Original Literature Review and Assessment

Note: *Designated Drivers* had its origins as a PhD dissertation, but of necessity I have edited and "de-academified" the manuscript to make it more suitable (and readable) as a book. This document contains the original literature review from Chapter One of the dissertation. The review looks at three different sets of literature:

- the developmental state
- neoclassical economic theory on state ownership
- previous works specifically on China's auto industry.

This is followed by two sections originally from Chapter Eight of the dissertation that assessed the book's findings in light of both the developmental state literature (page 23 below) and the neoclassical economic literature (page 25 below). Full references may be found in the bibliography also posted on DesignatedDrivers.co.

This section places my research in context among some of the more prominent literature of political science and economics on business-government relations along with previous work specifically on China's automobile industry.

A Landscape of Business-Government Relations

I am by no means the first researcher to attempt to understand the role of the state in economic development. For the the better part of two centuries, the essential debate has occurred between followers of Adam Smith and David Ricardo – whose theories influenced the Anglo-American model of a robust private sector, minimal state intervention and free trade – and the followers of Karl Marx who viewed free-market capitalism as an inherently flawed system, stacked in favor of the wealthy and exploitative of labor. Growing out of the Marxist criticism of capitalism during the 1950s and 1960s came a "structuralist" economic theory emphasizing market failures in the Third World and the necessity for government intervention in order to compensate for these failures that constrained economic development. A neoclassical "resurgence" in the 1960s and 1970s challenged the structuralist school, arguing that government interventions in the economy led to inefficiency and rent-seeking by firms.[1]

In this section I look primarily at two sets of theoretical literature that form opposing sides of the argument about the role of the state in economic development. First, I highlight the theory of the "developmental state" which was first advanced by Chalmers Johnson and widely adopted to describe heavy state influence in the development of 20th century East Asian economies. Then, I review a set of neoclassical propositions that spell out the reasons that private ownership of business delivers results that are superior to that of state ownership.

1 Öniş, "Review," 109.

Finally, I review the arguments and findings of some of the more prominent and recent social science and business literature on China's auto industry.

The Developmental State

The 1980s saw a challenge to the neoclassical school that originated in the discipline of political science. Whereas neoclassical adherents had argued that the experiences of several East Asian "tigers" (namely Hong Kong, Taiwan, South Korea and Singapore) had resulted primarily from *laissez-faire* (or "hands-off") policies, proponents of the theory of the "developmental state" argued precisely the opposite, that, in most of these cases, early development was driven by heavy state involvement.

Chalmers Johnson is credited with launching the theory of the developmental state in his 1982 book, *MITI and the Japanese Miracle*, a book whose major thesis was that Japan's economic success had been due to the ability of a single, autonomous government organization to take the lead and direct industry in the way that state planners wanted it to go.[2] Johnson credits MITI (Ministry of International Trade and Industry) for exercising a great degree of both intervention and protection in launching Japan's move toward heavy and chemical industries in the 1950s that ultimately led to its spectacular economic growth, taking it from a poor, war-torn nation to one of the world's largest economies in the space of three decades. In Johnson's formulation, the autonomy of this important bureaucracy was critical to its ability to direct industrial development.

Years later (1999), after much debate had taken place, Johnson continued to defend his thesis saying that, not only had Japan followed this path but that other East Asian countries, particularly South Korea and Taiwan (and Singapore and Hong Kong to a lesser degree), had followed Japan's lead. And, "during the 1990s," he said, "the People's Republic of China also began to adapt the institutions of Japan's developmental state to its own Leninist heritage, a command economy it was attempting to dismantle."[3] Perhaps Johnson found it easy to relate China's method of development to Japan's as he viewed Japan as "soft-authoritarian ... [having] an extremely strong and comparatively unsupervised state administration, single-party rule for more than three decades, and a set of economic priorities that seems unattainable under the true political pluralism during such a long period."[4] Johnson's formulation of the developmental state included both a firm commitment to private property, and a state that intervened in the market through an elite bureaucracy recruited from among Japan's most capable bureaucrats. Public-private partnerships created through MITI allowed Japan to accelerate the growth of favored sectors.

Alice Amsden built on Johnson's developmental state model to describe how the

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2 Johnson, *MITI and the Japanese Miracle*.

3 Johnson, "The Developmental State: Odyssey of a Concept," 40.

4 Johnson, "Political Institutions and Economic Performance: The Government-business Relationship in Japan, South Korea and Taiwan," 137.

government of South Korea selectively supported certain industries while requiring of firms certain performance levels in order to continue receiving help.[5] Amsden's argument is essentially that South Korea "got the prices wrong" by providing subsidies to favored industries and sheltering them from the influences of the market during their formative years. According to Amsden, Korea facilitated growth by sheltering private firms from external threats and by keeping them exposed to competition with each other. The surviving firms were then the beneficiaries of favorable policies that limited the number of firms allowed to enter certain industries.

All late industrializing countries, Amsden says, "have in common industrialization on the basis of learning, which has conditioned how they have behaved."[6] She differentiates late developers' "learning" from England's industrialization based on *invention* and German and U.S. industrialization based on *innovation*. The "learners" are focused primarily on catching up with technology deployed in other countries rather than on invention or innovation. The advantage to this mode of industrialization is that it tends to take less time to generate growth than did the methods employed by the early developers.

