
**Local Leadership and
Economic
Development:
Democratic India vs.
Authoritarian China**

Bo Zhiyue

ABSTRACT

What is the impact of the type of political regime on economic development? Does democracy foster economic growth? Or is an authoritarian regime in a better position to promote material welfare? The conventional wisdom, as detailed in Adam Przeworski et al (2000), is that the regime type has no impact on economic growth. Democracy neither fosters nor hinders economic development. However, the cases of India and China seem to suggest otherwise. In the past three decades, India—the largest democracy in the world—has sustained a moderate rate of economic growth while China—the largest authoritarian regime—has witnessed an unprecedented period of economic expansion.

Using data on economic growth at the state/provincial level from India and China, this study attempts to understand the impact of political regimes on economic development. The chapter will review the literature on regimes and economic development, highlight the contrast in economic growth between India and China in the past six decades, examine the two countries at the state/provincial level, and explore the impact of local leadership on economic development in a comparative framework.

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I. Introduction

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Using data on economic growth at the state/provincial level from India and China, this study attempts to understand the impact of political regimes on economic development. The paper will review the literature on regimes and economic development, highlight the contrast in economic growth between India and China in the past six decades, examine the two countries at the state/provincial level, and explore the impact of local leadership on economic development in a comparative framework.

II. Political Regimes and Economic Development

On the fundamental question of the relationship between political regimes and economic development, we often hear two opposite answers. On the one hand,

¹ Adam Przeworski, Michael E. Alvarez, Jose Antonio Cheibub, and Fernando Limongi, *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990* (New York: Cambridge University Press, 2000).

those who favor growth often argue against democracy because they believe that democratic regimes inhibit growth by diverting resources from investment to consumption.² On the other hand, those who value efficiency agree that democracies are better for economic growth because of their superior efficiency of resource allocation.³ In recent years, however, a growing literature is subscribing to a third perspective that does not see any differences regime types make on prosperity.⁴

It is conceivable that in a democracy a political party that is tailored to the interests of the largest number of voters has a better chance to win than its rivals and that a popularly elected party is more likely to adopt a socially popular public policy. “The more democratic a government is,” Walter Galenson hypothesized in 1959, “the greater the diversion of resources from investment to consumption.”⁵ Hence the first view that democracy is not good for economic growth.

However, democratic proponents argue that dictatorships are inherently inefficient because they have no incentives to maximize total output and that democracies are more efficient because they protect property rights and thus allow investors to have a long-term perspective.⁶

The third perspective that has been articulated is that regime types have nothing to do with economic growth. Democracy neither inhibits nor promotes economic development. This perspective, it should be noted, is not anything new. Samuel Huntington proposed this perspective in the 1960s. “The most

² Examples include Walter Galenson, ed., *Labor and Economic Development* (New York: Wiley, 1959); Karl de Schweinitz, Jr., “Industrialization, Labor Controls, and Democracy” *Economic Development and Cultural Change* 7, no. 4 (July 1959): 385-404; Samuel P. Huntington and Jorge I. Dominguez, “Political Development,” in F. I. Greenstein and N. W. Polsby, eds., *Macropolitical Theory* (Reading, MA: Addison-Wesley, 1975), 1-114; and Vaman Rao, “Democracy and Economic Development” *Studies in Comparative International Development* 19, no. 4 (December 1984): 67-81. For a succinct analysis of these works, see Przeworski et al., *Democracy and Development*, pp. 142-143.

³ Examples include Ronald Findlay, “The New Political Economy: Its Explanatory Power for LDCs,” *Economics and Politics* 2, no. 2 (July 1990): 193-221; Adam Przeworski, *The State and the Economy under Capitalism* (Chur, Switzerland: Harwood Academic Publishers, 1990); Robert J. Barro, “Economic Growth In a Cross Section of Countries,” *Quarterly Journal of Economics* 106, no. 2 (1991): 407-473; Mancur Olson, “Autocracy, Democracy, and Prosperity,” R. J. Zeckhauser, ed., *Strategy and Choice* (Cambridge, MA: MIT Press, 1991), pp. 131-157; and. For a brief summary, see Przeworski et al., *Democracy and Development*, pp. 143-144.

⁴ Examples include Samuel P. Huntington, *Political Order in Changing Societies* (New Haven, CT: Yale University Press, 1968); Robert J. Barro, “Democracy and Growth,” *Journal of Economic Growth* 1, no. 1 (March 1996): 1-27; James Robinson, “Theories of ‘Bad Policy’,” *Journal of Policy Reform* 2, no. 1 (February 1998): 1-46; and Przeworski et al., *Democracy and Development*, pp. 145-186.

⁵ Walter Galenson, ed., *Labor and Economic Development* (New York: Wiley, 1959).

⁶ This is based on Przeworski et al, p. 144.

important political distinction among countries,” according to Huntington, “concerns not their form of government but their degree of government.”⁷ In his judgment, a government is a good government as long as it can govern regardless of its regime type. Therefore, there are no fundamental differences between democratic countries such as the United States and Great Britain and authoritarian regimes such as the Soviet Union. “All three countries have strong, adaptable, coherent political institutions: effective bureaucracies, well-organized political parties, a high degree of popular participation in public affairs, working systems of civilian control over the military, extensive procedures for regulating succession and controlling political conflict.”⁸ In this regard, democracy is not necessarily superior to dictatorship and vice versa. For Robert J. Barro, regime types do not matter for economic growth because both democratic and nondemocratic governments have expanded economic freedoms—in the form of free markets and small governments that focus on the maintenance of property rights—that are conducive to growth.⁹ For James A. Robinson, both regime types are equally likely to suffer stagnation if they adopt bad economic policies.¹⁰ Based on a dataset of 135 countries over the period of 1950-1990, Adam Przeworski, Michael E. Alvarez, Jose Antonio Chelbub, and Fernando Limongi concluded that regimes have effects on neither investment nor the rate of growth of total income.¹¹

III. Political Regimes and Economic Development: India and China

In spite of overwhelming evidence from Przeworski et al., it is important to examine the experiences of India and China in greater details in terms of regimes and growth. First, with a combined population of 2.4 billion, these two countries represent 37 percent of the total world population. The welfare of the people in these two countries is of great importance in itself. Second, India and China are both developing countries. They are still faced with challenges of political, economic, and social development. It is important to understand whether a particular sequencing might make any difference to the welfare of these and other similarly situated countries in the long-run. Finally, the initial

⁷ Huntington, p. 1.

⁸ Huntington, p. 1.

⁹ Barro, “Democracy and Growth,” p. 1.

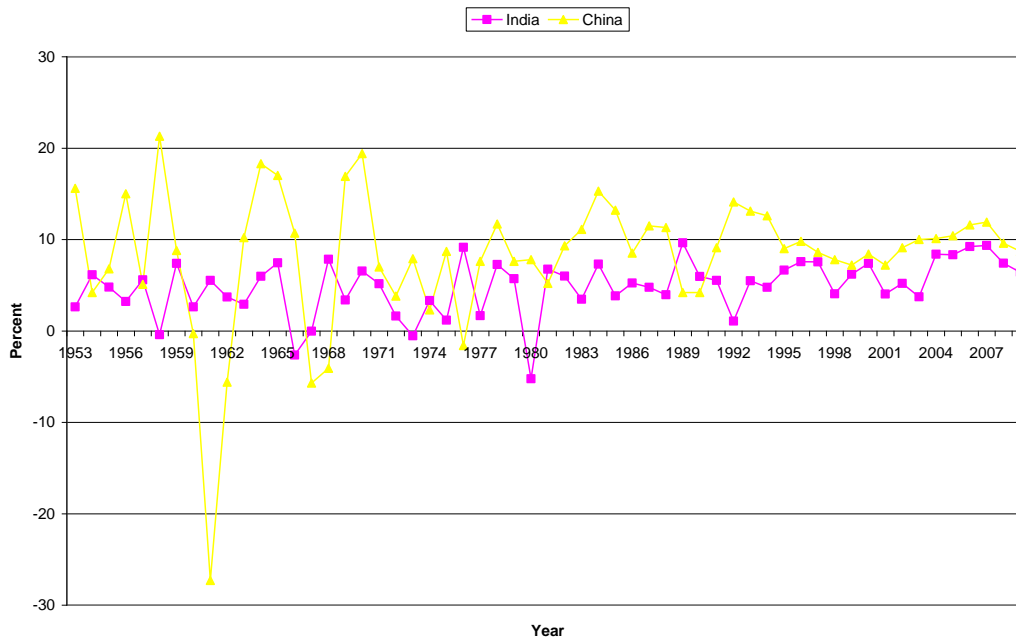
¹⁰ James Robinson, “Theories of ‘Bad Policy’,” *Journal of Policy Reform* 2, no. 1 (February 1998): 1-46.

