Chery was a direct beneficiary of the JV-led auto modernization process as its President, Yin Tongyao, had worked with Volkswagen AG in its joint venture with FAW in Changchun. Chery started building its first factories in March 1997. It began by purchasing the old engine lines of the Bridgend plant of Ford Britain for \$25 million, and Volkswagen’s Spanish subsidiary SEAT’s used car assembly plant. It hired a Taiwanese company to help design its first model, a sedan called the Fengyun (Wind Cloud), which was built mainly by cobbling together parts from local parts and components makers that supplied the China

operations of VW and GM. Many of the parts for the Fengyun were procured from suppliers for FAW's Jetta and SAIC's Santana. Chery executives noted that there was an oversupply of parts and parts makers for the foreign models, and local parts makers were willing to provide parts to Chery. Yin also recruited a number of FAW-VW engineers and purchasing staff (local parts and component sourcing) to come to work in Chery. This meant that Chery quickly acquired national parts sourcing connections, and had the knowledge to integrate the parts and components into new models. By February 2001, it had obtained ISO 9001 certification, and was the first local automaker to achieve TS16949 certification, which was considered the most strict standards certification system in the world. The independents initially focused entirely on the low end of the market, on low-priced cars, appealing to the lower income levels of Chinese consumers, many of whom were first-time buyers. This product range required less sophisticated technology, and allowed them to build their own brands using reverse engineering or lower-cost joint product adaptation, while competing in what was then the fastest-growing segment in China's burgeoning domestic auto market.

The first Fengyun rolled off the assembly line in December 1999, but Chery was not allowed to sell these cars as it had not obtained formal approval from the central authorities to manufacture and sell passenger cars. Chery, nonetheless, started manufacturing in May 2000, and by the end of that year had already invested RMB17 million into the company. When formal permission was finally granted in January 2001, it already had an annual capacity of 300,000 units, increasing the number by another 50,000 the next year. Formal approval only came through mediation by the central government, the Anhui government and the Shanghai government. Wuhu representatives had to agree to a "forced marriage" with SAIC, a large and priority automotive company for the central authorities.<sup>5</sup> The Wuhu government had to agree to transfer 20 percent of Chery's equity to SAIC at no charge, but on the condition that SAIC management would be excluded from direct management and dividend payments. Only with this arrangement did central regulators include Chery on the National Auto List, thereby allowing Chery to sell in the domestic market.

The Fengyun hit the market in 2001, competing with the three most popular JV car models in China, the Santana, Jetta and the Honda Civic, but priced at one-third of the others. Chery achieved sales of 28,000 units in the first year. In 2002, it introduced its very popular QQ model. Sales in 2002 for both models combined were 58,000. By 2003, sales

rose to 90,000 cars in the domestic market, and it exported 1200 cars, accounting for 50 percent of all Chinese branded cars exported that year. In May 2003, SAIC Chery announced that it would establish a JV in Iran to produce 50,000 vehicles per year. This was the first overseas production facility in China's automotive history.

Many Chinese auto analysts now write glowingly of Chery's legendary rise. Much has been made of the fact that it was determined to "go it alone", including fighting off constant attempts by SAIC to take over a larger equity share. Chery maintained a separate sales and production system, and did not even inform SAIC management about SAIC Chery board meetings. The company's strategy was to be an independent automobile manufacturer by integrating worldwide resources and serving both domestic and international markets.<sup>6</sup> However, Chery's ability, early on, to build up quickly its car production capacity was a direct result of the progress that had been achieved in China's auto industry more broadly over the 1980s and 1990s. It was a beneficiary of the national auto modernization gains that had been made in building modernized and comprehensive local parts and components networks, and acquiring sophisticated assembly capacities. The large JV assemblers were at the core of this industrial transformation, receiving crucial inputs from the foreign MNCs, and all occurring under the watchful eye of the Chinese state. Tacit acknowledgement that Chery has built on the foundations of the nearly two-decade auto modernization process can be seen in the statement on its company website: "At one stage of growth, we absorbed some product advantages from rivals."<sup>7</sup>

Chery's adaptation and integration practices caused serious tension with the major foreign automakers who were partnered in the large JVs. Volkswagen sued Chery over logo infringement, won the case, and Chery had to pay DM30 million to VW in 2003. However, the major focus of international attention has been on how Chery, Geely, Great Wall Automobile Holding Company, and Lifan Group designed their new models. All three became embroiled in IPR lawsuits launched by Daimler Chrysler, Toyota, Nissan, and Honda. For Chery, competitive tensions led to lawsuits after the launch of its new QQ model in late 2001. Both the Chery QQ and the Chevrolet Spark looked similar to the GM Daewoo Matiz, a very popular mini car that achieved major sales in South Korea and Europe. The QQ was an immediate success in the fast-growing mini car segment (it grew 141.5 percent from 2002 to 2003).<sup>8</sup> The QQ was priced at US\$6000 per car, making it virtually impossible for its rivals to compete on price. The first Chevrolet Spark rolled off the SAIC-GM-Wuling assembly line on November



8, 2003;<sup>9</sup> by August 2004, only 365 Spark cars had been sold. Chery then added fuel to GM's frustration when it announced the launch of a new QQ model, the QQ EZDrive, on September 22, 2004. The next day, Shanghai GM announced a price reduction on the manual transmission Spark by US\$1932, to US\$5531, and the automatic transmission Spark to US\$7584. The total 26 percent price cut was a new record for domestic mini cars. On September 30, 2004, SAIC announced that it was discontinuing its partnership with Chery, and returning its 12 percent share to the Wuhu government. This "divorce" opened the way for GM to take a tougher approach with Chery, as the potential conflict of interest for SAIC, sandwiched between the two partners, was removed. Chery was once again independent from SAIC. On October 10, 2004, Chery infuriated GM when it priced the new QQ EZDrive at 1 RMB more than the Spark. To that point, the sales totals for the QQ and the Spark were already estimated to be 6 to 1.<sup>10</sup> The price cuts on the Spark did spur demand, but by the end of October 2004, more than 70,000 QQs had been sold, versus only 6000 Sparks.<sup>11</sup> One of the problems for GM was that it had procured the engines for the Spark from GM Daewoo in South Korea, which lacked the capacity quickly to meet increased demand.<sup>12</sup> In contrast, Chery procured its engines from local Chinese suppliers, and could adjust rapidly to demand changes.

On December 16, 2004, GM Daewoo sued Chery for unfair competition, filing an intellectual property lawsuit in Shanghai, charging that Chery had designed the QQ using pirated proprietary information. Chery countered that Daewoo had sold parts of the design to Chery just before the Korean automaker was taken over by GM. It appealed to the central authorities, providing detailed information on how it had further developed the design for the QQ through reverse engineering and monumental efforts from its crack engineering teams. GM, while protecting its interests, had to think through how best to deal with the Chinese government. GM had already forced Chinese authorities to mediate once before. In December 2003, GM China accused the SAIC Chery "Oriental Son" car model, which had been introduced five months earlier, of being a copy of GM Daewoo's Magnus.<sup>13</sup> SAIC Chery had defended itself on that occasion by arguing that the Oriental Son was developed independently by SAIC Chery, using its own patents. GM questioned its chances of winning the IPR case in a Chinese court when the government had already made public statements to the effect that it did not see conclusive evidence of IPR violation or unfair competition. GM had to reflect on whether it could seriously jeopardize its hard-won good relationship with the Chinese government if it forced the government to act as mediator, rather than go for a private

settlement. It enrolled US politicians, such as Commerce Secretary Donald Evans, to help press its case with Chinese central authorities, but this did not convince the Chinese government. In November 2005, both sides agreed to a settlement.

Chery's management knew that they had to avoid costly legal battles with the powerful foreign automakers in the future, while continuing to promote further innovation of product line, cutting costs, and securing their own IPR. Chery began to put more attention into R&D. By 2003, it had already invested RMB700 million in its R&D institute. Chery announced plans to expand the size of its automotive research center from a staff size of 500 engineers in late 2004 to 3000 by the end of 2006, and establish R&D branches in Beijing, Shanghai, and overseas. Many of Chery's design and product development engineers and production managers had previously worked for FAW and Dongfeng, but left the large state automakers to join Chery when they became frustrated by the fact that the big companies had decided to rely mainly on the foreign partners for product design, and had released Chinese staff from their technical centers. Another large group of Chery's engineers were new university graduates. To strengthen its engineering staff, starting in 2003, Chery hired a number of foreign industry experts from foreign auto parts companies to join the R&D center. This included Xu Min, an overseas Chinese engineer who had extensive work experience in the US at Delphi and Visteon as an engine expert and vice president. Xu returned to head Chery's Automotive Engineering Institute, and build a new team of 35 foreign experts who had worked at Ford, GM, and other automotive companies. This included 18 Korean experts from Daewoo.

In 2003, Chery turned to AVL List GmbH, an Austrian engineering consulting firm that specialized in internal combustion engines, to implement a joint research program to develop 18 up-to-date engine models. Xu directed the cooperative project with the Austrians. AVL trained Chery engineers to design and build the sophisticated engines. Teams from the two companies worked side by side in Austria and in China. Chery established an "AVL Department" in its R&D Center, to focus solely on engine technologies innovation. This engine division soon had a staff of over 200 researchers and more than 10 world-class engine test platforms. To develop its new models, Chery built new engine and transmission plants, aiming to raise production capacity at its new engine plant to 400,000 units per year. In 2004, Chery was the only automobile company on the list of 153 key bases for innovation in the Chinese government's "National 863 Plan", organized by

the Ministry of Science and Technology (MOST). Chery's "Electrical Vehicles" project, which led to the development of several hybrid car models that passed the standards tests of MOST, and drew supportive acknowledgement from the central authorities that Chery was putting serious effort into developing "self-reliant automotive technology for the nation". MOST then agreed to fund the establishment of a "National-level" Research Center for Efficient and Environmental Automobile Techniques inside Chery's R&D Center. In making these R&D moves, Chery had made the shift beyond product innovation that was directly linked to short-term profits, to emphasizing longer-term strategic R&D and innovation.

Chery went even further in pushing the envelope of R&D through internationalization, and entered into a growing list of international collaboration projects for product development with foreign companies (see Table 8.1), including Pininfarina and Bertone of Italy (the designers of Ferrari and Lamborghini), Fiat, and Japanese design firms. The goal was to develop new car models that would help Chery move up the price bracket inside China, and to aim ultimately at the US and European auto markets.

In its latest stage of evolution, in August 2007, Chery broke with its own rule of not joint venturing inside China, and partnered with Italy's Fiat to establish a 50/50 JV in China to produce Chery, Fiat, and Alfa Romeo cars with an annual production capacity of 175,000 units for both the Chinese and international markets. The agreement included a groundbreaking engine purchase deal for the Chinese carmaker to supply more than 100,000 1.6- and 1.8-litre petrol engines per year for Fiat cars assembled in China and abroad. Fiat was looking to cut costs in its European operations, by importing Chinese-made engines for assembly

*Table 8.1 Chery international joint design and R&D*

| <i>Foreign partner</i>                     | <i>Project</i>                                |
|--------------------------------------------|-----------------------------------------------|
| Pininfarina (Italy)                        | Design new car models                         |
| Bertone (Italy)                            | Design new car models                         |
| Japanese company                           | Design new car models                         |
| AVL (Austria)                              | Engine design (to meet EU emission standards) |
| Richardo Consulting Engineers Limited (UK) | Design hybrid/electric drive-trains           |
| Fiat (Italy)                               | Design components for new car model           |
| Quantum LLC (US subsidiary of Israel)      | Design four vehicle models                    |

in Europe. Teaming up with Chery also gave Fiat a boost in the world's second biggest and fastest-growing vehicle market.<sup>14</sup> Yin Tongyao said, "The agreement will give Chery increased competitiveness on the international market."<sup>15</sup>

In January 2008, Chery gained approval from the central authorities to form a 150,000 unit venture with Quantum LLC, the US arm of Israel Corporation, to produce sedans and SUVs for local Chinese and overseas markets. Chinese state media reported that Quantum agreed to set up a US\$1 billion (RMB7.36 billion) JV in China, called Chery Quantum Automobile, to make Chery-branded cars for sale in China and for export to the US. Quantum will spend US\$225 million for a 45 percent stake in the new entity and is also expected to provide an additional US\$180 million guarantee to help Chery fund additional investment. Rather than direct financial investments, Chery will provide land and technology in return for a 55 percent stake in the JV. The project aims to produce 150,000 units a year under the Chery brand, further raising Chery's total production capacity in China to 500,000 vehicles. The JV will make four new models, including sedans and SUVs: 40,000 B21 vehicles, 25,000 B22 vehicles, 20,000 T21 vehicles, and 65,000 M21 vehicles.

Outside of China, Chery has continued to push ahead, breaking new ground in expanding its international operations. Chery's overseas JV project in Iran with SKT, the leading parts maker in that country, started in February 2003 assembling CKDs of Chery's original Fengyun (1600 cc) sedan. This project involved building an assembly line in Iran, as well as a new plant for stamping, welding, and painting lines. Total output capacity was 30,000 units per year.<sup>16</sup> In 2005, Chery announced it would expand into Iran with its new SUV model, the Tiggo. In 2005, Chery also signed an agreement with the US firm Visionary Vehicles LLC to export Chinese-made Chery cars to the US starting in 2007. Visionary Vehicles had introduced Subaru cars from Japan into the US in 1968. But the recent deal was on a shaky footing, between limited financing on the side of the transaction agent and strong opposition from GM headquarters in America.<sup>17</sup> In the end, the deal was not finalized. It would have been a first for China. But Chery then followed up in July 2007 by striking a deal with Chrysler to make small cars under the Chrysler brand for US and European markets.

Chery aims to increase its annual sales from 381,000 units in 2007 to 1 million units by 2010. Chery reported sales of about 310,000 cars in 2007, with 40,000 units exported. Its target for 2008 is 390,000 cars sold, with 70,000 units sold abroad. The company now assembles vehicles

with partners in Iran, Malaysia, Russia, Ukraine, Brazil, and Egypt, and announced plans in March 2007 to open its first Latin American factory in Uruguay with an Argentinean partner. It also has intentions to open a plant in India.<sup>18</sup> Li Chunbo, an auto analyst with CITIC Securities Corporation, has suggested that “these tie-ups will greatly help Chery boost its development, sales and profits”, and that Chery will “benefit a lot from the collaboration”, while striving to maintain its independence.<sup>19</sup> As international pressure on IPR has grown, and the some of the smaller companies have demonstrated their ability to build on the modernization gains of the 1980s and 1990s, to innovate further, and compete fiercely, the formerly skeptical Chinese government started to provide more support. In March 2005, China Export and Import Bank provided Chery with over US\$600 million in export credit for export promotion and overseas expansion, and the China Development Bank provided a loan of close to US\$300 million for Chery to expand its R&D capacities.<sup>20</sup> Other Chinese independents and smaller players have now joined in the internationalization drive. Geely is exporting vehicles to Malaysia, China Brilliance to Egypt, and Great Wall and Gold Cup to Latin America and the Caribbean. Lifan (Chongqing) signed international agreements in 2007 to establish parts plants in Mexico.

### **FAW: resurrecting the Red Flag**

The executives of the largest state auto groups were not always the champions of building technological self-reliance. By the late 1990s, even the management of FAW was starting to question the longer-term viability of the *Hongqi* (Red Flag) model, as its sales sagged and competitive pressure was intensifying in the domestic market. In this period, the executives of the leading JVs had openly called for restricting new entry into the industry, and saw absorbing technology from foreign partners as the most realistic path for the development of China's auto sector. In 2004, the general manager of FAW explained when being interviewed on television that: “We have no time to do [our own] development now as we are very busy ... producing Jetta and Bora ... We should wait some 20 years to have strong development capabilities.”<sup>21</sup> However, a combination of factors soon led to a major shift in the attitude of the senior management of China's leading auto groups.

Growing domestic criticism that China had “sold the country” to the foreign automakers but had not developed its own brands (discussed in the next chapter), intensifying international pressure on IPR, and increasing government support for the fiercely competitive smaller

independents, pushed two of China's "Big Three" to put more attention into carving out their own path, separate from their foreign JV partners. In 2005, First Auto Works (FAW), which had always maintained a small nationally branded operation, in addition to its JVs, announced that it would double its total production output to 2 million units by 2010, with half of the total being its national branded models. FAW's latest national car models are all designed from platforms of foreign models. The latest Red Flag (*Hongqi*) is an adaptation of the Toyota Majesta, the Besturn (*Benteng*) model is based on the Mazda 6, and the C1 (*Weizhi*) model draws heavily on the Toyota Echo.

To understand how FAW has moved these new car models to mass production, we need to understand the gains made in assembly and parts and components capacity over the 1980s and 1990s. To better comprehend the development of the latest so-called national models at FAW we must follow the shifts in Toyota's strategic approach to China in the mid to late 1990s, and what finally made it willing to share the technology with FAW, China's most privileged auto group. Chinese state intervention in the mid 1990s had a major impact on Toyota's strategy with regards to China and its investment decisions in the late 1990 and early 2000s. The '94 AIP and the outcomes of JV bidding in Shanghai in the mid 1990s, where GM defeated Toyota and Ford to win the license to establish the second JV with SAIC (after VW), were pivotal in forcing Toyota finally to make the investment decisions that eventually led to its partnership with FAW. The '94 AIP put a temporary freeze on investment in assembly projects and implied that latecomers could be denied entrance in the foreseeable future.<sup>22</sup> It was also uncertain whether the conditions for China's impending WTO entry would change the terms of the foreign investment situation. This also spurred Japan's automakers.<sup>23</sup>

Honda was the first to react. Japan's number two automaker faced challenges in establishing a production base in China, but it made the decision to go into China with large-scale investment more quickly than its conservative rival, Toyota. Honda outbid GM's Opel Division and South Korean Hyundai to win the right to purchase Peugeot's JV assets in Guangzhou in 1998. It overcame the Chinese government's hesitation to grant it approvals to produce engines or to assemble for the domestic market by offering to export its product. Honda then applied its skill in taking over troubled foreign plants and transforming them into profit-generating facilities. It moved quickly in Guangzhou to transfer the technology and production systems, and thoroughly train the Chinese workforce to build its most current

Accord models, began expanding production, and established a new engine plant with Dongfeng.

Toyota's long-standing refusal to invest in production facilities inside China had come back to haunt it on the Shanghai JV bid. The combination of the '94 AIP, VW's profits, GM and Honda's advances, and the uncertainty of the investment environment following China's WTO accession spurred Toyota finally to take action in the late 1990s. Toyota regrouped and turned its attention to Tianjin, where Daihatsu (which Toyota controlled) had a longtime alliance with Tianjin Xiali. The main strategic challenge for all three of Japan's leading auto companies, Toyota, Honda, and Nissan, was as "latecomers" they had few optimal partnering opportunities left in China. Toyota realized that it would have to pay a very high price if it wanted to partner with any of China's "Big Three", and SAIC was not a possibility since it had just formed another assembly JV. The Big Three together controlled close to 70 percent of China's total car production. Even if Toyota realized that Tianjin was not the best investment scenario, it only had few options to demonstrate to China's central authorities that it was serious about investing in China. Beijing expected to see a shift in attitude from Toyota, and the most senior economic officials delivered this message. Senior economic leaders such as Vice Premier Wu Bangguo, who was then responsible for pillar industries and the country's state enterprise reforms, and SPC Chair Zeng Peiyan, stressed that the Chinese government expected that investments from Toyota would contribute to helping China ensure a smooth transition to a mature market economy.

There was no more talk of discomfort with the strict limits on JVs set by the Chinese government from Toyota senior executives. Toyota, and its affiliated suppliers, made a series of targeted investments between 1995 and 1999, establishing several new JVs with Tianjin Automotive Group (TAG<sup>24</sup>), to produce parts and components such as universal joints, castings, and steering components. Toyota poured US\$321 million into these investments. Toyota helped upgrade Tianjin Toyota Motor Engine into an "excellent production facility" (but did not transfer engine design or modification capacity),<sup>25</sup> offered to update the outdated Charade model that was still being assembled by TAG, whose plant was only running at one-third capacity due to slumping sales, and the rise of Chery and Geely in the minicar market. Toyota invested another US\$132 million to establish the Toyota China Technology Center in Tianjin, to train Chinese suppliers, and to build a network of dealers, service facilities, and motor vehicle repair centers. By 2000, over 30 of Toyota's Japanese suppliers had also established partnerships of various sorts in the Tianjin area.

In May 2000, after seven years of on-and-off negotiations with TAG, and only after Toyota agreed to help TAG to increase its production capacity to 150,000 Xiali cars per year – thereby enabling the struggling TAG to qualify for “key producer” classification – Toyota and Tianjin Xiali (the most valuable section of TAG) were granted central approval to establish a new JV, Tianjin Toyota Motor. Toyota agreed that it would transfer a significant portion of technology and technical know-how to build its popular, well-designed, economy-sized Vios model. In so doing, Toyota met the objectives of the State Economic and Trade Commission, and the State Development and Planning Commission which by the late 1990s, had come to fully support the production of smaller, fuel-efficient, private family-oriented cars. In addition, Toyota agreed to establish several other JVs with Chinese parts suppliers, to feed its new JV assembler, and would make concerted efforts to convince its major Japanese parts and component suppliers to increase their investment in the Tianjin area.

To further to demonstrate its newfound commitment to supporting Chinese national developmental goals, Toyota offered to branch out to western China. In the late 1990s, China’s remote interior provinces had become a geographical zone of developmental concern for central authorities.<sup>26</sup> In March 1999, the government issued the “Opinions of the State Council on Promoting Further Development of the Western Region”, which outlined “ten suggestions for the further development of the western region”.<sup>27</sup> Party leaders gave speeches announcing the importance attached to helping China’s poor interior regions to develop more rapidly. In 2001, Toyota announced that it would invest US\$67 million in Sichuan province to establish a new JV to produce compact buses. The Sichuan Toyota facility in Chengdu city would have the capacity to build 13,000 Coaster small buses and Land Cruiser Prado SUVs, and employ 1300 workers in relatively high-paying and stable jobs. Toyota presented its decision to invest in this landlocked western province not only as a significant business opportunity for all involved, but also a concrete demonstration of its support to the Chinese government’s development priorities and reform agenda. Through the cumulative efforts, and in fairly short order, Toyota demonstrated a previously unseen seriousness and willingness to transfer large sums of investment capital, cutting-edge technology and related technical know-how to China. Similar to GM, it set its sights on looking beyond merely generating profits, and spoke of its contributions to the modernization of China’s automotive industry, and even to the country’s broader developmental goals, including tackling uneven regional development.



The most important factor that led FAW to create a new line of national branded cars came in February 2002, when in a surprise move, Tianjin municipal authorities sold a controlling 51.9 percent equity share of TAG to the FAW Group. Tianjin officials were under significant pressure from the central authorities to rethink the future of the troubled TAG, including its controls and ownership of the local auto grouping. Central authorities were emphasizing the national auto industry's longer-term viability and renewed the SOE reform drive under Vice Premier Wu Bangguo. With the country facing impending accession to the WTO, and increased foreign competition, Beijing put serious pressure on local authorities to find options for mergers and acquisitions in the state enterprise sector, to build economies of scale that would be globally competitive.

A senior Tianjin commerce official explained that, as China's WTO entry drew near in late 2001, the Tianjin mayor had been called to attend "key Party economic meetings in Beijing for leading local Party officials".<sup>28</sup>

At these meetings, local leaders were instructed by senior Party and government leaders to make difficult decisions about how to restructure their local state enterprises, and that this was vital to ensuring the longer-term developmental viability of both the Chinese national economy and their local areas. Senior government leaders impressed upon local leaders that China's WTO accession meant that local Party leaders would need to make tough decisions regarding changes in the ownership and control of local state enterprises, and that this was the only way to ensure that the SOE reform strategy of "grasping the large, releasing the small" would be successfully realized.

After returning from the Beijing meetings, in the middle of a restless night of sleep, the Tianjin mayor suddenly sprung up from his bed and called the other leading city officials in the middle of the night to come to a meeting in the morning. That morning, the mayor explained that he had followed Beijing's instruction to think through every means possible to bring difficult but necessary changes in the local industrial structure which would help the national and local situation, and that he had decided that Tianjin would need to release its long cherished local automotive grouping, TAG, to allow controlling acquisition by FAW, China's leading automotive grouping.<sup>29</sup>

For Toyota, this unexpected acquisition of TAG by FAW meant a major upgrading of its Chinese partner. It unexpectedly opened the way for Japan's top automaker to work with China's most privileged automaker, FAW Group, ironically the same FAW that Toyota had spurned in the 1980s and early 1990s. Toyota and FAW came to an agreement that they would jointly produce a line of cars, ranging from economy minicars, mid-sized luxury models to SUVs. In 2003, the two partners announced that by 2005, they would be producing the Corolla, Land Cruiser Prado, and the Crown in China.

Equally important for FAW, as a political concession to the Chinese authorities, Toyota also agreed to share the technology with FAW to build a new line of Red Flag models. FAW had long maintained a separate line of so-called national models. The Red Flag brand had experienced a temporary resurgence in the early to mid 1990s with its "mix-and-match" redevelopment strategy using a 1980s Audi platform and technology. However, domestic surveys showed that these "hybrid" mix-and-match car models were generally rated as "low performance", "requiring frequent repairs", and by the late 1990s, the Red Flag-Mingshi (2200cc), or more colloquially, "small Red Flag", had run its course.<sup>30</sup> Even in the 1990s, the reinvented Audi *Hongqi* had trouble competing against the Santana from SVW. In the late 1990s, FAW tried to develop a new Red Flag model (5600cc), purchasing the license from Ford for the Lincoln Continental 98 ("Town Car") car model. But the decision to "go big" and "American" was completely out of synch with Chinese consumer preferences in the slow-growing luxury car market, which was geared toward luxury European brands, Mercedes Benz and BMW, or Japanese high-end brands such as Lexus. This led to debates about the long-term viability of the "Red Flag", and whether FAW should develop a new flagship brand. These debates raised difficult questions of identity for FAW, a state enterprise giant whose entire history and profile continued to be tied up with the project of state socialism in China. FAW received strong backing from Beijing to once again try to save this "homegrown brand", which for so long had been associated with the prestige of China's political elite.

Toyota's willingness in this period to provide FAW with the technology "to raise the Red Flag to a new level" essentially saved the brand.<sup>31</sup> FAW proudly announced that it would build a whole new Red Flag "fleet". In the JV deal, the venerable Japanese automaker agreed to produce a version of the Toyota "Crown Majesta" model (Lexus GS in the US market) with FAW, and most importantly "not to charge management fees on purchases of spare parts for the jointly produced automobiles".

This would allow FAW to once again utilize a “mix-and-match” approach to reinvent the Red Flag through borrowed parts and some purchased licensing for key components. FAW could also draw on the modernized national automotive supply system for some of the parts, and its accumulated experience in modern car assembly with VW to move to mass production of the new Red Flag.

FAW debuted the new HQ3 Red Flag at the Beijing Auto Show in November 2006, aiming at the upscale luxury car category. International experts commented that the new HQ3 *Hongqi* was a major improvement on the older Audi designs, including its Toyota-derived 3.0-litre V-6 and 4.3-litre V-8 engines.<sup>32</sup> The HQ3 was equipped with a night vision system, collision avoidance systems, projection speed display, intelligent adaptive headlight system, AFS, automatic guidance system, and a tire pressure warning system amongst others. FAW planned to build around 13,000 units a year, at its home plant in Changchun. There was even talk of producing a bulletproof version for senior Party and government officials. FAW announced in 2004 that it already had orders for 15,000 units of its new Red Flag models, had plans to export 10,000 cars overseas, and that it expected to sell 1 million of its “own car” models by 2008.<sup>33</sup> At the Beijing Auto Show (2005), the HQ3 was listed starting at RMB499,800 (US\$63,500) for the base 3.0-litre, RMB566,800 (\$72,000) for the upscale 3.0-litre, and RMB688,800 (\$87,500) for the 4.3-litre.

In 2006, FAW added another model to the *Hongqi* fleet, called the “Besturn” (*Benteng* or *Hongqi* C301), which is a reworked Mazda 6. It also introduced a smaller C1 model, which is produced on the same assembly line as the FAW–Toyota Vizi and Vela, which are adaptations of the Toyota Echo. What surprised international and Chinese observers the most was that FAW showed a new *Hongqi* HQD limousine concept car at the 2005 Shanghai Auto Show. The design of the *Hongqi* HQD resembles the high-end luxury Rolls-Royce “Phantom”. FAW planned to begin production of this new *Hongqi* HQE limousine, which is powered by a new 6-litre V12 engine, sometime in mid to late 2009.

In May 2007, FAW senior management proudly announced in a press briefing that the value of its “Red Flag” brand had been restored, and was worth RMB5828 billion.<sup>34</sup> However, the sense of triumph was short-lived. On April 8, 2008, the *Beijing Morning News* reported that FAW acknowledged that its two “own brand” models, Besturn and Red Flag, lost a combined total RMB200 million (US\$28.5 million) in 2007. The company reported that its net profit doubled from RMB276.53 million

in 2006 to RMB552.87 million in 2007, however none of this profit was generated by its three vehicles under the Red Flag brand. Besturn (*Hongqi* 301) and Red Flag lost RMB150 and 50 million respectively. The only profitable model was the Mazda 6 model which was produced in Changchun, registering a net profit of 37.5 percent (RMB47.8 million) in the previous year. FAW decided to spend another RMB2.1 billion (US\$300 million) during 2008 to build a new production facility for the Besturn and C1/Mazda 6 lines, including a new RMB695 million engine plant, which would increase the annual capacity of “self-made engine” units to 90,000. FAW announced that it intended to commit over 70 percent of its total investment into developing its “own brand” vehicles in the future. This included another RMB821 million to be invested in developing another brand, a new FAW branded car, based on the Besturn platform, and that part of this new investment capital would come from floating stocks on the Shenzhen stock exchange.

### **SAIC: turning UK decline into Roewe**

Shanghai Automotive (SAIC), which had abandoned its own brands earlier, chose a different strategy from FAW. It decided to develop its own Chinese car brands and model. It sought to acquire independent capacity by taking over bankrupted foreign auto companies. In 2004, SAIC spent US\$500 million to acquire a controlling 48.92 percent equity share of Ssangyong Motor, South Korea’s financially troubled, fourth largest automaker.<sup>35</sup> With this purchase, SAIC gained Ssangyong’s technically competent SUV models, and its technical personnel and staff. In 2005, SAIC purchased the technology from the Rover 25 and 75 models from bankrupt MG Rover, plus the accompanying engines. SAIC’s path to independent models was partially determined by the fact that it no longer had its own assembly facilities, as both its assembly facilities were co-owned with VW and GM, respectively. It made the most of its situation by going transnational.