Another important contribution to the developmental state model was Robert Wade's (1990) study on the development model used by Taiwan.[7] He offers a theory of the "governed market" to describe how, contrary to the claims of most literature at the time, Taiwan's government went well beyond the neoclassical, Anglo-American model to allocate investment to favored industries. Taiwanese firms were exposed to competition abroad, but the domestic market remained protected from foreign competition. In addressing the developmental model at large, Wade says Taiwan, Korea and Japan all "have in common an intense and almost unequivocal commitment on the part of government to build up the international competitiveness of domestic industry – and thereby eventually to raise living standards."[8]

Where Wade's account differs from Johnson's, however, is that, unlike Japan, Taiwan did not jump-start its growth through public-private partnerships. Instead, Taiwan began with a considerably different arrangement in which the ruling Kuomintang Party owned a great many of Taiwan's most important firms. As Taiwan was, until 1987, essentially (like the People's Republic today) a single-party, authoritarian country, state-owned enterprises played a much more important role than in Japan.[9] The "partnership" that existed in Taiwan was among the core "technocrats and ministers of the central economic bureaucracy, plus the senior managers of public enterprises and public research organizations, with [Kuomintang] party leaders and military leaders having veto power." In the beginning, Taiwan's economic development was primarily a state affair as private interests remained on the sidelines.

5 Amsden, *Asia's Next Giant*.

6 Ibid., v.

7 Wade, *Governing the Market*.

8 Ibid., 7.

9 Ibid., 272.

The 2003 republication of Wade's 1990 book included a new introduction in which he reassesses his original work. He notes that, during the 1990s, there had been a (re-)shift toward the neoclassical "Washington Consensus" model among economists who determined that Japan's lost decade of the 1990s and the Asian Financial Crisis of 1998 confirmed that the East Asian governments were wrong to continue intervening in their economies. Wade counters that there still exists no conclusive evidence that the "core Washington Consensus package ... is either a necessary or sufficient condition for a dynamic industrial economy. Almost all now-developed countries went through stages of industrial assistance policy before the capabilities of their firms reached the point where a policy of (more or less) free trade was declared to be in the national interest."[10] Not even the United States, Wade notes, began to champion free trade until *after* World War II.

The developmental state, of course, has its detractors. Among them, Kent Calder finds that Japan's development model was more of a "struggle for strategy" in which strategists, primarily at MITI, tried, but did not always succeed in changing the Japanese economy according to their plans. "Pluralistic bargaining processes" took place between MITI and private sector actors.[11] And Peter Evans, whose work also falls primarily within the developmental state literature offers a caveat that the autonomy of the bureaucracy only creates the condition for state-led development when the bureaucracy is "embedded" within society.[12] While this may seem to be a contradictory requirement, Evans describes bureaucracies that, while insulated from pressure, are also able to take part in iterative negotiations with non-state actors in the formulation of goals and policies.

Evans effectively places his study in a global context while describing the motivating force behind economic development. Beyond the desires of individual countries to boost growth and standards of living, Evans says there also exists the driving force to move up in the global hierarchy of the division of labor – a description that, I will show, particularly describes China's motivation for economic development. Evans says that, "efforts to reshape participation in the global economy are interesting, not just because they might succeed, but also because they reveal the limits of what states can do."[13] Evans says that state intervention in economic development is a given now, and he tries to move the debate from the question of "how much" intervention to one of "what kind" of intervention – precisely the goal that motivates my own study of China.

As Wade noted in his 2003 introduction, there was indeed a shift back toward the neoclassical story during the 1990s. Perhaps it was due to the difficulties encountered by Japan after the bursting of its real estate bubble and market crash in 1990. Or perhaps it was due to the overwhelming "success" of the United States prior to the bursting of what we now know to have been the dot-com bubble of the late 1990s. This re-shift also happened long before the mid- to

10 Ibid., xv.

11 Calder, *Strategic Capitalism*, 13–14.

12 Evans, *Embedded Autonomy.*

13 Ibid., 10.

late-2000s, when it became clear to all that China's upward trajectory showed no signs of weakening, bringing back into focus the questions that this dissertation seeks to answer in regard to China's apparent success. In order to move forward, however, it is important to understand the essence of the neoclassical arguments that favor private over state-owned enterprise.

State-owned vs Private Enterprise, the Neoclassical Argument

William Megginson, a professor of finance at the University of Oklahoma and a preeminent scholar on the topic of state ownership and privatization identifies four main arguments in the literature against state ownership of enterprises.[14] First, the weak nature of incentives in state-owned enterprises leads to inefficiency. Second, due to collective action problems and ineffective disciplinary measures, state enterprises are inadequately monitored. Third, soft budget constraints, or the lack of a threat of bankruptcy, lead to imprudent management of state resources. And fourth, politicians who oversee SOEs use them to pursue political objectives. A fifth argument that I would add is one based on competition: the advantages given by governments to their state-owned firms make competition extremely difficult for private firms, either driving them out of, or barring their entry into, entire industries. This fifth argument most concerns the presence of private firms within China's SOE-dominated auto industry. The next several paragraphs briefly address each of the five arguments that make up the neoclassical argument against state ownership.

On incentives, Hart, Shleifer and Vishny develop a model demonstrating that the disposition of residual control rights determines whether a firm's managers have the incentives to reduce cost and to innovate.[15] Because government employees who control SOEs lack these residual control rights, and because there are limits as to how well such employees may be compensated for their performance, there is little incentive for efficiency or innovation. Years earlier, Alchian made similar arguments that private owners, because they accept the risk of investing, are more careful with costs, and they are also further incentivized by the potential for profits due to their residual control.[16] In addition, Dixit argues that public sector incentives are also weak because government employees, though responsible to a single executive branch owner, are subject to multiple constituencies within the government including both the legislative and judicial branches.[17]

The second argument, that public firms suffer from inadequate monitoring, results from a collective action problem. While a public firm's theoretical owners are the citizens of a given country, because they do not perceive a direct equity interest in state-owned firms, there is little incentive for them to closely monitor the behavior of SOE managers. Vickers and Yarrow argue that privatization, on the other hand, changes the way in which managers may be monitored –