¹¹ Przeworski et al., *Democracy and Development*, pp. 145-158.

conditions of India and China are remarkably comparable except for regime types.¹²

The two countries had similar conditions. They were both products of the Second World War. India declared independence in 1947, and the People's Republic of China was founded in 1949. Both had a low level of economic development. Real GDP per capita in India in 1952 was US\$139, and the similar figure in China was US\$59.2 in the same year.¹³ Moreover, both countries adopted the Soviet-type central planning system. India adopted its first five-year plan in 1950,¹⁴ and China's first five-year began in 1953.¹⁵ Both countries conducted economic reforms in recent years. China initiated economic reforms in the late 1970s, and India started reforms in the early 1990s.

Figure 1 Growth Rates in India and China (1952-2009)



¹² In this regard, they constitute almost ideal cases of comparison for studying the effects of regime types on growth.

¹³ Alan Heston, Robert Summers, and Bettina Aten, *Penn World Table Version 6.2* (Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006).

¹⁴ India's fiscal year begins 1 April and ends 31 March. For a detailed analysis of India's economic growth from 1950-1951 to 2001-2002, see Arvind Virmani, "India's Economic Growth: From Socialist Rate of Growth to Bharatiya Rate of Growth," *Working Paper No. 122* (February 2004), Indian Council for Research on International Relations.

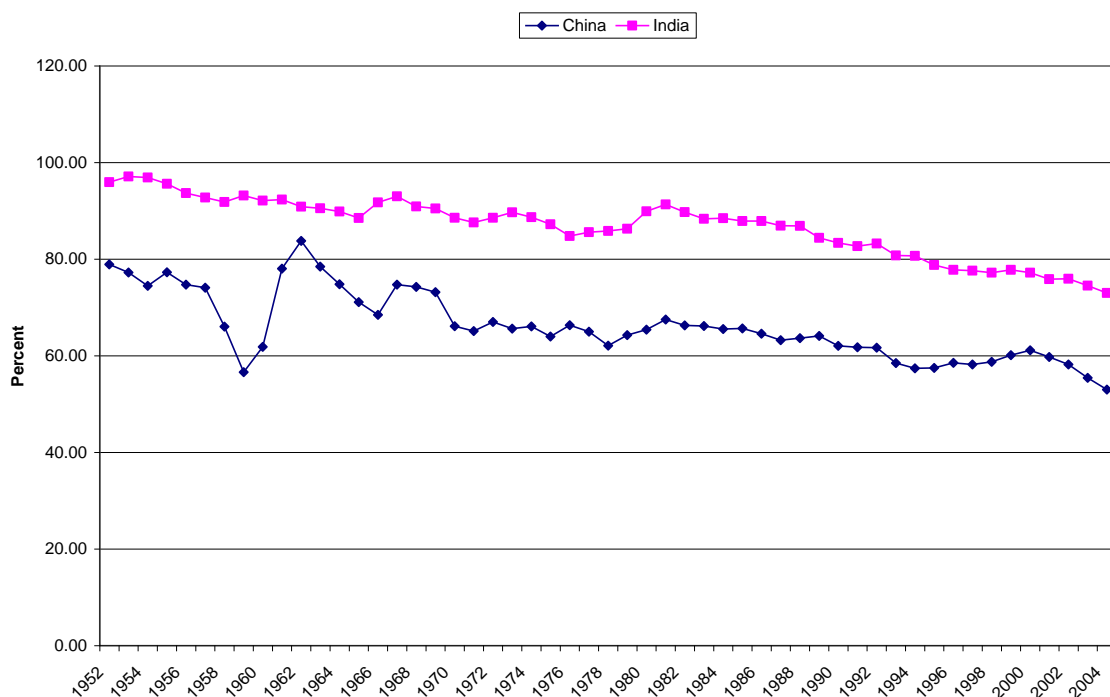
¹⁵ China adopts a calendar fiscal year, beginning 1 January and ending 31 December.

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Yet the two countries form a clear contrast because of their different regimes. It goes without saying that India is the largest democracy in the world and China maintains the world's largest authoritarian regime. The economic performances of these two countries in the past six decades are clearly in favor of the authoritarian regime instead of the democratic regime. China's annual rate of growth between 1953 and 2009 was 8.1 percent, and India's annual rate of growth during the same period was 4.8 percent (Figure 1). In other words, China grew almost 70 percent faster than India did.

One may wonder why China outperformed India in economic growth. Is it because the democratic regime in India diverted too many resources to consumption, thus having the effect of restricting investment? The answer is affirmative. India indeed uses a much larger share of its GDP on consumption than China does. India allocated 86.8 percent of its GDP to consumption on average each year between 1952 and 2004, and China's annual rate of consumption during the same period was only 66.1 percent. In these years, both countries started at high levels and declined in later years; but India maintained much higher levels throughout the period (Figure 2).

Figure 2 Proportion of Consumption in GDP: India and China (1952-2004)

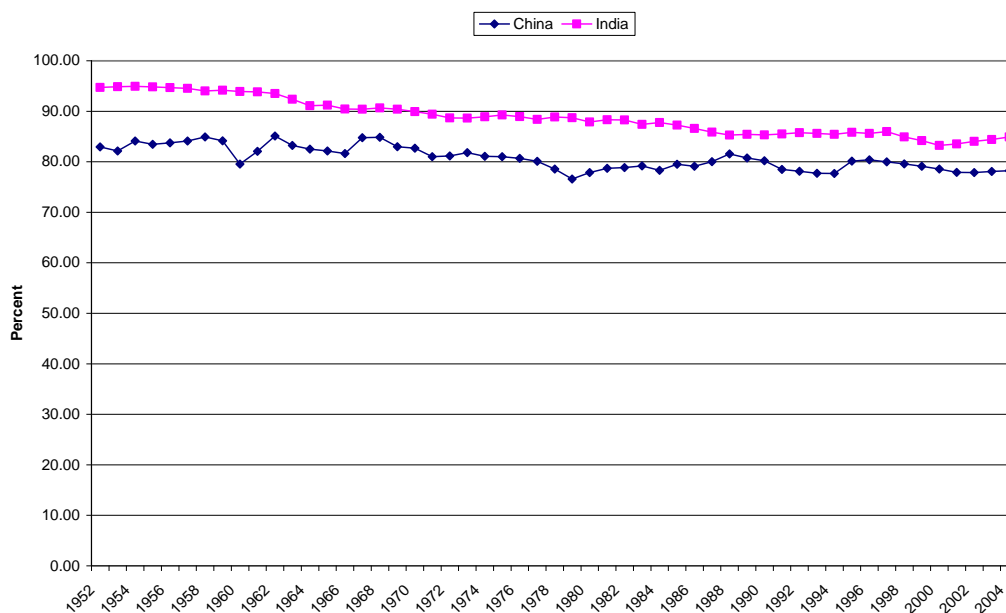


In the 1950s, India consumed almost 95 percent of its GDP each year on average, with 97.11 percent for 1953. In the meantime, China's annual

consumption was only 72 percent of its GDP on average, with the year of 1959 at its lowest level of 56.6 percent. In the 1960s, India lowered its annual consumption to about 91 percent on average while China increased its annual consumption to about 74 percent on average. In the 1970s, India's consumption further declined to 87 percent annually and China's consumption dropped to 65 percent per year. In the 1980s, China maintained its consumption at the 65 percent level while India increased its consumption to 88 percent annually. In the 1990s, India still consumed about 80 percent of its GDP while China's consumption dropped to less than 60 percent of its GDP. In the early years of the 21st century, India's consumption was reduced to 75.3 percent of its GDP and China's consumption declined to 57.5 percent, with the year of 2004 at 53 percent (the lowest level ever).

Moreover, consistent with the hypothesis that democratic regimes divert more resources to consumption than authoritarian regimes, India's households take a larger share of the total consumption than China's households do (Figure 3).

Figure 3 Household Consumption as a Proportion of the Total Consumption: India and China (1952-2004)



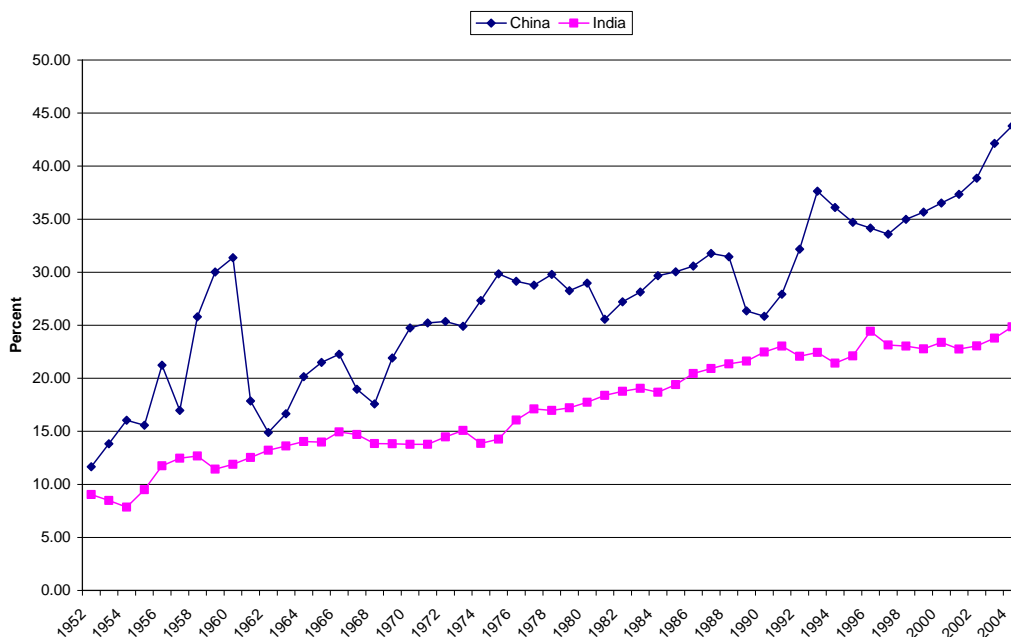
Between 1952 and 2004, India's household consumption ranged from 83.2 percent to 94.9 percent of the total consumption, with an average of 88.8 percent a year. During the same period, the Chinese households took 80.7 percent of the total consumption on average, with a range from 76.6 percent to

85.1 percent. In other words, the democratic regime in India diverted not only more resources to consumption in general but also more resources to household consumption in particular. In 1953, for instance, India consumed 97 percent of its GDP and China consumed 77 percent of its GDP, representing a different of almost 20 percent. In the same year, India diverted 94.8 percent of the 97 percent of its GDP on households while China used 82.1 percent of the 77 percent of its GDP on households.