SAIC’s efforts were a response to the growing tide of public criticism it was receiving. It was singled out as the example of how a profitable Chinese automobile corporation had relied too heavily on foreign partners to rebuild itself, and had not developed any national brands or models. SAIC sold more than 800,000 vehicles in 2004, more than half of which came from its model JVs, and a number were straight foreign imports from its JV partners. Chinese industry analysts noted that although SAIC had joined the ranks of the Fortune 500 (421) by 2004, it had not developed any indigenous car models or brands. The public

criticism, growing international IPR pressure, the rise of the aggressive new Chinese independents, and the Chinese government's growing support to the independents, combined to force SAIC to give more attention and resources to developing its own homegrown auto technology, brands, and models.

At a speech to the Fortune 500 Global Forum in Beijing in May 2005, SAIC's CEO Hu Maoyuan pledged to sharpen the company's "core competitive edge" in the coming years by "speeding up the development of SAIC's own brands".<sup>36</sup> Hu explained: "The very mission that we must perform urgently is to develop our own brands, though we have already made enormous progress in the fields of manufacture and research in the auto market."<sup>37</sup> He added, "We have several principles on which to develop our own brands: be open-minded, never reject foreign partners, and never get involved in IPR infringements", and outlined the four "paths" which SAIC will use to develop its own brands:<sup>38</sup>

- SAIC should fully use global sources
- Welcomes partnerships with world auto companies, and to share in SAIC's pursuits
- This does not necessarily mean walking away from SAIC's current foreign partners, as it may be possible to use the JVs to produce SAIC brand products<sup>39</sup>
- International acquisition – through buying out foreign auto companies' management or brands

In May 2005, SAIC announced that it would begin selling cars under its own national brand based on the Rover 25 and 75 models in 2007.<sup>40</sup> The Shanghai automaker confounded its foreign partner-rivals when it launched its new brand of luxury cars in January 2007, a model called "Roewe" (*Rongwei*). The Chinese government's IPR Protection Office wrote that the launch of the Roewe symbolized SAIC's successful initiation of a "self-owned brand", and how SAIC was meeting the challenge that the nation's entire automotive industry faced in shifting to the next stage of auto development.<sup>41</sup>

SAIC management highlighted that the production of the Roewe had built on the achievements of the previous two decades in automotive modernization. SAIC said that the company "did not indiscriminately imitate others but rather has digested experiences from its joint ventures over the past 20 years with Volkswagen, and now 10 years with GM". Hu Maoyuan noted in media interviews that "those sharing their experience and skills with others sometime have tricks up their sleeves", and

“so China has to equip itself with core competitiveness if it is to be strong in automotive production”. He added that SAIC’s experience in digesting experiences from its two top JVs has provided it with a “comparatively high starting-line” in developing and producing its own brands, and gave SAIC a “base of confidence” to initiate building its own brand using the Rover takeover.

The actual path to developing the Roewe model and brand required SAIC to respond in innovative ways to challenges that it had not encountered in the JV activities with VW and GM. Ford exercised its “first right of preemption” to prevent SAIC’s acquisition of the Rover brand in order to protect its “Land Rover” trademark.<sup>42</sup> Ford’s intervention delayed SAIC’s bid to take over the entire line of Rover cars and MG roadsters, and put the whole purchase under intense international scrutiny.<sup>43</sup> In the end, SAIC purchased the IPR for Rover’s core technologies, including Rover’s 1.1 L to 2.5 L series of motors, and the core technologies for the Type 75 and Type 25 platforms. But the deal excluded the Rover brand. This meant that SAIC would have to create its own new car brand if it wanted to sell the product that it had just purchased.

SAIC executives expressed indignation when discussing Ford’s actions. Hu Maoyuan was said to “grow quiet” when noting that Ford exercised its preemption right at “such a critical moment in the purchase, waiting until the eightieth day of the ninety-day pre-emption period”.<sup>44</sup> Hu explained that

SAIC wanted to buy Rover, in part, because Rover’s sales volumes of 100,000–150,000 cars in Europe and the Americas would have given SAIC immediate exports. However, Ford’s decision only made us [SAIC] more determined to increase our input and establish a completely self-owned and internationalized brand, and to do so from a high starting point.

Within a month of Ford’s decision to preempt SAIC’s Rover purchase, the Shanghai automaker announced its own brand would be called “Roewe”, and followed this up by publicizing the Roewe brand at the 2006 China Industrial Expo and the Beijing and Shanghai Auto shows.

According to a SAIC statement, “the meaning of Roewe is to elevate to a higher standard of innovation, to capture cosmopolitan sophistication, and establish an immediate innovative classic”.<sup>45</sup> The Roewe is said to integrate 14 high-end technologies from luxury European cars, a body design (sculpting) that is a leader among cars of the same class in China matching the Audi and BMW in terms of technological

configuration. It took over two years to create the Roewe 750, and SAIC established a group to work with the British Rover team to begin designing a Roewe fleet. Former Rover and Ssangyong engineers are now in Shanghai helping to do the design work for SAIC. SAIC also brought together 200 engineers at a new European R&D Center for its "Richardo 2010" project, which includes 150 European and 50 Chinese engineers. Of this group of European engineers, 120 are "elite engineers" from the R&D staff of MG Rover. Hu states that it is "absolutely possible for SAIC to make good use of resources in the world to establish internationally recognized brands", and that "such innovation means not simply following others but SAIC stepping out onto its own road".<sup>46</sup>

SAIC's plans do not end with the Roewe. Hu Maoyuan announced that SAIC Motors plans to produce 2 million vehicles a year by 2010, including 600,000 cars that will be under SAIC's own brand, and achieve RMB400 billion in sales. Arguably the most important "self-owned brand" project for SAIC is the lower-profile project at its plant in Yizheng, Jiangsu province. It is with this project that SAIC has caused its foreign partners and rivals the most worries as it moves to implement its strategy of "utilizing the skills from the joint venture companies to build SAIC brand name products". By late 2007 SAIC already had the SAIC logo – a curved "S" – appearing on 50,000 vehicles from the Yizheng plant alone.<sup>47</sup> The goal of selling 1 million vehicles with the SAIC logo would enable SAIC not only to stay in the Fortune 500 list but would allow it to move up to sixth place among the world's largest automobile producers, its ultimate goal. To accomplish this, SAIC cannot rely on the luxury car category alone. At the Shanghai Yizheng Automobile Corporation Ltd plant, a five-hour drive west of Shanghai, SAIC employees were already working toward producing another car model to be sold under SAIC's own brand, named the "Sabre", which looks like a station wagon model of GM's Opel Corsa.<sup>48</sup> A German source made two observations after making a tour of the dimly lit plant: first, that SAIC still has tremendous hurdles to overcome and is taking an "obsessive approach" to overcoming them.<sup>49</sup> It now has a team of about 20 SAIC engineers busily working on the details of the Sabre model. Second, the plant's 1600 workers earn an average of €180 per month, assembling about 200 cars per day, usually not the Sabre but the basic version of the Santana for SVW, meaning significant cost advantages, in comparison to its own VW and GM subsidiary operations.

By 2004, already 90 percent of the Sabre consisted of Chinese parts, and the aim of the Yizheng plant manager was to reach 100 percent local parts within a year.<sup>50</sup> In 2003, SAIC produced 2245 units of

the Sabre. At that time, Sabre model vehicles were only being produced once a month on the plant's assembly lines. But the Yizheng management was not discouraged, and plant manager Huang Jianping said that "the Sabre is only the beginning".<sup>51</sup> Hu Maoyuan, hoping further to reduce SAIC's dependence on imports of key parts, has been trying to convince more high-quality foreign suppliers to move their most sophisticated and higher valued-added manufacturing and design activities to China. He has been telling medium-sized German supply companies that if they wish to continue supplying parts to SVW, they should relocate to China. Yizheng could become the auto production base for SAIC's own line of economy and mid-range class of cars, as well as for passenger buses and small-sized commercial vehicles. Officials from the Yizheng local government note that,

SAIC Yizheng Company Ltd., has produced its multi-use Sabre in batches, with an annual production capacity of 30,000, and that SAIC has further intentions to cooperate with Yizheng in establishing a new-model automotive production base, and research & development facilities – a new development base with independent intellectual property rights.<sup>52</sup>

Yizheng officials proudly state that the improvement of SAIC's Yizheng factory is part of the "three strategic targets" in SAIC's five-year future plan.<sup>53</sup> In addition to Yizheng, the entire Shanghai suburb of Anting, home of SVW, is being redeveloped by SAIC and Shanghai officials into a new automobile manufacturing city, China's "Wolfsburg". By 2010 it will be completed, and will include worker housing, plants, suppliers and research and design laboratories. SAIC and its various local government allies appear to be committing huge amounts of investment to push ahead on building Chinese self-reliant technological capacity. Ever mindful of his broader national developmental responsibilities as not only corporate CEO, but also as the Party secretary of SAIC, Hu Maoyuan says, "We've kept our promise to society not only to build a modern plant and produce modern products but also to develop modern people."



# 9

## Vulnerabilities: View from the Inside

We have described how China modernized key segments of the automotive industry from the mid 1980s onwards, turned itself into a large-scale producer of more modern vehicles, a major source of low-cost auto parts, and potentially becoming a significant exporter of inexpensive cars within the next decade. However, despite this rapid growth, the fast-growing domestic auto market, and the recent rise of a new generation of “nationally” branded models, the reality is that the Chinese auto industry displays significant limitations. Product quality, design and systems integration skills, and management capabilities remain weak.<sup>1</sup> This general prognosis is supported by intensely critical and ongoing debate inside China on the situation of the national auto industry, two decades after relying on a JV-led modernization path and a strategy of “exchanging the Chinese market for foreign technology”. Public criticism of China’s major foreign-invested JVs has intensified since 2001. Chinese observers have questioned the longer-term developmental impact of the Sino-foreign JV strategy. Although the country can now produce modern car models, it has also become heavily reliant on foreign technology and technical know-how. Large Chinese automakers are said to have reaped huge profits from their JVs with the foreign MNCs, yet have put the long-term viability of the Chinese national auto industry in a precarious position because they failed to foster “independent” or “self-reliant” (*zizhu*) vehicle designs or strong internationally recognized brands.

The director general of the China Automobile Manufacturers’ Association, Zhang Xiaoyu, says that although China has evolved into a country that has large-scale and modern automotive manufacturing capacity inside, and is on the way to becoming a stronger automotive industrial nation, the reality is that it still has a long way to go before it can be considered “strong” in terms of indigenous

national production and design capacity.<sup>2</sup> The president of the China Automotive Engineering Society, Fu Yuwu, argues that the most fundamental issue for the Chinese automotive industry is the need to shift its mentality to grasping the national importance of “independent development” (*zizhu kaifa*) and fostering indigenous brands and R&D capacity.<sup>3</sup> What the public debate inside China, studies commissioned by the government, and primary research by this author suggest is that serious limits to the developmental outcomes have emerged after two decades of the JV-led auto modernization strategy – despite the impressive modernization gains that have been made.<sup>4</sup>

The terms and conditions for China’s accession to the global trading regime constrain the Chinese state’s ability to force content localization, as it did during the 1980s and 1990s. In the period since WTO accession, the Chinese government has been exploring less overt methods for circumventing some of the international regulatory constraints. They sense that indiscriminate application of the norms and rules of the global trading regime could further intensify the developmental limits that were emerging prior to China’s formal accession to the WTO in December 2001. While the conditions of WTO membership have not completely eliminated the Chinese government’s right to formulate and execute industrial policy for the auto sector, a number of policy levers that it used effectively in the recent past to mediate the terms, content, and direction of foreign investment are now illegal under the rules of the WTO, especially those pertaining to “nondiscrimination”, “national treatment”, and “fair competition”.

## **Branding and research and design**

Impending accession to the WTO gave rise to concern inside China that international competition would harm the fledgling local auto industry since the country would have to eliminate customs duties and open its domestic market. Commentators emphasized that China’s main automakers lacked homegrown brands and independent innovation and design capacity.<sup>5</sup> SAIC became an object of criticism as Chinese observers pointed out that the Shanghai automaker had become the largest and most profitable car producer in China, and had joined the Fortune 500, but it was not producing any “domestically self-developed” cars. They also noted that the state-owned auto giants, FAW and Dongfeng, needed to transform themselves from loss-making enterprises, but more importantly, that Dongfeng had abandoned producing homegrown models, and that sales of FAW’s “Red Flag” brand were languishing by

the late 1990s. If fostering indigenous industrial capacities is important for a nation's development, then one of the downsides of the path that China has taken to modernizing its auto sector has been overreliance on foreign design and innovation, and inadequate development of indigenous capabilities. Researchers in the country's automotive research centers and related government organs have found that the level of technological and R&D skills absorption among China's automakers was limited – "we have absorbed much less technology and technical know-how than we should have" – despite the high levels of foreign partnering in the industry with both vehicle manufacturers and suppliers.<sup>6</sup> Gallagher's analysis of technology transfer in three US–Chinese JVs shows that

while U.S. firms were effective at getting foreign models into production in China (and improving Chinese manufacturing capabilities in the process), U.S. foreign direct investment did not strongly contribute to improving Chinese innovation capabilities in the automotive sector because little beyond how to manufacture was transferred along with the product.<sup>7</sup>

The Chinese government's strategy of relying on JVs and imposing local content rates was aimed at encouraging technology transfers from the leading international automakers, based on the expectation that this would lead to fostering domestic R&D capacities. The '94 AIP contained explicit R&D clauses for foreign investors. Yet after over more than two decades of joint venturing and partnering with foreign automakers and parts producers, China still lacks R&D and design innovation capacity. A UNIDO-funded study (2005) found that China's shortage of R&D and design capacities applies equally to component suppliers at the various tiers.<sup>8</sup> The domestic industry has continued to rely on foreign manufacturers (JV partners or license providers) to provide product designs, as well as imported tooling, manufacturing equipment, and production expertise. The lack of product innovation and R&D capacity to develop a component from the concept stage to the final manufactured item means that many Chinese parts makers are *de facto* excluded from the bidding processes to supply new vehicle production inside China.<sup>9</sup> This is not to discount that select Chinese suppliers have emerged recently, especially in lower-valued-added parts segments, such as mufflers and car seats, and these producers possess internationally competitive manufacturing capacities, and have even started to challenge more established suppliers in international markets.<sup>10</sup> The cutting-edge local suppliers are

usually closely linked to the most successful JV assemblers, or were cultivated by the foreign automakers originally to meet the government-imposed localization requirements of the 1990s, and have more recently been spurred by growing market competition inside China.<sup>11</sup> However, the general situation is that of limited design, R&D and product innovation capacity for a large segment of local Chinese suppliers, across a range of component areas, ranging from higher-end more sophisticated components, to low-end first-tier suppliers. As a result, many Chinese suppliers have been relegated to contract manufacturer status with the big assemblers, unlike European, American, or Japanese counterparts which are more fully integrated in China as full service suppliers, from parts design to manufacturing. The foreign parts companies which have relocated to China thereby occupy a more stable valuable place within the international production chain.

The pattern of a lack of transfer of the highest value-added segments of the production chain has been replicated in China's latest high-profile JV, FAW–Toyota. Japanese researchers find that domestic Chinese suppliers have actually made few inroads in supplying the more sophisticated and higher value-added parts and components for the new Toyota models being assembled in Tianjin. The main reason given is once again the inadequate product quality of Chinese suppliers. Toyota has continued to prefer sourcing of key inputs from traditional Japanese suppliers in its *keiretsu* network. Local Chinese suppliers are supplying low-tech labor-intensive parts and components to the new JV operations. A senior Chinese purchasing executive in the Sino-Japanese JV expressed “embarrassment” over the limited level of local contribution.<sup>12</sup> In order to counter the potential criticism in a period of growing public questioning of the JV-led auto development strategy, Toyota has made public announcements to the Chinese media that it will increase the level of local inputs in its JV projects in the future.

China's inadequate R&D and design capacity in the automotive sector is acknowledged by Chinese authorities and industry experts, and the 2004 AIP continues to try to address these deficiencies. The previous AIPs showed that Chinese authorities saw developing indigenous R&D and innovation capability, and Chinese brands, as crucial objectives. For Chinese state planners, and economic nationalists, realizing world-class quality and productivity standards inside China is not enough. The nationality of the firms matters. Segal calls this China's “techno-nationalism”.<sup>13</sup> Chinese planners see it as “necessary regulation to protect the public good in China”.

## Why limited diffusion?

What accounts for the limited diffusion of R&D and innovation capabilities in China's domestic automotive industry? Why has China absorbed so little advanced design and innovation capacity? Why has China made limited progress in developing its own brands? The answer to these questions appears to lie in a combination of external and domestic factors. Gallagher, in answering why US firms did not transfer design and innovation skills along with manufacturing capacities and the products, and why Chinese firms were unable to learn how to design vehicles themselves through the technology transfer process, emphasizes the Chinese side of the equation: "The failure thus far of the Chinese firms to learn how to design and produce vehicles themselves through the technology transfer process can be mainly attributed to a lack of initiative and creativity on their part to learn more from their foreign partners."<sup>14</sup> Gallagher does add:

The foreign companies have viewed their Chinese counterparts as manufacturing and assembly partners, not strategic partners for the longer term, because otherwise they would have invested more in strengthening Chinese technological capabilities so that they could contribute to product development and innovation. This indicates that the U.S. and other foreign firms are afraid of spawning competitors and that there still is a lack of trust and true partnership between the U.S. and Chinese firms.

Five reasons have been given for why FDI from the American MNCs did not "substantially contribute" to improving Chinese innovation capabilities.<sup>15</sup> First, American firms did not see themselves as responsible for teaching their Chinese partners how to innovate and improve their technological capabilities. They focused instead on teaching how to install and operate manufacturing equipment, work with parts and component suppliers to maintain the quality of their inputs, how to ensure the profitability of the business, how to train workers on the assembly line, and how to adapt the product for local markets. Second, US firms saw their Chinese partners as counterparts for manufacturing and not for innovation; they transferred "sufficient" knowledge to give their Chinese partners manufacturing and project implementation capabilities. The American firms have not tried to cultivate the innovation capabilities of their Chinese partners.<sup>16</sup> The cost-benefit calculation of the US firms was to focus on what was needed for short-term investment

returns, and only to engage in longer-term capacity building if there was an immediate and direct financial rationale. GM was the major exception. It has allocated significant investment to improve technological capacities in China, both at PATAC and the university system. In early 2005, GM added another \$254 million to PATAC. Third, the JVs were structured primarily to launch foreign auto models into production inside China and maximize near-term profits for the JV partners, not to spark innovation in new technologies or products for the future. The Chinese side always held out hope that they would somehow acquire technological innovation capabilities through the JVs, but the US firms were focused on short-term motives (GM again being the exception). The lack of investment on the side of Chinese JV partners also suggested that they had largely abandoned the innovation drive. Fourth, the Chinese government failed to design and implement an aggressive, consistent strategy for the acquisition of technological capabilities from foreign investors. The '94 AIP was the Chinese government's attempt to articulate a strategy similar to that of South Korea, but the implementation of the R&D transfer-related conditions was haphazard. "Weak and inconsistent government policy" accounted for the variation in technology transfers over time. Some Chinese observers also suggest that China would only move beyond being a manufacturing base if the government invested more heavily in R&D. The weak Chinese state auto companies are said to be laggards in building their own R&D facilities. Fifth, there are no binding international rules governing FDI transfers.

Experienced Chinese observers place the blame on the Chinese firms and the "JV structure" for the lack of Chinese design and innovation skills development within the JV arrangement. Gen Shaojie, former head of FAW, offered the self-criticism that the Chinese management in the JVs and in the parent state companies had been "short-sighted". Gen believed that the "JV structure" led the Chinese management in the JVs and the parent SOE to ignore indigenous national capacity building, and instead seek easy profits. Excessive focus on introducing foreign technology to pursue increased production levels carried the longer-term risk of denationalizing China's car industry.<sup>17</sup> This line of criticism explicitly recalls how Chinese automakers either downsized or gave up their R&D programs when their plants were merged into the JVs in the 1980s and 1990s.<sup>18</sup> The most dramatic image was the ceremonial razing of the workshops of the Shanghai Saloon Car Plant on 25 November 1991, that was meant to symbolize SAIC's full-scale commitment to developing foreign model Santana cars, and the launch of Phase II of the SVW project.<sup>19</sup> SAIC, with agreement from the central authorities,

also terminated further production of its own brand, Shanghai Sedans, and its line of automotive trucks.<sup>20</sup> Chinese critics suggested that this ceremonial decimation of SAIC's own production facilities marked a key moment when China handed over a much greater say on technology decisions at the JVs to the foreign partner. The termination of production of SAIC's own branded cars also meant that local Chinese parts producers had to reorient their supply lines to only supplying for the Santana. These changes did raise the ratio of local content to 60 percent by 1990, and then 90 percent in 1997. However, the price, according to the critics, was that SAIC lost its own brand, and even more broadly, abandoned what a Chinese industry analyst called "SAIC's original foundation for automotive development".<sup>21</sup>

Critics also drew attention to the more recent examples of Dongfeng Motors and Guangzhou Honda, cases where the Chinese partners relinquished technological control to the foreign partners. The result was that except for minor parts modification, the engineers in Dongfeng's R&D center had few substantial tasks to perform. The Chinese management started to see Dongfeng's technology center as less significant and did not allocate sufficient resources to it. This led to layoffs of Chinese engineers, and in 2001 a group of more than 20 engineers from the sedan department in Dongfeng's technology center left and went to work instead for Chery, where they could help the "independent company" develop its own models.<sup>22</sup>

The JV structural argument subtly alludes to unintended consequences of the package of policies that accompanied the Chinese government's JV strategy, which also relied on stringent use of trade and market entry barriers to provide the model JVs with a protected market environment, to secure the profitability of the business venture. The goal was to ensure that the foreign partner was kept satisfied, in return for technology transfers. However, behind such protectionist walls, both Chinese and foreign JV partners could take advantage of their monopolistic position, and reap major if not excessive profits, simply by overpricing their vehicles. This situation created disincentives for foreign partners to support technology upgrades, and allowed them to try to lengthen the life of outdated products and equipment rather than transferring newer technology and work on substantial product adaptation or introducing new products. The prime case was VW's Santana in Shanghai. As late as 1999, only 10 brands and 20 models were available in China, and SVW still earned a profit of US\$723 million in 1998 and 1999 selling 230,000 outdated Santana sedans.<sup>23</sup>

Chinese JV heads have tried to explain that the major factor that accounts for China's delay in developing innovation and R&D capability was because the country's catch-up modernization needs were so great in the auto sector that priority had to be placed on introducing new technology and increasing domestic production levels rather than focusing on developing indigenous design and innovation capacity. The Chinese partners in the JVs often had to scramble to keep up with the evolving needs of the JVs' operation, and their energies were consumed by having to measure up to the demands of their more advanced foreign partners. One consequence was that the most capable Chinese staff in the parent SOE were shifted to the JV in order to ensure that the Chinese side could meet the higher level of performance requirements required in the JV arrangements.<sup>24</sup> The most capable local engineers and design staff were shifted to focusing on product adaptation for the JV. As the national domestic branded car models of the Chinese parent enterprise became noncompetitive relative to the "foreign models" produced in the JVs, the Chinese partner enterprise had less and less incentive to allocate its scarce human resource talent to upgrading the Chinese branded models, or to developing new product lines. Some Chinese auto executives even tried to counter mounting public criticism of the JV strategy, up till 2004, by suggesting that this focus needed to be maintained. The general manager of FAW explained in an interview on Chinese television that: "We have no time to do development now as we are very busy ... producing Jetta and Bora. We should wait some 20 years to have strong development capabilities."<sup>25</sup>

Chinese academic researchers who have conducted in-depth analysis of the current situation of China's auto development for the Ministry of Science and Technology (MOST) have suggested that the JV strategy is not likely to lead to building independent auto production and design capacity, because the introduction of foreign models does not automatically mean a transfer of R&D capabilities, given that the foreign partners do not want to foster the autonomous capabilities of their Chinese partners.<sup>26</sup> The longer-term risk of continuing to rely heavily on the JV strategy is "disappearance of independent initiative" on the part of the main Chinese auto companies. The policy recommendation in the MOST-funded report is that if the goal is to spur and support the development of China's indigenous automotive production and design capacities, then more government support should be given to market-competitive medium-sized independents, such as Chery and Geely, and to reduce the emphasis on the large JVs and large-scale state automotive groups.<sup>27</sup>



It is not clear, however, just how far the smaller independents have actually advanced their "own" technological innovation and design capabilities either, given that they have also relied in part on hiring foreign consultants to do design and product adaptation work. It is therefore difficult to decipher exactly how much of Chery and Geely's product innovation accomplishments are "indigenous" versus "foreign", even if the independents make sure to secure international and national patents (the IPR) for the newly adapted or designed products. Other Chinese analysts continue to place their faith in the Chinese SOE partners in the JVs, calling for them to adjust their arrangements with the foreign partners to "free up" the Chinese partner to pursue self-development and to pressure the foreign partners to support the Chinese partner in developing new car models.<sup>28</sup> Another step would be for the JV partners to design and produce completely new brand names for the new models; new brands that symbolize the JV partnership rather than the existing practice of using the brand of the two partners conjoined by a hyphen.<sup>29</sup>

Researchers associated with the NDRC emphasize that the foreign partners in the JVs, "being corporations that are locked in market competition", keep their most value-added parts of the value chain in their home operations, and do not want to transfer their most advanced technology and research and design skills to foreign production bases, for fear of directly creating their next generation of competitors. They suggest that China's "poor record in digesting foreign technology" has been caused "at root, by the strategy of the foreign partners". They add, "We have seen how many times the Chinese partners have asked for more advanced technology, either vehicle models or parts, and to help develop research and design skills of the Chinese side, and these requests were resisted by the foreign partner. The importance of the State Planning Commission is to force them to do so." Bernard and Ravenhill identified a similar dynamic of Japanese MNCs holding back their highest value-added segments in the Japan-centred regionalized production networks in East Asia in the 1980s and early 1990s.<sup>30</sup> Chinese state planners and their affiliated researchers suggest that a similar dynamic has been inherent in the international production networks that were established in China's auto industry: a lack of diffusion of R&D and innovation skills.

One Chinese researcher suggested that even those foreign automakers that appeared to have been more cooperative in meeting the R&D transfer requirements contained in the '94 AIP have subverted (either unintentionally or intentionally) the objectives of these demands.<sup>31</sup>

In his view, the MNCs use the new R&D technology centers not to transfer cutting-edge technology and design knowledge, but to constrain China's own domestic automotive research and design capacity-building efforts by "taking over" the research agendas of their Chinese partners:

The foreign automakers have maintained control over the research agenda, by buying out the best and brightest, next generation of Chinese engineers and researchers. They identify the best young engineers, hire them, and place them in the newly established R&D centers that are either affiliated to the JV, owned by the foreign parts producers, or the ones they have helped to create in the universities. But the young engineers are left only to modify and adapt existing technology for the local Chinese market or left simply doing nothing.

He added:

In actuality, the research and development sponsored in these foreign supported R&D centers has not led to any substantial new automotive products being produced inside China. If one closely examines the kind of research that has been conducted, we can see that it has focused overwhelmingly on technological improvement on existing products, and adapting existing products to suit local taste and needs. There has been little, if any, innovation or new design. Or even transfer of research and design skills for new product development. In fact, not only the key technologies, but also the key design skills have been kept in the home country of the foreign multinationals.

The conclusion is that even though it was stipulated in both the 1994 and 2004 AIP, that each new JV must be accompanied by the establishment of a new R&D facility, there had been "too much thunder, not enough rain" (*leisheng da, yudian xiao*). The research groupings that were created in these MNC-supported technology centers have been "passive" (*beidong*), and "have not demonstrated real initiative and innovation. These centers provided little if any input into vehicle development." In Shanghai, GM made sure to secure agreement from the Chinese side that the development of new models would be carried out in GM's design departments back in its American headquarters, and then transferred to China. The model JVs were used by their foreign partners as manufacturing bases inside China, to access the Chinese

market, not as vehicles for product innovation. The R&D centers were largely showcases of compliance to the R&D requirements in the '94 AIP.

The combination of public criticism and the IPR lawsuits launched by the foreign partners in the large JV projects tipped the balance in the auto policy debates, and brought Chinese authorities around to seeing heavier investment in costly indigenous R&D and innovation for developing independent models and national brands as a necessity.<sup>32</sup> However, this shift in investment commitment came at the same time that Chinese strategists grasped that they were dealing with a changed world environment of economic globalization, in which not only had intensifying international competition become the order of the day but that product cycles in the automotive sector were shortening, making product obsolescence a constant concern. The risk from not investing more in indigenous R&D, and failure to build indigenous capacity for future national innovation capacity and car models to keep pace with product evolution, was now potentially losing the catch-up gains which China had painstakingly achieved in the auto sector over the 1980s and 1990s.

### **Impact of WTO accession**

The issue of China's WTO membership also became a focal point for intense domestic policy debate on China's auto industry. Proponents of China's WTO accession insist that it is too simplistic to discuss the impact of China's WTO accession in terms of "winners" and "losers", or to fixate only on negative impacts. They emphasize that entry into the global trading regime has had two types of impact: upside and downside. Chinese leaders agree, and are banking on the upside outweighing the downside. Chinese commerce officials have tended to focus on identifying and pursuing comparative advantages, and devising export-oriented means for accentuating the upside impacts, and minimizing the downside, while keeping China on a path of continued international integration. Other supporters of comparative advantage theory in the Development Research Center of the State Council believed that, in the era of economic globalization, less attention should be given to the "nationality" of the carmakers as long as they produce inside China and pursue exports.<sup>33</sup> One researcher argued that such export gains enable China to transfer its comparative advantages into international "competitive advantage", and that in doing so China could take a third way that was different from either the self-development drive of the South Koreans or the complete takeover by foreign auto firms in the Brazilian

model.<sup>34</sup> State planners and officials in the industrial bureaucracy have a different perspective. They explained that Chinese authorities “do not need to worry about the upside of WTO entry – but only the downside. The upside will take care of itself. The Chinese government needs to be concerned with the downside impacts, and what it means for people’s lives.”<sup>35</sup> The advocates of national industry criticized the various comparative advantage policy options as ultimately leading to a scenario of the foreign automakers consigning China to production of low value-added parts and providing cheap labor for final assembly.<sup>36</sup>

The differences between the supporters of comparative advantage versus national cars came to a head in the 2005 debate between China’s former chief WTO negotiator, Long Yongtu, and He Guangyuan, the former minister of machinery industry.<sup>37</sup> Long argued that it was easy to put excessive focus on building national brands and models, and that doing so could lead China to making mistaken investments of scarce resources to supporting extreme versions of self-reliance. For China to achieve successful development in today’s globally integrated auto industry, particularly after becoming a WTO member, it should continue to focus on attracting investment from the world’s leading automakers, and to continue learning from them to ensure national improvement, and most importantly, develop export competitiveness rather than focusing on building national brands and holding off foreign involvement. He Guangyuan believed that China needed to adjust the auto modernization path, including elements of the JV strategy. He explained that China’s historical experience of cooperating with foreign automakers had shown that engagement itself would not automatically lead to the technological and managerial learning which would further enable China to develop its own national brands or independent IPR; that the country had basically caught up to international standards; and that it was time to shift to a higher stage of automotive industrial evolution in which China focused on developing indigenous R&D capacities and on building a group of internationally competitive national enterprises. Continuation along the current path would ultimately mean China being controlled by foreign partners in the JVs, and that this was not the goal of China’s auto policy.