14 Megginson, *The Financial Economics of Privatization*, 38–41.

15 Hart, Shleifer, and Vishny, "The Proper Scope of Government."

16 Alchian, *Economic Forces at Work*, 146–7.

17 Dixit, "Power of Incentives in Private Versus Public Organizations."

particularly through the mechanism of the capital markets.[18] Assuming that the efficient markets hypothesis is correct, the information produced by markets can be used by a firm's owners to pressure managers to improve performance. Such information drives markets for corporate control among private firms – at least in countries where these markets are not too tightly bound by regulation. The ever present threat of hostile takeover can serve to discipline the managers of publicly-listed firms in the private sector.[19]

Sheshinski and López-Calva succinctly describe the third argument, the problem of the soft budget constraint.[20] When an SOE makes imprudent investments, or its operation is incompetently managed, or even if it simply has a run of bad luck, the state has little interest in bankrupting and liquidating the firm and redeploying the capital toward a more productive purpose – something that happens with regularity among private firms in societies with robust corporate governance systems. The political cost of bankrupting an SOE would be too high for the politician. This also results from a collective action problem: the costs of bankruptcy would be concentrated among a small, vocal group, whereas the benefits of such a move would be dispersed among the entire populace. Boycko, Shleifer and Vishny contribute further to this argument by noting that the subsidy of the SOE that would be politically prudent would be much more difficult to carry out once a firm is privatized: "The public … may not be aware of the potential profits that a state firm is wasting, but they are keenly aware of the alternative uses of tax revenues, and would not wish to spend public money to subsidize private firms."[21] Of course, this assumes a level of transparency not likely to be found in China.

As Megginson points out, the above three arguments all assume that a government is acting benevolently; however, in reality, politicians and bureaucrats often have motives that could not be called benevolent (from the perspective of the efficiently managed SOE).[22] Megginson's fourth argument is that politicians are often motivated by political and social objectives that would preclude the economic objective of prudent SOE management. Shleifer and Vishny argue that politicians seeking to remain in office have an incentive to encourage the state-owned firms they oversee to employ too many people.[23] Regardless of whether politicians succumb to the temptation to use the firms under their control to reward political supporters and constituents, such temptation is a constant. As for bureaucrats, noted economist and reformed Hungarian central planner, János Kornai, spoke from his own experience when he wrote that government bureaucrats cannot help but interfere in the inner workings of the firms they control because this is how they define and justify their positions.[24] Functionaries want their bureaucratic control to continue because it gives them power and justifies the continued

18 Vickers and Yarrow, "Economic Perspectives on Privatization," 115.

19 Organisation for Economic Co-operation and Development, *Corporate Governance, State-Owned Enterprises and Privatisation*.

20 Sheshinski and Lopez-Calva, "Privatization and Its Benefits," 434–5.

21 Boycko, Shleifer, and Vishny, "A Theory of Privatisation," 311.

22 Megginson, *The Financial Economics of Privatization*, 41.

23 Shleifer and Vishny, "Politicians and Firms."

existence of their organizations.

The fifth argument, regarding the lack of competition among SOEs, is not without its detractors. Hart, Shleifer and Vishny place little stock in the competition argument noting that it is entirely possible to envision several state-owned firms competing within a single market, protected from private sector competition.[25] Likewise, it is not inconceivable that a single privately-owned firm could hold a monopoly position in a market. However, Sheshinski and López-Calva argue that real competition would be difficult to introduce when SOEs already exist in a competitive market.[26] The SOE's ability to sustain perpetual losses (i.e., the soft budget constraint) as well as possible preferential access to loans by state-owned banks, would effectively drive any potential private competitors out of the market. However, Vickers and Yarrow argue that it may be possible for governments to "loosen the budget constraints" for private firms as well through "subsidies, loan guarantees (and) trade protection."[27]

The question is, which of these scenarios best describes what we see in China's auto industry? If, as Vickers and Yarrow argue, private firms are getting many of the same benefits as SOEs, this could explain how they are able to compete with SOEs. If, however, as Sheshinski and López-Calva argue, the playing field is completely tilted in favor of the SOEs, then private firms should not even exist in the auto industry. Since we know that they do, we must ask why this is, and China's automobile industry provides the perfect case study through which to ask this question.

Previous Work on China's Auto Industry

Within the academic realm, surprisingly little has been written specifically about China's automotive industry. A survey of dissertations and academic papers reveals works of a mostly descriptive nature as social scientists and business scholars have attempted to understand what makes this particular industry tick. The first such work, by Eric Harwit, documents the early development of China's auto industry from the founding of the PRC until the early 1990s.[28] He borrows a bureaucratic politics approach from the field of international relations in the vein of Graham Allison's *Essence of Decision* to describe how the various individuals and institutions interacted to shape early development of the industry during the 1980s and early '90s.[29]

The empirical focus of Harwit's book is on the establishment of the early Chinese-foreign joint ventures and how central and local governments acted and interacted with foreign

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24 Kornai, *The Socialist System*, 498–9.

25 Hart, Shleifer, and Vishny, "The Proper Scope of Government," 1129.

26 Sheshinski and Lopez-Calva, "Privatization and Its Benefits," 437.

27 Vickers and Yarrow, "Economic Perspectives on Privatization," 116.

28 Harwit, *China's Automobile Industry.*

29 Allison, *Essence of Decision; Explaining the Cuban Missile Crisis*.

automakers and with each other to shape early automobile policy. His interviews conducted in China and analysis of primary documentary evidence yielded a detailed understanding of how the industry developed and, more importantly, which individuals and institutions won and lost in the bureaucratic pushing and pulling that shaped the industry. The purpose of my research has been very similar to that of Harwit's except that, whereas his focus was on early development in the 1980s, I attempt to accomplish a similar task covering three decades. Where our research differs is that I focus less on the internal politics at the central level and more on China's macro policy and the outcomes that have resulted.

Harwit followed up his book with a return visit to China in 1999 to gauge the possible consequences of WTO membership for China's auto industry.[30] He found the worry among local officials to be that an expected influx of foreign imports could drive smaller Chinese automakers and their suppliers out of business. Among the major Chinese SOEs, Harwit also encountered concern that their prices would have to come down and quality would have to improve on a much faster timeline than would have liked. Foreign automakers in China, while expressing optimism that their operations would be ready for competition from increased imports, also felt that, even though China was planning to give up some industrial planning tools in exchange for WTO membership, other protectionist measures would surely take their place.