Consequently, the Indian government consumes less than the Indian households and the Indian government has fewer resources for itself than its Chinese counterpart. During the period of 1952 to 2004, the Indian government's consumption was 11.2 percent of the total consumption and was only 9.5 percent of its GDP a year on average. In the meantime, the Chinese government's consumption was 19.3 percent of the total consumption and was 12.6 percent of its GDP on average annually.

As a result of its high consumption, understandably, India has had lower levels of investment. From 1952 to 2004, India's gross fixed capital formation (gfcf) was 17.2 percent of its GDP a year on average. China's rate of gross fixed capital formation during the same period was 27.3 percent, 10 percent higher. In contrast to Figure 3 where India maintained higher levels of consumption than China, China's investment was consistently higher than that of India throughout the period (Figure 4).

Figure 4 Fixed Capital Formation as a Proportion of GDP: India and China (1952-2004)



Moreover, although both countries witnessed growth in investment over the years, China's growth was faster than that of India. In 1952, China's fixed capital formation was 11.7 percent of its GDP and India's fixed capital formation was 9 percent of its GDP. During the Great Leap Forward, China's fixed capital formation jumped to 25.8 percent, 30 percent, and 31.4 percent of its GDP in 1958, 1959, and 1960 respectively. India's shares in the same years were only 12.7 percent, 11.4 percent, and 11.9 percent, respectively. The gap between China's fixed capital formation and that of India was not significantly narrowed during the years of China's Cultural Revolution (1966-76), and the gap has substantially expanded since 1995. China's fixed capital formation in 2004 was almost 20 percent higher than that of India. China's gross fixed capital formation in that year took 43.8 percent of its GDP, and India's gross fixed capital formation in the same year was only 24.9 percent of its GDP.

A more fundamental reason for India's relatively inferior records is that democratization in an underdeveloped country is the antithesis of modernization. The main social function of democratization in rural areas, as Emilio Willems observed in 1958, is to preserve the existing power structure.¹⁶ "Electoral competition in postcolonial countries," Huntington indicated in 1968, "thus seems to direct the attention of political leaders from the urban to the rural voter, to make political appeals and governmental policies less modern and more traditional, to replace highly educated cosmopolitan political leaders with less educated local and provincial leaders, and to enhance the power of local and provincial government at the expense of national government."¹⁷ In contrast, because of its authoritarian nature, the Chinese regime did not subject to the same electoral pressure from peasants. In other words, democratic India is more likely than the authoritarian China to have a rural bias in terms of resource allocations. And this is true especially in the early years of these two countries.

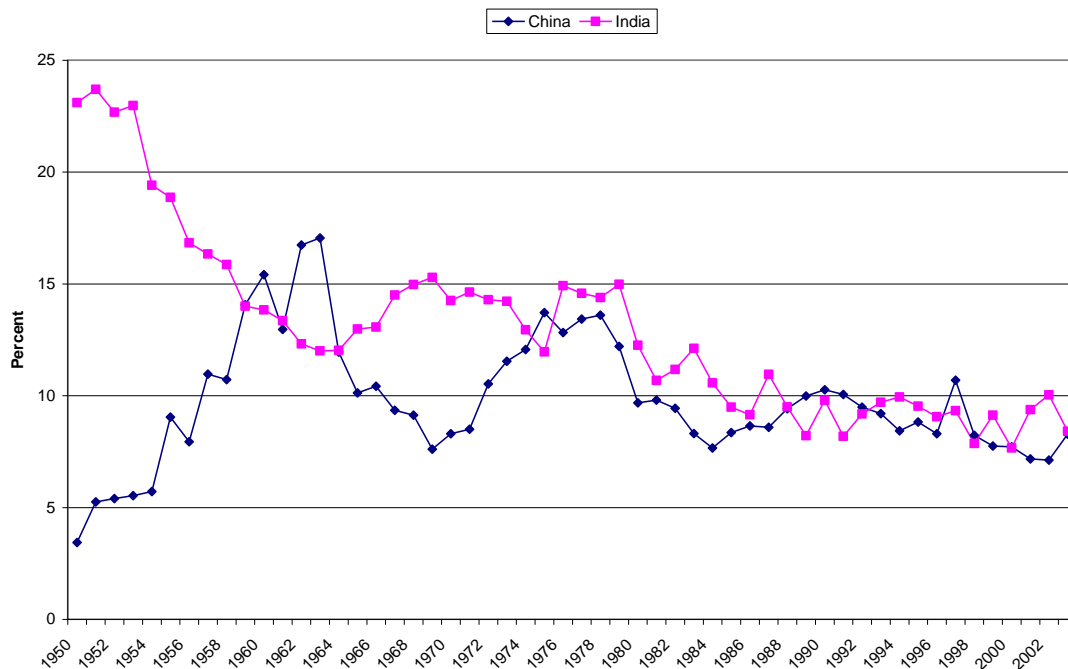
In India, politicians appealed to peasants for votes by making substantial investment in agriculture and rural development. Between 1951 and 2004, India's annual investment in agriculture (gross fixed capital formation for agricultural and allied activities) was about 13 percent of the total investment (gross fixed capital formation in India) on average, ranging between 7.7 percent and 23.7 percent.

¹⁶ Emilio Willems, "Brazil" in Arnold M. Rose, ed., *The Institutions of Advanced Societies* (Minneapolis: University of Minnesota Press, 1958), p. 552. Quoted in Huntington, *Political Order in Changing Societies*, p. 444.

¹⁷ Huntington, p. 445.

On the other hand, although the Chinese Communist Party had been propelled to power by peasants' support, Chinese leaders did not have to appeal to peasants by providing similar levels of investment in agriculture. In the period of 1951 to 2004, China's expenditure in agriculture was only 9.8 percent on average, with a range of 3.4 percent to 17.1 percent.¹⁸

Figure 5 Investment in Agriculture in China and India (1951-2004)



In terms of historical trends, India and China followed opposite directions initially and then converged in the trend of decline. India's agricultural investment started at a high point and continuously declined over the years. China's agricultural investment went from a low level to the highest level in the first 14 years and then joined India in the downward trend (Figure 5).

Because of its authoritarian nature, China's leadership was able to promote industrialization at the expense of agriculture. As a result, China's secondary sector expanded from 20.9 percent of the total GDP in 1952 to 52.9 percent of the total GDP in 2004, while China's primary sector dropped from 50.5 percent in 1952 to 15.2 percent in 2004.¹⁹ In contrast, India's democratic system hindered its ability to transfer resources from agriculture to industry. Consequently, India's industrialization progressed at a much slower pace.

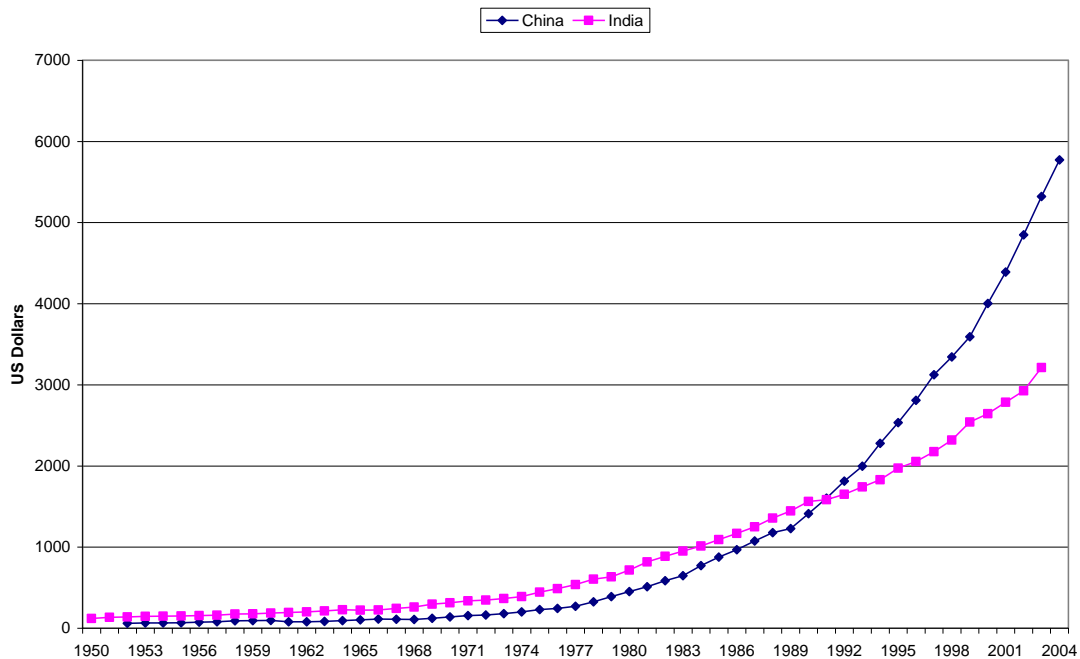
¹⁸ *China Compendium of Statistics 1949-2004*, p. 23. The average is the author's computation.