In 2004, prior to the Long–He debate, the Chinese government issued a new AIP which emphasized independent development, renewing the call to “increase R&D and technological innovation capacity”, “actively develop projects with independent IPR”, “implement the strategy of promoting national brands” and export promotion.<sup>38</sup> It noted that enterprises implementing independent development would be granted

preferential tax treatment.<sup>39</sup> It also called for China's automotive companies to become involved in international markets on a "significant scale".<sup>40</sup> Starting in 2006, the CCP and government leadership also put renewed emphasis on national innovation for all sectors.<sup>41</sup>

There is recognition that the operating environment for Chinese automakers has changed since late 2001. According to state planners:

In the past, Chinese state auto companies could hide behind protectionist walls, and prior to China's WTO accession, foreign investors and the Chinese partners were basically in a "win-win" situation. Steady profits, earned in a fairly stable competitive environment, meant that both sides could build up their future investment capacity. The local content requirements meant that large amounts of technology were transferred, even if it was largely outdated. However, this has changed since WTO entry. It is also possible to suggest that the "catch-up phase" for China's auto industry is drawing to a close, and that China must now shift to a new phase of product innovation if it is to sustain the modernization drive. We have to make a big push on scientific and technological innovation inside China. However, the terms of our WTO entry have brought some serious new challenges. We previously had policies and regulatory tools to control.

The potential negative impact of China's WTO entry for leading Chinese automakers was evident to them prior to formal accession, despite the fact that most of them already had at least two large-scale and successful foreign JV partners. SAIC's Hu Maoyuan stated that, "when China enters the WTO, all our companies must become globally competitive very fast".<sup>42</sup> In November 1999, a leading representative of FAW voiced its concern: "We need another two to three years. It's not just our company; the restructuring of the whole auto industry needs it."<sup>43</sup> A general sentiment across the Chinese government was that the terms of WTO membership entailed the security risk of state enterprises being targeted for takeover by foreign firms, and China losing sovereign control over key parts of the economy.<sup>44</sup> It was also generally understood that the auto sector was particularly vulnerable to mass layoffs due to the lack of international competitiveness of China's many small and inefficient vehicle and parts producers, which would be facing tremendous pressure to close. One Chinese official estimated that China needed at least nine years for the auto industry to be competitive under WTO rules.<sup>45</sup>

Contrary to "WTO pessimists", Noble, Ravenhill, and Doner argue that China's WTO accession has not had the negative impact on

China's auto sector development that many had imagined, and in fact, has had a positive impact of "disciplining" China's automotive industrial development for the longer term.<sup>46</sup> They write, "Accession neither de-nationalized the auto industry in China nor led to imports swamping the domestic market." Rather, "the combination of increased competition brought about by new entrants to the market and the slowing of domestic demand that occurred in 2004 has substantially reduced the rents earned by companies in the industry", and that "entry into the WTO did not so much destroy industrial policy for the auto industry ... as constrain and discipline it".<sup>47</sup> Those firms that are the most productive and efficient have responded and are now focusing on building up further their capacities and competitiveness; there is a weeding-out of the weaker performers, particularly those corporations that have relied on government support and protection for their expanded reproduction. Noble et al. suggest that the empirical trends fail to show that WTO accession has had an adverse effect on China's auto industry – as envisioned in the pessimistic scenarios. Output of sedans has increased more than threefold from 2001 to 2004; imports have not swamped the domestic industry but are running at levels below those of the mid 1990s. The Chinese state still holds a range of controls on foreign ownership of assembly operations and over the speed of investment approvals, on tax breaks, preferential financing, and discretionary authority over a range of regulatory issues, from distribution to pollution control and compulsory labeling of domestic parts. "China's domestic auto industry has boomed since it joined the WTO", and "Beijing still maintains the capacity to shape the development of the industry". WTO entry has "not stifled the development of indigenous Chinese capabilities capacities – rather it has stimulated the growth of domestic privately owned companies", which they believe have the most global growth potential.<sup>48</sup>

### **National concerns: the view of Chinese planners**

Researchers in the NDRC explained that "the meaning and direction of change, from China's WTO commitments is clear. Over the longer-term, the trend will clearly be toward greater trade and investment liberalization. There may be delays in some areas of implementation, yet overall, the direction is clear."<sup>49</sup> For the Chinese government, the meaning of WTO membership is that:

Since 2001, with China's WTO accession, there have been big changes in the development environment in China. The Chinese

government's behaviour is now more restricted, in accordance with WTO rules and regulations. The Chinese government must now re-align its policies, including those for the auto sector, and its foreign investment strategy for the development of firms and the market.<sup>50</sup>

NDRC researchers believed that to understand the potential and already emerging impact of the WTO-specific regulatory adjustments that the Chinese government committed to for the auto sector, one should examine both short- and longer-term perspectives, and approach the question from an "integrated national development" perspective, and look beyond immediate trends in the trade statistics.

They offer a different picture than Noble et al. on the implications of China's WTO accession for the auto industry. They explained that "the specific accession agreements for the auto sector, and the general WTO rules mean four new categories of risk for China's auto industry".<sup>51</sup> First, that trade protection measures had to be significantly reduced by July 2006. Specifically, that "import tariffs for passenger cars had to be reduced to 25 percent; and to only 9.5 percent tariff duty on imported auto parts".<sup>52</sup> Second, "quotas must be eliminated by 1 January 2006".<sup>53</sup> In their view "these two conditions mean that basically free trade would take effect in China's auto sector by July 2006 for all vehicle types, whether domestic or foreign-made".

Third, "the terms of accession require China to open the various auto-related service sectors to foreign investors, and their participation could significantly cut into Chinese gains". China has agreed to phase in the opening of service sectors to foreign participation, including banking, insurance, and nonbank auto financing, as well as wholesale and retail trade. NDRC researchers noted that these requirements would have a "huge long-term impact. For the auto sector, this would cut into profits that the Chinese side has controlled up to now." In the contemporary automotive business, major profits are made in the upstream and downstream segments of the value chain. Downstream affiliates include dealers, repair shops, loan brokers, and insurance companies. Thun has described how SAIC made substantial profits by controlling downstream activities such as automotive financing and other services, including repairs. Chinese authorities were able to guarantee that the Chinese parent company would capture a certain share of the profits from the JVs by controlling distribution and sales from the JVs. By controlling the taxation from sales of the Santana, SAIC and Shanghai authorities rapidly built up their investment "war chest" to fund the development of the local supplier network around SVW.

Fourth, “the government’s auto parts and components local content requirements must be eliminated to accord with the WTO norms of “nondiscrimination” and “national treatment”, that are contained in the agreements on Trade-Related Investment Measures (TRIMs) and Trade-Related Intellectual Property Rights (TRIPs). In brief, China agreed to eliminate the performance requirements which had been imposed on foreign investors for local content, exports, or technology transfer, in agreeing to join the WTO. A range of Chinese observers, including MOFCOM officials, and researchers from the NDRC and the China Automotive Manufacturers’ Association (CAMA), pointed out that local Chinese parts companies have been experiencing major competitiveness challenges in the period since China’s WTO accession. They draw a correlation to the fact that the Chinese state is now constrained in its ability to encourage or sustain localization pressure; that foreign competitors no longer feel the necessity or have incentive to partner with local (Chinese) parts producers. CAMA researchers note that many local Chinese parts suppliers are now “on the brink of major trouble”.<sup>54</sup>

One NDRC researcher explained that prior to joining the WTO, Chinese authorities could rely on the so-called “two control levers” (*liang ge kongzhi*) – specifically the 50/50 ownership requirements for engine and whole vehicle assemblers – to encourage foreign auto firms to partner with local firms, and transfer their technology and technical know-how. However, “the WTO agreements mean that it is illegal to have such local performance requirements”. They saw this as particularly important with regard to the production of engines, which they see as the “heart” of the car, and engine design affects not only the design of the rest of the car but also upstream and downstream decisions.

According to NDRC strategists, the rule changes in terms of performance requirements have also led to two other “troubling” trends with regard to the role of foreign MNCs in this pillar industry:

Since WTO accession, and the lifting of previous government regulatory controls, we already see two major shifts in the auto sector. First, in terms of ownership control, the foreign partners are taking over a larger share in each of the major JVs; and second, the foreign partners are disengaging from parts manufacturing JVs.

This view from Chinese strategists, the actual examples, and the implications they point to, run counter to the view from Noble et al. that “one crucial area in which China has held firm, and did not agree to the



requested concessions for WTO accession, is that it insisted on retaining the limit of 50 percent ownership for auto assembly operations" and that the Chinese continue to have the capacity to direct the industrial development process.<sup>55</sup> In the period since WTO accession, there has been a shift in the ownership shares in SVW, with Volkswagen increasing its share from 40 to 60 percent, the Chinese share reduced to 40 percent ownership. Starting in 2004, VW also lobbied to increase its share in FAW-VW in Changchun from 40 to 50 percent.<sup>56</sup>

These shifts in ownership share build on a trend that started before China's WTO entry with Guangzhou Honda. Japan's number two automaker sought the right, with backing from local authorities, to be able to take a (strong) controlling 70 percent share of the new JV, which would leave Guangzhou Automotive holding 30 percent. Central authorities cautiously granted approval for the arrangement on the condition that Honda agreed to export a significant percentage of the product overseas. For Chinese strategists, looking back, this was the start of the "troubling trend". More recently, Ford insisted on taking 100 percent ownership in the negotiations for two new large-scale production facilities in China. These negotiations eventually led to Ford's new JV plants in Nanjing and Chongqing. After coming to the realization by the early 2000s that it may have "missed the boat" in China, Ford began serious negotiations with Chinese authorities over more aggressive investment strategies. Ford came in pressing hard for total ownership in the new projects, and only after extensive and drawn-out discussions with Chinese authorities, and only after Ford was made to realize that it would have to take on increased costs in other areas of the operations if it insisted on such a huge controlling share, did it come around to agreeing to 50 percent Chinese ownership, in accordance with Chinese policy.<sup>57</sup> One NDRC analyst explained: "In the end, we were able to convince Ford to accept 50-50 ownership arrangement, but this is becoming increasingly hard to ensure, and especially since WTO accession." He added that if Ford or any foreign investor really wanted to take over majority ownership in the future, it would become increasingly difficult for the Chinese government to resist. And that the Chinese government would have to come up with other new methods of influence in the post-WTO period.<sup>58</sup>

The cumulative effect of the above (post-WTO accession) trends is that they create a "real possibility for a hollowing out" (*wakong*) of China's presence inside the national automotive industrial structure. The central locus of the supply-assembly network – the JV partnership – could become "less and less important" within the overall

value chain, resulting in a dilution of Chinese control at the “core” of the increasingly internationalized production, distribution, and retail networks. The ultimate effect would be the loss of the domestic presence in the industrial structure as well as a withering away of the gains that China has made in catching up, as the most vital and highest value-added activities in the production system are transferred to MNC control.<sup>59</sup> Using language reminiscent of theories of “dependent development”, NDRC researchers added: “For the Chinese partner, this hollowing-out means the gradual ‘peripheralization’ (*bianyuanhua*) of the role and stature of the Chinese parent state enterprise in the total production, distribution and retail system. These trends, when combined, are the real integrated effect of fully implementing the terms of China’s WTO accession.” These observations concur with domestic Chinese debates that emerged in early 2006 over whether China is now facing the threat of “Latin Americanization” (*Nan meizhouhua*) of its national economy and society.

What will make the situation even more difficult for the central authorities in the future is that the center has been ceding more and more authority to local authorities to approve foreign-invested projects. As one planner explained:

This has been a crucial element in China’s general trend toward greater openness, and is in keeping with the requirement of China’s WTO commitments. But it means that the political center will have less and less capacity to guide the path of China’s development in the future, and to ensure a coherent and rational industrial development process. This will also affect government direction of the auto industry.

The level of FDI approval authority for local authorities has increased incrementally and substantially almost year by year since China’s WTO accession. In 2002, the first year after WTO accession, local authorities could approve foreign-invested projects up to US\$60 million. By 2003, it had increased to US\$90 million. It would not be unreasonable to expect that by 2007, five years after WTO entry, local approval authority would have increased to US\$150 million. This would give local authorities much more room to circumvent central regulatory controls when approving foreign-invested projects.

The main concern of Chinese state planners is that the above changes present a “great risk” and that, over the longer term, “China’s ‘pillar industries’ (*zhizhu chanye*) could be turned into ‘auxiliary industries’

(*fuzhu gongye*). The consequences would go beyond issues of national economic steering, and would have major social implications for employment and social welfare, and for the standard of living for China's citizens, as housing and transportation have become the 'two major purchases' in Chinese people's lives." As one NDRC researcher added:

Prior to WTO accession, the Chinese government could always protect and promote the auto industry as a pillar industry. But if these trends continue, it would mean the transformation of a pillar industry into one that is actually controlled by foreign investors – control would have shifted to their hands. The key strategic issue for the Chinese government now is how to avoid or slow down the advance of these inter-related trends.

China's automakers would need to make some major breakthroughs in their competitiveness in the near future, including in their capability to innovate and maintain the modernization drive in a self-generated manner. Officials pointed out:

The government is strategizing how we can help by bringing adjustments to the terrain of competition which would allow us to manage the process and speed of international economic integration and economic liberalization. We all accept that the long-term trend and direction of China's evolution is toward greater opening, but there is nothing wrong with a country's government trying to manage the speed of integration. This is the lesson to be drawn from the (1997) Asian financial crisis. Integrating too quickly has many inherent dangers, some of which we only learn about after it's too late.

Since WTO accession, "foreign capital" has sought fuller, if not full, control of the production, distribution, and retail network – of the entire value chain. Yet Chinese strategists believe that China must not rely as heavily on foreign design, and must develop its own brand, indigenous automotive R&D, and industry development capacity. "Our leaders and industry have now reached the consensus that China must have *its own* stage or arena for development, and develop China's own brands. At the same time, China cannot close the door, and must continue to have JVs and international cooperation." The concluding thought was that: "To properly develop our auto industry, China must 'walk on two legs'." Put another way, China must continue to learn from the most advanced

foreign automakers, and even maintain partnerships with them. But in order to become a major player in the global auto industry China cannot depend only on Sino-foreign JVs. China must also focus on developing the independent capabilities of its national auto manufacturers.<sup>60</sup>

By forming and maintaining the partnerships with the foreign auto companies, according to NDRC strategists, China can “learn by doing” (*bian gan, bian xue*), but must also “depend on ourselves” (*kao ziji*). This, according to one researcher, was “self-reliance without isolation”. These points allude to the differences between the current thinking and the late Maoist understandings of “self-reliance” of the late 1960s. They also highlight the fact that WTO accession has meant real changes in how the Chinese state approaches the regulatory problem – its calculus for state support in addressing the older vulnerabilities that remain in terms of indigenous R&D and innovation and system integration capability, and for mitigating the new WTO-related challenges that may amplify or accentuate the existing vulnerabilities.

Leninist means of state control and coordination were conducive to effective formulation and implementation of many aspects of the foreign capital utilization strategy contained in the '94 AIP – especially in ensuring transfers of complete car technology and the necessary remaining transfers to build more complete local auto supply networks. However, they failed to introduce market-driven incentives for the Chinese auto executives to give renewed priority or dedicate more resources to fostering indigenous product innovation and design and integration capacity in China's state-owned auto giants. The new Hu-Wen government (2003) has therefore tried a different approach to supporting China's automotive modernization, by giving more investment support for technological innovation, to a broader and more varied grouping of Chinese automakers. The main changes underway since 2003 have been rising government support to Chery and other successful independents, continuing support to FAW but pressuring it to transform itself into a more competitive enterprise group, and new support to SAIC to “go outside”. These are the three faces of how the Chinese Party-state is trying to adjust its mediation role, and to sustain China's automotive modernization drive.

# 10

## Conclusion

We have presented a detailed examination of how the Chinese state used industrial policy and other forms of political institutional mediation to leverage foreign multinationals to support national industrial modernization objectives in the automotive sector. The Chinese state effectively forced the world's leading automakers to transfer massive amounts of investment capital and advanced technologies to subsidiaries in China and the capabilities to produce complete cars, including the higher value-added components. The Chinese Party-state oversaw the transformation of the Chinese auto industry into one that has modern large-scale assembly and supply capacity, current car models, and most recently, a new generation of homegrown Chinese models.

Building on a research agenda on state mediation of international economic and domestic industrial factors, we examined how the Chinese government took a "strategic" rather than laissez-faire approach to MNCs, actively influencing the content and direction of incoming foreign investment. Chinese officials intervened with the '94 AIP to ensure effective execution of foreign investment strategy and related auto policy measures in the Ninth Five-Year Plan (1996–2000). They forced increasingly complete transfers of auto production technology and know-how to China. In exchange for these transfers, Chinese authorities provided assurances that the state would build the necessary infrastructure to facilitate the growth of a passenger car market, as well as meeting the operational needs for a high-quality modern supply network, fully functioning according to just-in-time and lean production methods. The state played an indispensable role in pushing the country to a higher phase of automotive modernization, using the AIP to draw the leading foreign assemblers and their key components suppliers into the country. From the mid to late 1990s, foreign automakers

relocated the more sophisticated and higher value-added segments of the auto production chain to China. These shifts entailed the transfer of complete car manufacturing capability to China, and provided the base for the eventual birth of the new generation of homegrown Chinese passenger cars from 2002 onwards.

China initially attempted a two-track approach in the 1980s to remaking the auto industry, giving primary emphasis to integrating foreign technology under “national” management (FAW and SAW), while treating a new group of foreign-invested JV partnerships (Beijing Jeep, Guangzhou Peugeot, and Shanghai VW) as supplemental. However, this two-track approach became unsustainable due to the poor performance of FAW and SVW in indigenous industrial transformation. By the early 1990s, Chinese authorities recognized that because of the complexities and high capital and technology costs of the auto sector, they had little choice but to rely more heavily on their foreign-invested projects. They made this decision knowing the potential costs and benefits of inviting MNCs to play a greater role in the country’s auto industry. They were emboldened by their sense of China’s increasingly advantageous position in the world automotive industry. This policy shift was reflected in the guidelines for foreign investment in new automotive assembly projects in the ‘94 AIP.

At the same time, Chinese strategists drew important lessons from the failure of the Beijing Jeep and Guangzhou Peugeot projects, compared with the success at Shanghai Volkswagen. SVW provided a demonstration effect on a number of levels for potential foreign investors and Chinese strategists and industrial planners. For GM, Ford, and Toyota, companies hesitant about investing in large-scale manufacturing inside China, the example of SVW showed that it was feasible to achieve a high level of profitability in partnership with Chinese state enterprises. SVW’s success increased the Chinese government’s bargaining leverage vis-à-vis the world’s leading auto MNCs, and set the stage for the major advances that were made in the sector during the 1990s. The SVW experience taught Chinese authorities the importance of “going big”; of having a strong and capable foreign partner that could enter into the country, strategizing from a longer-term perspective and, when called upon, being able to exercise the flexibility needed to meet the developmental demands of the state.

In the early 1990s, the focus of state planners and automotive officials turned to establishing more precise conditions and regulations for utilizing foreign investment, to target the world’s leading automotive assemblers as future JV partners. The foreign investment conditions in the ‘94 AIP,

backed up by automotive-specific policies in the Ninth Five-Year Plan (1996–2000), indicated that only foreign firms that were capable and willing to make major financial investment, and transfer leading technology and managerial and R&D know-how, should be invited to invest. First, only the most powerful foreign automakers could qualify for investment; those with large financial capacity, world-leading technology and models, and global brand recognition. Second, local content requirements were raised, and set sufficiently high, so that MNCs had to work together with their key parts and component suppliers to join together in large-scale investments in China. To attract world-class automotive suppliers, Chinese authorities provided a more liberalized investment environment for the leading suppliers. Finally, even where foreign entry was allowed, the state made sure that the institutional arrangement was a JV, in which the Chinese side maintained, at a minimum, 50/50 ownership control. This actually meant majority control for the Chinese partner. Chinese authorities then played off one foreign company against the others, in an effort to maximize technology transfers and spillover. Those investors more willing to transfer leading technologies were selected over those that were not. This criterion for selection then induced behavioral modifications in the other foreign rivals, for later JV agreements.

Even though the broader macroeconomic thrust of the 1990s was economic decentralization, deregulation of state economic controls, and liberalization of the foreign trade and investment regimes, in the auto sector – a “pillar” industry – Chinese authorities chose to intervene directly, and coordinate between central and local levels, to force desired developmental outcomes. Rather than seeing the logic of the economic reforms from the 1990s onwards as “growing out of the plan”, it is more accurate to describe it as a combination of releasing state control in nonstrategic sectors, while reaffirming and restoring centralized state planning and policy coordination in strategic areas, all the while making the shift to greater market orientation.<sup>1</sup>

The role of the Party-state in determining the content and direction of the foreign investment flows in this “pillar” industry actually grew stronger in the 1990s, though interventions became more selective, both in terms of affecting partnership arrangements and in extracting international technology transfers for complete car production, honing in on more sophisticated and higher value-added components. These changes represented important shifts in the nature of the SPC, in its Leninist heritage of command-control planning. While continuing as the interlocutor between Party and bureaucracy on economic planning,

the role of the SPC had begun to adjust. Rather than passively approving state investment for major projects, or dictating targets and allocating state funds to meet them, the *raison d'être* of the Planning Commission was refocused on coordinating development policy between different sectors, within an increasingly market-oriented economic environment. For the strategic industries, this meant coming up with a particular Chinese combination of a smaller number of requirements and objectives in foreign capital utilization, together with a much greater intra- and intersectoral policy coordination role around united developmental objectives to guide, rather than command, the development of the pillar industries.

As the 1990s unfolded, the Planning Commission stepped up its direction of the pillar industries and the formation of globally competitive national champions. It played a lead coordinating role in putting together an auto policy group in the early to mid 1990s, a broad-ranging state-led "joint committee", consisting of the main government and industry stakeholders. With Zeng Peiyan at its head, the SPC organized an internal consultation process for the execution of the '94 AIP. This auto policy team drew a number of lessons from the experience of joint venturing in the auto sector in the 1980s, and integrated a number of lessons learned into a coherent strategy, the AIP. They then took on direct roles in overseeing the execution of the AIP, to ensure effective state mediation between the world's leading MNCs and the domestic Chinese auto companies, and shape the content of the FDI to secure more sophisticated and complex transfers of technology, technical and managerial know-how than in the 1980s.

Strategic coordination in drafting and implementing the '94 AIP was aided by the fact that the number of individuals involved in making the policy and regulatory choices in the '94 AIP, and whose active cooperation was required, was much less than in the Anglo-American or Western European policy models. The structure of the Chinese Party-state, especially the role of the SPC within the Chinese economic governance system, provided a degree of insulation for the economic policy elite and their closest advisors from direct interest-group pressure, with the SPC arbitrating conflict within the policy network and helping to maintain socioeconomic balance and political order, even while the Party elite was attempting to alter the structure of the national auto industry. The SPC functioned as an effective instrument of state power for the Party elite. The formulation and implementation of the '94 AIP showed how the potential was exercised in concrete terms. In such a top-down policy model, policy coordination requires the intervention of, and sometimes arbitration from, senior economic Party and government leaders – in



this case, Zeng Peiyan, Li Lanqing, Zou Jiahua, and Lu Fuyuan. This leadership contribution was also aided by Leninist organizational norms of “unified and centralized leadership”, “democratic centralism”, and the “correct line”, and the Party’s senior cadre management system, so that even after intense internal debate, a policy decision was made, and it became the policy line for all.

VW, and later GM, contributed heavily to China’s auto modernization. VW, unlike AMC and Peugeot, responded positively to regulatory pressures and the national developmental demands of Chinese state authorities. VW grasped the importance of appealing to the industrial modernization ambitions and developmental norms of the Chinese state. It put concerted effort into transferring technology and related technical know-how to foster local industrial capacity. It strategized from a longer-term business developmental mindset than either of its initial foreign rivals, who were focused on immediate returns. While pressuring its Chinese partners to improve their performance in terms of assuring product quality, VW also supported SAIC to localize parts production and to create the foundation for a nationwide parts supply, distribution, and service network. At the level of the firm, VW and SAIC emphasized cultivating cross-cultural managerial communication, and fostering “mutual trust, understanding and benefit”. VW played a critical role in transforming the managerial mindset of its Chinese partners, and transferring to Chinese staff the financial and FOREX management skills needed to build a sustainable modern supplier network in Shanghai initially, and eventually, in China more broadly. VW understood that localizing production would also foster support from government officials, whereas neither AMC/Chrysler nor Peugeot responded to central pressure to localize capabilities.

With GM, Chinese authorities pushed for more comprehensive technological transfers. GM adapted quickly and figured it was in its longer-term interests to support building a modern local supply network to feed its new JV in Shanghai. The GM executive team, knowing it was facing a strong host (Chinese) government with significant bargaining strength and ability to cajole the leading automakers into concessions, took bold and proactive steps and devised an international investment strategy that combined market and China-specific extra-market factors to outbid Ford and Toyota, and win the rights to form the second Shanghai JV assembler. GM took an active role in establishing a comprehensive local supplier-assembler network, building on the initial parts supply capacities that VW had set up previously.

GM worked closely with its key component suppliers to relocate to China. It relied heavily on Delphi, Bosch, ADL, and other established

suppliers to transfer knowledge and skills to local parts producers, to build a local supplier network that could meet the requirements of the lean production system it was introducing at the Shanghai GM plant. According to Delphi President J.T. Battenberg, almost all the automakers in the world, both assemblers and parts suppliers, have now set up manufacturing bases in China. Delphi made major long-term commitments to the Chinese market, and by 2002 it had established 13 solely funded businesses and JVs, a technology center, and a training center, with a total investment of more than \$400 million. Its sales in China also reached nearly \$500 million in 2000. Battenberg noted that technological development, economic globalization, and changes in consumption were creating new opportunities for the industry. He noted that Delphi was aiming to export one-third of the products made from its Chinese ventures, and that these ventures had already taken a key position in the company's global supply system. In exchange for the major investments by GM and Delphi, Chinese authorities agreed to build the highways and roads in the Shanghai area and across China to facilitate new car purchasing and ensure steady logistics and distribution networks, especially if GM was to introduce just-in-time production systems to the new facilities.

It is difficult to overstate the reindustrialization gains that China has made from its automotive modernization path. At the same time, there are developmental limits. Despite the massive amounts of FDI that have been invested inside China during the 1980s and 1990s, indigenous research, design, innovation and systems integration capability has been slow to develop. The debate inside China is whether accepting a package of finance, technology, managerial skills, limited R&D skills transfers, and other capabilities offered by MNCs in a JV arrangement is better for China's long-term industrial development than encouraging national firms to construct their own packages, using their own managerial skills, combined with some necessary outsourcing, especially now that China's large-scale automotive assemblers and its most advanced parts producers have arguably completed the catch-up phase. While being able to attract more FDI has brought net benefits to China's auto sector in the 1980s and 1990s, longer term, there is the matter of choosing between different strategies regarding the role of FDI.

## **Lessons learned**

This book has presented a detailed examination of how one developing country case has effectively used industrial policy to leverage MNCs to

support national modernization objectives. Can this dimension of China's internationalization and reindustrialization experience be replicated? What lessons can be drawn from the Chinese case for other developing states, and for states in the global economy more broadly?

1. The Chinese case is likely *sui generis*. Similar to Johnson's view on the Japanese developmental state, the conclusion here is that China's experience of automotive modernization will be hard to emulate. China's auto modernization in the 1980s and especially the 1990s and early 2000s has depended on a world automotive industry with cash-flush MNCs. For more than two decades, the world's leading automakers had excess capital to invest in new growth markets. Few countries have a similar population base and the growth prospects of China's booming domestic market of the past three decades. The special characteristics of the Chinese case notwithstanding, some qualified and measured developmental lessons can be drawn from China's experience of automotive modernization.

This study provides a set of mid-range conclusions and a preliminary comparative analytical framework for thinking about how states in developing countries can respond to the internationalization of production, competitiveness pressures from economic integration, and means for capturing opportunities offered by the global expansion of production networks. The lesson to be drawn is: for specific sectors, and certain countries (depending on the particular factor endowments of the individual countries), and depending on world industry and world market conditions, it is possible to use industrial policy to leverage multinational investors for national developmental gains. This is done largely by regulating the scope and speed of international integration, by shaping the content and direction of FDI, to maximize capital, technology, and technical knowledge transfer from such investment. The chances for effectively utilizing industrial policy are greatly enhanced if due consideration can be given to aligning institutional factors at various levels through state coordination mechanisms. Governments would want to be clear that in choosing to use an FDI-led industrial modernization scheme, there are costs and benefits, and trade-offs in terms of policy autonomy and the range of developmental options. China's experience in automotive modernization over the past three decades is generally an affirmative case, and suggests that active state mediation can be brought to bear to ensure that developmental benefits outweigh costs.<sup>2</sup>

This study has not tried to argue that industrial policies can be used by "perfect governments" to improve the lives of their citizens.

The unsatisfactory results of China's first Automotive Industrial Policy in 1988 showed that state policy was far from "perfect". Nor do we deny the risks that state rules are often open to manipulation by both central and local state interests, and that industrial policies can often spawn unintended consequences. However, the policy review, adaptation, and regulatory innovation that was undertaken in China in the first half of the 1990s did lead to the formulation of the landmark '94 AIP. It demonstrated that it is possible for imperfect governments to learn and improve upon previous performance, and achieve significant advances. These policy gains were achieved in an era of increasing capital mobility in the world automotive industry.