Arguably the single most influential event on the growth of China's auto industry was China's accession to the WTO in 2001. A few years following accession, Greg Noble, John Ravenhill and Richard Doner analyzed China's auto industry to understand the effects of WTO membership.[31] Noble, et al, similar to Harwit, noted that prior to accession pessimists were predicting that China would lose its ability to conduct industrial planning and that reduction of tariffs would lead to China's becoming flooded with foreign exports. But this did not happen. China experienced a post-WTO boom in auto sales that has only accelerated since the time of Noble's study. What Noble, et al, also discovered was that WTO membership stimulated the growth of private auto firms, and that their success, "prodded local joint ventures into deepening localization." The increase in competition, rather than swamping LSOEs (local state-owned enterprises) led many local governments to adopt heavy local state intervention to support the development of local supply chains. Noble, et al, also found, and some of my interviewees supported this finding, that, "on issues such as enforcement of intellectual property rights, or requirements for local research and development, the Chinese government has at times simply either ignored the letter of WTO law and/or dragged its feet on implementing its commitments."[32]

China's ability to circumvent some of its WTO commitments was also mentioned in a dissertation by Irina Aervitz in 2007, though it was not highlighted as such.[33] Aervitz compared

30 Harwit, "The Impact of WTO Membership on the Automobile Industry in China."

31 Noble, Ravenhill, and Doner, "Executioner or Disciplinarian: WTO Accession and the Chinese Auto Industry."

32 Ibid., 23.

33 Aervitz, "The Driving Force Behind the Automotive Sector in China and Russia: The Role of the State in Technology Appropriation."

the state attempts of China and Russia to encourage technology development in their respective auto sectors. Her findings were that China's auto industry was (and is) simply more highly valued by the government than is that of Russia, and that this is evidenced by central policy intended to assist Chinese automakers in acquiring foreign technology. The tactics used by China's central government include the continued requirement that foreign automakers remain unable to own more than 50 percent of a joint venture (unless, that is, the JV produces cars for export), import substitution and local content requirements. Aervitz, however, neglects to point out that local content requirements were forbidden under China's WTO accession agreement. The fact that China is still able to enforce local content requirements attests to the attractiveness of its market to foreign automakers.

Eric Thun's *Changing Lanes in China* looks at the next stage of development following that covered by Harwit. The major focus of Thun's work is the development of auto supply networks during the 1990s.[34] He chooses the five largest Chinese-foreign joint ventures and examines their supply networks to understand why some of these assemblers were performing better than others. Interestingly, the dependent variable in his work was not enterprise performance, rather it was the development of the networks of supply firms that supported the assembly plants.[35] While he recognized the role of the central government in establishing the broad framework within which these joint ventures were formed, Thun's contention was that differences in their relative success were due to local path dependencies. In other words, local historical characteristics determined how local governments developed their local auto firms.

His major finding was that the local Shanghai government, due to its historically heavy-handed, state-centric nature was most successful in nurturing and supporting the individual local firms in the supply network of Shanghai's VW plant.[36] (Noble, et al, whose article followed Thun's original dissertation by several years noted a similar phenomenon.) The local regions that were somewhat less successful in developing supply networks to support their nascent joint ventures were Guangzhou and Beijing, both of which took a more *laissez-faire* approach, leaving their joint ventures to find suppliers wherever they could.

The joint ventures located in Changchun (First Auto Works or FAW) and Wuhan (Dongfeng Auto) were even less successful than the others. Because their joint venture partners

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34 Thun, *Changing Lanes in China*. Thun's empirical research covered the auto groups and associated supply networks located in Shanghai (Shanghai Auto), Beijing (Beijing Auto), Guangzhou (Guangzhou Auto), Changchun (First Auto Works) and Wuhan (Dongfeng Auto).

35 Thun's selection for his dependent variable was likely influenced by a problem similar to that encountered by many China researchers, myself included, who wish to compare a set of firms. Financial statements, if available, are not always comparable from one firm to the next, and many listed firms are part of group companies with significant portions of their businesses contained in unlisted entities. And, according to two China-based "Big 4" auditors with whom I spoke, the veracity of "audited" financial statements in China is often questionable – even those compiled by "Big 4" affiliates.

36 At the time of Thun's research the general consensus among China observers was that Shanghai was a bastion of entrepreneurship, so Thun was ahead of his time in suggesting otherwise. This claim was later strongly supported by the empirical research of Huang Yasheng. See: Huang, *Capitalism with Chinese Characteristics*.

were centrally-owned SOEs (CSOEs, as differentiated from the *locally*-owned SOEs, or LSOEs, in Shanghai, Guangzhou and Beijing) their primary owner, the central government, being less concerned about local development, was content for supply firms to be scattered about the country. In fact, the central government was most concerned with development of China's western regions, and was, therefore, most supportive of parts factories located there, this despite the fact that FAW and Dongfeng are located in the east. While this helped to stimulate local economic growth in other regions, it led to logistics issues and comparatively expensive supply chains for the firms located in Changchun and Wuhan.

Even today, the foresight of the local Shanghai government revealed by Thun's work is an important factor in explaining why Shanghai Auto continues to dominate China's auto industry. However, as interviews conducted for this dissertation have revealed, (and as the article by Noble, et al, reviewed above indicated) Shanghai's local supply network development efforts are being duplicated to varying degrees in other local regions in China. Furthermore, improvements in China's transportation and logistics infrastructure have decreased somewhat the advantage to be gained from a locally-based supply chain. In short, Shanghai's competitive edge is not as sharp as it once was. This is not because Shanghai has declined, but because the others have lifted their games. It is also because the demands of the central government for what China's auto industry should be have increased substantially.