¹⁹ National Bureau of Statistics of the People's Republic of China, *China Compendium of Statistics 1949-2004* (Beijing: Zhongguo Tongji Chubanshe, 2005), p. 10.

India's industrial sector in 2007 took only 19.3 percent of its GDP (vs. China's 48.1 percent of the same year).²⁰

Moreover, due to its authoritarian nature, China's leadership was able to implement effective family planning policies. China's natural growth rate of population declined from 33.3 per thousand in 1963 to 5.9 per thousand in 2004.²¹ In contrast, India's democratic system hindered its ability to control its population growth. India's population increased much more rapidly than China's. India's population expanded from 357 million in 1950 to 684 million in 1980 and further to 1,130 million in 2007. With an estimated growth rate of 1.38 percent in 2007, India is expected to overtake China as the most populous country in the world by 2030.²²

Figure 6 Real Gross Domestic Product Per Capita in India and China (US\$ in current prices)



Consequently, China's real GDP per capita first caught up with and then substantially surpassed that of India (Figure 6). In 1952, China's real GDP per capita was barely 43 percent of India's number. But fifty years later, China's

²⁰ For details, see http://en.wikipedia.org/wiki/List_of_countries_by_GDP_sector_composition.

²¹ National Bureau of Statistics of the People's Republic of China, *China Compendium of Statistics 1949-2004* (Beijing: Zhongguo Tongji Chubanshe, 2005), p. 6.

²² For details, see http://en.wikipedia.org/wiki/Demographics_of_India.

real GDP per capita was almost two thirds more than that of India. In 2003, China's real GDP per capita reached \$5,321.27 and India's real GDP per capita was only \$3,212.53.

It seems clear from Table 1 that both regime types and reform policies make differences in terms of economic growth in China and India. Reform policies were introduced in 1978 in China and in 1991 in India. These two countries grew 2.7 percent faster under reform than previously. India as a democracy grew 2.8 percent slower than China as an authoritarian regime. Both results are statistically significant.

Table 1 Regime Types and Economic Growth in India and China

	Model 1	Model 2	Model 3
Democracy	-2.869 ** (1.153)	-2.204 * (1.186)	-0.675 (1.148)
Reform	2.456 ** (1.182)	2.715 ** (1.180)	2.784 ** (1.295)
Investment		0.062 (0.040)	0.095 ** (0.044)
Labor			0.661 ** (0.272)
Constant	6.783 *** (1.001)	5.697 *** (1.134)	3.569 ** (1.465)
Adjusted R ²	0.105	0.116	0.141
Observations	105	103	84

Notes:

1. Dependent variable is real GDP annual growth rate.
2. Numbers in parentheses are standard errors.

* p < .10 **P < .05 ***p < .01

IV. Political Variables and Economic Growth at the Local Level: India vs. China

How do political variables including regime types affect economic development at the state/provincial level in India and China? Do democratic regimes in Indian states have any advantage in terms of economic growth over their authoritarian counterparts in China? Or visa versa?

Before answering these questions, we need to examine local development in India and China.

1. Politics of Economic Development in Indian States

1.1 The evolution of India's state system

India's state system has evolved in the past six decades. During the British occupation of India, there were two categories of regions in India. One is collectively referred as "British India" that were directly administered by the British, and one is known as "Princely States" that were ruled by Indian rulers.²³ At Independence in 1947, there were 17 provinces under British India and hundreds of Princely States.²⁴ Upon the Partition of India into Union of India and Dominion of Pakistan, 12 provinces (Ajmer-Merwara-Kekri, Andaman and Nicobar Islands, Assam, Bihar, Bombay, Central Provinces and Berar, Coorg, Delhi, Madras, Panth-Piploda, Orissa, and the United Provinces) became provinces with India, three (Baluchistan, North-West Frontier, and Sindh) within Pakistan, and two (Bengal and Punjab) were partitioned between India and Pakistan. And 625 princely states were given a choice of joining either country.²⁵

The British Indian province of Bengal was divided into West Bengal (a province of India) and East Bengal (a province of Pakistan), the latter later was renamed East Pakistan in 1956 and became the independent nation of Bangladesh in 1971. The British Indian province of Punjab was also divided into West Punjab

²³ http://en.wikipedia.org/wiki/British_India.

²⁴ For a complete list of Princely States, see http://en.wikipedia.org/wiki/List_of_Indian_Princely_States.

²⁵ http://en.wikipedia.org/wiki/Partition_of_India.

(later Punjab (Pakistan) and Islamabad Capital Territory) and East Punjab (later Punjab (India), Haryana, and Himachal Pradesh).²⁶

India adopted a new constitution on January 26, 1950 and replaced provinces by states and territories. The states would have extensive autonomy and complete democracy in the Union, and the Union territories would be administered by the Government of India. The constitution of 1950 classified 27 states into three types.

Part A states, which were the former governors' provinces of British India, were ruled by an elected governor and state legislature. There were nine Part A states, including Assam, West Bengal, Bihar, Bombay, Madhya Pradesh (formerly Central Provinces and Berar), Madras, Orissa, Punjab, and Uttar Pradesh (formerly United Provinces).

There were eight Part B states, which were former princely states or groups of princely states governed by a rajpramukh (who was often a former prince) along with an elected legislature. The rajpramukh was appointed by the President of India. The Part B states were Hyderabad, Surashtra, Mysore, Travancore-Cochin, Madhya Bharat, Vindhya Pradesh, Patiala and East Punjab States Union (PEPSU), and Rajasthan.

There were 10 Part C states, which included both the former chief commissioners' provinces and princely states governed by a chief commissioner (who was appointed by the President of India). Part C states included Delhi, Kutch, Himachal Pradesh, Bilaspur, Coorg, Bhopal, Manipur, Ajmer-Merwara, and Tripura.²⁷

In the subsequent years, there were a few changes in states of India. The 16 northern, Telugu-speaking districts of Madras State were separated and became a new state of Andhra in 1953. The small state of Bilaspur (a Part C state) was merged with Himachal Pradesh on July 1, 1954. Chandernagore, a former enclave of French India, was incorporated into West Bengal in 1955.²⁸

India's state governance went through a fundamental transformation in 1956, providing a foundation for the modern states of India. The States Reorganization Act, which went into effect on November 1, 1956, eliminated the distinction among Part A, B, and C states and reorganized state boundaries along linguistic lines. As a result, India was divided into 21 units, including 14 states and seven union territories.

²⁶ http://en.wikipedia.org/wiki/Partition_of_India.

²⁷ http://en.wikipedia.org/wiki/States_Reorganisation_Act.

²⁸ http://en.wikipedia.org/wiki/States_Reorganisation_Act.

The 14 states were Andhra Pradesh, Assam, Bihar, Bombay State, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras State, Mysore State, Orissa, Punjab, Rajasthan, Uttar Pradesh, and West Bengal. The seven union territories were Andaman and Nicobar Islands, Delhi, Himachal Pradesh, Lakshadweep, Pondicherry, Tripura, and Manipur. Language played an important role in the restructuring. For instance, the Telugu speaking state of Andhra was renamed Andhra Pradesh and was enlarged by the addition of Telangana, the Telugu speaking region of the Hyderabad State. Consequently, Hyderabad, the former capital of the Hyderabad State, was made the capital of Andhra Pradesh.²⁹

The states and union territories of India went through a few more changes in the subsequent years. Bombay State was split into the linguistic states of Gujarat and Maharashtra on May 1, 1960 by the Bombay Reorganization Act. The former French and Portuguese colonies in India were incorporated into the Republic as the union territories of Pondicherry, Dadra, Nagar Haveli, Goa, Daman, and Diu in 1962. Nagaland was made a state on December 1, 1963. Punjab State was reorganized according to the Punjab Reorganization Act in 1966. A new Hindu and Hindi-speaking state of Haryana was created on November 1, 1966, the northern districts of Punjab were transferred to Himachal Pradesh, and Chandigarh, the shared capital of Punjab and Haryana, was designed a union territory. Himachal Pradesh became a state on January 25, 1971, followed by Meghalaya and Tripura on January 21, 1972. The Kingdom of Sikkim joined the Indian Union as a state on April 26, 1975. Arunachal Pradesh and Mizoram became states on February 20, 1987, followed by Goa on May 30, while Goa's northern enclaves of Daman and Diu became a separate union territory.