2. China's experience in the 1980s and 1990s challenges the idea that globalization, specifically the internationalization of production and MNCs, was beyond the regulatory control of governments, or that state economic policy was constrained, due to globalization, to an extent that states could no longer use industrial policy to channel FDI toward national development benefit. We should recognize, however, that the reason why the Chinese Party-state was successful was in part due to world and domestic market conditions and because it had built up its bargaining power and leverage vis-à-vis the MNCs. China's experience suggests that, at least for the auto sector, despite the growing mobility of capital, MNCs have not always had the upper hand in bargaining over investment sites during the past three decades.

While some have portrayed the technology transfer requirements and other foreign investment conditions as examples of foreign firms "stymied by the political straitjacket imposed by the Communist Party",<sup>3</sup> these same regulatory requirements can be seen as the developmental levers through which the Chinese state successfully pursued a modernization agenda. The details of the cases of state-firm bargaining examined here show that the relative bargaining strength of MNCs and national governments is dynamic and shaped by the specifics of the industry, the particularities of country cases, and the world historical timing of the bargaining. Relative bargaining advantages change over time. At the same time, China has some unique locational advantages, a large supply of skilled workers, and exceptionally large domestic market potential. Nonetheless, the relative bargaining power of the Chinese state and the automotive MNCs shifted significantly over time.

Observers such as Ha-joon Chang have pointed out that it is not just governments that compete for FDI; MNCs also compete for attractive host countries. China has been held up as a particularly attractive host, having especially strong bargaining power vis-à-vis MNCs.<sup>4</sup> However,

even for China, such power, especially in the automotive sector, was not fait accompli, or preordained, due to its large population. It was not simply a matter of holding out the lure of partnering to building the "people's car", or holding out the prospect of first-mover advantages in what may be the biggest car market in the world, and then having the MNCs flock to China. The dynamics that led to the fierce bidding that eventually took place in the mid 1990s over the right to form the second assembly partnership with SAIC was gradually nurtured by the Chinese side over a decade; and it was partly conditioned by shifts in the world automotive industry and global markets.

Duplicating the Chinese experience is not possible for most developing states. However, even the Chinese government's so-called unique bargaining power relative to the automotive MNCs, its ability to play one foreign multinational against another to extract greater concessions, was also preconditioned by the fact that it had developed a foreign investment utilization strategy in its '94 AIP. A targeted, detailed, and precise AIP was helpful not only for attracting more FDI, but also for drawing in the higher value-added segments of the production chain.

3. The Chinese example suggests that it was not necessary for China to adopt a completely open investment regime during the 1980s and 1990s in order to attract massive and key investment from leading MNCs. Multinationals were willing to accept a partially "restrictive" regulatory regime as long as they saw the investment environment and competitive conditions as stable and predictable. China's experience, and that of some East Asian countries, namely Japan, Korea, and Taiwan, shows that states have tried, and can try, to use MNCs to access capital, technology, and related technical know-how to support their catch-up development and industrial modernization objectives.

The exact meaning of using FDI in "a strategic way" depends on various interrelated factors, such as the country's relative bargaining position, the nature of the industry in terms of whether it is capital-, knowledge-, technology-, labor-, or resource-intensive, the role of the industry or sector in question within the country's overall industrial development scheme, the situation of the industry at the world level in terms of the intensity of interfirm rivalry, and the position of that country in terms of global market conditions. Until the 1997 Asian financial crisis, Korea (and earlier Japan) could choose a path that actually gave the automotive MNCs less leeway, while selectively integrating foreign technology and technical knowledge into its national industrial structures. Even when entry was allowed, the governments of these countries encouraged JVs with a high level of local majority ownership

as the norm. For China which suffered capital scarcity, the strategic way was to rely more heavily on foreign investment and foreign MNCs for auto modernization than Japan or Korea, while funneling scarce state investment capital into promoting light industry and consumer durable industries for export growth in these FOREX-earning sectors.

4. When an industry that is targeted for modernization requires major injections of new capital and technology, and the country is facing investment capital shortage, MNC participation may be a desirable option. One point of caution is that the host state will want to pursue a strategic industrial policy tailored to the specific needs of the national industry at a specific stage, and how that industry fits within the grand scheme of national industrial development. As developmental needs evolve, the government must furthermore adjust the policy to reshape the relations with MNCs and the character of FDI over time, depending on changing internal and external conditions. For example, with the '94 AIP, Chinese central authorities closed off access for nonworld-leading automotive MNCs in order to give priority access to the world's leading auto firms. This was backed by the further financial provisions under the Ninth Five-Year Plan (1996–2000) provided to key large Chinese state auto firms for partnering with the new foreign entrants.

The Chinese government shifted from a more general set of foreign investment guidelines for the automotive sector under the 1988 AIP, to more detailed and targeted foreign investment requirements under the '94 AIP. This was precipitated by the emergence of a credible "success story" in SVW, and Chinese planners realizing that changes in the world automotive industry and global automotive markets had evolved in China's favor. The '94 AIP also gave much more attention to attracting and supporting investment from leading foreign parts and component suppliers, whose importance in the world automotive industry had grown in the intervening period. Their role had become crucial in supporting product adaptation and innovation, and facilitating flexibility in design and production under the new post-Fordist arrangements. Chinese planning officials gave foreign parts supply companies a more open environment for investment, and easier access to the Chinese market, either through a wholly foreign-owned venture or joint venture; however, they did require Sino-foreign partnerships in the highest value-added component segments. The more relaxed regulations combined with world market conditions to draw in the leading parts and component suppliers such as Delphi, Visteon, and Bosch into China.

5. The Chinese experience suggests that it is useful to give due consideration to cultivating national champions. While China relied heavily on MNCs to drive the automotive modernization process, it has relied on national companies, partnered with the MNCs, to sustain the modernization process. It has not relied exclusively on MNCs. The Chinese government deliberately directed FDI to strategic sectors, and into specific partnerships with particular Chinese firms. The Chinese state picked winners, and then selected "marriage partners" in a match-making exercise.

The Chinese authorities could draw on the experience of the 1980s and early 1990s of countries in Southeast Asia and elsewhere in seeing that technology transfer to a broader segment of local firms in the host country was more likely, and that technology was more likely to be absorbed and modified for local needs and conditions if domestic firms were more intensively integrated into the production networks. When MNCs established their presence in the host country with their own wholly foreign-owned subsidiaries, there were fewer and less complete transfers.<sup>5</sup> The outcomes in China, Japan, Korea, and Taiwan indicate that MNCs can be utilized for national development. However, the policies on MNC entry, ownership, contractual terms, technological spillovers, and local content requirements, employed to varying degrees in China, Korea, and Taiwan, suggest that the role of MNCs needs to be clearly and precisely defined in relation to the overall national industrialization strategy, and in relation to the specific dynamics of a particular industry.

6. Which countries actually have the potential to use MNCs or can afford to play such a strategic game, especially in the automotive sector? The poorest developing countries and small states would have weak bargaining power vis-à-vis multinationals in most industries, let alone the automotive industry, as their low labor cost advantages are in industries that are the most internationally mobile. The China case suggests that, in the automotive sector, the most important "bargaining chip" for a developing country is large market growth potential. This narrows the list of those countries that have the potential to utilize MNCs in a strategic manner to those developing countries that can directly control access to domestic or regional auto markets with large growth prospects, and those actually experiencing rapid growth, for example, China, India, Brazil, Russia, and potentially the larger countries in Southeast Asia. The Southeast Asian cases of Indonesia, Malaysia, Thailand, and arguably Vietnam, have limited potential because they have to be able to provide

access to the entire ASEAN regional market, as their individual national markets are too small to attract large-scale investment. Vietnam has experienced this problem in the auto sector. Some countries in Central and Eastern Europe appear to have locational advantages vis-à-vis the EU market, but the negative investment experience of South Korean automakers gives reason to reconsider.<sup>6</sup> Mexico possesses a combination of locational advantages in terms of access to large markets and a low-cost and experienced domestic workforce.

7. Having such potential bargaining power does not automatically translate into actual bargaining power. A key variable in utilizing MNCs and foreign investment is whether the host authorities can ensure internal coherence in their bargaining position. This requires a high level of centralized leadership and internal coordination to ensure consensus and consistency in the negotiating position of the host state, and in engaging MNCs throughout the life of the partnership. In this regard, China may have unique characteristics and reserve capacities. It is ironic that in the era of economic globalization, a source of organizational coherence and an enduring organizational advantage for China has been *select* Leninist institutional features of the CCP.<sup>7</sup>

In the China case, the organizational character of the Party-state is a distinguishing variable that accounts for China's success in executing auto industrial policy. These observations highlight an area of potential future research for comparing with Vietnam and Russia. They draw attention to the relevancy of a renewed Comparative Communisms framework for analyzing lessons from China's use of MNCs and FDI for automotive modernization.

8. Global economic conditions have a strong conditioning influence, constraining the potential for political elites and state officials to transfer potential into actual bargaining power. Such structural factors do not predetermine outcomes; however, environmental conditions do provide constraints on what is possible in specific historical and temporal situations. The rise of China in the world auto industry, and its successful application of industrial policy to extract concessions from foreign automotive MNCs, may actually limit, maybe even negate, the prospects for other larger developing countries to pursue similar strategies, to extract similar concessions. Do the modernization and rise of China's automotive industry trigger a race to the bottom for the rest? China's reindustrialization gains may actually be driving deindustrialization elsewhere in the South, and even among the other emerging economies.<sup>8</sup> As the world automobile industry is opened up



as the next frontier for Chinese manufacturers, several of China's new automotive firms are making aggressive moves to acquire assets in other developing countries, most of which have more established auto sectors than China. For instance, Lifan Group, from Chongqing, is bidding to purchase sophisticated technology at the DaimlerChrysler BMW car engine plant in Brazil, and to transport the entire factory piece by piece back to China. Such a purchase would significantly boost China's ability to compete with leading automakers from Japan, Germany, and the United States in the production of fuel-efficient cars, such as the Honda Civic and the Toyota Corolla.<sup>9</sup>

Or will China's own automotive groupings begin investing overseas, in these other leading developing countries, and utilize their locational advantages as overseas investment sites for tapping new export markets? While parts exports in Mexico have suffered as a result of new supplier competition from China, Cheri Automotive Grouping recently established a new parts production facility in Mexico, and is aiming to shift into assembly of cars for sale in the Mexican and US markets. These new investments are creating new jobs in Mexico's auto sector, even if it means creating new players inside the country.

Here, we take the view that environmental or structural conditions do not predetermine outcomes. How other developing states evolve in relation to China's economic rise is contingent on competition between the range of key states and corporate actors that are involved, of which China is a main player, and the market environment they all face. Global circumstances are understood to make a given outcome more or less likely, but there is still a range of purposive policy choice, rather than automatic responses.<sup>10</sup> In this study, the emphasis is on strategy over structure, to illustrate how the outcomes of politico-economic change are not predetermined, but affected by the interplay of policy inclinations and decisions, and environmental conditions.

9. Differences in the capacities and investment strategies of different MNCs matter. For a developing country that is trying to leverage FDI for national development, the positive cases of VW in the 1980s and GM in the 1990s are important for what they reveal in terms of their relative capabilities and willingness to make significant transfers to China. It is useful to understand how the corporate strategy and market developmental attitudes of firms have contributed to outcomes, and played a significant role in turning these investments into what could aptly be labeled "model JVs". This was not the case with AMC/Chrysler or Peugeot.

After an MNC decides to invest or trade in a given market, there is still a range of options when it comes to how and when to enter, and how to

invest in that market. These decisions are predicated on a number of calculations, only some of which recipient states can influence. Once VW decided to go into China, it developed a coherent and tailored strategy for investing and producing in China. The approach was conditioned by VW's unique political location and historical experience, headquartered in Cold War West Germany. It was also guided by the foresight of its executive leadership, and its normative acceptance of contributing to the national developmental objectives of China's central authorities. The latter became readily apparent in comparison to the behavior of its foreign rivals in China. VW's actions, together with the contributions of local players, helped to secure full-fledged support for SVW from China's governing authorities.

The success of the partnership in SVW first, and then VW's success in winning the bid to partner with FAW, provided a positive demonstration effect of the feasibility of partnering in car production in China, through alliances with China's largest auto companies. This project also demonstrated to Chinese authorities the importance of establishing institutional means for exerting state pressure on MNCs for more complete content localization. Increased leverage was built into the '94 AIP, into the next round of bargaining for the second Shanghai JV, and into the Ninth Five-Year Plan (1996–2000). At the same time, we also saw how more capable MNCs can take the initiative to drive transformation in business organization in China, reorienting Chinese partner firms toward focusing on profits and other global business norms. When GM voiced its support for China's localization goals, it appeared, at first glance, to be traveling on ground already traversed by VW. However, GM actually went much further, both in terms of the transfers it agreed to, and its own demands on the Chinese side in terms of allowing the new Shanghai GM JV to operate more fully according to the logic of market competition. Rudy Schlais, the first President of GM China, noted that GM's aim was to "rewrite the very meaning of competition in the Chinese market".<sup>11</sup> Phil Murtaugh, one of GM's lead negotiators and the second President of GM China, added: "One of our primary objectives was to have GM bring our management practices, so that the capitalist versus Marxist Leninist culture clash wasn't such a big issue."<sup>12</sup>

After holding off from investing in car production in China for almost two decades, when GM finally decided to jump fully into the China market in the mid 1990s, the world's largest vehicle maker did so with vigor. GM's entire package was, and still is, the single largest investment in China by an American company. To gain support for the shift

in business logic, GM gave much more than any other previous foreign partner. At the same time, it also successfully pushed for market-oriented transformations, changes in business operations that, up till then, were unprecedented in China's automotive sector.

This book has offered a modest contribution to the literature on specific correlations and causal relations between industrial policy and industrial modernization. While mindful of the pitfalls in making general arguments from specific cases, and aware of the apparent success that other countries (such as Ireland) have achieved using a laissez-faire approach to FDI, we have examined whether the case of China's "state managed and controlled open door" in the auto sector has provided lessons for other states to consider. Other states that do not possess China's unique level of bargaining power or leverage in engaging MNCs may still want to analyze how China has managed to remake a capital- and technology-intensive (automotive) sector, and how its experience to date gives reason to pause before accepting the claims about the futility of industrial policy in an era of intensifying economic globalization.

# Notes

## 1 Introduction

1. See for example: Gordon Fairclough, "Passing Lane: GM's Chinese Partner Looms as a New Rival", *Wall Street Journal*, April 20, 2007, p. A1; Wieland Wagner, "China's Auto Ambitions: the Coming Competitor", *Der Spiegel*, November 29, 2004.
2. The automobile industry consists of trucks, buses, motorcycles, and cars. This book focuses on passenger cars.
3. See Peter J. Katzenstein (ed.), *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States* (Madison: University of Wisconsin Press, 1978); John Zysman, *Governments, Markets and Growth: Financial Systems and the Politics of Industrial Change* (Ithaca: Cornell University Press, 1984).
4. Paul N. Doremus, William W. Keller, Louis W. Pauly, and Simon Reich, *The Myth of the Global Corporation* (Princeton: Princeton University Press, 1998).
5. *1996 Automotive Industry of China* (Beijing: Beijing Institute of Technology Press, 1996), p. 12.
6. China National Statistics Bureau, *China Statistical Yearbook 2004* (Beijing: China Statistics Press, 2005).
7. Interview with Gu Xianghua, deputy secretary general of the China Association of Automobile Manufacturers [CAMA]: Beijing, May 2007. See also Gu Xianghua, "Current Situation, Development Prospects and Relevant Policies of the Chinese Auto Industry", in United Nations ESCAP (ed.), *Development of the Automotive Sector in Select Countries of the ESCAP Region* (New York: United Nations Publications, 2002), pp. 32–48.
8. Author's interviews: Changchun, April 1998; Tianjin, May 1998; Shanghai July 1998; Beijing 2001. This is not to deny that the Chinese workforce in the model joint venture firms and the parent state-owned enterprise grouping is segmented into a more securely employed stratum and a more flexibly employed, i.e. vulnerable, stratum of line workers.
9. CATARC, "The Impact of Foreign Direct Investment on Chinese Auto Industry", *China Auto* (Tianjin: China Automotive Technology and Research Center [CATARC] and China Association of Automobile Manufacturers [CAMA], 2001). Cited in K.S. Gallagher, *China Shifts Gears: Oil, Pollution, and Development* (Cambridge, Mass.: MIT Press, 2006), p. 23.
10. CATARC, "The Impact of Foreign Direct Investment on Chinese Auto Industry", p. 15.
11. Peter Nolan, "China and the WTO: the Challenge for China's Large-Scale Industry", in Heike Holbig and Robert Ash (eds), *China's Accession to the World Trade Organization: National and International Perspectives* (London: Routledge, 2002), p. 52.
12. See John Sutton, "The Globalization Process: Auto-Component Supply Chains in China and India", *World Bank Report*, 2001. Sutton clarifies that

between product and work quality and productivity, quality is far more important to achieving global market competitiveness for a developing country, as lesser productivity can be offset with low wage rates. I thank Loren Brandt for drawing my attention to this research project.

13. Sutton, "The Globalization Process", p. 46.
14. Interview with the secretary general of CAMA: Beijing, January 2004.
15. Ibid.
16. The standards covered auto emissions and safety standards, auto electronic technology, environmental and energy efficiency technology, new materials application, and energy replacement that were compatible with international standards. They also included anti-lock brake systems, safety airbag, and side-slide prevention control systems used in some domestic-produced cars.
17. Gallagher, *China Shifts Gears*, p. 121.
18. E. Thun, *Changing Lanes in China: Foreign Direct Investment, Local Governments, and Auto Sector Development* (Cambridge: Cambridge University Press, 2006), p. 79.
19. Ibid., pp. 7–8, 79. Thun notes that the auto industry is the only industry in which each of the core projects is a joint venture as "emblematic of China's efforts to leverage foreign firm's access to the domestic marketplace for their technology and managerial skills". The auto sector is therefore a useful case study for examining how two decades of reform, development, and foreign investment have prepared state-owned Chinese auto firms for the challenge of global integration. However, in his comparative methodology, he holds constant the foreign-invested joint ventures in different regions as a variable, i.e. a common factor, in order to allow for variation in local institutions as the key factor, the dependent variable, in explaining variations in outcome across different regions. Such an approach diverts attention away from variations in MNC behavior, and variation in state–MNC bargaining outcomes.
20. Interview with researchers of the Development Research Center of the State Council, NDRC researchers, and the research director of CAMA: Ottawa, January 2001; Beijing, November 2001, April 2002.
21. Dic Lo, *Market and Institutional Regulation in Chinese Industrialization, 1978–94* (Basingstoke: Macmillan, 1997), p. 192.
22. Development Research Center of the State Council, "Reconciling China's Trade and Industrial Policies", *DRC Final Research Report*, September 2000, p. 5.
23. Ibid.
24. Ibid., p. 8.
25. On the definition of "institutions" as regularized procedures, practices, and norms that structure relations between individuals and groups in and across the economy, polity, and society, and phases and critical junctures in institutional development in historical institutionalist theory, see Peter Hall, *Governing the Economy: the Politics of State Intervention in Britain and France* (New York, Oxford University Press, 1986), p. 19; and P. Hall and R. Taylor, "Political Science and the Three New Institutionalisms", *Political Studies*, 44 (5), 1996, p. 938; Vivien Schmidt, "Institutionalism", in Colin Hay, Michael Lister and David March (eds), *The State: Theories and Issues* (Basingstoke: Palgrave Macmillan, 2006), p. 105; R.B. Collier and D. Collier, *Shaping the Political Arena: Critical Junctures, the Labor Movement and Regime Dynamics in Latin America* (Princeton, Princeton University Press, 1991); G. John Ikenberry, "Conclusion: an Institutional

- Approach to American Foreign Economic Policy", in G.J. Ikenberry, D.A. Lake and M. Mastanduno (eds), *The State and American Foreign Economic Policy* (Ithaca: Cornell University Press, 1988), pp. 226–9.
26. Gallagher, *China Shifts Gears*.
  27. Thun, *Changing Lanes in China*.
  28. The argument on the significance of the 1994 AIP here is based on both qualitative and quantitative indicators of change.
  29. Stephan Haggard, *Pathways from the Periphery: the Politics of Growth in the Newly Industrializing Countries* (Ithaca: Cornell University Press, 1990), pp. 191–222.
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  31. Peter Evans, *Dependent Development: the Alliance of Multinational, State, and Local Capital in Brazil* (Princeton: Princeton University Press, 1978); Garry Gereffi, *The Pharmaceutical Industry and Dependency in the Third World* (Princeton: Princeton University Press, 1983); Douglas Bennett and Kenneth E. Sharpe, *Transnational Corporations versus the State: the Political Economy of the Mexican Automobile Industry* (Princeton: Princeton University Press, 1985); Richard Newfarmer (ed.), *Profits, Poverty, and Progress: Case Studies of International Industries in Latin America* (Notre Dame: University of Notre Dame Press, 1985). For the pioneering work in this literature, see Fernando Henrique Cardoso, "Associated-Dependent Development: Theoretical and Practical Implications", in Alfred Stepan (ed.), *Authoritarian Brazil* (New Haven: Yale University Press, 1973).
  32. For a critique of the understanding of MNCs as global corporations, see Doremus et al., *Myth*, pp. xi, 11–14.
  33. L. Brittan, "Investment Liberalisation: the Next Great Boost to the World Economy", *Transnational Corporations*, 4(1), 1995, p. 2.
  34. D. Julius, "International Direct Investment: Strengthening the Policy Regime", in George Keenan (ed.), *Managing the World Economy* (Washington, DC: Institute for International Economics, 1994), p. 278.
  35. Gerald K. Helleiner, "Transnational Corporations and Direct Foreign Investment", in H. Chenery and T.N. Srinivasan (eds), *Handbook of Development Economics*, Vol. II (Amsterdam: Elsevier Science Publishers, 1989), p. 1443. These external sources of scarce inputs and complementary services may or may not be MNCs; they could be foreign buyers who help procure the needed inputs from international suppliers.
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  40. Richard Baum and Victor Shevchenko, "The 'State of the State'", in M. Goldman and R. MacFarquhar, *The Paradox of China's Post-Mao Reforms*, pp. 333–62. Baum and Shevchenko provide a list of 17 concepts that have been used to classify the Chinese political order.
  41. Kenneth Lieberthal and Michel Oksenberg, *Policy Making in China: Leaders, Structures, and Process* (Princeton: Princeton University Press, 1988); David M. Lampton and Kenneth Lieberthal (eds), *Bureaucracy, Politics and Decision Making in Post-Mao China* (Berkeley: University of California Press, 1992).
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44. Adam Segal and Eric Thun, "Thinking Globally, Acting Locally: Local Governments, Industrial Sector, and Development in China", in *Politics and Society*, 29(4), 2001, pp. 557–88; Thun, *Changing Lanes in China*; Adam Segal, *Digital Dragons: National Technology Policy, Local Governments, and Enterprises in China* (Ithaca: Cornell University Press, 2003).
45. Segal and Thun, "Thinking Globally".
46. Ibid., p. 561.
47. Thun, *Changing Lanes in China*, p. 110.
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## 2 The Chinese State: International and Comparative Perspective

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22. Helen Shapiro, *Engines of Growth: the State and Transnational Auto Companies in Brazil* (New York: Cambridge University Press, 1994), p. 3.
23. Ha-joon Chang, "Globalization, Transnational Corporations, and Economic Development: Can the Developing Countries Pursue Strategic Industrial Policy in a Globalizing World Economy?", in Dean Baker, Gerald Epstein, and Robert Pollin (eds), *Globalization and Progressive Economic Policy* (Cambridge: Cambridge University Press, 1998), p. 108.
24. Ibid. Chang's observations are drawn from the *Financial Times*, November 23, 1994.
25. Ibid., pp. 108, 109.
26. Thun, *Changing Lanes in China*, p. 67 (emphasis added).
27. Ibid., p. 109 (emphasis added).
28. Ibid. Thun gives a detailed account of how local institutions, including local state institutions, acted as "development tools" in driving China's automotive development.
29. Gallagher, *China Shifts Gears*, p. 23. Gallagher's book focuses on the environmental sustainability considerations in China's automotive sector development, and addresses the limits of Chinese state intervention from the angle of environmental protection.
30. Ibid., p. 23; John Sutton, "The Globalization Process: Auto-Component Supply Chains in China and India", World Bank Report, 2001, p. 46. Sutton qualifies the observation, noting that "policies of this kind are not always appropriate or successful. Indeed they are liable to have seriously damaging effects, especially when pursued in small countries under conditions of continuing protection."
31. See Atul Kohli, *State-Directed Development: Political Power and Industrialization in the Global Periphery* (New York: Cambridge University Press, 2004).

32. Chalmers Johnson, *MITI and the Japanese Miracle: the Growth of Industrial Policy, 1925–1975* (Stanford: Stanford University Press, 1982); Alice Amsden, *Asia's Next Giant: South Korea and Late Industrialization* (New York: Oxford University Press, 1989); Robert H. Wade, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (Princeton: Princeton University Press, 1990); Jung-en Woo, *Race to the Swift: State and Finance in Korean Industrialization* (New York: Columbia University Press, 1991).
33. Amsden, *Asia's Next Giant*; Wade, *Governing the Market*.
34. Johnson, *MITI and the Japanese Miracle*, p. 217.
35. Chang, "Globalization, Transnational Corporations, and Economic Development", p. 105.
36. *Ibid.*, p. 106.
37. *Ibid.*
38. Alice Amsden, "The Wild Ones: Industrial Policy in the Developing World", in Narcis Serra and Joseph E. Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance* (Oxford: Oxford University Press, 2008), p. 96 (emphasis added).
39. Helen V. Milner and Robert O. Keohane, "Internationalization and Domestic Politics", in R.O. Keohane and H.V. Milner (eds), *Internationalization and Domestic Politics* (Cambridge: Cambridge University Press, 1996), pp. 20–2.
40. T.J. Pempel, "The Developmental Regime in a Changing World Economy", in M. Woo-Cumings (ed.), *The Developmental State* (Ithaca: Cornell University Press, 1999), pp. 137–81.
41. Stephan Haggard and Tun-jen Cheng, "State and Foreign Capital in the East Asian NICs", in Frederic C. Deyo (ed.), *The Political Economy of the New Asian Industrialism* (Ithaca: Cornell University Press, 1987), pp. 84–135; Bruce Cumings, "The Origins and Development of the Northeast Asian Political Economy: Industrial Sectors, Product Cycles, and Political Consequences", in F.C. Deyo (ed.), *The Political Economy of the New Asian Industrialism* (Ithaca: Cornell University Press, 1987), pp. 44–83; John Ravenhill, "From National Champions to Global Partners: Crisis, Globalization and the Korean Automobile Industry", in W.W. Keller and R. Samuels (eds), *Crisis and Innovation in Asian Technology* (Cambridge: Cambridge University Press, 2003) pp. 108–36.
42. Chalmers Johnson, "The Developmental State: Odyssey of a Concept", in M. Woo-Cumings (ed.), *The Developmental State* (Ithaca: Cornell University Press, 1999), p. 43.
43. Theda Skocpol, "Bringing the State Back In: Strategies of Analysis in Current Research", in Peter B. Evans, Dietrich Rueschemeyer, and Theda Skocpol (eds), *Bringing the State Back In* (Cambridge: Cambridge University Press, 1985), p. 17.
44. The French jurist Jean Bodin called finance the "nerves of the state".
45. Chalmers Johnson, "Political Institutions and Economic Performance: the Government–Business Relationship in Japan, South Korea and Taiwan", in Frederic C. Deyo (ed.), *The Political Economy of the New Asian Industrialism* (Ithaca: Cornell University Press, 1987), pp. 136–64.
46. John Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change* (Ithaca: Cornell University Press, 1983). See also Michael Loriaux, *France after Hegemony: International Change and Financial Reform* (Ithaca: Cornell University Press, 1991); Juhana Vartiainen, "Finnish

- Monetary Policy in the Credit Rationing Era", *Finnish Economic Papers*, 7(1), Spring 1984, pp. 42–55.
47. Jung-en Woo, *Race to the Swift: State and Finance in Korean Industrialization* (New York: Columbia University Press, 1991).
  48. Ravenhill, "From National Champions to Global Partners".
  49. For the SOE sector more broadly, however, heavy investment in the asset base has often been finance by bank borrowing, from state banks at all levels in the Chinese system. Yasheng Huang, *Selling China Foreign Direct Investment during the Reform Era* (New York: Cambridge University Press, 2003), pp. 106–51, 226.
  50. *Jingji ribao* [Economic Daily], January 14, 1993, p. 1. Cited in Dic Lo, *Market and Institutional Regulation in Chinese Industrialization, 1978–94* (Basingstoke: Macmillan, 1997), p. 182.
  51. Yang, *Globalization of the Automobile Industry*, p. 133.
  52. This drew overt resistance from SAW in particular, as it became focused on maximizing its production capacity and technological competitiveness in order to compete against FAW. Tensions degenerated into open conflict between CNAIC and SAW over the right to market SAW's lucrative spare parts.
  53. Yang, *Globalization of the Automobile Industry*, pp. 133–4.
  54. Cyril Lin, "Open-Ended Economic Reform in China", in V. Nee and D. Stark (eds), *Remaking the Economic Institutions of Socialism: China and Eastern Europe* (Stanford: Stanford University Press, 1989), pp. 95–136.
  55. Yang, *Globalization of the Automobile Industry*, p. 140. In 1985, just prior to their takeover by the SPC, FAW and SAW received financial support from central authorities for a number of Sino-foreign technology-transfer deals to strengthen their truck manufacturing capacities.
  56. *Ibid.*, p. 171.
  57. Thun, *Changing Lanes in China*.
  58. *Ibid.*, p. 151.
  59. Yang, *Globalization of the Automobile Industry*.
  60. *Ibid.*
  61. Harwit, *China's Automobile Industry*, p. 98.
  62. SVW included the Bank of China as one of its partners.
  63. Guangzhou Peugeot included China International Trust and Investment Corporation, a state investment firm, France's national commercial bank, and the World Bank's International Finance Corporation (IFC) as JV partners.
  64. Interview with NDRC researcher: Beijing, November 2005.
  65. *Jingji ribao* [Economic Daily], January 14, 1993, p. 1.
  66. Wang Shaoguang and Hu Angang, *Zhongguo guojia negli baogao* [Report on China's state capacity] (Shenyang, Liaoning renmin chubanshe, 1993).
  67. Wang Shaoguang, "China's 1994 Fiscal Reform: an Initial Assessment", *Asian Survey*, 37(9), September 1997, pp. 801–17.
  68. Thun, *Changing Lanes in China*; Huang, *Selling China*.
  69. Interview with NDRC automotive industry researcher: Beijing, December 2005.
  70. See Yasheng Huang, *Inflation and Investment Controls in China* (New York: Cambridge University Press, 1996), pp. 322–4.
  71. Yukyung Yeo and Margaret M. Pearson, "Regulating Decentralized State Industries: China's Auto Industry", *The China Review*, 8(2), Fall 2008, pp. 231–59.
  72. *Ibid.*