Geographers Victor Sit and Weidong Liu published in 2000 a study of the spatial arrangement of China's auto industry during the 1980s, and they found that LSOEs grew faster than CSOEs because they were not "constrained by central government dependencies toward central planning."[37] This finding supports that of Eric Thun who also found the CSOEs to have the least well-organized local supply chains. As Sit and Liu studied the behavior of auto firms in the 1990s, they then found that CSOEs held an advantage over their LSOE competitors. As the industry began to grow with demand for passenger cars, CSOEs were generally freer to expand throughout the country, whereas LSOEs were, at the time, still largely confined to their local regions by the local government. However, I have observed that, as auto ownership exploded in China, post-WTO, even the LSOEs have also begun to expand into other regions – a phenomenon that still was not possible in the early 2000s as the Brilliance China case study in Chapter Five will demonstrate.

In 2002 economist Yasheng Huang compared China's and Korea's auto industries to illustrate how industrial planning can overcome coordination failures.[38] Huang says that the coordination failures governments get depend upon how far-reaching their industrial planning programs reach. The first coordination failure is when firms fail to invest *enough* in a selected industry – or, in economic terms, "at socially optimal levels." This can typically be overcome through trade protection and direct subsidies, both of which were (and are) components of Korea's and China's industrial plans. This first failure then leads to a second failure which

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37 Sit and Liu, "Restructuring and Spatial Change of China's Auto Industry Under Institutional Reform and Globalization."

38 Huang, "Between Two Coordination Failures."

occurs when firms then begin to invest *excessively* in a selected industry. Huang says that Korea's strong, centralized bureaucracy managed to solve both coordination failures, resulting in an amount of investment that was neither too much nor too little.

In the case of China, however, Huang found that only the first failure was solved, and the second failure occurred due to China's "fragmented bureaucracy." In other words, he found investment in China's auto sector to be excessive, and he places the blame for this excessive investment on China's "divided and decentralized bureaucratic arrangements." One of the major areas of China auto policy that Huang holds up as evidence of China's supposed inability to coordinate policy outcomes was the fact that, as of 2002, there had been practically no consolidation in China's auto industry. However, I will argue that the lack of consolidation in China's auto industry stems, not from the central government's *inability*, but from its *unwillingness* to consistently enforce policy provisions. That is, while the central government wants consolidation and has demonstrated that it has the power to prod automakers into mergers, it has chosen only to selectively use that power. Regardless, my research supports Huang's assertion that China's auto industry suffers from excessive, wasteful investment, as is evidenced by the large number of small, inefficient auto assemblers that are supported by local governments.

Kelly Sims Gallagher's *China Shifts Gears*, observes central and local governments that, at the time of her research from 1999 to 2003, were not quite convinced of the need, nor of China's ability, to "leapfrog" the rest of the world in terms of vehicle technology.[39] Furthermore, her empirical research revealed that the joint venture agreements between Chinese automakers and their foreign counterparts were generally neither specific about what kinds of technologies should be transferred, nor did they spell out how such transfers might be measured. My own survey of primary auto industry sources in Chapter Three supports Gallagher's findings. However, perhaps Gallagher's book was also slightly ahead of its time because, as I will demonstrate, China's central government is now engaged in a full-on assault to push all Chinese automakers – whether state-owned or private – to pursue research in "new energy vehicles." For the first time, China's central government believes itself to be on a level playing field with the advanced auto producers in Japan, Europe and North America, as each competes to provide the world with viable alternatives to traditional internal combustion (i.e., petrol-driven) technology. China's government, through Chinese auto firms, is determined to win this battle.

Qingjiu Tao, in a dissertation written in 2004, set out to determine the extent to which the performance of a joint venture in China's auto industry would be affected by the timing of its entry into the market, and the amount of resources it committed to the venture, both initial and subsequent.[40] Not surprisingly, Tao found that there was a significant early-mover advantage, but that late arrivals could also succeed if the amount of investment were significant enough. Tao's quantitative analysis (the only real attempt at quantitative analysis I have found in the literature) is supported by the case studies in this dissertation. Among the three major JVs founded in the

39 Gallagher, *China Shifts Gears*.

40 Tao, "The Road to Success: A Resource-based View of Joint Venture Evolution in China's Auto Industry."

1980s, only Shanghai-Volkswagen still exists, and it was the only of the three in which the foreign partner took a 50 percent interest. Foreign partners in the other two JVs, Beijing Jeep and Guangzhou-Peugeot, took only 31 percent and 22 percent shares, respectively. (See joint venture case studies in Chapter Four.)

In another recent dissertation, Yukyung Yeo compares China's auto and telecom industries with a purpose similar to mine. She seeks to understand the underlying regulatory logic governing these two strategic industries.[41] Distinguishing between CSOEs and LSOEs, she finds that the central state exercises tight control over the former, but "soft and invisible" control over the latter. And in a finding that is also supported by the case studies in my research, she discovers that, despite its "soft" mode of control, that the central government is no less effective in its ability to oversee LSOEs. The mechanism through which this oversight is achieved helps to explain why the central government is able to exercise effective control. Yeo finds that, in both the auto and telecom industries, a given firm's party committee is deeply integrated with the firm's board of directors. Furthermore, her interviews reveal that the Communist Party's Organization Department recommends to the boards of directors senior officials in both the major state-owned firms and the regulatory bodies that oversee them. This finding was further confirmed by Richard McGregor in his 2010 book, *The Party*.[42]

Here I build on the work of prior scholars to extend the development story of China's auto industry to present day (early 2011). The contribution of my research is, for the first time, a chronological picture, with confirming case study evidence, of the evolution of China's industrial policy over three decades. This present work contains a story that describes step-by-step how China's central and local governments have interacted with an industry and with each other to develop policy and create a potential global competitor to long-established multinational corporations. And while China's development path has similarities with those of other late developers such as Japan and Korea, it also has some similarities with early developers such as the U.S., but, most importantly, it has taken a unique, experimental path that challenges conventional wisdom about business-government relations.