In 2000, three new states were created. Chhattisgarh was created out of eastern Madhya Pradesh on November 1. Uttaranchal, which was later renamed Uttarakhand, was created out of the Hilly regions of northwest Uttar Pradesh on November 9. Jharkhand was created out of the southern districts of Bihar on November 15. The Union Territories of Dehli and Pondicherry (later renamed to Puducherry) were given the right to elect their own legislatures and thus were counted as small states.

Currently, India has altogether 35 units, including 28 states and seven union territories. The most populous state is Uttar Pradesh, with a total population of 166.2 million (2001); and the least populous state is Lakshadweep, with a population of only 61,000 (2001). The largest state in territory is Rajasthan

²⁹ http://en.wikipedia.org/wiki/Andhra_Pradesh.

(342,000 square kilometers), and the smallest state is again Lakshadweep (30 square kilometers) (Table 2).

Table 2 AREA AND POPULATION BY STATES : 2001 CENSUS

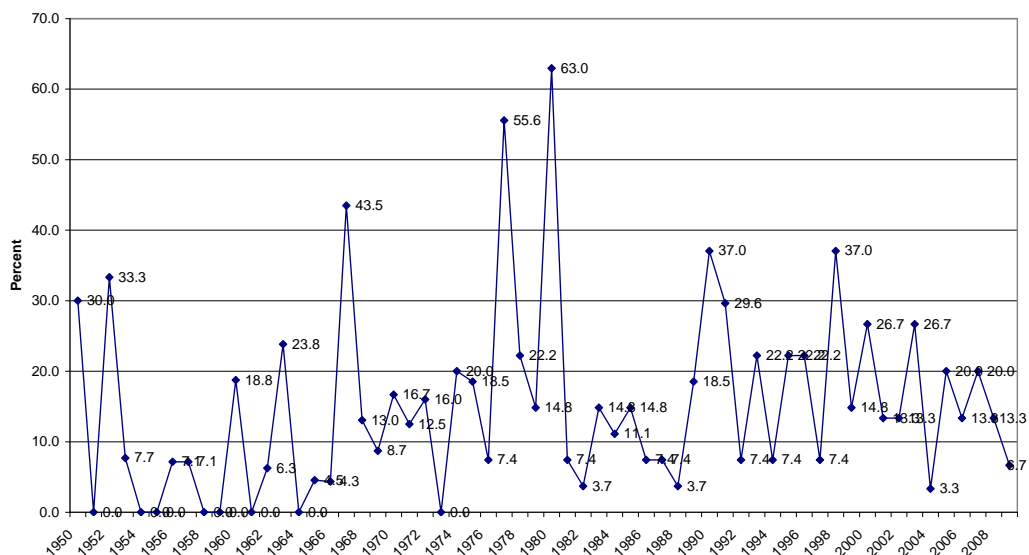
State/Union Territory	Area as on 1/3/2001 ('000sq.km.)	Population('000)
States:		
Andhra Pradesh ##	275	76210
Arunachal Pradesh	84	1098
Assam	78	26656
Bihar	94	82999
Chhattishgarh+	135	20834
Goa	4	1348
Gujarat	196	50671
Haryana	44	21145
Himachal Pradesh	56	6078
Jammu & Kashmir ###	222***	10144
Jharkhand	80	26946
Karnataka	192	52851
Kerala	39	31841
Madhya Pradesh+	308	60348
Maharashtra	308	96879
Manipur	22	2294*
Meghalaya	22	2319
Mizoram	21	888
Nagaland	17	1990
Orissa	156	36804
Punjab	50	24359
Rajasthan	342	56507
Sikkim	7	541
Tamil Nadu	130	62406
Tripura	10	3199
Uttar Pradesh	241	166198
Uttarakhand	53	8489
West Bengal	89	80176
Union Territories:		
A.& N.Islands	8	356
Chandigarh	0.1	901
D. & Nagar Haveli	0.5	220
Daman & Diu	0.1	158
Delhi	1.5	13851
Lakshadweep	0.03	61
Puducherry ##	0.5	974
All India ###	3287***	1028737*

1.2 Political changes in the Indian states

The Constitution of 1950 introduced elections to state governments in India. The first elections were conducted in 1952, with scheduled elections every five years thereafter.³⁰ However, a substantial number of state elections occurred in the middle of a five-year term. Out of 107 state elections over the period of 1960-1992 in a sample of 14 states, for instance, 36 (34%) occurred in the mid-term.³¹

There are three major types of political changes to state leadership. First, it is party changes (Figure 7). In Indian states, there have been multiparty competitive elections. Therefore, it is likely that a ruling party is replaced by an opposition party in an election. Party changes in Indian states are rare. Out of 1,429 state/years from 1950 to 2009, 228 (16%) experienced party changes. However, some years stand out in terms of party changes. In 1967, 10 out of 23 states saw party changes, representing 43.5%. In 1977, 15 out of 27 states changed hands from one party to another, representing 55.6%. Year 1980 witnessed the period of party changes, with 17 out of 27 states (63%) changing ruling parties. Years 1990 and 1998 are also noteworthy, with 10 out of 27 states (37%) changing ruling parties each year.

Figure 7 Party Changes in Indian States

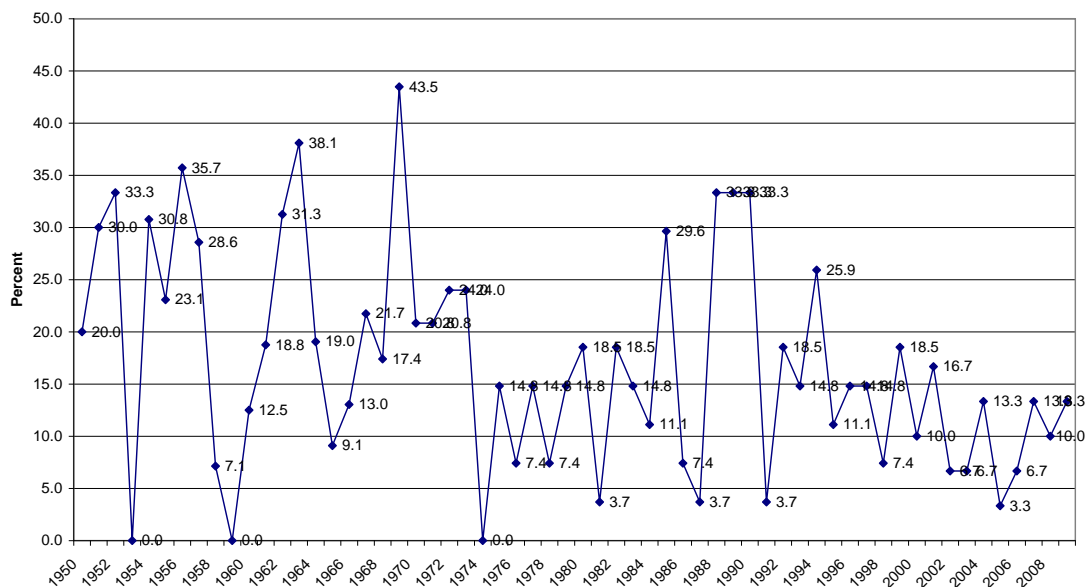


³⁰ Stuti Khemani, "Political cycles in a developing economy: effect of elections in the Indian States," *Journal of Development Economics* 73, No. 1 (2004): 125-154.

³¹ Stuti Khemani, "Political cycles in a developing economy: effect of elections in the Indian States," *Journal of Development Economics* 73, No. 1 (2004), p. 134.

The second type of political change in Indian states is the replacement of an old leader of the same party by a new one (Figure 8). This is a bit more frequent than party changes. Out of 1,429 state/years, there are 231 changes, representing 16.2 percent. Over the period of 1950 to 2009, there are six peaks of leadership changes. The first peak came in 1952 when one third leaders were replaced in the elections. Out of 12 states at the time, four had new leaders of the same ruling parties. Travancore-Cochin (later Kerala), for instance, was under the control of the Indian National Congress on January 1, 1950 when it was recognized as a state. The chief minister was Paravur T. K. Narayana Pillai. In January 1951, he was succeeded by C. Kesavan, who in turn was replaced by A. J. John, Anaparambil on March 12, 1952.³²

Figure 8 New Leaders in Indian States



The second peak occurred in 1956 when the State Reorganization Act was introduced. Out of 14 states, five states (35.7%) saw new leaders in that year. Karnataka, for instance, changed two leaders in the year. On August 19, 1956, Kengal Hanumanthaiah was replaced by Kadidal Manjappa, who in turn was replaced by S. Nijalingappa on November 1, 1956. They all belonged to the Indian National Congress.³³

³² http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Kerala.

³³ http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Karnataka.