73. Yeo and Pearson highlight an informal institutional mechanism that is used by the Party to further bolster its influence: the *xunshizu*, in which a small group of leading cadres go to each province, to inspect and supervise leading cadres, as part of the Party center's anticorruption program. The activities of the *xunshizu* have extended to business management, including the large automotive SOEs, and they review the business plans and balance sheets of the firms to examine their financial practices. They have even attended some board meetings. The *xunshizu* group investigates whether the executives are concealing any revenue or asset holdings, and reportedly also remind the enterprise management of the goals of the Party center. *Xunshizu* can thus be thought of as an invisible "third party" in the regulatory regime, between the state and the Chinese automotive groupings.
74. S. Hymer, *The International Operations of National Firms: a Study of Direct Foreign Investment* (Cambridge, Mass.: MIT Press, 1976); Alice Amsden, *The Rise of "The Rest": Challenges to the West from Late-Industrializing Economies* (New York: Oxford University Press, 2001); Gallagher, *China Shifts Gears*, p. 131.
75. A.B. Atkinson and J. E. Stiglitz, "New View of Technological Change", *Economic Journal*, 79, 1969, pp. 573–78; R. Nelson and S. Winter, "In Search of a Useful Theory of Innovation", *Research Policy*, 6(1), 1977, pp. 36–76; P. David, "Clio and Economics of QWERTY", *American Economic Review*, 75(2), 1985, pp. 332–7; D. Teece, "Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy", *Research Policy*, 1(15), 1986, pp. 285–305; W.B. Arthur, "Competing Technologies: an Overview", in G. Dosi, C. Freeman, R. Nelson, G. Silverberg, and L. Soete (eds), *Technical Change and Economic Theory* (London: Pinter, 1988), pp. 590–607.
76. See Alice Amsden, *Asia's Next Giant*. Eric Thun examines this in the case of Shanghai Automotive Corporation in the period since China's WTO accession period. See Thun, *Changing Lanes in China*.
77. K.J. Arrow, "The Economic Implications of Learning By Doing", *Review of Economic Studies*, 29(3), 1962, pp. 155–73; J. Baranson and R. Roark, "Trends in North–South Transfer of High Technology", in N. Rosenberg and C. Frischtak (eds), *International Technology Transfer: Concepts, Measures and Comparisons* (New York: Praeger, 1985); C. Dahlman, B. Ross-Larson, and L. Westphal, "Managing Technological Development: Lesson from New Industrializing Countries", *World Development*, 15(6), 1987, pp. 759–75; J.Z. Yin, "Technological Capabilities as Determinants of the Success of Technology Transfer Projects", *Technological Forecasting and Social Change*, 42, 1992, pp. 17–29; B. Xu, "Multinational Enterprises, Technology Diffusion, and Host Country Productivity", *Journal of Development Economics*, 62, 2000, pp. 477–93; S.B. Ohshita and L. Ortolano, "The Promise and Pitfalls of Japanese Cleaner Coal Technology Transfer to China", *International Journal of Technology Transfer and Commercialization*, 1(1–2), 2002, pp. 56–81.
78. Richard F. Doner, *Driving a Bargain: Automotive Industrialization and Japanese Firms in Southeast Asia* (Berkeley: University of California Press, 1991); Hidetaka Yoshimatsu, "The Role of Government in Jump-Starting Industrialization in East Asia: the Case of Automobile Development in China and Malaysia", *Issues and Studies*, 36(4), July–August 2000, pp. 166–99.
79. Mitchell Bernard and John Ravenhill, "The Pursuit of Competitiveness in East Asia: Regionalization of Production and Its Consequences", in David P. Rapkin

- and William P. Avery (eds), *National Competitiveness in a Global Economy: International Political Economy Yearbook*, Vol. 8 (Boulder: Lynne Rienner, 1995), pp. 103–32; Mitchell Bernard and John Ravenhill, “Beyond Flying Geese and Product Cycles: Regionalization, Hierarchy, and the Industrialization of East Asia”, *World Politics*, 47(2), January 1995, pp. 171–209.
80. Sanjaya Lall and Wolfram Latsch, “Import Liberalization and Industrial Performance: the Conceptual Underpinnings”, *Development and Change*, 29(3), 1998, pp. 437–65. Other factors include the determination and skill of the local recipient firm, and specific contractual arrangements between buyer and seller. See Dahlman et al. (eds), “Managing Technological Development”, pp. 759–75; Amsden, *Asia’s Next Giant*; Amsden, *The Rise of “the Rest”*; A. Warhust, “Technology Transfer and the Development of China’s Offshore Oil Industry”, *World Development*, 19(8), 1991, pp. 1055–73.
  81. The assumption is that human beings learn from others, can transmit knowledge to others due to the ability to codify knowledge (in concepts, language, and signs), store it (in the human mind, manuals, books, and computers), and pass it on, including through transferred institutionalization.
  82. For one application of such a view see Ha-joon Chang, *The Political Economy of Industrial Policy* (Basingstoke: St Martin’s Press, 1994), pp. 71–4.
  83. Yin’s cross-sector study of technology transfer to China has found that the government has played a key role in the process of “indigenizing technology”. See Yin, “Technological Capabilities as Determinants of the Success of Technology Transfer Projects”, pp. 17–29.
  84. P. Katzenstein, *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States* (Madison: University of Wisconsin Press, 1978), pp. 20–1.
  85. Kholi, *State-Directed Development*.
  86. *Ibid.*, pp. 383–5.
  87. On the Anglo-Saxon models, see Katzenstein, *Between Power and Plenty*, p. 20.
  88. On the Japanese and French statist models, see T.J. Pempel, “Japanese Foreign Economic Policy: the Domestic Bases for International Behaviour”, and John Zysman, “The French State in the International Economy”, in P. Katzenstein (ed.), *Between Power and Plenty*, pp. 139–90, 255–94.
  89. Zysman, “The French State in the International Economy”.
  90. There is need to rethink the conceptual distinction between the realms of the “public” and “private”, and new forms of public–private institutions in the case of China’s evolving “Communism”. This applies to China’s large state automotive conglomerates, as well as to the financial sector, with the creation of new “public” and supposedly commercially driven corporate entities such as the China Investment Corporation, which is managing a portion of the country’s sovereign wealth funds. These China-specific corporate forms highlight the need for conceptual rethinking.
  91. Ken Jowitt, *New World Disorder: the Leninist Extinction* (Berkeley: University of California Press, 1992), pp. 59–61.
  92. *Ibid.*, p. 60.
  93. On China’s efforts to form “national champions”, see Peter Nolan, *China and the Global Economy: National Champions, Industrial Policy and the Big Business Revolution* (Basingstoke: Palgrave, 2001). On the Leninist inheritances in Chinese regulatory approaches, see Margaret M. Pearson, “The Business of Governing Business in China: Institutions and the Norms of the Emerging

- Regulatory State", *World Politics*, 57(2), January 2005, pp. 296–322; Yeo and Pearson, "Regulating Decentralized State Industries".
94. Scott Kennedy has recently shown that business interests, both domestic and foreign, have started receiving a more independent hearing from government decision makers, and have started to exert influence over public policy in China, as the country continues to evolve along the market reform path. See Scott Kennedy, *The Business of Lobbying in China* (Cambridge, Mass.: Harvard University Press, 2005).
  95. For the debate over whether Beijing is pursuing regional leadership in the Asian region, even if it is not, at this stage, pursuing global leadership ambitions, see David Shambaugh (ed.), *Power Shift: China and Asia's New Dynamics* (Berkeley: University of California Press, 2005).
  96. Bruce J. Dickson, *Red Capitalists in China: the Party, Private Entrepreneurs, and Prospects for Political Change* (Cambridge: Cambridge University Press, 2003); David Shambaugh, *China's Communist Party: Atrophy and Adaptation* (Berkeley: University of California Press, 2008); Kjeld Eric Brodsgaard and Zheng Yongnian (eds), *The Chinese Communist Party in Reform* (London: Routledge, 2006).
  97. Interviews with the deputy director general of the Institute of International Strategy of the Central Party School: Beijing, October 2005.
  98. See Chen Yun, "The Economic Situation and the Lessons We Have Learned" (Speech to the Central Working Conference of the Central Committee of the Communist Party of China, December 16, 1980), in *Selected Works of Chen Yun*, Vol. III, 1956–1994 (Beijing: Foreign Languages Press, 1999 edition), pp. 275–80. See also David M. Bachman, *Chen Yun and the Chinese Political System* (Berkeley: Institute of East Asian Studies, University of California, Berkeley, 1985).
  99. Chen Yun, "The Economic Situation and the Lessons We Have Learned", p. 276. See also Bachman, *Chen Yun and the Chinese Political System*; Margaret M. Pearson, *Joint Ventures in the People's Republic of China: the Control of Foreign Capital under Socialism* (Princeton: Princeton University Press, 1991).

### 3 Weak Foreign Automakers, State Coordination Failure

1. Joe Studwell, *The China Dream: the Quest for the Last Great Untapped Market in the World* (New York: Grove Press, 2003).
2. Margaret M. Pearson, *Joint Ventures in the People's Republic of China: the Control of Foreign Capital under Socialism* (Princeton: Princeton University Press, 1991), p. 8. To quote Pearson, "socialism such as was found in China in the 1980s could significantly enhance a country's bargaining power" with foreign companies.
3. Shaoguang Wang, "The Rise of the Regions: Fiscal Reform and the Decline of Central State Capacity in China", in Andrew G. Walder (ed.), *The Waning of the Communist State: Economic Origins of Political Decline in China and Hungary* (Berkeley: University of California Press, 1995), pp. 87–113; Shaoguang Wang and Hu Angang, *Jiaqiang zhongyang zhengfu zai shichang jingji zhuangxingzhong de zhudao zuoyong* [Strengthen the central government's guiding role in the shift to a market economy] (Shenyang: Liaoning renmin chubanshe, 1993). See also: Hongying Wang, *Weak State, Strong Networks: the Institutional Dynamics of Foreign Investment in China* (New York: Oxford University Press, 2002).

4. This was likely a one-off personal intervention by Deng Xiaoping. Eric Harwit has noted that Deng appears to have been supportive of the automotive modernization efforts, but did not become personally involved. Eric Harwit, *China's Automobile Industry* (Armonk: M.E. Sharpe, 1995).
5. See Chunli Lee, "Adoption of the Ford System and Evolution of the Production System in the Chinese Automobile Industry, 1953–93", in Haruhito Shiomi and Kazuo Wada (eds), *Fordism Transformed: the Development of Production Methods in the Automobile Industry* (Oxford: Oxford University Press, 1995), pp. 297–314; Jin Chen, Chunli Lee, and Takahiro Fujimoto, "Adaptation of Lean Production in China: the Impact of Japanese Management Practice", MIT IMVP Working Paper 162a, 1997, pp. 1–29; Tomoo Marukawa, "The Contradictions of Enterprise Groups: a Case Study of the FAW Group", *China Information*, 23, 1999, pp. 18–26.
6. George T. Crane, *The Political Economy of China's Special Economic Zones* (Armonk: M.E. Sharpe, 1990).
7. Interview with the former lead VW German executive in China: Beijing, July 2006.
8. A former VW executive noted that the German automaker did conduct a preliminary survey to help determine whether it made sense to produce cars in Shanghai rather than Beijing or any other locale. The survey indicated that the choice of Shanghai made sense for VW because it had an existing tradition of car production, unlike Beijing. Interview with Stefan Messmann, June 2005.
9. AMC initially was interested in building passenger cars at the Beijing JV, in addition to jeeps; however, Chinese authorities made it clear to AMC at the outset of the negotiations that AMC would only be allowed to partner with Beijing Automotive Works, and to only make one type of vehicle, and that was going to be a military-type jeep.
10. Interview with NDRC auto industry planner: Beijing, November 2005.
11. See Wang Shaoguang and Hu Angang, *Zhongguo guojia negli baogao* [Report on China's state capacity] (Shenyang, Liaoning renmin chubanshe, 1993); Wang Shaoguang, "The Rise of the Regions: Fiscal Reform and the Decline of Central State Capacity", in A.G. Walder (ed.), *The Waning of the Communist State: Economic Origins of Political Decline in China and Hungary* (Berkeley: University of California Press, 1995). For an application of the weak state argument to China's international economic relations, see Wang, *Weak State, Strong Networks*.
12. According to Hongying Wang, this state weakness was the result of economic decentralization and intense regional competition over investment, which further fractured the efforts of the Chinese state to intervene in "FDI development", and gave rise to the reliance on informal networks and institutions. See Wang, *Weak State, Strong Networks*.
13. Interview with NDRC officials: Beijing, November 2005.
14. Ibid.
15. Ibid.
16. Ibid.
17. Mitchell Bernard, "Post-Fordism, Transnational Production, and the Changing Global Political Economy", in Richard Stubbs and Geoffrey Underhill (eds), *Political Economy and the Changing Global Order* (Toronto: McClelland and Stewart, 1994), pp. 216–29.



18. Eric Thun, *Shifting Lanes in China* (Cambridge: Cambridge University Press, 2006).
19. James P. Womack, Daniel T. Jones, and Daniel Roos, *The Machine that Changed the World: the Story of Lean Production* (New York: Macmillan Press, 1990).
20. The creation of "flexible firms" involved firm restructuring, the creation of alliances between firms, vertical disintegration, and the creation of networks of firms.
21. On the historical evolution of post-Fordism, see Bernard, "Port-Fordism", pp. 216–29.
22. Daniel T. Jones and James P. Womack, "Developing Countries and the Future of the Automobile Industry", *World Development*, 13(3), 1985, pp. 393–407.
23. Ibid., pp. 400–1. According to Jones and Womack, the Japanese, between 1970 and 1981, had reduced the total number of hours needed to build a car from 250 to 130, and were continuing to lower the hours needed.
24. Ibid., p. 405.
25. Ibid., p. 406.
26. Ibid.
27. This warning is from G. Helleiner, "Transnational Corporations", in H. Chenery and T.N. Srinivasan (eds), *Handbook of Development Economics*, Vol. II (Amsterdam: Elsevier Science Publishers, 1989), p. 1461. See also Constantine Vaitsos, "Power, Knowledge and Development Policy: Relations between Transnational Enterprise and Developing Countries", in G.K. Helleiner (ed.), *A World Divided: the Less Developed Countries in the International Economy* (New York: Cambridge University Press, 1976), pp. 113–46; C. Doyle and S. van Wijnbergen, "Taxation of Foreign Multinationals: a Sequential Bargaining Approach to Tax Holidays", *International Tax and Public Finance*, 1(3), December 1994, pp. 211–25.
28. John Zysman, "The French State in the International Economy", in Peter Katzenstein, *Between Power and Plenty: Foreign Economic Policy of Advanced Industrial States* (Madison: University Wisconsin Press, 1978), pp. 255–93; Helleiner, "Transnational Corporations", pp. 1461–4.
29. Nathan Fagre and Louis T. Wells Jr., "Bargaining Power of Multinationals and Host Countries", *Journal of International Business*, 13, 1982, pp. 9–23; Dennis J. Encarnacion and Louis T. Wells Jr., "Sovereignty en Garde: Negotiating with Foreign Investors", *International Organization*, 39(1), 1985, pp. 47–78; Paul Streeten, "Bargaining with Multinationals", *World Development*, 4(3), 1976, pp. 225–9.
30. Helleiner, "Transnational Corporations", p. 1461.
31. Susan Strange, "Rethinking Structural Change in the International Political Economy: States, Firms and Diplomacy", in Richard Stubbs and Geoffrey R.D. Underhill (eds), *Political Economy and the Changing Global Order* (Toronto: McClelland and Stewart, 1994), p. 108.
32. For a detailed list of conditions under which the host government's bargaining power relative to the foreign investor is likely to increase, see Encarnacion and Wells Jr, "Sovereignty en Garde", pp. 51–2.
33. G. Philip, "The Limitations of Bargaining Theory: a Case Study of the International Petroleum Company in Peru", *World Development*, 4, 1976, pp. 231–9.

34. T.H. Moran, *Multinational Corporations and the Politics of Dependence: Copper in Chile* (Princeton: Princeton University Press, 1974); Streeten, "Bargaining with Multinationals", pp. 225–9; R. Vernon, *Storm over the Multinationals: the Real Issues* (Cambridge, Mass.: Harvard University Press, 1977).
35. Walter Arnold, "The Japanese Automobile Industry in China", JPRI Working Paper, No. 95, November 2003, p. 2.
36. John Ravenhill, "From National Champions to Global Partners: Crisis, Globalization and the Korean Automobile Industry", in W.W. Keller and R. Samuels (eds), *Crisis and Innovation in Asian Technology* (Cambridge: Cambridge University Press, 2003), pp. 108–36.
37. Richard F. Doner, *Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia* (Berkeley: University of California Press, 1991).
38. Hidetaka Yoshimatsu, "The Role of Government in Jump-Starting Industrialization in East Asia: the Case of Automobile Development in China and Malaysia", *Issues and Studies*, 36(4), July/August 2000, pp. 166–99.
39. Interview with Chinese state planner for the automotive sector: Beijing, January 2006.
40. Arnold, "The Japanese Automobile Industry in China", p. 2.
41. Watanabe Masumi, *2000nen no Chuugoku jidousha sangyou* [The Chinese Auto Industry in the Year 2000] (Tokyo: Sousou-sha, 1996). Cited in G.W. Noble, J. Ravenhill, and R.F. Doner, "Executioner or Disciplinarian: WTO Accession and the Chinese Auto Industry", *Business and Politics*, 7(2), 2005, p. 5.
42. Shiomi Haruto, *Ikouki no Chuugoku jidousha sangyou* [The Chinese Auto Industry in Transition] (Tokyo: Nihon kezai hyouron-sha, 2001), pp. 343–7. Cited in Noble et al., "Executioner or Disciplinarian", p. 5.
43. I thank Bernie Wolf for highlighting this point.
44. The first Arab oil embargo, the ousting of the Shah of Iran, and return of gasoline shortages in the late 1970s, price inflation, and the US recession encouraged the Japanese to establish plants in the US. The turmoil in the Middle East and in international oil markets guaranteed a market for compact cars in the US, in which the Japanese specialized.
45. L. Hiraoka, *Global Alliances in the Motor Vehicle Industry* (Westport: Quorum Books, 2001), pp. 48, 54.
46. I thank Bernie Wolf for drawing my attention to this Toyota case.
47. Christopher Law, "Motor Vehicle Manufacturing: the Representative Industry", in Christopher M. Law (ed.), *Restructuring the Global Automobile Industry: National and Regional Impacts* (London: Routledge, 1991), p. 16.
48. The defeat of Hua, and rise to power of Deng Xiaoping and his allies was accompanied by Chen Yun's decision to scale down and rebalance the national development agenda.
49. Arnold, "The Japanese Automobile Industry in China".
50. Ibid., p. 2.
51. Japanese specialists did become involved in training FAW and SAIC on lean production techniques during the 1980s. See Jin Chen, Chunli Lee, and Takahiro Fujimoto, "Adaptation of Lean Production in China: the Impact of Japanese Management Practice", MIT IMVP Working Paper 162, 1997.
52. Walter Arnold, "Bureaucratic Politics, State Capacity, and Taiwan's Automobile Industrial Policy", *Modern China*, 15, 1989, pp. 178–214.

53. Interview with former senior executives of a major US automaker: September 2008.
54. Ibid.
55. Ravenhill, "From National Champions to Global Partners".
56. Kenneth P. Thompson, *Capital beyond Borders: States and Firms in the Auto Industry, 1960–94* (Basingstoke: Macmillan, 1997). In this period, Ford was the most internationalized producer among the Big Three (measured by factory unit sales), and over five-eighths of its workers were located overseas. Its threats to relocate had teeth. GM was the next most mobile, while Chrysler was the least mobile of the Three, especially after its financial troubles and selling off its Latin American, European and Australian operations in 1978 and 1979.
57. Interview with NDRC industrial planner involved in drafting the 1994 AIP: Beijing, May 2004.
58. Interview with NDRC industrial planner: Beijing, January 2005.
59. This group included Mercedes-Benz, Fiat, British Leyland, Volkswagen, Ford, American Motors Corporation, Toyota, Nissan, Mitsubishi, and Daihatsu.
60. Michael N. Young and Justin Tan, "Beijing Jeep at a Crossroads: facing the Challenge of China's Entry into the WTO", *Asian Case Research Journal*, 5(1), 2001, p. 3.
61. Ibid.
62. Jim Mann, *Beijing Jeep: a Case Study of Western Business in China* (Boulder, Colo.: Westview Press, 1997).
63. Ibid., p. 1.
64. Young and Tan, "Beijing Jeep at a Crossroads", p. 3.
65. Harwit, *China's Automobile Industry*, p. 50.
66. Ibid.
67. Jean-Louis Loubet, "The Cautious and Progressive Internationalization of PSA Peugeot Citroën", in Michel Freyssenet, Koichi Shimizu, and Giuseppe Volpato (eds), *Globalization or Regionalization of the European Car Industry?* (Basingstoke: Palgrave Macmillan, 2003), pp. 152–70.
68. Harwit, *China's Automobile Industry*.
69. Nick Biziouras and Beverly Crawford, "The Fast Lane to Asia: European Auto Firms in China", in Vinod Aggarwal (ed.), *Winning in Asia, European Style* (New York: Palgrave, 2001), pp. 159–86; Harwit, *China's Automobile Industry*.
70. Loubet, "The Cautious and Progressive Internationalization of PSA Peugeot Citroën", p. 162.
71. Thun, *Changing Lanes in China*.
72. A former senior VW executive explained that VW's United States Office did not protect VW's customer base in the US; that VW did not successfully respond to the Japanese challenge by effectively marketing the VW Rabbit (or later the Golf) as the new VW model which had been designed exactly with the limits of the Beetle in mind; and that the Rabbit had all the benefits of the Japanese models, and was actually better engineered. Interview with Stefan Messmann, May 2005.
73. Hiraoka, *Global Alliances*, p. 45.
74. Ibid., p. 46.
75. Ibid., p. 48.

76. Charles B. Camp, "Small Japanese Cars Score Big Success in American Market", *Wall Street Journal*, May 26, 1971, pp. 1, 31.
77. Interview with NDRC planner: Beijing, November 2005.
78. Wang, "The Rise of the Regions".

#### 4 Shanghai VW: Origins of the Modern Supply Network

1. E. Thun, *Changing Lanes in China: Foreign Direct Investment, Local Governments, and Auto Sector Development* (Cambridge: Cambridge University Press, 2006), pp. 109–10.
2. Martin Posth, *1000 Days in Shanghai* (Singapore: John Wiley & Sons, 2006).
3. Interview with Dr Stefan Messmann, former President of VW Asia and China Operations: May 2005. See also Posth, *1000 Days in Shanghai*.
4. Martin Posth provides the following list: (1) construct prefabricated assembly lines, initially for semi knocked-down vehicle sets and later completely knocked-down sets, and set up related material-handling systems; (2) modernize newly acquired factories (Volkswagen), factory parts (American Motors) or complete construction of new assembly lines in a greenfield site (Peugeot); (3) modernize outdated local supply industries, and attain international production standards; (4) create country-wide service network (service, and after-sales service); (5) create efficient company structures (management and organization); (6) raise the qualifications of Chinese employees (through training); (7) balance foreign exchange flows. See M. Posth, "The Automobile Sector", in Heike Holbig and Robert Ash (eds), *China's Accession to the World Trade Organization: National and International Perspectives* (London: Routledge, 2002), p. 80.
5. Posth, "The Automobile Sector", p. 80. As noted previously, Guangzhou did ignore central requests to press for design of new vehicle models.
6. Adam Segal, *Digital Dragons: National Technology Policy, Local Governments, and Enterprises in China* (Ithaca: Cornell University Press, 2003); Adam Segal and Eric Thun, "Thinking Globally, Acting Locally: Local Governments, Industrial Sector, and Development in China", *Politics and Society*, 29(4), 2001, pp. 557–88; Thun, *Changing Lanes in China*, p. 52.
7. Thun, *Changing Lanes in China*, p. 61. Thun does acknowledge that the central government, its "limited ability" notwithstanding, did use merger and acquisition to promote the development of large corporate groups, and did demonstrate the ability to regulate and control foreign investment in the auto sector. See *ibid.*, pp. 61–70.
8. Interview with Stefan Messmann: July, 2006.
9. *Ibid.*
10. Posth, *1000 Days in Shanghai*, p. 160.
11. *Ibid.*, p. 160 (emphasis added).
12. *Ibid.*, p. 162.
13. This quote is cited in *ibid.*, p. 162.
14. *Ibid.*, p. 163 (emphasis added).
15. *Ibid.*
16. *Ibid.*, pp. 155–6.

17. Quote by Wang Rongjun. Harvard Business School N90696-092, March 18, 1996. Cited in Posth, *1000 Days in Shanghai*, p. 156.
18. Posth, *1000 Days in Shanghai*, p. 156.
19. Ibid., p. 156.
20. Ibid.
21. Ibid.
22. Ibid., p. 159.
23. On the package of measures to contain the drain on FOREX, introduced in 1986, see Gregory Chin, "Beyond 'Outside-In' and 'Inside-Out': the Internationalization of the Chinese State", in David Zweig and Chen Zhimin (eds), *China's Reforms and International Political Economy* (London: Routledge, 2007).
24. Thun, *Changing Lanes in China*, p. 110.
25. Ibid.
26. Ibid., p. 112.
27. Posth, "The Automobile Sector", p. 82.
28. Posth, *1000 Days in Shanghai*, p. 55.
29. Eric Thun describes the details of the role that SAIC played in identifying local supply partners. See Thun, *Changing Lanes in China*, p. 158.
30. Ibid.
31. Ibid.
32. Ibid., pp. 160–1.
33. Interview with VW senior executive: July, 2006.
34. *Financial Times*, October 29, 1985.
35. Posth, *1000 Days in Shanghai*.
36. *Far Eastern Economic Review*, March 26, 1992.
37. Ibid., p. 53.
38. Ibid., p. 54. Posth notes that the test results of the Chinese female workers were "best of all" – "much better than anywhere else in the world".
39. Interview with VW senior executive: July, 2006.
40. Ibid.
41. *Asian Wall Street Journal*, January 27, 1987; Jim Mann, *Beijing Jeep* (New York: Simon and Schuster, 1989).
42. *China Business Review*, September 1992.
43. Ibid.
44. Starting from zero retired German experts in China, prior to the SVW project, China has booked the largest number of SES experts since the start of SVW.
45. Posth, *1000 Days in Shanghai*, p. 65.
46. Ibid., p. 8.
47. Ibid.
48. Ibid., p. 9.
49. Ibid., p. 68.
50. Ibid., p. 161.
51. Interview with Stefan Messmann: May 2005. Martin Posth also recalled that the hold of the central planning mindset persisted for a while after the start of operations in SVW, and that VW had to exert significant effort to change the thinking of especially state authorities.
52. Personal correspondence from Stefan Messmann, July 2008. On Chinese managers being very interested in learning from somebody they respect

- see: Jack Perkowski, *Managing the Dragon* (New York: Crown Business, 2008), pp. 122–7. Perkowski is Chair and CEO of ASIMCO Technologies, among China's largest automobile components makers, with 12,000 employees in 17 plants in 8 Chinese provinces.
53. Personal correspondence from Stefan Messmann, July 2008.
  54. The range of related management skills included negotiating supply agreements to reduce costs and improve payment and delivery terms; reducing head count; raising quality standards; developing customer relations; new product development; developing standard costing for controlling manufacturing costs, reducing inventories and collecting accounts receivable.
  55. Interview with Stefan Messmann, May 2005.
  56. Personal correspondence from Stefan Messmann, July 2008.
  57. Interview with Stefan Messmann, May 2005.
  58. Ibid.
  59. Posth, "The Automobile Sector", pp. 7, 79.
  60. Posth, *1000 Days in Shanghai*, p. 7.
  61. Ibid. Jiang Tao wrote a memoir on the SVW project, which summarizes the background and prehistory of the project, and the Chinese strategic aims for the project.
  62. Interview with VW senior executive: July 2006.
  63. Ibid.
  64. Ibid.
  65. *Financial Times*, September 26, 1986.
  66. *South China Morning Post*, October 18, 1985; *Financial Times*, September 22, 1986.
  67. *Financial Times*, March 14, 1985.
  68. The fact that Shanghai municipal authorities gave VW a protected local market and guaranteed purchases also greatly helped SVW's cause.
  69. Interview with Stefan Messmann, May 2005.
  70. Helmut Schmidt supported the early negotiations with the Chinese representatives sent to discuss the investment possibilities with VW. Schmidt's support to VW expansion into China would likely have been rooted in his personal experience as an officer in Hitler's Germany, where he had drawn deeper lessons from personally witnessing the tragic outcome of allowing economic and industrial tensions to boil over into international conflict. Schmidt is reported to have been a strong proponent of international efforts to bridge political gaps that were rooted in differences of economic interests and systems. I thank Ulrich Banteurbush for highlighting the details of Schmidt's personal background: Cancún, Mexico, March 2008.
  71. Reuters, February 28, 1984. Cited in N. Biziouras and B. Crawford, "The Fast Lane in Asia: European Auto Firms in China", in Vinod Aggarwal (ed.), *Winning in Asia, European Style* (New York: Palgrave, 2001), p. 177, fn. 57.
  72. Interview with Stefan Messmann: May 2005. See also Posth, *1000 Days in Shanghai*, p. 19.
  73. Posth, *1000 Days in Shanghai*, pp. 19–20.
  74. Ibid., p. 162.
  75. Ibid.
  76. Biziouras and Crawford, "The Fast Lane to Asia", p. 172.

77. Posth, *1000 Days in Shanghai*, p. 84.
78. Leslie S. Hiraoka, *Global Alliances in the Motor Vehicle Industry* (Westport, Conn.: Quorum Books, 2001), p. 8.
79. Ibid., p. 4.