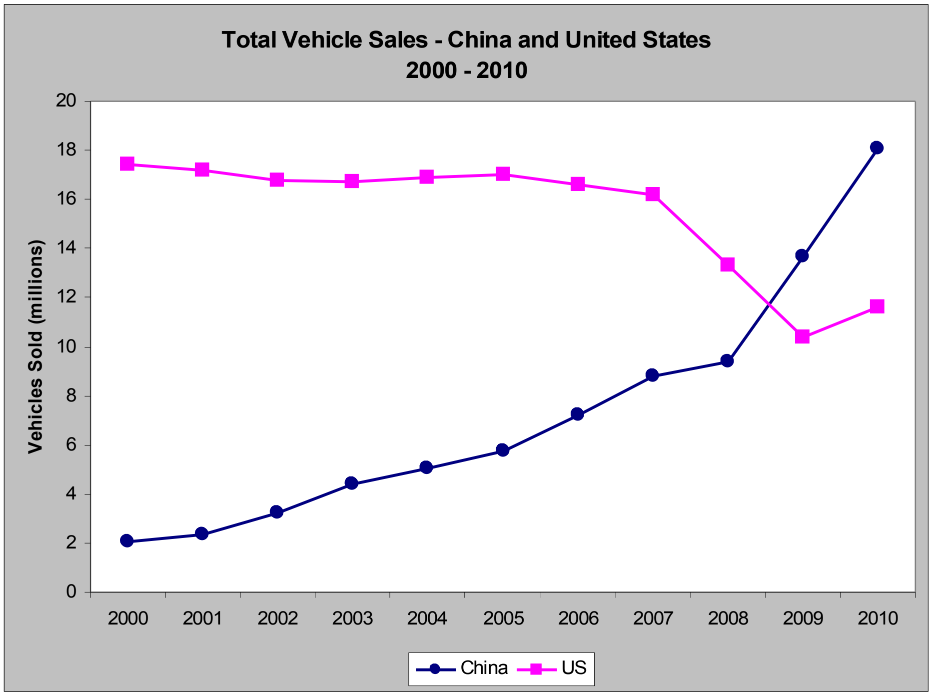
At the time his book was published (2006), Thun wrote that Beijing had been expecting China to become one of the world's top three markets for automobiles by 2010.[43] In fact China exceeded its own expectations to become the world's single largest auto market by 2009.

41 Yeo, "Regulating China's Industrial Economy: A Comparative Case Study of Auto and Telecom Service Sectors."

42 McGregor, *The Party*.

43 Thun, *Changing Lanes in China*, 52.

Figure 1-4 Total Vehicle Sales in China and the U.S., 2000-2010



Sources: 2010 China Automotive Industry Blue Book, Automotive News Website.

China's success was due to the confluence of several factors, some of which were not of its own doing. The Great Recession that began in 2008 decimated demand for automobiles in the developed countries, and it also temporarily slowed growth in China. As part of its stimulus plan to combat the potential effects of the recession, Beijing implemented a 50 percent cut on the sales tax for purchases of automobiles with engines 1.6 liters or less in early 2009. This led to a marked increase in sales of small, low-emission cars in China. In the West, the recession merely exacerbated the destructiveness of decades of auto firm mismanagement and the insatiable demands of the American labor unions, forcing two of America's "big three" automakers into bankruptcy and the third deep into debt.[44] Figure 1-4 (above) compares annual vehicle sales in China and the United States.

Also, whereas part of Thun's conclusion was that, in the 1990s the central government had limited power to influence the development of the auto industry, things have changed under the Hu/Wen government that has been in power since 2002. While my findings agree with Thun's, that local governments still wield heavy influence over their local auto firms, the central government has increased its power as well – not just over the auto industry, but over business in general. There has been a concerted effort to re-centralize much of the central government's power that was lost during the earlier reform years.[45]

44 See, *inter alia:* Ingrassia, *Crash Course*; Holstein, *Why GM Matters*; Maynard, *The End of Detroit*; Dewar, *A Savage Factory*; Rattner, *Overhaul*.

This dissertation incorporates the work of Harwit, Thun and Gallagher, but with the advantage of nearly an additional decade of observations, it also looks back to reveal patterns of behavior by the central government as its attitude toward, and plans for, the automobile industry have evolved since the 1980s. In the space of three decades, we see the central government's approach to the auto industry change from ambivalent to hopeful to pragmatic. In his conclusion, Harwit expected that China's impending membership in GATT (now the WTO, which China later joined in 2001) would drive China toward a more "rational" auto industry policy.[46] And while my findings confirm Harwit's expectations, they also demonstrate that China's aspirations of building a globally competitive auto industry did not end with WTO accession. The subsequent decade has revealed a concerted effort, not just to join in the game, but to increase China's chances of winning. A look at this single industry in China will have implications for other industries, and for other countries as well, as nations battle for economic supremacy in the coming decades.

Is China a Developmental State?

Recall from Chapter One's review of the most prominent literature on the developmental state the common factors that scholars used to describe the concept. A developmental state has the following qualities:

- heavy state intervention in selected industries
- high priority on economic development with the goal of increasing international competitiveness
- a capable and autonomous economic policy bureaucracy
- protection from external competition
- exposure to domestic competition
- a commitment to private property

It may seem that discussing whether a country fits into a certain theoretical category based on observation of a single industry is an exercise in futility; however, because a developmental state selects particular industries for accelerated development, we can cheat a little bit by observing an industry that we already know to be among the selected. Because we already know that China's auto industry was selected as a "pillar" industry in the 1980s, we know that China satisfies the first criterion on the list.