The third peak took place in the period of 1962-1963. About one third (31.3%) of 16 states in 1962 replaced leaders of the same party; and more than one third (38.1%) of 21 states got new leaders in 1963. Again, Karnataka had frequent changes to the chief minister of the Indian National Congress in 1962. B. D. Jatti was replaced on March 9, 1962 by S. R. Kanthi, who in turn was replaced on June 21, 1962 by S. Nijalingappa.³⁴

K. Kamaraj was a leader of the Indian National Congress. He served as the chief minister of Madras State (later Tamil Nadu) from April 13, 1954 to October 2, 1963.³⁵ One and a half years after his third victory (in the 1962 Madras Legislative Assembly Election), Kamaraj resigned and transferred the power to M. Backthavatsalam, his finance minister at the time.³⁶

The fourth peak came in 1969 when 10 out of 23 states (43.5%) saw new leaders of the same party. Dravida Munnetra Kazhagam (DMK) won the Madras State Assembly Election in 1967, and C. N. Annadurai became the first non-Congress chief minister of a state in India. He renamed the state to Tamil Nadu. Less than one month after Madras became Tamil Nadu, he died of cancer on February 3, 1969.³⁷ V. R. Nedunchezhiyan, his finance minister, took over as acting chief minister for only one week. Annadurai's successor as the head of the DMK, M. Karunanidhi, became the chief minister of Tamil Nadu on February 10, 1969. A legendary figure, Karunanidhi has ever since served as the chief minister of Tamil Nadu five times (1969-1971, 1971-1976, 1989-1991, 1996-2001, and 2006-present).³⁸ Similarly, Madhya Pradesh also changed two chief ministers within a year in 1969. Govind Narayan Singh became the chief minister of Madhya Pradesh on July 30, 1967 as an Indian National Congress politician. He was replaced on March 13, 1969 by Raja Nareshchandra Singh, who in turn was replaced on March 26, 1969 by Prakash Chandra Sethi.³⁹

The fifth peak occurred in 1985 when eight out of 27 states (29.6%) saw new leaders of the same party. For instance, Madhava Singh Solanki, an Indian Congress Party chief minister of Gujarat was replaced by Amarsinh Chaudhary on July 6, 1985; Chandra Shehar Singh of the Indian National Congress was replaced on March 12, 1985 by Bindeshwari Dubey of the same

³⁴ http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Karnataka.

³⁵ http://en.wikipedia.org/wiki/K._Kamaraj.

³⁶ http://en.wikipedia.org/wiki/M._Bhaktavatsalam.

³⁷ http://en.wikipedia.org/wiki/C._N._Annadurai.

³⁸ http://en.wikipedia.org/wiki/M._Karananidhi.

³⁹ http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Madhya_Pradesh.

party as the chief minister of Bihar; and Bhajan Lal, an originally Janata Party politician, became a member of the Indian Congress Party on January 22, 1980 and was replaced on July 5, 1985 by Bansi Lal, another Indian Congress Party politician as the chief minister of Haryana.

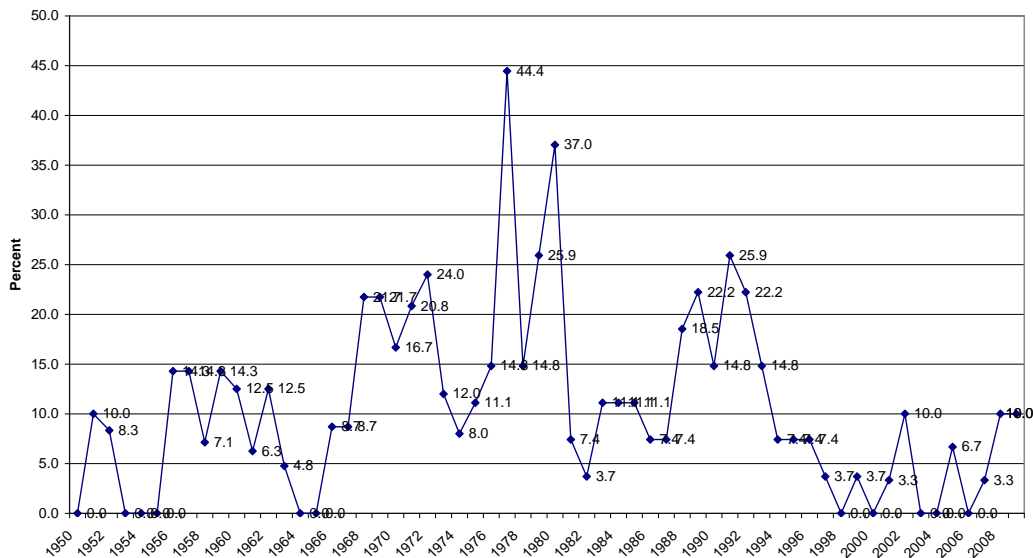
The last peak occurred in the period of 1988 to 1990 when nine out of 27 states (33.3%) witnessed new leaders of the same party each year. In Karnataka, for instance, Ramakrishna Hedge, the chief minister from Janata, was replaced by S. R. Bommai of Janata on August 13, 1988. Bommai was replaced on November 30, 1989 by Veerendra Patil of the Indian National Congress, who was in turn replaced by S. Bangarappa of the INC on October 17, 1990.⁴⁰

The third type of political changes in Indian states is the intervention of the central government in local affairs according to “President’s Rule.” According to Article 356 of the Constitution of India, the central government has the right to rule in a state when its legislature is dissolved or put in suspended animation. Under President’s rule, the state governor, who is appointed by the central government, exercises executive authority on behalf of the President of India. It is called “President’s rule” because it is the President of India who governs the state instead of a Council of Ministers who are answerable to the elected legislature. Since the president has no discretionary powers in India and has to act according to the advice of the Council of Ministers at the center, the administration of the state is practically in the hands of the ruling party at the center.⁴¹ Since 1950, this article has been used more than 100 times (Figure 9).

⁴⁰ http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Karnataka.

⁴¹ http://en.wikipedia.org/wiki/President%27s_rule.

Figure 9 President's Rule in Indian States



The article was used for the first time in 1951 in Punjab of India.⁴² Formerly a part of the Punjab region, which also includes the Pakistani province of Punjab and the North-West Frontier Province, the Indian states of Haryana and Himachal Pradesh, parts of Jammu and Kashmir, and the Union Territory of Chandigarh, the Indian state of Punjab was under the control of the Indian National Congress. Dr. Gopi Chand Bhargava, an Indian National Congress politician, was the chief minister of Punjab from August 15, 1947 to April 13, 1949 and then again from October 18, 1949 to June 20, 1951.⁴³ For some reason, President's rule was imposed on June 20, 1951 and lasted until April 17, 1952. Apparently, there was competition between Dr. Gopi Chand Bhargava and Bhim Sen Sachar. The latter replaced the former for six months as the chief minister of Punjab, from April 13 to October 18, 1949 but had to return the power back to the former. After the central intervention, Bhim Sen Sachar became the chief minister again instead of Dr. Gopi Chang Bhargava, on April 17, 1952. President's rule was subsequently imposed in the state of Punjab seven more times, in 1966, 1968-1969, 1971-1972, 1977, 1980, 1983-1985, and 1987-1992.⁴⁴

⁴² [http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_\(India\)](http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_(India)).

⁴³ [http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_\(India\)](http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_(India)).

⁴⁴ [http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_\(India\)](http://en.wikipedia.org/wiki/List_of_Chief_Ministers_of_Punjab_(India)).

The most well-known use (or abuse) of the article was in the case of Kerala in 1959. After Kerala was inaugurated as a state on November 1, 1956, a new Legislative Assembly election was held in April 1957, producing the world's first democratically elected communist government headed by E. M. S. Namboodiripad. However, the central government invoked this article to dismiss the democratically elected communist government of Kerala on July 31, 1959, during the "Liberation Struggle" (Vimochana samaram).

In the 1970s and 1980s, the central government used the article to dismiss the state governments under opposition parties under various pretexts. The central government imposed President's rule in 12 states (44.4%) in 1977 and 10 states (37%) in 1980. After the landmark case of *S. R. Bommai versus Union of India* in 1989,⁴⁵ this misuse of Article 356 is less frequent.