## 5 The Automotive Industrial Policy

1. Peter Nolan, *China and the Global Economy: National Champions, Industrial Policy, and the Big Business Revolution* (Basingstoke: Palgrave, 2001), pp. 8–15.
2. *Jingji lilun yu jingji guanli* [Economic Theory and Economic Management], 1, January 28, 1989, pp. 44–9 (emphasis added) (cited in Chalmers Johnson, “Nationalism and the Market: China as a Superpower”, Japan Policy Research Institute, Working Paper No. 22, July 1996).
3. Nolan, *China and the Global Economy*, p. 5.
4. This is the “law of centralization of capital” in Vol. 1 of Karl Marx’s *Capital*.
5. Interview with NDRC state planners: Beijing, January 2005.
6. The calls from the moderate reformers to slow down the pace of economic reform, to contain the surging inflation of the late 1980s, and restore economic stability started in 1988.
7. Chinese researchers recalled in conversation that relations between Deng Xiaoping and Chen Yun had degenerated in the early 1990s to the point where Deng did not even pay a personal visit to Chen in 1992 when he visited Shanghai even though he knew that Chen was by then quite ill and resting at his home in Shanghai.
8. Li Peng and Zou Jiahua were engineering classmates in Moscow, and their ascent inside the central state industrial and economic planning-related organs coincided during the 1980s. In 1982, Zou was appointed Vice Minister of the Commission of Science, Technology, and Industry for National Defense in 1982. In November 1985 he was appointed as an advisor to the Party’s influential Leading Small Group on Financial and Economic Affairs. He was appointed Minister of Ordnance Industry in mid 1985 (military supplies including weapons, ammunition, combat vehicles, and maintenance tools and equipment; procuring, distributing and safekeeping of ordnance), and in December 1986, promoted again to Chair of the Commission of Machine-Building Industry. See E. Harwit, *China’s Automobile Industry: Policies, Problems, and Prospects* (Armonk: M.E. Sharpe, 1995), p. 65.
9. Laurence J. Brahm, *Zhu Rongji and the Transformation of Modern China* (Singapore: John Wiley & Sons, 2002).
10. Victor Shih, *Factions and Finance* (Cambridge: Cambridge University Press, 2008).
11. Joseph Fewsmith, *China since Tiananmen: the Politics of Transition* (Cambridge: Cambridge University Press, 2001), p. 84.
12. Chen Yuan, “Wo guo jingji de shengceng wenti he xuanze (gangyao)” [China’s deep-seated economic problems and choices (outline)], *Jingji yanjiu* [Economic Research], 4, April 1991, p. 19.
13. Chen Yuan, “Several Questions on Methods and Theory Regarding Studies in Economic Operations in China”, *Jingji yanjiu* [Economic Research], February 2002, pp. 29–37 (originally published in December 1990).

14. Ibid., p. 23.
15. He Guangyuan, "Mingque mubiao wanshan zhanlue tuijin jixie qiche chanye de zhenxing [Clarify goals, improve strategy, invigorate the mechanical and automobile industry], *Gongcheng jianshe yu sheji* [Project construction and design], 3, 1993, pp. 2–5.
16. Fewsmith explains that Chen Yuan praised Keynes for pointing out in clear-cut terms that the function of macroeconomic quantitative regulation and control can only be performed by the government, not the market mechanism, but rejected deficit financing and expansionary monetary policy. Chen rejected Milton Friedman's laissez-faire economic philosophy but praised the emphasis on monetary control. Fewsmith, *China since Tiananmen*, p. 86.
17. This means that resources invested in manufacturing firms cannot be instantaneously and shifted to other activities, without losses. In short, that every asset is not "general" or "liquid", and cannot be instantly withdrawn at little or no loss in terms of cost. See Ha-joon Chang, *The Political Economy of Industrial Policy* (Basingstoke: St. Martin's Press, 1994), pp. 65–6.
18. Interview with NDRC automotive industrial official: Beijing, January 2005.
19. The State Council, *Qiche gongye chanye zhengce* [The Industry Policy of the Automobile Industry], 1994.
20. Dic Lo suggests that the longer-term objectives of the '94 AIP were to promote catch-up modernization of China's auto industry by aiming to: (1) rationalize the production structure, including overcoming fragmentation and miniaturization of the industrial structure; and (2) to promote domestic demand. See Dic Lo, *Market and Institutional Regulation in Chinese Industrialization, 1978–94* (Basingstoke: Macmillan, 1997), p. 183.
21. Ibid., p. 184.
22. The totals were revised downwards in 1996, under the Ninth Five-Year Plan, to 2.7 million units, and 1.3 million cars.
23. Wayne W.J. Xing, "Shifting Gears", *The China Business Review*, November 1997.
24. I thank Bernie Wolf for this point.
25. Interview with NDRC industrial planners: Beijing, January 2006.
26. In the component industry, however, foreign investors can have total equity control over their China-based subsidiaries.
27. Margaret M. Pearson, *Joint Ventures in the People's Republic of China* (Princeton: Princeton University Press, 1991).
28. See Dali L. Yang, *Remaking the Chinese Leviathan: Market Transition and the Politics of Governance in China* (Stanford: Stanford University Press, 2004).
29. Interview with NDRC automotive industry planner: Beijing, January 2006.
30. Alice H. Amsden, *The Rise of "the Rest": Challenges to the West from Late-Industrializing Economies* (New York: Oxford University Press, 2001), p. 218.
31. Edith Penrose, *The Theory of the Growth of the Firm* (Oxford: Oxford University Press, 1995).
32. Interview with NDRC state planners: Beijing, January 2005.
33. The importance of this list of requirements was highlighted to the author during the interview with NDRC Academy of Macro-Economic Research (AMER) policy researchers: Beijing, January 2006.
34. Interview with Chinese academic researcher: Beijing, August 2006.
35. Interview with NDRC automotive industry planner 3: Beijing, January 2006.



36. Lo, *Market and Institutional Regulation in Chinese Industrialization*, p. 189.
37. One of the main objectives for the establishment of China Development Bank was to provide long-term financing support to the development of China's infrastructure, basic industries, pillar industries, and top-priority state projects.
38. This announcement followed the big increases in investment in China's auto sector from 1991 to 1995, when investment was RMB75.61 billion, marking a three times increase of the previous investment total. Source: China Automobile Technology and Research Center and China Automobile Manufacturers' Association, *Zhongguo qiche gongye nianjian 2005* [China Automobile Industry Yearbook 2005] (Tianjin: Zhongguo qiche gongye nian-jian bianji bu, 2005).
39. I thank John Ravenhill for raising this point.
40. Prior to 1994, foreign MNC assemblers could only partner with one Chinese state partner.
41. Interview with NDRC AMER policy researchers: Beijing, May 2006.
42. Interview with NDRC AMER policy researchers: Beijing, May 2006. See also Barry Naughton and Adam Segal, "China in Search of a Workable Model: Technology Development in the New Millennium", in William W. Keller and Richard J. Samuels (eds), *Crisis and Innovation in Asian Technology* (Cambridge, UK: Cambridge University Press, 2003), p. 169.
43. Interview with NDRC automotive official: Beijing, June 2006.
44. Ibid.
45. Interview with NDRC state planners: Beijing, January 2005.
46. On "managed market competition" in the Chinese economy, see Scott Kennedy, "The Price of Competition: Pricing Policies and the Struggle to Define China's Economic System", *The China Journal*, 49, January 2003, pp. 1–32; Margaret M. Pearson, "The Business of Governing Business in China: Institutions and Norms of the Emerging Regulatory State", *World Politics*, 57(2), 2005, pp. 296–322; Jae Ho Chung, "The Political Economy of Industrial Reform in China: the Case of Civil Aviation", *The China Journal*, 50, July 2003, pp. 61–82.
47. Interview with automotive industry researcher of the Academy of Macroeconomic Research of the NDRC: Beijing, January 2005.
48. The author's interview with NDRC researchers: Beijing, January 2006.
49. Interview with NDRC automotive industry planners: Beijing, January 2006.
50. Ibid.
51. Xing, "Shifting Gears", p. 51.
52. Jack Perkowski, *Managing the Dragon* (New York: Crown Business, 2008).
53. Xing, "Shifting Gears", p. 51.
54. John Ravenhill, "From National Champions to Global Partners: Crisis, Globalization and the Korean Automobile Industry", in W.W. Keller and R. Samuels (eds), *Crisis and Innovation in Asian Technology* (Cambridge: Cambridge University Press, 2003), p. 132.
55. Lo, *Market and Institutional Regulation in Chinese Industrialization*, p. 190.
56. Ibid.
57. Interview with NDRC automotive researcher: Beijing, December 2005.
58. Gen Shaojie, "Meiyou pinpai, zao duoshao che doushi bieren de huihuang" [Without brands, whatever auto output is achievement for others], China

Auto News (ed.), *Zhongguo qiche chuangxin cankao ziliao di si juan* [Materials for China's automotive innovation, phase 4] (Beijing: Zhongguo qiche baoshe, 2004), pp. 36–50; Huang Peiyan, “Cujin kuaguo gongsi dui woguo qiche jishu zhanyi de duice jianyi” [Suggestions to encourage MNCs to transfer automotive technology], *Shanghai zonghe jingji* (Shanghai economic forum), 7, 2002, pp. 26–7.

59. Naughton and Segal, “China in Search of a Workable Model”, p. 165.

## 6 Institutional Inheritances and Policy Effectiveness

This chapter is based on interviews with economic officials in China conducted during visits in 1998, 2002, and from 2003 to 2006; with Chinese economic officials visiting Canada in 2000, 2001, and 2002; with former senior executives of Volkswagen and General Motors who previously were involved in negotiating and implementing major JV projects in China in the 1980s and 1990s; with Chinese researchers and academics who specialize in the development of the Chinese automotive industry; and analysis of materials from Chinese and Western scholars and the press.

1. John Zysman, *Political Strategies for Industrial Order: Market State and Industry in France* (Berkeley: University of California Press, 1977).
2. Sebastian Heilmann has provided an excellent study of the role of Leninist means in regulatory innovation in China's financial sector. Sebastian Heilmann, “Regulatory Innovation by Leninist Means: Communist Party Supervision in China's Financial Industry”, *The China Quarterly*, 2005, pp. 1–21.
3. Susan Shirk, *The Political Logic of Economic Reform in China* (Berkeley: University of California Press, 1993), pp. 334, 347.
4. On the internalization of the CCP's organizational norms by Party cadres, see Melanie Manion, *Retirement of Revolutionaries in China: Public Policies, Social Norms, Private Interests* (Princeton: Princeton University Press, 1993).
5. On the CCP's adaptation, see Bruce J. Dickson, *Red Capitalists in China: the Party, Private Entrepreneurs, and Prospects for Political Change* (Cambridge: Cambridge University Press, 2003); Andrew G. Walder, “The Party Elite and China's Trajectory of Change”, in Kjeld Erik Brodsgaard and Zheng Yongnian (eds), *The Chinese Communist Party in Reform* (London: Routledge, 2006), pp. 15–32; Bruce J. Dickson, *Wealth into Power: the Communist Party's Embrace of China's Private Sector* (Cambridge: Cambridge University Press, 2008); David Shambaugh, *China's Communist Party: Atrophy and Adaptation* (Berkeley: University of California Press, 2008).
6. The discussion here responds to Zysman's question: “Can one even speak of the state as a coordinated and directed institution apart from the agencies that are its instrumentalities, or the political executive who seek to direct the bureaucracy, or the social groups that attempt to use it?” See J. Zysman, “The French State in the International Economy”, in Peter Katzenstein (ed.), *Between Power and Plenty: Foreign Economic Policy of Advanced Industrial States* (Madison: University Wisconsin Press, 1978), p. 265.
7. The State Planning Commission was renamed the State Development and Planning Commission (SDPC) in 1998, and then the National Development

- and Reform Commission (NDRC) in 2003. The basic mandates of the SPC described in this section continue to be the case for the NDRC; however, its regulatory functions have evolved from command control to market regulatory, but maintaining Party-state directive control.
8. Interview with former director of the State Council Office for Restructuring the Economic System: Beijing, February 2004.
  9. Interviews with senior researchers in the Academy of Macroeconomic Research of the NDRC: Beijing, April 2003, December 2005, October 2007, October 2008.
  10. See Lixin Wang and Joseph Fewsmith, "Bulwark of the Planned Economy: the Structure and Role of the State Planning Commission", in Carol Lee Hamrin and Suisheng Zhao (eds), *Decision-Making in Deng's China: Perspectives from Insiders* (Armonk: M.E. Sharpe, 1995), p. 53.
  11. Interview with senior researchers from the Academy of Macroeconomic Research of the NDRC: Beijing, January 2005. See also Wang and Fewsmith, "Bulwark of the Planned Economy", p. 53.
  12. Wang and Fewsmith, "Bulwark of the Planned Economy", p. 56.
  13. Ibid.
  14. Adam Segal and Eric Thun, "Thinking Globally, Acting Locally: Local Governments, Industrial Sector, and Development in China", *Politics and Society*, 29(4), 2001, pp. 557–88; Eric Thun, *Changing Lanes in China: Foreign Direct Investment, Local Governments, and Auto Sector Development* (Cambridge: Cambridge University Press, 2006); Adam Segal, *Digital Dragons: National Technology Policy, Local Governments, and Enterprises in China* (Ithaca: Cornell University Press, 2003). Segal and Thun build on an earlier literature on fragmented state authority. See Kenneth Lieberthal and Michel Oksenberg, *Policy Making in China: Leaders, Structures, and Process* (Princeton: Princeton University Press, 1988); David M. Lampton and Kenneth Lieberthal (eds), *Bureaucracy, Politics and Decision Making in Post-Mao China* (Berkeley: University of California Press, 1992). Others who also describe a weakened Chinese national state include: Wang Shaoguang and Hu Angang, *Zhongguo guojia negli baogao* [Report on China's state capacity] (Shenyang, Liaoning renmin chubanshe, 1993); Wang Shaoguang, "The Rise of the Regions: Fiscal Reform and the Decline of Central State Capacity", in A.G. Walder (ed.), *The Waning of the Communist State: Economic Origins of Political Decline in China and Hungary* (Berkeley: University of California Press, 1995); David S. Goodman and Gerald Segal, *China Deconstructs* (London, Routledge, 1994).
  15. Interview with NDRC auto industry planners: Beijing, December 2005.
  16. This office was created in 1991 by Zhu Rongji, to assume many of the authorities previously held by the former State Economic Commission. Under China's central planning system, the SPC was responsible for economic planning, and the State Economic Commission for coordinating the implementation of the plans, by overseeing the work of the line ministries.
  17. The Ministry of Machine-Building and Electronics Industry was created through a merger of two separate line ministries in April 1988, but was split again in March 1993 at the Eighth National People's Congress in March 1993. The rivalry between these two ministries was particularly intense over automotive policy. See E. Harwit, *China's Automobile Industry: Policies, Problems, and Prospects* (Armonk: M.E. Sharpe, 1995), pp. 49–50.

18. This list of the specific players was provided by a Chinese state planner who was involved in the policy review and has been working on the automotive file inside the SPC since 1993.
19. Zeng Peiyan had accumulated a deep reservoir of sector knowledge and working experience on the automotive file. He served in the Ministry of Electronics Industry for a significant period, and had been responsible for the file as senior bureaucrat, first as Vice Minister of Electronics Industry responsible for the automotive sector (1987–88), and continued on as Vice Minister of Machinery-Building and Electronics Industry (1988–92), until he was promoted to Vice Chair of the SPC. During the early periods in the Ministry of Electronics Industry, Zeng became close to future CCP General Secretary and Chinese President Jiang Zemin, who was the Minister of Electronics Industry.
20. Interview with state planners: Beijing, January 2006.
21. Zeng's emphasis on establishing a thorough consultation process across the range of main stakeholders may have likely drawn inspiration from the Maoist "mass line" leadership technique; and the emphasis on reaching consensus and ensuring coordinated policy mobilization from the Leninist organizational norm of democratic centralism.
22. Lieberthal and Oksenberg, *Policy Making in China*; Lampton and Lieberthal, *Bureaucracy, Politics and Decision Making in Post-Mao China*.
23. The difference between joint committees and leading groups is that the former have usually been formed to address more specific or focused issue areas, with bureaucratic *lianxi huiyi* addressing specific policy issues of social welfare, environment and natural resources issues, or specific issues of Party building. In contrast, the latter have traditionally been organized according to broader thematic/functional areas such as "Party affairs", "government work", "state security", "foreign affairs", and in the reform period, "financial and economic affairs", "agricultural affairs", "Taiwan affairs", "political and legal affairs". More recently some State Council leading groups have been formed for high-profile national policies such as "WTO affairs" and the "Great Western Regional Development Strategy". Recent examples of joint committees included the interministerial *lianxi huiyi* for food safety, and the Central Party *lianxi huiyi* on teaching the "Three Represents Theory". Source: Interview with the Leading Group Office of the Western Development Leading Group Office and the Ministry of Agriculture: Beijing, November 2003, November 2004. Interviews at the Central Party School: January 2004. See Kenneth Lieberthal, *Governing China* (New York: W.W. Norton, 2005, 2nd edn), pp. 215–18. For a discussion of more thematic-specific State Council leading groups, see Gregory Chin, "The Politics of China's Western Development Initiative", in Ding Lu and William A.W. Neilson (eds), *China's West Region Development: Domestic Strategies and Global Implications* (Singapore: World Scientific Press, 2004), pp. 137–74.
24. Interview with NDRC automotive industry planner 3: Beijing, January 2006.
25. Interview with former GM senior executive: September 2008 (emphasis in the original statements).
26. Interview with the former Vice President of GM China: October 2008.
27. Ibid. Rudy Schlais noted that he knew that he could find Lu Fuyuan in the reading room of the National Capital Library on weekends if he needed to discuss matters of importance. In his eight years at the FMIBI, Lu is said

- to have contributed greatly to auto industry policy, and took a personal role in championing a number of key auto projects. He also successfully convinced a number of expatriate Chinese auto experts to return to China, to help build the domestic industry. After serving a stint in the Ministry of Education, in March 2003, Lu was promoted to Commerce Minister.
28. Interview with NDRC officials and researchers: Beijing, December 2005.
  29. The “three big, three small” scheme referred to preferential focus on a select group of Chinese vehicle manufacturers: FAW, SAIC, and SAIC as the major players; and Beijing Jeep, Guangzhou Peugeot, and Tianjin Automotive Corporation as the privileged minor players. The plan also called for increasing passenger car output to 40 percent of vehicle production by 2000, but to limit new passenger car production to these select facilities. The aim was to stem the tide of building new and small-scale production facilities, flung across the country, while also emulating the concentrated industry structure of the US in Michigan and Ohio, or Japan’s centralized Nagoya–Tokyo factories.
  30. Rao Bin, “Fakan ci” [Forward], in China National Automotive Industry Corporation, *Zhongguo qiche gongye nianjian 1983* [China Automobile Industry Yearbook, 1983] (Beijing: Jixie gongye chubanshe, 1984), pp. xi–xiii.
  31. Interview with NDRC planners: Beijing, December 2005.
  32. Li Lanqing rose within the bureaucratic ranks, starting as Deputy Director of the Foreign Investment Office of the short-lived State Import–Export Control Commission, from 1979 to 1982, which vetted foreign investment decisions on major foreign-invested projects in the early reform period as China’s economic bureaucracy focused on renegotiating or escaping from the highly unrealistic contracts it had signed with foreign suppliers or commitments it had made with foreign investors under Hua Guofeng’s ill-conceived Ten-Year Plan. Li rose within the Ministry of Foreign Economic Relations and Trade (MOFERT, which was later renamed Ministry of Foreign Trade and Economic Relations or MOFTEC) to become Minister by the late 1980s, building a reputation as an expert on international finance, trade and investment.
  33. Dinner meetings with then Commerce Minister Wu Yi also ventured into geopolitics, but Minister Wu also used the dinners to forcefully press the case for the Chinese side on details of the proposed investment project. Interview with former GM senior executive: September 2008.
  34. The leading contenders realized that such meetings were part of building the human relations that Chinese leaders saw as essential in establishing proper business relations with the eventual winner.
  35. Interview with NDRC automotive industry planner: Beijing, January 2006.
  36. After holding a number of files close to the military industrial complex from 1982 onwards, in 1988 Zou was named as head of the new Ministry of Machine-Building and Electronics Industry, where he worked closely with Zeng Peiyan. He was appointed State Councilor in late 1988, and then in December 1989 was made Chair of the SPC. In spring 1991, Zou was appointed Vice Premier (while also keeping the post of SPC Chair until he stepped down in 1993). See Harwit, *China’s Automobile Industry*, p. 66.
  37. Ibid.
  38. Much to the surprise of GM executives, Zou resisted GM’s offer to build a broad range of vehicles in their Shanghai JV proposal. They came to learn

that Zou was a strong advocate for allocating the rights for van production to Guangdong or Hainan province.

39. Thun, *Changing Lanes in China*. On the importance of "local risk takers" in driving economic development in developing countries, see Alice H. Amsden, "The Wild Ones: Industrial Policies in the Developing World", in Narcis Serraand and Joseph E. Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance* (Oxford: Oxford University Press, 2008), p. 96.
40. Ibid.
41. Interview with NDRC automotive industry researcher: January 2006.
42. Ibid.; interview with former senior GM executives: September and October 2008.
43. For the application of factional politics models to China for the energy and financial sectors, see Lieberthal and Oksenberg, *Policy Making in China*; Victor Shih, *Factions and Finance* (Cambridge: Cambridge University Press, 2008).
44. Segal and Thun, "Thinking Globally, Acting Locally", p. 561.
45. Interview with NDRC automotive researcher: Beijing, December 2005.
46. Shirk, *The Political Logic of Economic Reform in China*, pp. 322–4; Yasheng Huang, *Inflation and Investment Controls in China* (New York: Cambridge University Press, 1996), pp. 322–4; Heilmann, "Regulatory Innovation by Leninist Means", pp. 1–21.
47. Yukyung Yeo and Margaret M. Pearson, "Regulating Decentralized State Industries: China's Auto Industry", *The China Review*, 8(2), Fall 2008, pp. 231–59.
48. This is the norm that lower Party organizations must firmly carry out the decisions of higher organizations. Lower organizations may request a change in the decision of the higher organization if they think it does not conform to conditions in their locality or department; if the higher organization insists on its original decision, the lower organizations must carry it out and shall not openly publicize differing opinions, but they have the right to report the matter to the organizations at a still higher level. Source: "The Communist Party of China", *People's Daily* (online: <http://english.peopledaily.com.cn/data/organs/cpc.html>) (accessed January 27, 2009).
49. In discussing and deciding issues, a Party organization must apply the principle of subordinating the minority to the majority. Decisions on important issues shall be put to the vote. Serious consideration shall be given to the different opinions of a few people. If a dispute over an important issue arises and the number of people on both sides is approximately the same, except when in an emergency the opinions of the majority must be carried out, finalizing a decision shall be deferred. Under special circumstances, a report of the case under dispute may be referred to the organization at the next higher level for a ruling. Source: "The Communist Party of China", *People's Daily* (online: <http://english.peopledaily.com.cn/data/organs/cpc.html>) (accessed January 27, 2009).
50. The Leading Small Group consisted of 22 members including two vice mayors, the directors of the Shanghai Economic Commission, Planning Commission, Science Commission, and Construction Commission, the directors of the Customs Department, Personnel Department, and Finance Department, the directors of three banks (Bank of China, Construction Bank, and Communications

- Bank), the directors of the Personnel Ministry, Finance Ministry, and every industry ministry (electric, light, second light, chemical, textiles), the President of SAIC, general manager of SVW, and head of Anting County (where SVW was located). Source: Thun, *Changing Lanes in China*, pp. 110–11.
51. Thun, *Changing Lanes in China*, p. 112.
  52. Segal and Thun, "Thinking Globally, Acting Locally", p. 562.
  53. In the close "revolving-door" relationship between the Shanghai municipal government and the senior management of SAIC, Lu also had very close working relations with Shanghai mayors and vice mayors, as well as Shanghai Vice Party Secretary Chen Xianglin, who had formerly been SAIC President (1983–86) and head of the Shanghai Planning Commission (until 1993), before being promoted to Vice Party Secretary of the Shanghai Communist Party Committee (1993–94). In 1995, Chen resumed the presidency of SAIC, while Lu took up the position as Chair of the Shanghai Municipal Economic Commission. Source: Thun, *Changing Lanes in China*, p. 112.
  54. Interview with Louis Hughes: September 2008.
  55. Ibid.
  56. Ibid.
  57. Interview with NDRC automotive researcher: Beijing, December 2005.
  58. Ibid.
  59. John Ravenhill, "From National Champions to Global Partners: Crisis, Globalization, and the Korean Auto Industry", in William W. Keller and Richard J. Samuels (eds), *Crisis and Innovation in Asian Technology* (Cambridge, UK: Cambridge University Press, 2003), p. 121.
  60. These general arguments are based on interviews with Chinese state planners on auto industry strategy behind the '94 AIP: Beijing, December 2005.
  61. Success is defined here as the remaking of the existing auto industry, and the establishment and maintenance of the industry structure into one that was satisfactory to the state. The policy outcomes that were achieved resulted from an improved understanding of the requirements of success in an increasingly internationalized auto industry, and the possibilities of state leverage.
  62. For example see Zhou Jiayi, "China's Passenger Car Industry", May 1989, pp. 22–4; Jiang Xianfen, "Fazhan jiaochē, shì zì bī xíng" [It is imperative to develop passenger cars], *Qiyè yánjiū* [Industrial Research], 7, 1987, pp. 15–16.
  63. For example see Yang Lincun, "Dui fazhan woguo jiaochē gongyè de jǐ diān kānfǎ" [A few opinions on developing our passenger car industry], *Zhōngguó kējì jìtān* [China Technical Compendium], 5, 1987, pp. 25–8.
  64. Interview with NDRC automotive industry researcher: Beijing, December 2005.
  65. E. Thun, "Industrial Policy, Chinese-Style: FDI, Regulation, and Dreams of National Champions", *Journal of East Asian Studies*, 4(3), 2004, p. 467.
  66. Interview with state planner: Beijing, January 2006.
  67. *Zhōngguó qìchē bào* [China Automotive News], January 4, 1990, p. 3.
  68. Jack Perkowski, *Managing the Dragon* (New York: Crown Business, 2008), pp. 123, 124–5.
  69. Personal correspondence from Stefan Messmann: August 2008.

70. Susan Strange, "Rethinking Structural Change in the International Political Economy: States, Firms and Diplomacy", in R. Stubbs and G.R.D. Underhill (eds), *Political Economy and the Changing Global Order* (Toronto: Macmillan, 1994), p. 111.
71. Jim Mann, *Beijing Jeep* (New York: Simon and Schuster, 1989).
72. The equity holding breakdown on the German side is Volkswagen AG 20 percent, Audi AG 10 percent, Volkswagen China 10 percent.
73. Interview with Stefan Messmann, former head of VW China and Asia: Beijing, April 2006.
74. Chrysler, in its bid to win the rights to JV with FAW, had sold FAW the license to produce its CA488 engine (mounted in the Dodge 600 minivan). But for the Chinese side, this was not enough to win the bid for FAW, despite the eagerness on the Chinese side to acquire engine technology.
75. FAW, upon purchasing the license for the Chrysler CA488 engine, built a new (second) engine plant on its premises, and after transferring the line for the cylinder block, it all of sudden could produce 300,000 engine units per year, running on two shifts per day. By transferring the lines for the cylinder head and crankshaft from a branch plant to the main engine factory, it quickly increased production capacity of these components to 150,000 units per year. After working out a merger with the Changchun Light Engine Factory, FAW acquired casting and processing nonmetal parts production facilities, and could give parts specifications. Interview with FAW lead engineer: Changchun, April 1998.
76. Louis Kraar, "China's Car Guy Hu Maoyuan has Skillfully Blended GM's Best Practices into a Creaky State Auto Industry", *Fortune*, October 11, 1999 (online: CNNMoney.com).
77. The Warring States Period covers the period from some time in the 5th century BC to 256 BC when China was united under the Qin Dynasty.
78. Interview with auto policy researcher of the Academy of Macroeconomic Research of the NDRC: Beijing, May 2006.
79. Ibid.
80. In 1991, China's most influential economic newspaper, *Jingji ribao* [Economic Daily], started publishing a number of articles calling for a new emphasis on small passenger car production and targeting private purchases. See Zhou Jiayi, "China's Passenger Car Industry", pp. 6, 12; *China Daily*, June 29, 1991, p. 4.
81. For example see Yang, "A few opinions on developing our passenger car industry", p. 26; Hu Zixiang et al., "Jiasu fazhan woguo xiao jiaochengongye de tantao" [An inquiry into speeding up our small passenger car industry's development], *Gongye jingji guanli congkan* [Industrial Economic Management Collection], 9, 1987, pp. 20–3.
82. Thun, *Changing Lanes in China*, p. 197.

## 7 Negotiating Shanghai GM

1. The AIP was bolstered by even stiffer tariffs on imported vehicles which were applied in late 1994.
2. This two-level game perspective highlights the importance of going beyond the analysis of the local actors and institutions, to examine the



strategic interplay of central *and* local authorities, and their relations with rival foreign firms.