Beginning with the Third Plenum of the Eleventh Central Committee which met in December of 1978, economic reform and opening was elevated to, if not the highest, certainly among the highest of priorities.[47] And though conservatives and reformers engaged in a tug-of-

45 Hu Xingdou, "建议两会审议和制止国进民退 = Suggestion for NPC to Deliberate and Put a Stop to the Phenomenon of Guo Jin Min Tui"; Wines, "China's Policies Ensure State Enterprises Grow."

46 Harwit, *China's Automobile Industry*, 171–172.

47 Baum, *Burying Mao*, Chapter 2.

war throughout the 1980s, Deng Xiaoping's "southern tour" of 1992 put an end to much of the in-fighting and left no doubt as to the priority of economic growth for China.[48] Following this important event, China's first Automotive Industry Policy declared in 1994 that the aim was to develop "globally competitive" automakers. A state priority of economic development and an industrial policy with the aim of global competitiveness would seem to qualify China as a developmental state according to the second bullet point above. However, with economic growth widely recognized to be a pillar supporting regime survival, it is not difficult to imagine economic growth being given a backseat when the authority of the party-state is deemed to be under attack.

China has in the NDRC the capable economic bureaucracy called for in a developmental state, and though this institution continues to wield more than its share of power in Beijing, the ability of local governments occasionally to subvert central government policy calls into question the NDRC's autonomy. In addition, there are other bureaucracies with which the NDRC shares authority over the auto industry. MIIT, whose Auto Industry Department was carved out of the NDRC, formulates micro-policy for the industry. SASAC is the nominal "owner" of the central SOEs. The Ministry of Finance, People's Bank of China and China Securities Regulatory Commission hold authority on decisions concerning the funding of SOEs and availability of credit in the economy. The Ministry of Environmental Protection writes policy concerning the impact of the auto industry on the environment, and the Ministry of Science and Technology writes policy on the direction of technology in the auto industry. And China's state-owned oil firms, which are ministries unto themselves, make decisions regarding the types of fuel refined and sold in China.[49] All industries in China, not just the auto industry, continue to endure the problem of "too many mothers-in-law," or too many regulatory agencies who can withhold their support for a company's proposals.[50] The NDRC may be first among equals, but it still does not enjoy complete autonomy.

There is no question that China's central government has, since the 1980s, been highly protective of its domestic auto industry. Prior to its accession to the WTO, China protected its nascent auto industry from a potential flood of foreign imports with high tariffs, such that, by the time WTO membership required those tariffs to come down, China's major automakers had been firmly established. In addition, China has ensured that foreign investment would be used as a tool for acquiring the technology with which eventually to compete with foreign automakers rather than as a tool for the foreigners to control China's auto market. It continues to force all foreign automakers to enter only in partnership with Chinese automakers, and it restricts their ownership to 50 percent or less. However, as was noted in the previous section, China's auto market nevertheless continues to be dominated by foreign brands. This state exists, not due to deliberate policy, but due to a lack of appreciation of the value of Chinese brands that did not become a policy focus of the central government until the early 2000s.

48 Ibid., Chapter 14.

49 Interview, Beijing, November 2009.

50 Tang and Ward, *The Changing Face of Chinese Management*, 49–51.

The fact that China's auto industry contains both state-owned and private firms is an indication that the central government values competition. And the central government's recent acceptance of the existence of the larger private players, along with some minimal funding provided by state-owned banks, attests to the importance of these few firms in the eyes of the central government. However, due to the continued advantages enjoyed by the SOEs, particularly in terms of their superior access to funds and partnerships with foreign automakers, the private sector continues to compete with one arm tied behind its back. *The central government indeed values competition, but only to the extent that it strengthens the SOEs.*

The final criterion, a commitment to private property, would also seem to describe China. In 2004 Article 13 of China's state constitution was amended to say that, "citizens' lawful private property is *inviolable*."[51] While this was heralded as a breakthrough for the rights of citizens and private business owners, it still follows Article 12 which reads, "socialist public property is *sacred and inviolable*," which seems to accord public property with somewhat higher status. In addition, China lacks an independent judiciary that can be depended upon to defend the rights of citizens against arbitrary seizure by the state. To the degree that Wang Chuanfu of BYD and Li Shufu of Geely feel comfortable that their businesses would not be seized by the state, the legal grounds on which their comfort rests are shaky at best.

Based on what we know of China's auto industry, to what degree can we say that China fits the description of a developmental state? Among the six bullet points listed above, China only solidly qualifies on the first. On the remaining five, China would appear, on the surface, to qualify, but, I have also noted serious exceptions to the applicability of each of those criteria to the case of China's auto industry.

If China does not fully qualify as a developmental state in five of six criteria – even in an industry that has been designated as a pillar industry for development – is it possible to call China a developmental state? At least three of the bullet points listed above do not need to be evaluated in terms of a single industry. In China as a whole, economic development is a high priority, but, barring significant political reform, the authority of the Party will always trump the need for economic development. During times of social unrest, or even potential social unrest, this fact becomes evident. The lack of complete autonomy of the NDRC exists, not only for the auto industry, but for all industries. And the exceptions to China's commitment to private property cross all industries and all people. While China itself is most definitely a *developing* state, it does not fully satisfy all of the criteria of the concept of the developmental state.

State-owned vs Private Enterprise

While the case studies and analysis presented indicate that China's auto industry planning has resulted in a mixed bag of both success and failure, the argument that China's government has shaped an increasingly competitive industry may not be so easily dismissed. The fact that foreign automakers continue to clamor for access, often at the cost of handing over critical

51 Official English translation of China's Constitution: http://english.peopledaily.com.cn/constitution/constitution.html. Emphasis added.

technology, is an indication that China's government must be doing something right. Is it possible that state ownership is not as bad as the neoclassical economists would have us believe?

Chapter One contained a brief review of the neoclassical arguments against state ownership and in favor of private enterprise. In this section I will assess whether China's mode of planning involving state ownership has in some way managed to overcome the typical neoclassical objections to state ownership.