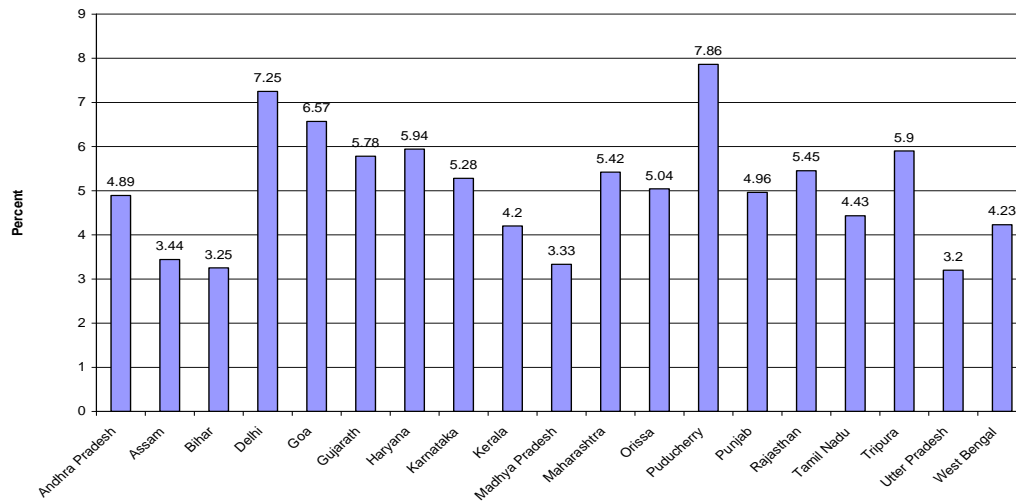
1.3 Economic Development of the Indian states

Indian states had a remarkable record of economic growth in the period of 1961 to 2005.⁴⁶ The average growth rate among 19 states with available information is 5% with a standard deviation of 7.4. The slowest growth rate was -23.4% (Goa in 2003), and the fastest growth rate was 41.3% (Rajasthan in 1988). Two union territories stand out as the best performers. Puducherry and Delhi had average growth rates of 7.9% and 7.3%, respectively (Figure 10). Three of the largest states, on the other hand, had the slowest growth. Uttar Pradesh, Bihar, and Madhya Pradesh had an average growth of 3.2%, 3.25%, and 3.33%, respectively.

⁴⁵ [http://en.wikipedia.org/wiki/S. R. Bommai v. Union of India](http://en.wikipedia.org/wiki/S._R._Bommai_v._Union_of_India).

⁴⁶ State-wise data are three series of different constant prices. One series of 1960 to 1979 is probably based on the 1960-1961 constant price, another series of 1980 to 1992 is based on the 1980-1981 constant price, and a third series of 1993-2005 is based on the 1993-1994 constant price. Since I do not have access to the deflator from the 1960-1961 to the 1980-1981 constant prices, I have decided to delete growth rate data for 1980.

Figure 10 GDP Growth of Indian States (1961-2005)



1.4 Political changes and Economic Growth in Indian states

What is the impact of political changes on economic growth in Indian states? The answer is not straightforward (Table 3). First, it seems that the change from one political party to another in a state seems to be a good thing for the local economic growth (Model 1). For each change of the ruling party, there is a corresponding GDP increase of 1.5 percent. This result is statistically significant. Leadership changes and the imposition of President's rule seem to slow down the local economic growth, but their results are not statistically significant. Moreover, a new variable, "reform," is introduced to the model. This is a dummy variable, with pre-reform years (1961-1990) as 0 and reform years (1991-2005) as 1. It seems that "reform" brings about positive changes to the local economy (Model 2). However, when investment was under control, "reform" became liabilities to the local economic growth (Model 3). Finally, it seems both labor and "reform" contribute negatively to the economic growth of a locality when they are both under control (Model 4).

Table 3 Leadership Changes and Economic Growth in Indian States

Variables	Model 1	Model 2	Model 3	Model 4
Party Changes	1.426 ** (.712)	1.220 * (.714)	.930 (.868)	.969 (.868)
Leadership Changes	-0.209 (.586)	-0.123 (.585)	-0.243 (.740)	-0.128 (1.273)
President's Rule	-0.576 (.905)	-0.266 (.910)	-0.880 (1.243)	-1.219 (1.273)
Reform		1.413 ** (.551)	-1.132 (.824)	-0.872 (.850)
Investment			0.0002 *** (0.0001)	0.0002 *** (0.0001)
Labor				-0.303 (0.247)
Constant	4.898 *** (.310)	4.381 *** (.369)	4.994 *** (.576)	8.965 *** (3.290)
Adjusted R ²	0.002	0.009	0.018	0.019
Observations	805	805	477	477

Notes:

1. Dependent variable is real GDP annual growth rate.
2. Numbers in parentheses are standard errors.

* p < .10 ** p < .05 *** p < .01

2. Political Leadership and Economic Growth in Chinese Provinces

2.1 The evolution of China's provincial system

The system of provinces in China has evolved in the past six decades.⁴⁷ First, Taiwan broke away from the rest of China in 1949 when Guomindang under the leadership of Jiang Jieshi fled to the island province as a result of its military defeat on the mainland. Second, the Central Government of the People's Republic of China merged a number of provinces in the early 1950s and removed regions as a level of government in 1954, reducing the number of provincial units from 51 to 30 (excluding Taiwan). In August 1952, Wannan and Wanbei were merged into Anhui Province; Chuandong, Chuannan,

⁴⁷ For a detailed introduction, see Zhiyue Bo, *Chinese Provincial Leaders: Economic Performance and Political Mobility* (Armonk, NY: M. E. Sharpe, 2002), pp. 151-160.

Chuanxi, and Chuanbei were merged into Sichuan Province. In November 1952, two border provinces, Chahar and Pingyuan, were dissolved; Subei and Sunan were merged into Jiangsu Province. In June 1954, Liaodong and Liaoxi were merged to become Liaoning Province; Songjiang was merged into Heilongjiang Province.

Third, the four categories of provincial units—centrally administered municipalities, autonomous regions, provinces, and special administrative regions—were gradually established and stabilized in later years. The People’s Republic of China initially had 14 centrally administered municipalities. These included Beijing, Tianjin, Shanghai, Guangzhou, Wuhan, Xi’an, Chongqing, Shenyang, Luda, Anshan, Fushun, Benxi, Harbin, and Changchun. In June 1954, the number of centrally administered cities was reduced to three. Except for Beijing, Tianjin, and Shanghai, all the others were downgraded. Tianjin was also downgraded into a city under Hebei Province in 1958, but its status of a centrally administered city was restored in 1967. Similarly, Chongqing also recovered its “centrally administered city” designation in 1997. Among the autonomous regions, Inner Mongolia was established the earliest, in 1947. The second autonomous region that came in line was Xinjiang Uyghur Autonomous Region. It was established in 1955. Guangxi Province was made an autonomous region in March 1958, and Ningxia, a part of Gansu Province,⁴⁸ was converted to an autonomous region in October 1958.⁴⁹ Finally, the Tibetan local government was established in April 1956 and Tibet Autonomous Region was formally established in September 1965, completing the list of five autonomous regions in China.

With the return of Hong Kong to China, there has emerged a new category of provincial units in China: special administrative regions. Hong Kong was the first special administrative region. It was established in July 1997. Macao became the second special administrative region, in December 1999.

Currently, China has 34 provincial units: 23 provinces (including Taiwan), four centrally administered cities, five autonomous regions, and two special administrative regions (Table 4). This study is going to focus on 31 of them (Taiwan, Hong Kong SAR, and Macao SAR are not included).

⁴⁸ Ningxia was merged into Gansu at least twice, in 1914 and in 1954. See *Dangdai Zhongguo de Ningxia*, p. 4.

⁴⁹ *Ibid.*, pp. 100-105.

Table 4 China's Provincial Units

Province ^a	Area (km ²)	Population ('000)
Beijing	16,808	16,950
Tianjin	11,920	11,760
Hebei	187,700	69,890
Shanxi	156,800	34,110
Inner Mongolia	1,183,000	24,140
Liaoning	145,900	43,150
Jilin	187,400	27,340
Heilongjiang	460,000	38,250
Shanghai	6,340	18,880
Jiangsu	102,600	76,770
Zhejiang	101,800	51,200
Anhui	139,400	61,350
Fujian	121,400	36,040
Jiangxi	166,900	44,000
Shandong	156,700	94,170
Henan	167,000	94,290
Hubei	185,900	57,110
Hunan	211,800	63,800
Guangdong	177,900	95,440
Guangxi	236,700	48,160
Hainan	33,920	8,540
Chongqing	82,300	28,390
Sichuan	485,000	81,380
Guizhou	176,100	37,930
Yunnan	394,100	45,430
Tibet	1,228,400	2,870
Shaanxi	205,800	37,620
Gansu	454,000	26,280
Qinghai	721,000	5,540
Ningxia	66,000	6,180
Xinjiang	1,660,000	21,310
Taiwan ^b	35,764	23,070
Hong Kong	1,104	7,000
Macao	29	540
Total	9,630,960	1,358,650

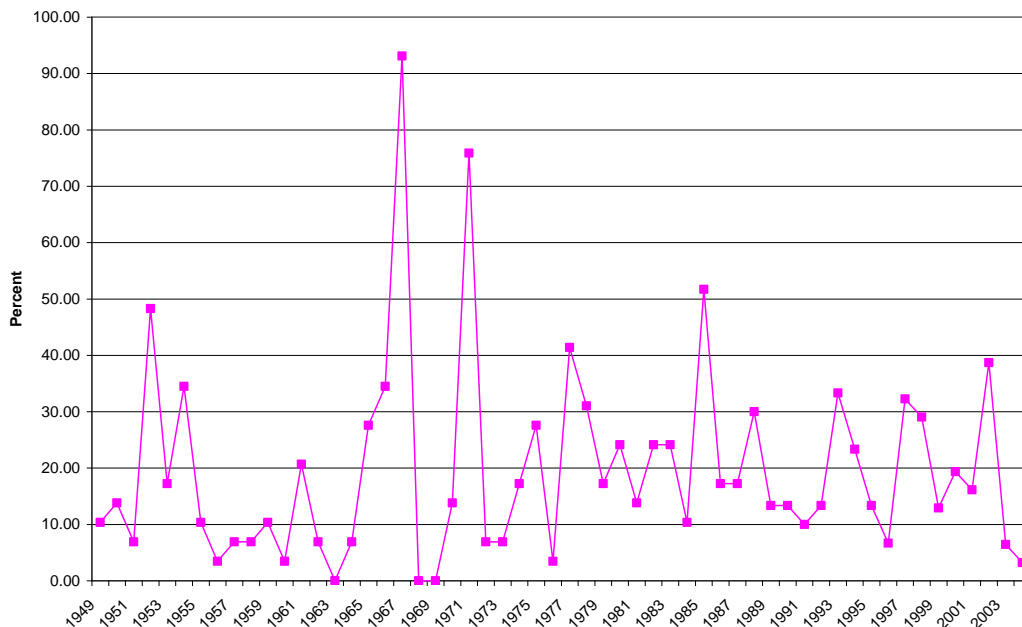
2.2 Changes in China's Provincial Leadership

China's provincial leadership consists of party leaders, government leaders, congressional leaders, and military leaders. For our purposes, we will focus on party and government leaders, in particular provincial party secretaries and governors.