3. Interview with state planner: Beijing, January 2006.
4. Gerald T. Bloomfield, "The World Automotive Industry in Transition", in Christopher M. Law (ed.), *Restructuring the Global Automobile Industry: National and Regional Impacts* (London: Routledge, 1991), pp. 42–6.
5. Leslie S. Hiraoka, *Global Alliances in the Motor Vehicle Industry* (Westport: Quorum Books, 2001), pp. 178–9.
6. This statement is from an interview that Louis Hughes gave to *Fortune* magazine.
7. Richard Doner, *Driving a Bargain: Automobile Industrialization and Japanese Firms in Southeast Asia* (Berkeley: University of California Press, 1991). On the spread of Japan-centered production networks across the East Asian region, see Mitchell Bernard and John Ravenhill, "Beyond Product Cycles and Flying Geese: Regionalization, Hierarchy, and the Industrialization of Asia", *World Politics* (1995), pp. 173–209.
8. Eric Harwit, *China's Automobile Industry: Policies, Problems, and Prospects* (Armonk: M.E. Sharpe, 1995), p. 170; *International Herald Tribune*, November 12, 1993, p. 1. Another report in the *Wall Street Journal* noted that the truck did not meet local Chinese consumer preferences. The vehicle could only seat two passengers, while the Chinese wanted space for five or six. See *Wall Street Journal*, January 11, 1994 (cited in Harwit, *China's Automobile Industry*, p. 190).
9. Interview with Louis Hughes: September 2008.
10. Daniel Rosen, *Behind the Open Door: Foreign Enterprises in the Chinese Marketplace* (New York: Institute for International Economics, 1999), p. 42.
11. Interview with Louis Hughes: September 2008.
12. John Smith Jr, "GM's Thinking on China", *CEO Series*, Issue No. 12, Center for the Study of American Business, Washington University in St Louis, January 1997.
13. E. Thun, *Changing Lanes in China* (Cambridge: Cambridge University Press, 2006).
14. This point was stressed in interviews with both Louis Hughes and Rudy Schlais.
15. The emphasis on the "globalizing ambitions" of Shanghai actors differs from Eric Thun who sees the globalizing ambition at the central level of the Chinese state. See E. Thun, "Industrial Policy, Chinese-Style; FDI, Regulation, and Dreams of National Champions in the Auto Sector", *Journal of East Asian Studies*, 4, 2004, pp. 453–89.
16. Interview with NDRC state planners for the automotive industry: Beijing, January 2006.
17. Interview with state planner for the automotive industry: Beijing, January 2006.
18. Thun, "Industrial Policy, Chinese-Style", p. 486, note 82.
19. See *ibid.*, p. 470.
20. The view of the two-level negotiating game depicted here is different from Thun who saw SAIC forming the core of the negotiating team, which reported to Beijing regularly on its negotiating position and for approvals. In short, Thun saw central authorities as having a minimal and indirect role

- in the negotiations, rather than seeing a division of labor between central and local actors, each of whom played key but different roles. See Thun, "Industrial Policy, Chinese-Style", p. 486, note 82.
21. Interview with NDRC state planners: Beijing, January 2006. Also see K.S. Gallagher, *China Shifts Gears: Oil, Pollution, and Development* (Cambridge, Mass.: MIT Press, 2006), p. 66.
  22. Shanghai Jiaotong University was the alma mater of then Chinese President Jiang Zemin.
  23. Y.M. Yeung and X.J. Li, "Bargaining with Transnational Corporations: the Case of Shanghai", *International Journal of Urban and Regional Research*, 23(3), 1999, pp. 513–33.
  24. Statement from C. Green, executive director of Regional Science and Technology, General Motors Asia Pacific Ltd (2002), cited in Gallagher, *China Shifts Gears*, p. 65.
  25. Rudy Schlais had been involved in managing GM's troubled Jinbei JV in Shenyang, and had previously managed other JVs in China.
  26. Interview with Louis Hughes: September 2008.
  27. In 1993, Peter Hanenberger was named director of projects for future programs, and was promoted to vehicle chief engineer for compact cars in 1996. Shortly thereafter, he held several engineering director positions, and was named executive director of vehicle performance for GM North America.
  28. Interview with Rudy Schlais: September 2008.
  29. Ibid.
  30. Ibid.
  31. Ibid.
  32. Harwit, *China's Automobile Industry*, p. 59.
  33. Zhu Rongji (ed.), *Guanli Xiandaihua* [Management Modernization] (Beijing: Kexue puji chubanshe, 1983), pp. 61–8.
  34. Interviews with Louis Hughes and Rudy Schlais: September 2008.
  35. Interview with Rudy Schlais: September 2008.
  36. "SAIC and GM Sign Contracts to Form New Automotive Company in China", *Bloomberg News*, 1997, June 11.
  37. Seth Faison, "GM Opens Buick Plant in Shanghai", *New York Times*, December 18, 1998, p. 1.
  38. Mark Graham, "Paddy Fields to Full Production", *Industry Week* (online: www.industry week.com), November 6, 2000.
  39. Notes on presentation by GM Executive Vice President International, Louis Hughes on "GM's Strategic Plans in China and Developing Shanghai's Automotive Industry", November 2, 1997. The select audience included the top Shanghai government leaders, central authorities, and foreign diplomats from countries where GM had a major presence and whose operations would be affected by GM's huge new investments in China.
  40. Notes on L. Hughes presentation, November 2, 1997.
  41. Ibid.
  42. Ibid.
  43. Interviews with Louis Hughes, and Rudy Schlais: September 2008. See also Gallagher, *China Shifts Gears*, p. 63.
  44. Seth Faison, "GM Sets Out on a Long Road in China", *New York Times*, October 25, 1995.

45. Ibid.
46. Interview with Louis Hughes: September 2008. Philip Murtaugh, one of GM's negotiators on the Shanghai GM bid (later head of GM China), believed that the Chinese decision to go with GM was ultimately based on Chinese preferences in terms of product taste and style. He downplayed major differences in terms of concessions between the GM and Ford bids. See Gallagher, *China Shifts Gears*, p. 66. *New York Times* reporter Seth Faison noted that the decision to go with the largest US automaker coincided with China's efforts to improve strained relations with the Clinton administration and with the US government in the mid 1990s. However, this does not account for why GM was chosen over Ford. Faison also noted that some industry executives said that one reason GM won the project was that it promised Chinese officials that GM would be more liberal than Ford with export rights. See Faison, "GM Sets Out on a Long Road in China".
47. Thun, *Changing Lanes in China*.
48. This picture of the Shanghai GM plant may be accessed at: <http://www.siteselection.com/ssinsider/snapshot/sf040621.htm>
49. See Thun, "Industrial Policy, Chinese-Style", p. 486, note 83.
50. Shanghai GM's passenger car models were transferred to China through a technology transfer agreement in which GM developed the automotive technology and manufacturing design, and transferred it to Shanghai GM for production. GM carried out product adaptation for the luxury Buick for the Chinese market, and Shanghai GM did most of the product adaptation for the Sail (*Sai Ou*). According to Murtaugh, former GM China CEO, the Buick luxury sedan produced in China is different from its equivalent produced in the US. Not only was the Chinese New Century model an amalgamation of two models sold in the US – the Buick Century and the Buick Regal – but Shanghai GM made approximately 600 changes to the US designs, seven major ones, before and during the first three years of production of the luxury sedans. The engine was designed especially for China by GM Powertrain. See Gallagher, *China Shifts Gears*, p. 69.
51. Shanghai GM took unprecedented steps to localize the product for Chinese consumer tastes and needs. To meet the fuel efficiency needs of Chinese consumers, and Chinese regulations requiring passenger cars for government officials to have a 3.0 liter engine or smaller, Shanghai GM introduced two engines smaller than 3.0 liters for its luxury sedan. It also provided a new suspension, redesigned the interior seats for the Chinese body type, put new door pads on, upgraded to tan leather interior, added a sunroof and improved noise reduction. According to Phil Murtaugh, who headed GM's China Office after the establishment of Shanghai GM, the Chinese version of the Buick Regal is better than the US model in some performance characteristics, such as fuel economy and reduced noise levels.
52. Graham, "Paddy Fields to Full Production".
53. Notes on L. Hughes presentation, November 2, 1997.
54. Ibid.
55. This picture of the production line at Shanghai GM can be accessed at: <http://www.siteselection.com/ssinsider/snapshot/sf040621.htm>

56. Interview with the head of GM's negotiating team for Shanghai GM: September 2008.
57. Ibid.
58. One former senior GM executive referred to the existing state of the local supplier capacity in the Shanghai area, at that time, as "abysmal".
59. This point was confirmed by Louis Hughes, Rudy Schlais, and Phil Murtaugh. For Murtaugh's views, see Graham, "Paddy Fields to Full Production".
60. Notes on L. Hughes presentation, November 2, 1997.
61. Interview with Louis Hughes: September 2008.
62. Under J.T. Battenberg, Delphi increased its investment in China to over \$450 million in one decade.
63. Interview with Louis Hughes: September 2008.
64. Interview with Rudy Schlais: September 2008.
65. Graham, "Paddy Fields to Full Production".
66. Thun, *Changing Lanes in China*, p. 225.
67. Notes on L. Hughes presentation, November 2, 1997.
68. Thun, *Changing Lanes in China*, p. 264.
69. L. Hughes speech.
70. Gallagher, *China Shifts Gears*, p. 68.
71. Craig S. Smith and Rebecca Blumstein, "In China, GM Bets Billions on a Market Strewed with Casualties", *Wall Street Journal*, February 11, 1998, pp. A1, A8.
72. PATAC is patterned after the successful Lotus Engineering Group.
73. This picture of the Pan Asia Technical Automotive Center can be accessed at: <http://www.siteselection.com/ssinsider/snapshot/sf040621.htm>
74. Gallagher, *China Shifts Gears*, p. 76.
75. J. Leicester, "General Motors Targets China's Middle Class with New Compact Car", *LexisNexis*, October 24, 2000, cited in Gallagher, *China Shifts Gears*, p. 69.
76. Gallagher, *China Shifts Gears*, pp. 72–3.
77. I thank John Ravenhill for suggesting this point.
78. "Building a Successful Joint Venture – SAIC", presentation at the China Executive Leadership Academy Pudong in Shanghai (online: [www.chinaherald.net/2005\\_03\\_20\\_chinaherald\\_archive.html](http://www.chinaherald.net/2005_03_20_chinaherald_archive.html)).
79. Thun, "Industrial Policy, Chinese-Style", p. 486, note 85.
80. Ibid., p. 470.
81. I thank Loren Brandt for this point.

## 8 Homegrown Brands and Models

1. Source: Organization Internationale des Constructeurs d'Automobiles (online: [www.oica.net](http://www.oica.net)).
2. Huang Shaohua, "Shangqi 'biaojuexin' litai zizhu pinpai" [SAIC determined to develop self-reliant brands], *Zhongguo qingnian bao* [China Youth Daily], April 13, 2006.
3. For example see: Ben Blanchard, "Copycat Cars", *Reuters*, June 27, 2003; *Reuters*, March 31, 2004.
4. Li Maio, "Hyperdrive: an Industry on the Fast Track", *China Pictorial*, April 2008, p. 12.

5. Shenjian Liu and Juan Antonio Fernandez, "GM China versus Chery: Disputes over Intellectual Property Rights", *Asian Case Research Journal*, 11(2), 2002, p. 272.
6. Ibid.
7. Jonathan Gapper, "China Needs to get Copy Smart", *Financial Times*, January 19, 2005.
8. Liu and Fernandez, "GM China versus Chery", p. 273.
9. Ibid., p. 278.
10. Ibid., pp. 278–9.
11. Ibid., p. 289.
12. Gregory W. Noble, John Ravenhill and Richard F. Doner, "Executioner or Disciplinarian: WTO Accession and the Chinese Auto Industry", *Business and Politics*, 7(2), 2005, p. 16.
13. The Oriental Son was aimed at competing with the Honda Accord, but was sold at only half the price.
14. Lu Hui, "Chery, Fiat Reach Local JV Pact", *China Daily*, August 8, 2007.
15. "Chery to Make Engines for Fiat", *International Herald Tribune*, August 6, 2007.
16. This was the first automotive-related project in Iran in 20 years: *Nihon kezai shimbun* [Japan economic journal], February 19, 2003.
17. Booke & Partners, *Auto Dealers News*, February 2005.
18. "Chery to Make Engines for Fiat", *International Herald Tribune*, August 6, 2007.
19. Lu Hui, "Chery, Fiat Reach Local JV Pact", *China Daily*, August 8, 2007.
20. *Automotive News*, April 22, 2005.
21. *People's Daily*, October 28, 2004. Cited in Noble et al., "Executioner or Disciplinarian", p. 17.
22. Noble et al., "Executioner or Disciplinarian", p. 7.
23. Ibid.
24. TAG made a name for itself producing the Xiali minicar, a Daihatsu Charade, under a licensing agreement. This plant could produce 150,000 Toyota 1.3 liter engines per year.
25. Noble et al., "Executioner or Disciplinarian", p. 8; Noble, "Japanese Auto Production Networks in China", p. 12.
26. For interpretations of the Chinese government's western development campaign, see Gregory Chin, "The Politics of China's Western Development Initiative", in Ding Lu and William A.W. Neilson (eds), *China's Western Development Strategy: Domestic Strategies and Global Implications* (Singapore: World Scientific Press, 2004), pp. 137–74; David S. Goodman, *China's Campaign to "Open Up" the West: National, Provincial and Local Perspectives* (Cambridge: Cambridge University Press, 2004); Y.M. Yueng and Shen Jianfa (eds), *Developing China's West: a Critical Path to Balanced National Development* (Hong Kong: The Chinese University of Hong Kong Press, 2004).
27. On March 22, 1999, the "Opinions of the State Council on Promoting Further Development of the Western Region" outlined ten suggestions for the "further development" of the western region. The proposal and implementation of this strategy are seen by Chinese authorities as

conducive to fostering a unified national market and improving the socialist market economic system; promoting the strategic adjustment of economic

structure and speeding up coordinated regional economic development; expanding domestic demand and providing driving forces for the sustainable growth of the national economy; improving the country's ecological situation and creating a better environment for the Chinese nation's survival and development; further expanding the opening of the country to the outside world and making good use of domestic and foreign markets and resources. It is therefore of great economic, social and political significance. (Source: *People's Daily*, March 23, 1999)

28. Interview with the director general of Tianjin Commerce Commission: Tianjin, April 2005.
29. Ibid.
30. Chunli Lee, Jin Chen, and Takahiro Fujimoto, "Chinese Automobile Industry and Product Architectures" (discussion paper for International Motor Vehicle Program, Massachusetts Institute of Technology, 2003), p. 20.
31. Source: online: <http://www.apmforum.com/columns/china24.htm>
32. Its equipment list includes: ETCS-I, ACIS, Dual VVT-i V6/DOHC/24V, ABS\_EBD\_VSC (Vehicle Stability Control System), TRC (Traction Control System), and HAC (uphill auxiliary control system).
33. "FAW Plans to Sell 1 M of Own Car Model in 2008", *China Daily*, June 10, 2004.
34. "China's Auto Sector Sees Rapid Growth", *China Economic Net*, May 25, 2007 (online: [http://en.ce.cn/Insight/200705/25/t20070525\\_11487064.shtml](http://en.ce.cn/Insight/200705/25/t20070525_11487064.shtml)).
35. This was not SAIC's first purchase of foreign equity. In 2002, it purchased a 10 percent share of GM Daewoo as a diplomatic gesture to GM to help resolve the tensions that had emerged between SAIC and GM as a result of its position in the middle between Chery and GM in their minicar IPR dispute. This purchase of minority shares also gave SAIC the right to use foreign expertise from Daewoo, without IPR infringement. As Hu Maoyuan stressed, "we want to develop a win-win situation".
36. Zeng Qinghai, "Automaker Striving to Build Own Brands", *China Daily*, May 18, 2005.
37. Ibid.
38. Ibid. These four paths were outlined by Hu Maoyuan in his speech to the Fortune 500 Global Forum, Beijing, May 17, 2005.
39. Hu Maoyuan cites the example of the successful new partnership between GM and Toyota.
40. Agence France Presse, May 2, 2005.
41. Source: Official website of the National Working Group for IPR Protection, China's Ministry of Commerce (online: [http://www.ipr.gov.cn/ipr/en/info/print.jsp?a\\_no=47231&col\\_no=927&dir=200701](http://www.ipr.gov.cn/ipr/en/info/print.jsp?a_no=47231&col_no=927&dir=200701)).
42. Ford had acquired the Land Rover trademark in a deal with BMW at the time of the three-way split-up of Rover, and Ford's purchase of one-third of Rover's product line, Land Rover off-road vehicles.
43. Source: Official website of the National Working Group for IPR Protection, China's Ministry of Commerce (online: [http://www.ipr.gov.cn/ipr/en/info/print.jsp?a\\_no=47231&col\\_no=927&dir=200701](http://www.ipr.gov.cn/ipr/en/info/print.jsp?a_no=47231&col_no=927&dir=200701)).
44. Ibid.
45. Ibid.

46. Ibid.
47. Online: [www.yzauto.gov.cn/detail.php?n=21743&c=368](http://www.yzauto.gov.cn/detail.php?n=21743&c=368)
48. The Sabre station wagon model comes from the GM Opel S4200 platform, and can be used as a passenger vehicle, as well as used by police, postal service, electric power, telecommunications, drug inspection, municipal supervision, chain stores, emergency rescue, and logistics services. This multipurpose passenger car is said to be popular in Europe, and provides a comfortable ride as a family sedan, leisure travel, as well as professional services. Source: online: <http://english.chinabuses.com/manufacturer/yizheng.htm>
49. See Wieland Wagner, "China's Auto Ambitions", *Spiegel*, November 29, 2004 (online: [Spiegel.de/international/Spiegel/0,1518,druck-330431,00.html](http://Spiegel.de/international/Spiegel/0,1518,druck-330431,00.html)).
50. Interview with Huang Jianping, plant manager at Yizheng. Source: Wagner, "China's Auto Ambitions", *Spiegel*, November 29, 2004, (online: [Spiegel.de/international/Spiegel/0,1518,druck-330431,00.html](http://Spiegel.de/international/Spiegel/0,1518,druck-330431,00.html)).
51. Ibid.
52. Source: online: <http://www.yzjm.gov.cn/wpscms/html/2006-12/20061261100191.htm> (Chinese).
53. Source: online: <http://english.chinabuses.com/manufacturer/yizheng.htm>

## 9 Vulnerabilities: View from the Inside

1. Gregory W. Noble, John Ravenhill, and Richard F. Doner, "Executioner or Disciplinarian: WTO Accession and the Chinese Auto Industry", *Business and Politics*, 7(2), 2005, p. 20.
2. Interview with Zhang Xiaoyu, director general of the China Automobile Manufacturers' Association: Beijing, November 2003. See also Zhang Xiaoyu, "Woguo zhengxiang qiche chanye qianguo maijin" [China on the Way to a Strong Automotive Industrial Nation], *Zhongguo qiche bao* [China Auto News], September 16, 2003.
3. Dan Ru, "Zizhu kaifa guangyou reqing hai buguo" [Enthusiasm alone is enough for independent development], in China Auto News (ed.), *Zhongguo qiche chuangxin cankao ziliao si juan* [Material on China Automotive Innovation, Volume 6] (Beijing: Zhongguo qiche baoshe, 2004), pp. 61–7.
4. Lu Feng and Feng Kaidong wrote a thorough report (2004) on China's auto industry that was funded by China's Ministry of Science and Technology. I thank Professor Xue Lan for drawing my attention to this report. See Lu Feng and Feng Kaidong, *Fazhan woguo zizhu zhishi chanquan qiche gongye de zhengce xuanze* [Policy Choices for Developing China's Automotive Industry on the Basis of Independent Intellectual Property] (Beijing: Peking University Press, 2005).
5. Cheng Li, "China Auto Industry Focus on Homegrown Brand", *ChinaAuto News*, December 5, 2006.
6. Interview with researchers from the Academy of Macroeconomic Research of the State Planning and Development Commission and CAMA: Beijing, November 2001, April 2002.
7. Kelly Sims Gallagher, *China Shifts Gears* (Cambridge, Mass.: MIT Press, 2006), p. 121.

8. Matthias Holweg, Jianxi Luo, and Nick Oliver, "The Past, Present, and Future of China's Automotive Industry: a Value Chain Perspective", Working Paper prepared for UNIDO Global Value Chain Project, August 2005, pp. 42–5.  
A study by John Sutton finds that some leading Chinese parts producers that are either branch companies of the major Chinese auto group corporations or first-tier suppliers seem to have developed design capacity. Sutton's report cites one such company, which designs aluminum alloy wheels, and indicates that such design skill may exist to some degree among the very top – i.e. export competitive – Chinese suppliers of seats and exhaust systems. See John Sutton, "The Auto-Component Supply Chain in China and India: a Benchmarking Study", paper provided by Suntory and Toyota International Centres for Economics and Related Disciplines, London School of Economics, Economics of Industry Paper, 34, February 2004, p. 40, note 10.
9. Some exceptions have emerged recently in certain segments of Chinese parts suppliers such as shock absorbers, brakes, and seat moldings. Personal discussion with Loren Brandt: Beijing, 2006.
10. I thank Loren Brandt for this point. See also Sutton, "The Auto-Component Supply Chain in China and India", pp. 1–48.
11. Huang Yasheng, *Selling China: Foreign Direct Investment during the Reform Era* (New York: Cambridge University Press, 2003); Eric Thun, "Industrial Policy, Chinese-Style: FDI, Regulation, and Dreams of National Champions", *Journal of East Asian Studies*, 4(3), 2004, pp. 453–91.
12. Interview: Tianjin, August 2005.
13. Adam Segal, "Chinese Technonationalism: Autonomy and Security in the World Economy", in Saadia Pekkanen and Kellee Tsai (eds), *Japan and China in the World Economy* (London: Routledge, 2005).
14. Gallagher, *China Shifts Gears*, pp. 121–2.
15. This list is provided by Kelly Sims Gallagher. See Gallagher, *China Shifts Gears*, pp. 134–40.
16. Production capabilities include facilities management, production engineering, repair and maintenance of physical capital, troubleshooting, and basic production and process adaptation. Project implementation skills include personnel training, project feasibility studies, project management, project engineering, procurement, plant construction, and start-up operations. Innovation capabilities, in contrast, include the skills needed to create new products and processes (ranging from basic science to product development). See C. Dahlman, B. Ross-Larson, and L. Westphal, "Managing Technological Development: Lessons from Newly Industrializing Countries", *World Development*, 15(6), 1987, pp. 759–75; A. Amsden, *The Rise of "the Rest": Challenges to the West from Late-Industrializing Economies* (New York: Oxford University Press, 2001).
17. Gen Shaojie, "Meiyou pinpai, zai duoshao che doushi bieren de huihuang" [Without brands, whatever automotive output is the achievement of others], in China Auto News (ed.), *Zhongguo qiche chuangxin cankao ziliao si juan* [Material on China Automotive Innovation, Volume 6] (Beijing: Zhongguo qiche baoshe, 2004), pp. 36–50.
18. Holweg et al., "The Past, Present, and Future", p. 44.



19. A land area of 170,000 square meters was thus further transferred to SAIC's JV operations.
20. Li Miao, "Hyperdrive: an Industry on the Fast Track", *China Pictorial*, April 2008, p. 10.
21. Ibid.
22. A number of them had previously received training in France by Citroën, as they had once been responsible for modifying and localizing for the Dongfeng-Citroën JV. The members of this research team could immediately function effectively together as a research unit, and the usual long lead time for team-learning was not needed, as they had built up a high level of tacit knowledge working together as a team for a long time at Dongfeng. See Jianxi Luo, "The Growth of Independent Chinese Automobile Companies", Paper for the International Motor Vehicle Program, MIT, May 2005, p. 19.
23. *21st Century Economics Report*, December 27, 2003.
24. Interview with the director of human resources and personnel management of FAW-VW: Changchun, April 1998. The case of the unsuccessful model JVs may have witnessed dumping of surplus labor from the parent SOE into the JV, but this did not appear to be the case in the successful automotive JVs.
25. *People's Daily*, October 28, 2004. Cited in Noble et al., "Executioner or Disciplinarian", p. 17.
26. Lu Feng and Feng Kaidong, *Fazhan woguo zizhu zhishi chanquan qiche gongye de zhengce xuanze* [Policy Choices for Developing China's Automotive Industry on the Basis of Independent Intellectual Property].
27. See the previous chapter. See also Gallagher, *China Shifts Gears*, p. 139.
28. Chen Jianguo and Zhang Yuxian, "Woguo qiche zhengce he fazhan zhan-lue" [Our national automobile policy and development strategy], *Jingji lilun yu jingji guanli* [Economic Theory and Economic Management], 12, 2004, pp. 26–30.
29. Such an approach was recently taken up by SAIC and VW when they jointly designed and launched a completely new model in mid 2008. I thank Zhang Haibing, director of Department of World Economy Research at the Shanghai Institute of International Studies, for this point.
30. Mitchell Bernard and John Ravenhill, "Beyond Product Cycles and Flying Geese: Regionalization, Hierarchy, and the Industrialization of East Asia", *World Politics*, 47(2), January 1995, pp. 171–209.
31. Interview with auto industry researcher of the Academy of Macroeconomic Research of the NDRC: Beijing, December 2005.
32. On the role of the IPR campaign of the foreign auto producers in spurring this policy shift, see Noble et al., "Executioner or Disciplinarian", pp. 17–24.
33. Chen Qingtai and Lu Zhiqiang, "Zhongguo qiche chanye de fazhan moshi (shang)" [Development model of China's automobile industry (Part 1)], *Zhongguo jidian chanye* [China Machinery and Electronics Industry], 3, 2002, pp. 6–9; Chen Qingtai and Lu Zhiqiang, "Zhongguo qiche chanye de fazhan moshi (xia)" [Development model of China's automobile industry (Part 2)], *Zhongguo jidian chanye* [China Machinery and Electronics Industry], 6, 2002, pp. 30–1.
34. Zhang Zhanbin, *Bijiao youshi: Zhongguo qiche chanye de zhengce moshi zhan-lue* [Comparative Advantage: Policies, Models, and Strategies of China's

- Automobile Industry] (Beijing: Qinghua daxue chubanshe, 2004). I thank Gao Yuning for drawing my attention to this argument.
35. Discussions with MOFCOM officials: Beijing, November 2001, April 2002, December 2003. Interviews with senior officials in the Department of Foreign Trade of the State Development and Planning Commission, and senior researchers of the Economics Institute of the SDPC's Academy of Macroeconomic Research: Beijing, November 2001, April 2002.
  36. Li Xianjun, "Woguo qiche chanye yao shixian cong bijiao youshi xiang jingzheng youshi zhanlue zhuanbian" [Our national auto industry needs to achieve a strategic transformation from comparative advantage to competitive advantage], *Shanghai qiche* [Shanghai auto], 9, 2005, pp. 2–6.
  37. Source: <http://auto.sohu.com/s2005/zzdbl.shtml>
  38. Chapter 1 of the "National Automotive Industrial Policy", 2004.
  39. Chapters 3 and 7 of the 2004 AIP.
  40. Chapter 1 of the 2004 AIP.
  41. In his November 2007 "Report to the Seventeenth Party Congress", Hu Jintao mentioned the word "innovation" 77 times. Discussion with Li Zhongjie, director of the Party History Research Office, who helped coordinate the drafting of the report: Ottawa: January 2008.
  42. Louis Kraar, "China's Car Guy Hu Maoyuan has Skillfully Blended GM's Best Practices into a Creaky State Auto Industry", *Fortune*, October 11, 1999 (online: CNNMoney.com).
  43. "China: WTO or Bust?", *Businessweek Online*, November 22, 1999.
  44. Discussions with officials from China's ministries of Foreign Economic Trade and Economic Cooperation, Finance, Agriculture, and People's Bank of China, State Development and Planning Commission, the State Economic and Trade Commission, Customs General Administration, State Administration of Quality Supervision, Inspection and Quarantine: Beijing, November 2001.
  45. Eric Harwit, "The Impact of WTO Membership on the Automobile Industry in China", *The China Quarterly*, 2001, p. 662.
  46. Noble et al., "Executioner or Disciplinarian", pp. 1–24.
  47. *Ibid.*, pp. 22–3.
  48. *Ibid.*, p. 2. Noble et al. suggest that the Chinese case challenges the claims of the WTO critics who argue that the provisions on trade-related investment measures contained in the Uruguay Round agreements prevent the use of many policies that have been associated with the promotion of domestic industrial development in the high-growth East Asian economies over a three-decade period, have "shrunk developmental space" for developing countries. See Robert Wade, "What Development Strategies are Viable for Developing Countries?: the World Trade Organization and the Shrinking of Development Space", *Review of International Political Economy*, 10(4), pp. 621–44.
  49. Interview with auto industry researcher of the Academy of Macroeconomic Research of the NDRC: Beijing, December 2005.
  50. *Ibid.*
  51. Interview with auto industry researchers of the Academy of Macroeconomic Research of the NDRC: Beijing, December 2005.

52. The requirement: gradual reduction of tariffs: at accession, the tariffs on passengers were 70 percent (80 percent for cars with engines over 3.0 liters). By 2005, tariffs fall to 30 percent, and 25 percent by July 2006. Auto parts tariffs, which averaged 17.4 percent on accession, had to drop to 9.5 percent by July 2006.
53. The requirement: gradual elimination of quotas and licenses: aggregate import quotas covering motor vehicles and parts had to be progressively loosened, then eliminated by 2005.
54. Interview with Chinese researchers from the NDRC and the China Automotive Manufacturers' Association, and statements from MOFCOM officials.
55. Noble et al., "Executioner or Disciplinarian", p. 10.
56. Ren Kan, "Volkswagen Wants Larger Stake in FAW-VW", *China Daily*, March 18, 2004.
57. Interview with NDRC strategist: Beijing, January 2005. The implicit threat of increased local costs related to local supply of basic inputs of production, such as the cost of land, energy and water supplies, and labor; all of which local governments traditionally help to manage and guarantee for the JV.
58. The strategist noted that it would "not be appropriate" to describe what these other methods could be. Interview, Beijing, 2005.
59. The movement of Japanese low-end manufacturing offshore also provoked fears in Japan of a slightly different type of "hollowing out" of the domestic economy and a loss of production expertise. See Y.-K. Yoon, "The Political Economy of Transition: Japanese Foreign Direct Investment in the 1990s", *World Politics*, 43(1), 1990, pp. 1–27.
60. Li Maio, "Hyperdrive", p. 10.

## 10 Conclusion

1. Barry Naughton, *Growing out of the Plan: Chinese Economic Reform, 1978–1993* (Cambridge, UK: Cambridge University Press, 1995), pp. 274–308.
2. This is not to deny the significant costs in environmental protection. See Kelly Sims Gallagher, *China Shifts Gears* (Cambridge, Mass.: MIT Press, 2006).
3. L. S. Hiraoka, *Global Alliances in the Motor Vehicle Industry* (Westport: Quorum Books, 2001), p. 182.
4. Ha-joon Chang, "Globalization, Transnational Corporations, and Economic Development: Can the Developing Countries Pursue Strategic Industrial Policy in a Globalizing World Economy?", in Dean Baker, Gerald Epstein and Robert Pollin (eds), *Globalization and Progressive Economic Policy* (Cambridge: Cambridge University Press, 1998), p. 108.
5. Leslie O'Brien found in her detailed survey of manufacturing companies in Malaysia that locally owned or controlled companies were more likely than their foreign counterparts to forge links with the national economy and to modify or manufacture their own production equipment to suit local conditions. See L. O'Brien, "Malaysian Manufacturing Sector Linkages", in K.S. Jomo (ed.), *Industrializing Malaysia: Policy, Performance, Prospects* (London: Routledge, 1993) (fn. 23), pp. 157, 159.
6. I thank John Ravenhill for this point.