Weak Incentives

The first argument is that, because the managers of SOEs lack residual control rights – that is, because they have no share in the company's profits – they lack incentives to control costs or to foster innovation. My research confirms that this is indeed the case, and we can still see the effects of this lack of incentives. The job performance of the leaders of the largest SOEs (whether centrally- or locally-owned) continues to be measured by size and profitability, and they continue to find cooperation with foreign partners to build and sell foreign-branded cars to be the fastest route to favorable job performance and future promotion.

The central government has, however, introduced one method to overcome the disincentive for innovation, and that is the acceptance and minimal support of some of the larger among the independent automakers. In recent years this has served as a push to the SOEs to begin investing in Chinese brands and new technologies, but the commitments of SOEs to self-development continue to be outweighed by their commitments to pulling in profits by selling foreign brands.

Inadequate Monitoring

The argument here is that the theoretical owners of an SOE are a country's citizens who, because they perceive no direct equity interest, have no incentive to monitor the performance of SOEs – a "collective action problem" in social science parlance. China's central government has taken some steps to deal with this issue. The formation of SASAC (State-owned Assets Supervision and Administration Commission) in 2003 was an attempt to consolidate central state ownership within a single organization that would provide better oversight of state-owned firms.[52] Prior to SASAC, state-owned enterprises were owned by various ministries and not subject to a single authority whose sole purpose was to oversee the performance of the enterprises. Similar bodies were also required to be formed within local governments all over China as well. However, as was noted in the previous section, SASAC is still but one among many government organizations that oversee the auto industry.

Another effort to overcome this problem has been the partial listings of many SOEs on both mainland and overseas stock markets. Theoretically, this would open the companies to further scrutiny by outside shareholders who would have access to the companies' audited financial statements. In reality, however, the purpose of state ownership in China is not

52 Naughton, "The State Asset Commission: A Powerful New Government Body"; Naughton, "SASAC Rising."

maximization of shareholder value; therefore, "it is uneconomical for minority shareholders to spend time educating themselves on corporate issues and attending shareholder meetings when their vote[s] will not affect the outcome."[53] The fact is that there is still no market for corporate control in China, even among *non*-state-owned enterprises that are listed on domestic markets. In the auto industry, each of the three most prominent private automakers, while listed, is also controlled by a single individual who holds a controlling equity stake.

Soft Budget Constraints

The idea of the soft budget constraint is that a state-owned enterprise would never be in danger of bankruptcy and liquidation because the resulting unemployment and loss of economic activity would be politically unacceptable to the state. The state would always make use of its vast resources to bail out an ailing firm rather than let it go under, and the knowledge of SOE managers of this fact places them in a position of moral hazard. They simply do not have to worry about the firm's performance when they know the state will backstop their losses.

In the case of China's auto industry, the bifurcation between the top dozen or so big firms and all of the rest shows two different systems at work. While we can be certain that many of the small-scale local firms are being supported by their local governments, we also know that there are some incentives for the leaders of the larger SOEs to be concerned about profitability. The fact that leader promotions depend on size and profitability does ensure that the leaders of the largest SOEs take the most expedient path to short-term profitability, which is production of foreign-branded cars. Because promotion opportunities come from good performance, SOE leaders, at both central and local levels, understand that consistent losses would not be good for their future careers.

There also seem to have been a few cases in which smaller automakers on the brink of bankruptcy, rather than seek further bailouts by their local governments, elected to pursue mergers with larger automakers. We saw these examples in Tianjin Xiali and Nanjing Auto, both of which were motivated to merge due to their poor financial circumstances.

Pursuit of Political Objectives

Another of the neoclassical arguments against state ownership is that politicians are compelled to use the resources at hand to further their political goals, not the least of which is to remain in office. For example, with state-owned enterprises this would result in politicians ordering businesses they oversee to engage in "featherbedding"– i.e., to employ more people than would be prudent – the idea being that unemployment would be politically unacceptable. In the case of China's auto industry, we do not even need to ask whether this happens with SOEs when we already know that it happens with *private* businesses. While local governments are happy to support local automakers, case studies have revealed that local governments often expect in return a commitment to maintain employment levels during difficult times. This is also revealed in the fact that local governments tend to be resistant to mergers that could potentially

53 Clarke, "Corporate Governance in China," 15–16.

reduce employment and tax revenue in the local region.

Does state investment drive out private investment?

As I wrote in the Preface, one of the phenomena that drew me to this research was the existence of private businesses in industries dominated by SOEs. And in the auto industry in particular, I was surprised to find some private players listed among the top-ten producers in China. Neoclassical theory asserts that even the presence of state investment should drive out private investment because private individuals are unable to match the state in terms of resources.

Despite barriers to entry into China's auto industry put in place by the central government, local governments have helped to overcome this hurdle by assisting local entrepreneurs who wished to start auto companies. And once those private firms became large and strong enough to stand on their own, the central government, seeing the value the winners could bring to the industry has rewarded them with minimal support. While there are probably fewer competitive private automakers than there would have been in the absence of state investment in the sector, there are still more private players in this industry than neoclassical economic theory would allow.

China's auto industry strongly supports four of the five neoclassical arguments against state-ownership: SOEs are faced with weak incentives for performance, they are inadequately monitored, they enjoy soft budget constraints and are subject to pressure to achieve political objectives. Only on the final argument does China continue to confound: state ownership has not driven private investment out of this industry.

Based on this evidence, the proponents of neoclassical economic theory would likely argue that, because China has been unable to overcome the "disadvantages" of state-ownership, their current strategy will not be viable for the longer-term. While this remains to be seen, I think a more important question, particularly for China's foreign competitors, is whether China may still be able to follow its current model to develop one or more formidable global competitors in the automotive industry. Accusing one's opponent of fighting "unfairly" is of little use if that opponent can achieve victory with such tactics.