7. Jane L. Price, *Cadres, Commanders, and Commissars: the Training of the Chinese Communist Leadership, 1920–45* (Kent, UK: Dawson, 1976).
8. Nicola Phillips, “Consequences of an Emerging China: Is Development Space Disappearing for Latin America and the Caribbean?”, in Andrew F. Cooper and Jorge Heine (eds), *Which Way Latin America?: Hemispheric Politics Meets Globalization* (Tokyo: United Nations University Press, forthcoming).
9. K. Bradsher, “In a Slow Start, Ford Opens an Auto Factory in China”, *New York Times*, January 20, 2006, p. 2.
10. Louis Pauly has similarly identified the continuing range of state policy options amid international financial integration. See Louis W. Pauly, “Capital Mobility, State Autonomy, and Political Legitimacy”, *Journal of International Affairs*, 48, 1995, pp. 369–88.
11. “Driving in Reverse: China’s Car Industry Hoodwinked by Foreign Auto Giants?”, *ChinaOnline*, January 17, 2000 (cited in E. Thun, *Changing Lanes in China: Foreign Direct Investment, Local Governments, and Auto Sector Development* (Cambridge: Cambridge University Press, 2006), p. 209).
12. M. Graham, “Paddy Fields to Full Production”, *Industry Week*, 249, 2000, pp. 54–60.

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# Index

- Accord 194
- Adam Opel 158
- agricultural industry, demand for
  - vehicles 53–4
- AlliedSignal Inc. 123
- AMC/Chrysler 1, 19, 52, 57, 63, 78, 88, 96, 149, 228
  - accumulated debt 70
  - Chinese investment 66–70
  - financial problems of 66–7
  - Mitsubishi JV 63
  - reluctance to transfer
    - technology 151
- American Motors Corporation *see* AMC/Chrysler
- Amsden, Alice 31
- Anglo-American model 45, 46
- Asia Strategic Investment Corporation (ASIMCO) 124
- assembly bias 36
- assembly line production 58
- Audi 150
- auto industry
  - consolidation 106–14
  - as facilitator 54
  - foreign investment 114–26
  - policy towards 54
  - production capacity 111–12
  - rationalization 106–14
  - recentralization 106–14
  - shift to large-scale
    - production 54
  - targets of 112
  - see also individual firms and organizations*
- auto parts suppliers 5, 6, 35–6, 60
  - joint ventures 36
  - localization of 120–4
  - project approval: approval (*shenpi*) 121; put on file (*bei an*) 121; requests (*lixiang*) 121; verification (*heshi*) 121
- Shanghai GM 172–5
  - supply problems 82–3
- automakers
  - effect of post-Fordism on 57–60
  - foreign 51–76: financial
    - contribution 52;
    - Japanese 58; technology transfer *see* technology transfer
  - interfirm dynamics 60–74
  - reluctance to produce latest models
    - in China 96
  - see also individual automakers*
- automotive component tax (*qiche lingbujian shui*) 84
- automotive faction 139
- Automotive Industrial Policy
  - (1994) 2, 8, 9, 10, 17, 27, 35, 47, 66, 105–26, 227
- FDI 114–26: 50/50 ownership
  - 115–18; joint venture
    - requirement 115–18;
    - partnership arrangements 118–21; parts localization 121–4; R&D 124–6, 206
- formulation and
  - implementation 127–54
- recentralization, rationalization and
  - consolidation 106–14
- Automotive Industry Leading Small Group 15
- auxiliary industries (*fuzhu gongye*) 222
- AVL List GmbH 189
- backward linkage 147
- Bank of China 9
- Baoshan Steel Mill contract 64
- bargaining power 235–6
  - lack of 55–8
- Battenberg, J.T. III 158, 160, 164, 172, 174, 229



- Beijing Auto Works 38, 55
  - AMC/Chrysler deal 68
- Beijing Jeep 53, 79, 118, 133, 138, 167, 225
  - AMC/Chrysler deal 66–69
  - FOREX problems 69, 119
- Bertone 190
- Besturn (*Benteng*) 193, 198, 199
- blind investment (*mangmu touzi*) 110
- BMW 197
- Bosch 174, 234
- branding 205–8
- Brazil 43, 234
- Buick models 158, 166–7, 170
  - Sail 177
- C1 (*Weizhi*) 193
- cadre management 140–5
- Calvet, Jacques 70, 97
- capital budgeting 94
- capital structure 94
- capital transfer 31
- Cappy, Joseph E. 67
- cash flow management 95
- Central Financial and Economic Leading Small Group (*Zhongyang caijing lingdao xiaozu*) 130
- central government, lack of
  - coordination with local representatives 76
- Central Organization Department 40
- centralized leadership 140
- Chang, Ha-joon 231
- Changchun Automotive Research Institute 150
- Changchun Light Engine Factory 267
- Charade 194
- Chen Yuan 110, 111
- Chen Yun 23, 46, 111, 118, 258
- Chen Zutao 80–1, 84, 92, 165
- Chery Automotive Company 1, 20, 26, 123, 183, 185–92
  - annual sales 186–7, 191–2
  - collaborations: with AVL List GmbH 189; with Fiat 190; in Iran 191; Quantum LLC 190, 191; with SAIC 186; Visionary Vehicles LLC 191
  - electrical vehicles project 190
  - expansion of 189
  - Fengyun 185
  - ISO 9001 certification 186
  - legal actions against: by Daewoo 188; by Volkswagen 187
  - Oriental Son 188
  - QQ 187–88
  - QQ EZDrive 188
  - research and development 189–90
  - startup 185–6
  - Tiggo 191
  - TS16949 certification 186
- Chery Quantum Automobile 191
- Chevrolet
  - Matiz 187
  - Spark 187–88
- Chevy Blazer 159
- China Automobile Manufacturers' Association 204, 219, 239
- China Automotive Engineering Society 205
- China Automotive Technology and Research Center (CATARC) 4
- China Development Bank 110, 118
- China Export and Import Bank 192
- China First Automotive Works 1
- China International Trust and Investment Corporation (CITIC) 70
- China National Accreditation Committee for Laboratories 5
- China National Accreditation Council for Registrars 5
- China National Automobile Industry Corporation (CNAIC) 34, 76, 80, 133, 136
  - downgrading of 80
- China Registration Board for Auditors 5
- China Shifts Gears* 28
- Chinese Communist Party 16, 127
  - business management decisions 40

- guidance of auto development 128
- see also* Leninist organization
- Chinese state
  - failure of coordination 51–76
  - finance 32–41
  - industrial policy 25–32
  - role of 24–43
  - technology transfer 41–3
  - weaknesses of 52, 56–7
- Citroën 116
- Clare, Todd 67
- Coaster bus 195
- combined management
  - companies 34
- “commanding heights” strategy 44
- competition 175
  - oligopolistic 107
  - orderly (*youxu jingzheng*) 111
- competitive advantage 215
- complete knockdown kits
  - (CKDs) 61, 68, 69, 149
- importing of 71
- cofinancing 39
- conscious learning 42
- consolidation 106–14
- construction duplications (*chongfu jianshe*) 111
- contractural cooperative production
  - agreements 34–5
- Cooper 123
- copyright violation 184
- Corolla 197
- Corona 72–3
- corporate finance training 93–4
- correct line 19, 47, 139, 140, 228
- Crown 197
- Crown Majesta 197
- Customs General
  - Administration 121, 133
- Daihatsu 62, 194
- Daimler Chrysler 187
- Dana Corp. 123
- decentralization 14, 16, 17, 226
- Delco Electronics 174
- Delphi Automotive Systems 10, 123, 158, 160, 172, 234
  - involvement in China 174
  - R&D centers 176–7
- democratic centralism 19, 47, 128, 140, 228
- Deng Xiaoping 23, 46, 54, 108, 251
- Department of Machinery-Electronics, Light Industry and Textiles (*Jidian chingfang shi*), Automotive Division (*Chiche chu*) 133
- deregulation 226
- developing countries 11–13
- developmental state 29, 47
- developmentalism 47
- distribution 116
- domestic auto brands 183–203
  - branding 205–8
  - Chery *see* Chery Automotive Company
  - failure of international recognition 204
  - Fengyun 185–6
  - First Auto Works *see* First Auto Works
  - Geely 26, 183, 185
  - mavericks 185
  - target production 185
  - see also individual automakers*
- domestic market 60, 65
  - agricultural 53
  - demand for passenger cars 53
- Dongfeng Motors 210
- Dongfeng–Citroën 116, 131, 139, 276
  - Fukang 177
- downstream activities 218
- Echo 193
- economic decentralization 16
- Eighth Five-Year Plan 37, 131, 132, 152
- Eisenach Opel 159, 169
- electrical vehicles project 190
- Eleventh Five-Year Plan 183
- emission standards, European 6
- endogenous factors 77, 85
- equity ownership 115–18
- Europe
  - emission standards 6
  - weakness of home markets 58–9
  - see also individual countries*

- Evans, Donald 189  
 exogenous factors 77  
 expectations and demands 57–8  
 Export and Import Bank of China  
   (EXIM Bank) 119  
 exports  
   auto parts 98  
   car engines 90–1  
   original equipment manufacturing  
     (OEM) 174
- FAW *see* First Auto Works  
 Feng Kaidong 26  
 Fengyun 185–6  
 Fiat 190  
 finance 32–41  
   credit-based 33  
 financial management 93  
 First Auto Works (FAW) 34, 37, 38,  
   54, 131, 149, 183, 192–9,  
   225  
   acquisition of Tianjin Automotive  
     Group 196–7  
   domestic models: Besturn  
     (*Benteng*) 193, 198; C1  
     (*Weizhi*) 193; *Hongqi* (Red  
     Flag) 150–1, 192, 193,  
     197–9, 208; *Hongqi-Mingshi*  
     (small Red Flag) 150, 197  
   engine production lines 267  
   lack of competitiveness 55  
   lack of development  
     capability 211  
   mix-and-match strategy 184, 197,  
     198
- First Auto Works–Toyota 207  
   Corolla 197  
   Crown 197  
   Crown Majesta 197  
   Land Cruiser Prado 197
- First Auto Works–VW 139, 142, 150,  
   153
- First Ministry of Machine  
   Building 37
- First Ministry of Machine  
   Industry 121
- Five-Year Plans  
   Sixth 34  
   Seventh 33, 92, 132
- Eighth 37, 131, 132, 152  
 Ninth 8, 35, 39, 106, 113, 118,  
   122, 132, 145, 224, 226  
 Eleventh 184
- flexibility 58  
 flexible firms 252
- Ford 1, 27, 33, 52, 57, 65, 136, 155,  
   161, 163, 220  
   foreign investment: Japan 64;  
     Mexico 101; South Korea 65  
   negotiations with SAIC 157  
 Ford Motor China Limited 161  
 Ford shadow 162
- foreign automakers 51–76  
   financial contribution 52  
   leverage on 157–61
- Foreign Capital Law 30  
 foreign capital utilization 29, 145  
 foreign direct investment (FDI) 9,  
   10–11, 13, 25, 114–26  
   50/50 ownership 115–18  
   difficulties in attracting 55–6  
   joint venture requirement 115–18  
   partnership arrangements 118–21  
   parts localization 121–4  
   R&D 124–6, 206
- foreign equity investment 36–7  
 foreign exchange 34, 52  
   Guangzhou Peugeot 71–2  
   Shanghai VW 90–4
- foreign technology  
   indigenization 43  
   introduction of 7
- FOREX *see* foreign exchange  
 Fortune 500 199, 200, 205  
 Four Modernizations 22–3  
 fragmented authoritarianism  
   14–15, 17
- France 44  
   lack of support for Chinese  
     ventures 97
- Fu Yuwu 205  
 Fukang 177
- Gallagher, Kelly Sims 6  
 Geely 26, 185, 187  
 Gen Shaojie 209  
 General Motors 1, 19, 27, 33, 52, 57,  
   65, 96, 142–4, 156, 229–30

- Adam Opel 158
- China Office 164
- Chinese investments 159
- “coaching” of 143–4, 156
- contribution to Chinese technological capability 209
- demands for QPS system 143
- downsizing 158
- Eisenach Opel 159, 169
- foreign investment: Japan 64; Mexico 101; South Korea 65
- global repositioning 179
- local–central coordination 142–4
- QSP (quality, service, price) system 143, 173, 175
- strategic roadmap 168
- technology transfer 179
- win–win (*shuang ying*) conditions 101, 165, 168
- see also* Shanghai GM
- German–Italian model 46
- Germany
  - Senior Expert Service 89–90
  - support for Volkswagen in China 97
- global economic conditions 235–6
- global hegemony 46
- globalization 231
- GM Daewoo
  - legal action against Chery 188
  - Matiz 187
- Gore, Al 167
- Great Wall Automobile Holding Company 187
- growth allowance incentives 113
- Gu Xianghua 239
- Guangzhou Auto Company 38
- Guangzhou Automotive Corporation 70
- Guangzhou Honda 210
  - local–central coordination 144–5
  - shift in ownership share 220
- Guangzhou Peugeot 39, 53, 69–71, 79, 96, 118, 133, 138, 167, 225
  - FOREX problems 70–1, 119
  - importing of CKDs 70
  - production of outdated models by 70
- Hackworth, Don 164
- Haggard, Stephan 32
- Hahn, Carl 83, 88, 166
  - key role in Chinese VW operation 95–6
  - presence in China 97
- Hanenberger, Peter 164, 269
- He Guangyuan 110, 215
- Heavy Duty Group 35
- Honda 58, 73
  - Accord 193–4
  - Civic 73, 186
  - CVCC engine 73
  - FOREX, USA 64
  - joint ventures in China 193–4
  - legal action 187
- Hongqi* (Red Flag) 150–1, 192, 193, 197–199, 206
- Hongqi-Mingshi* (small Red Flag) 150, 197
- Hu Maoyuan 178, 200, 201, 202, 203, 216
- Hua Guofeng 23, 64
  - Ten-Year Plan 244
- Huang Jianping 203
- Huang Ju 99
- Huang Yicheng 81
- Hughes, Louis 158, 160, 166, 167, 171, 173
- human resource training 88
- Iachocca, Lee 149
- import tariffs 218
- imports, limitation of 24
- incentives, growth allowance 113
- independent development (*zizhu kaifa*) 205
- India 43, 234
- Indonesia 234
- Industrial and Commercial Bank of China 70
- industrial policy 24, 25–32
- industry consolidation 25–6
- innovations 57
- institutional inheritances 127–54
- institutions 240
- integrative innovation (*jicheng chuangxin*) 20, 183–4
- intellectual property rights 185, 212

- intellectual property theft 184
- intentional changes 42
- intentions 53–5
- interfirm dynamics 61–74
- inventory management 94
- investment 24
- ISO 9000 certification 5
- ISO 9001 certification 186
- isolationism 146
- Isuzu 64
- ITT 123
- Japan 42, 62
  - automotive boom 58–60
  - cost reductions in production 59–60
  - economic relations with China 64–5
  - investment in US auto production 63
  - keiretsu* networks 42
  - lean production methods 55, 59
  - Ministry of International Trade and Industry (MITI) 107
  - oligopolistic competition 107
  - post-Fordist innovations 57–9
  - regionally diffused production networks 62
  - reluctance to transfer technology 62–3
  - zaibatsu* model 106
- Japanese model 44, 45, 46
- Jetta 177, 186
- Jiang Tau 95
- Jiang Yuren 175
- Jiang Zemin 81, 85, 139, 152, 166, 263
- Jiangling Motor Corporation 161
- jiao he zhu* 116
- Jinbei (Gold Cup) GM Automotive Company 159
  - Chevy Blazer 159
- joint council (*lianxi huiyi*) 133, 135
- Johnson, Chalmers 30
- joint ventures 30, 33–4, 37, 51
  - effect on Chinese R&D 211
  - failures of 146
  - Japan–USA 63
  - location of 55
  - requirements for 115–18
  - risk of reliance on 211–12
  - state support for 37–8
  - targeting of partners 149
  - weakness of 50–1
  - see also* multinational corporations
- JVs *see* joint ventures
- kaifang* 46
- key national projects 131
- key vehicle manufacturers 111, 112
- Kohl, Helmut, visit to China 97
- Korea 33
  - chaebols* 33
- Koshkarian, Vaughn 169
- Land Cruiser Prado 195, 197
- laobaixing* (masses) 162
- large national enterprise groups 111, 112
- Latin Americanization (*Nan meizhouhua*) 221
- leadership, unified/centralized 19, 47, 128, 228
- leading cadres 128
- Leading Small Group 265–6
- lean production methods 55, 58, 169
- learning by doing (*bian gan, bian xue*) 223
- legal actions 187
- Leninist organization 16, 19, 44, 127–54
  - adaptation 145–54
  - correct line 19, 47, 128, 140
  - democratic centralism 19, 47, 128, 140
  - improved mediation 145–54
  - local–central coordination 140–5
  - policy coordination 129–45
  - strategic planning 129–45
- Lexus 197
- Li Chunbo 192
- Li Lanqing 137, 138, 163, 228, 264
- Li Peng 108, 258
- Li Xiannian 108
- lianzi huiyi* (joint council) 133
- Lifan Group 187, 236
- local development 14, 15

- local-central coordination 140–5
  - General Motors 142–4
  - Guangzhou Honda 144–5
- Localization Office of the Automobile Industry Leading Small Group 141
- localization of production 99–100
- Long Yongtu 215
- Lu Feng 26
- Lu Fuyuan 136, 228, 263–4
- Lu Jian 10, 99, 141–3, 156, 164
- Lucas Verity Inc. 123
- Majesta 193
- Malaysia 234
  - Mitsubishi Proton project 100
- managing returns 94
- manufacturing capacity 5
- Marxist theory 107
- mass production, items for 113–14
- Matiz 187
- maverick firms 149, 185
- Mazda 6 193
- Mazda, Ford JV 63
- mediation 145–54
- Mercedes Benz 197
- Mery 123
- Messmann, Stefan 79, 149
- micro-agents 15
- microelectronics 59
- middle way (*zhongyong*, *zhezong*) 116
- Ministry of Communications 134
- Ministry of Electronics Industry 133
- Ministry of Finance 133
- Ministry of Foreign Economic Relations and Trade 13
- Ministry of Foreign Trade and Economic Cooperation 25
- Ministry of Machine-Building and Electronics Industry 133, 262
- Ministry of Public Security 135
- Ministry of Science and Technology (MOST) 190, 211
- Mitsubishi
  - AMC/Chrysler JV 63
  - Malaysian Proton project 100
- Mitterrand, François 97
- mix-and-match strategy 184, 197, 198
- MNCs *see* multinational corporations
- modernization 4–8, 148
  - role of MNCs in 4
- multinational corporations (MNCs) 2–3, 11–13, 27
  - bargaining strength of 56–7
  - competition for host countries 231–2
  - criticisms of 11–12
  - desirability of partnerships 233
  - failure to improve Chinese innovation 208
  - focus on short-term motives 209
  - as global corporations 241
  - hijacking of R&D by 214
  - increasing share of ownership 220
  - refusal to invest 61–6
  - resistance to technology transfer 41–2
  - role in modernization 4, 230
  - support for 12
  - surplus extraction 12
  - see also* joint ventures; and individual companies
- Murtaugh, Phil 165, 167, 175, 237
- mutual benefit 98
- mutual obligation (*guanxi*) 175
- National Auto List 186
- “national champions” 45, 109, 249
- National Development Reform Commission (NDRC) 57
- National Environmental Protection Agency 133
- national interests 31, 53–5
- national level projects 78
- National People’s Congress 131
- National Planning Conference 131
- neoconservatism 109, 110
- “new centralization” 110
- Ninth Five-Year Plan 8, 35, 39, 106, 113, 118, 122, 132, 145, 224, 226
- Nissan 58, 63, 73–4, 163
  - foreign investment, USA 63
  - legal action 187
- nomenklatura* 16
- Nummi JV 63

- obsolete production 96
- oligopolistic competition 107
- one-to-one partnerships 119, 151, 152
- one-to-two partnerships 119–20, 151
- orderly competition (*youxu jingzheng*) 111
- Oriental Son 188
- original equipment manufacturing (OEM) 112
- exports 174
- Pan-Asia Technical Automotive Center (PATAC) 176–79, 209, 271
- paradigm gap 14
- partnership arrangements 118–21
- Party-state 2, 10, 16–17, 18, 19, 28, 31, 43–7, 51, 55, 128, 235
- Passat 153
- passenger cars, demand for 54
- Paul, Hans-Joachim 88
- Pempel, TJ 31
- People's Bank of China 133
- “people's car” 27
- peripheralization (*bianyuanhua*) 221
- Perkowski, Jack 124
- Peugeot 19, 52, 57, 63, 78, 88, 96, 149, 228
  - Chinese investment 70–2
  - financial problems 70
  - pullout from China 71–2
  - reluctance to transfer technology 151
- pillar industries (*zhizhu chanye*) 105, 110, 111, 131, 222, 226
  - transformation into auxiliary industries (*fuzhu gongye*) 222
- Pininfarina 190
- policy coordination 129–45
- policy effectiveness 127–54
- policy opportunity (*youhui zhengce*) 152
- political acceptability 139
- political coherence 16
- political system 13–18
- post-Fordism 51, 57–8
  - effect on developing country automakers 57–60
- Posth, Martin 82, 83–4, 86, 87, 88, 89, 90–1, 92, 98, 99, 255
- preferred projects 132
- private car market 154, 162
- production 4
  - assembly line 58
  - lean methods 55, 58
  - localization of 101–2
  - social organization of 87–90
- production capacity 112, 275
- production output 118
- production technology
  - lean production 55, 58
  - microelectronics 59
  - post-Fordism 51, 57–60
  - reduced costs 59–60
- protectionism 24, 59, 146
- public goods policies 25
- public realm 44
- purposive intervention 29
- QQ 187–8
- QQ EZDrive 188
- QS 9000 certification 5
- QSP (quality, service, price) system 143, 173, 175
- Quantum LLC 190, 191
- quiche jituan qiye* (automotive groupings) 161
- quotas 218
- rationalization 106–14
- Ravenhill, John 32
- readjustment and improvement (*zhili zhengdun*) 108
- rebalancing and reconsolidation 54
- receivables collection 94
- recentralization 106–14
- regional variation 15
- Renault 96
- rent seeking 125
- research and development facilities 213–14
  - PATAC 177–9, 209
- research and development (R&D) 124–6, 205–8
  - Automotive Industrial Policy (1994) 124–6, 206

- Chery Automotive Company
  - 189–90
  - hijacking by MNCs 213
  - limited diffusion of 208–14
  - Pan-Asia Technical Automotive Center (PATAC) 176–9
- restraint 146
- reverse engineering 185
- Richardo 2010 202
- Richardo Consulting Engineers Limited 190
- risk-taking 66
- Robert Bosch GmbH 123
- robotics 57
- Rockwell 123
- Roewe (*Rongwei*) 200–2
- Russia 234
- Sabre 202–3, 274
- SAIC 1, 9, 19, 20, 141, 156, 175, 199–203
  - collaboration with Chery 186
  - criticisms of 205
  - negotiations with GM 164
  - purchase of Rover technology 199, 201
  - Richardo 2010 202
  - Roewe (*Rongwei*) 200–2
  - role in setting up Shanghai VW 81, 83, 84
  - Sabre 202–3, 274
  - Shanghai Sedans 210
- SAIC Yizheng Company 202, 203
- sales 4, 116
- Santana 36, 52, 82–3, 84, 96–7, 153, 186, 211
- Schlais, Rudy 164, 165, 166, 238
- Schmidt, Helmut 257
  - visit to China 97
- Second Auto Works (SAW) 34, 37, 38, 54, 131, 149, 225
  - lack of competitiveness 55
- Segal, Adam 14
- self-dependence (*kao ziji*) 223
- semiconductors 57
- senior economic cadres 133
- Seventh Five-Year Plan 33, 92, 132
- Shanghai Automotive Corporation 45
  - foreign partners 153
  - role in setting up Shanghai GM 156–7
- Shanghai Automotive Industrial Corporation *see* SAIC
- Shanghai Automotive Works 55
- Shanghai Economic Commission 142
- Shanghai GM 9, 155–79
  - attitudinal shift 165–68
  - Buick models 153, 166–7, 170; Sail 177
  - building of 170
  - component supply capacity 172–6
  - negotiations 161–5
  - opening of 166–7
  - PATAC 176–9
  - production line 171
  - technology transfer 170–1
  - winning bid 168–71
  - see also* General Motors
- Shanghai Jiaotong University, engineering institute 163
- Shanghai Municipal Economic Commission 141
- Shanghai Saloon Car Plant 210
- Shanghai Santana Localization Community 84, 85
- Shanghai Sedans 210
- Shanghai VW 9, 36, 38, 39, 77–101, 138, 149, 153, 225, 251
  - business strategy 95–98
  - central government involvement 78–94
  - CNAIC role in negotiations 80–1
  - expansion of 98–101
  - exports: auto parts 98; car engines 90–1
  - financial problems 91–2
  - FOREX measures 90–4
  - localization of production 99–100
  - parts supply problems 82–3
  - Passat 153
  - problems in modernization 82
  - profitability of 100–1
  - quadruple alliance 82–7
  - recruitment policy 89
  - SAIC role in setting up 81, 83, 84
  - Santana 36, 52, 82–3, 84, 96–7, 153, 186, 211



- Shanghai VW—*Continued*  
 social organization of  
 production 87–90  
 staff training 88–9  
 supply localization 79–82  
 testing of parts/components 86  
 work-flow plan 84  
*see also* Volkswagen  
 shared equity, shared control  
 principle 116  
 shared ownership 115–18  
*shichang shikong* 116  
 short-termism 125  
 Sichuan Toyota 195  
 Coaster bus 195  
 Land Cruiser Prado 195  
 Siemens 123  
 Singapore 107  
 Sino-Japanese economic  
 relations 63–5  
 Sixth Five-Year Plan 34  
 Smith, Adam, public goods  
 policies 25  
 Smith, Jack 158, 160, 163, 166, 172  
 social organization of  
 production 87–90  
 socialized bonds 39  
 Song Ping 108  
 South Korea 65, 107  
*chaebols* 112  
 Ssangyong Motor 199  
 Spark 187–8  
 Special Economic Zones 12, 55, 147  
 Ssangyong Motor 199  
 staff  
 local, recruitment of 125  
 training: corporate finance 93–4;  
 production 88–9  
 State Assets Supervision and  
 Administration Commission  
 (SASAC) 40  
 State Council 13, 25  
 State Council Production Office 133  
 State Economic Commission 99  
 State Planning Commission 13, 25,  
 34, 81, 128, 129–32, 212, 227  
 centralization of power in 129–30  
 Chairman's Conference (*zhuren*  
*bangong huiyi*) 130  
 as lead unit (*qiantou danwei*) 133  
 leadership of auto policy  
 group 132–40  
 renaming of 261–2  
 state power 117  
 state-directed intervention 29  
 state-owned enterprises 40  
 Strange, Susan 60, 149  
 strategic planning 129–45  
 strategic way 232  
 supply localization 79–82  
 Sutton, John 5  
 Suzuki 62, 64  
 system-building 44  
 Taipei, French support for 97  
 Taiwan 64, 107, 125  
 tariff barriers 24  
 tariff rates 121–2  
 techno-nationalism 208  
 technological innovation 148  
 technology, extraction from foreign  
 ownership 30  
 technology transfer 8, 31, 35, 56,  
 231, 234  
 failure points 42  
 and human resource training 88  
 initiatives for 36  
 problems of 41  
 Shanghai GM 170–1  
 state role in 41–3  
 Volkswagen 85–6  
 Ten-Year Plan 23  
 Tenneco Inc. 123  
 Thailand 234  
 “Three Big, Three Small” (*San Da, San*  
*Xiao*) scheme 38, 137, 264  
 Thun, Eric 8, 14, 71, 77, 162, 240, 255  
 Tiananmen crisis 108  
 Tianjin Automotive Group 81, 194  
 acquisition by First Auto  
 Works 196–7  
 Xiali 38, 177, 194  
 Tianjin Toyota Motor, Vios 195  
 Tianjin Toyota Motor Engine 194  
 Tiggo 191  
 time-work discipline 88  
 Toyota 27, 52, 57, 58, 63, 96, 136,  
 155, 162

- Charade 194
- Corona 73
- decision against partnership 157
- Echo 193
- FAW partnership 193–5, 207
- foreign investment: Taiwan 64;  
USA 63
- keiretsu* network 207
- legal action 187
- lobbying of 54
- Majesta 193
- reluctance to transfer  
technology 163
- trade 24
- trade liberalization 108
- Trade-Related Intellectual Property  
Rights (TRIPs) 219
- Trade-Related Investment Measures  
(TRIMs) 219
- training *see* staff training
- Trotman, Alex 157, 161, 166
- TRW Inc. 124
- TS16949 certification 186
- unified/centralized leadership 19,  
47, 128
- United Kingdom 44
- United Technologies Corp. 123
- USA 44
  - compact car market 253
  - Japanese investment in 53–4
  - weakness of home markets 58
- Valeo 123
- VDO 174
- vehicle imports, rise in 53
- vehicles, type of 55
- Vietnam 234–5
- Vios 195
- Visionary Vehicles LLC 191
- Visteon 10, 234
- Volkswagen 19, 52, 57, 63, 135, 228,  
236–7
  - challenge from Japanese  
imports 72–3
  - Chinese investment 72–4, 78
  - continuing presence in China 97
  - export of Chinese-built  
engines 90–1
  - Golf 150
  - international activities 98
  - Jetta 177, 186
  - legal action against Chery 187
  - partnerships with 54
  - strategic goals in China 95–98
  - technology transfer 85–6, 96–7  
*see also* Shanghai VW
  - vulnerabilities 204–23
- Wagoner, Rick 172
- Wang Shaoguang 56
- Warring States Period 152
- West European model 44, 45
- win–win (*shuang ying*)
  - conditions 101, 165, 168
- World Trade Organization 20, 119,  
205
  - impact of membership 214–23
- Wu Bangguo 194, 196
- Wu Yi 163, 264
- Xiali 38, 177, 194
- Xu Min 189
- xunshizu* group 248
- Yao Yilin 108
- Yasheng Huang 25
- yi da zhi da* (using big to control big)
  - strategy 152
- yi zhi yi* strategy 152
- Yin Tongyao 185, 191
- Zeng Peiyan 10, 15, 17, 128, 130,  
133–5, 156, 163, 166, 172,  
194, 227, 228, 263
- Zhang Xiaoyu 204
- Zhao Ziyang 46, 69, 79, 108,  
115
- zhongyang* 156
- Zhu Rongji 69, 81, 85, 86, 99, 109,  
139, 152, 165, 262
- zizhu pinpai* (homegrown  
brands) 105
  - see also* domestic auto brands
- Zou Jiahua 108, 130, 133, 137, 138,  
163, 228, 258
- Zysman, John 44, 127