2.2.1 Provincial Party Leadership

As Figure 11 reveals, Chinese provincial party leadership was not very stable over the period of 1949-2004. Out of 1,649 unit/years, there were 323 changes, representing 19.6 percent of the total. In the early years of the People's Republic of China, changes occurred when there were major structural transformations. Around the Cultural Revolution, provincial party secretaries were purged for political reasons. Since 1987, provincial party leadership reshuffles have become more regularized and have come along with the opening of the National Congress of the CCP.

Figure 11 Changes in Provincial Party Leadership in China (1949-2004)



More specifically, there have been several peaks of provincial party leadership changes over the years. The first peak came in 1952 when 14 out of 29 provincial party secretaries were replaced, taking 48.3 percent. Provincial units involved include Shanxi, Tianjin, Jilin, Jiangsu, Zhejiang, Anhui, Jiangxi, Henan, Hunan, Sichuan, Yunnan, Tibet, Shaanxi, and Xinjiang. In fact, Shanxi's provincial party leadership did not stabilize until 1953. Cheng Zihua (1905-1991)⁵⁰ was the founding party secretary of Shanxi. He served in the

⁵⁰ For his bio, see <http://baike.baidu.com/view/393877.htm>.

post for only one year, from August 1949 to September 1950. Cheng's replacement, Lai Ruoyu, worked as Shanxi's provincial party secretary also for a year, from September 1950 to November 1951. But Lai took a sick leave in July 1951, and Xie Xuegong became acting party secretary in the same month. Wu De was appointed as party secretary of Shanxi in November 1951 but did not assume the post. In July 1952, Xie was replaced by Gao Kelin, who was replaced by Tao Lujia in December 1952.⁵¹ Huang Jing was party secretary of Tianjin since May 1949, and he was transferred to Beijing as minister of No.1 Machine Building in August 1952. Huang Huoqing became acting party secretary of Tianjin in October 1952.⁵² In the case of Jilin, Liu Xiwu's replacement in June 1952 by Li Mengling was due to political reasons. Liu was removed because he was wrongfully charged.⁵³ Tan Zhenlin (1902-1983) was the founding party secretary of Zhejiang. He assumed the post in May 1949, but he was transferred to the East China Bureau in November 1951. Tan Qilong took over in November 1951 but was not appointed as party secretary of Zhejiang until September 1952.⁵⁴ Chen Zhengren (1907-1972) was the founding party secretary of Jiangxi. He served in the post from June 1949 to November 1952. He was replaced by Yang Shangkui in November 1952. Hunan's Provincial Party Committee was founded in Tianjin, in March 1949, with Huang Kecheng as its secretary. Huang was replaced by Jin Ming in September 1952.⁵⁵ The founding party secretary of Yunnan was Song Renqiong. He served in the post from February 1950 to July 1952. He was replaced by Xie Fuzhi in July 1952.⁵⁶ Ma Mingfang was the founding party secretary of Shaanxi. He was in the post from January 1950 to October 1952. He was replaced by Pan Zili in October 1952.⁵⁷

Jiangsu, Anui, Henan, Sichuan, Tibet, and Xinjiang represent a different category. They all went through structural changes in 1952. Before 1952, instead of Jiangsu Province, there were three different jurisdictions: Nanjing Municipality, Sunan District, and Subei District. Liu Bocheng, Shu Yu, Tang Liang, and Ke Qingshi consecutively served as party secretaries of Nanjing from May 1949 to November 1952. Chen Pixian was party secretary of Sunan

⁵¹ *Zhongguo Gongchandang Zuzhishi Ziliao* vol. 5 (Beijing: Zhongguo Dangshi Chubanshe, 2000), p. 271.

⁵² Vol. 5, pp. 240-241.

⁵³ *Ibid.*, p. 368. For Liu Xiwu's bio, see http://www.sznews.com/culture/content/2006-08/24/content_281296.htm.

⁵⁴ *Ibid.*, p. 477.

⁵⁵ *Ibid.*, pp. 599-600.

⁵⁶ *Ibid.*, p. 723.

⁵⁷ *Ibid.*, p. 765.

from April 1949 to August 1952. Xiao Wangdong was party secretary of Subei from April 1949 to November 1952.⁵⁸ These three places were merged to form Jiangsu Province in November 1952, and Ke Qingshi was made the First Party Secretary of Jiangsu.⁵⁹ Similarly, Anhui Province was also formed in 1952 by merging Wanbei and Wannan. Zeng Xisheng was party secretary of Wanbei from April 1949 to January 1952; Xie Fuzhi, Niu Shucai, and Ma Tianshui were party secretaries of Wannan from May 1949 to December 1951. Zeng Xisheng became the party secretary of Anhui in January 1952 when the new provincial party committee was established.⁶⁰ Henan Province was established in March 1949. The founding party secretary was Li Xuefeng, who was there only for two months. He was replaced by Zhang Yu in May 1949. In November 1952, Pingyuan Province was merged into Henan Province and First Party Secretary Pan Fusheng of Pingyuan was appointed party secretary of Henan.⁶¹ Sichuan Province was formed in July 1952 when Chuandong, Chuannan, Chuanxi, and Chuanbei were merged. Xie Fuzhi was party secretary of Chuandong from December 1949 to August 1952; Li Dazhang was party secretary of Chuannan from December 1949 to August 1952; Li Jingquan was party secretary of Chuanxi from January 1950 to August 1952; and Hu Yaobang was party secretary of Chuanbei from February 1950 to August 1952.⁶² The Tibetan Work Commission was established in Leshan, Sichuan in January 1950 with Zhang Guohua as its secretary. Another Tibetan Work Commission was established in Lanzhou, Gansu in June 1951 with Fan Ming as its secretary. The two commissions were merged in December 1951, and Zhang Jingwu became party secretary of the new commission in March 1952.⁶³ Finally, Xinjiang is a bit more complicated. In 1950, three provincial-level units were established under the Xinjiang Sub-Bureau (which was under the leadership of Northwest Bureau): Kashi (later Nanjiang) and Dihua (Beijiang) were established in January; Yili was established in July. Wang Enmao was party secretary of Kashi from January 1950 to January 1952 and party secretary of Nanjiang from January 1952 to January 1953. Luo Yuanfa was party secretary of Dihua from January 1950 to February 1952. Dun Xingyun was party secretary of Yili from July 1950 to May 1952. Dihua District Party Committee was dissolved in February 1952; Yili District Party Committee was dissolved in May 1952. Both places were placed under the

⁵⁸ *Ibid.*, pp. 441, 449, 454.

⁵⁹ *Ibid.*, p. 457.

⁶⁰ *Ibid.*, pp. 490, 494-495, 500.

⁶¹ *Ibid.*, pp. 556-557.

⁶² *Ibid.*, pp. 671, 674, 677, 680.

⁶³ *Ibid.*, pp. 738-740.

direct leadership of the Xinjiang Sub-Bureau.⁶⁴ Wang Zhen was the founding secretary of the Xinjiang Sub-Bureau. He served in the post from October 1949 to June 1952.⁶⁵ He was removed and was replaced by Wang Enmao in June 1952.

The second peak came in 1954 when regional governments were removed as a level of government in China. More than one third of provincial party secretaries were replaced that year. Provinces involved include Liaoning, Shanghai, Jiangsu, Zhejiang, Shandong, Hubei, Guizhou, Shaanxi, Gansu, and Qinghai. Liaoning Province was formed in August 1954 by merging Liaodong and Liaoxi Provinces as well as centrally administered municipalities such as Shenyang, Luda, Anshan, Fushun, and Benxi. Party secretaries of Liaodong were Luo Fu (Zhang Wentian) (May 1949-March 1950), Zhang Qilong (March 1950-June 1952), and Gao Yang (June 1952-August 1954); party secretaries of Liaoxi were Guo Feng (May 1949-June 1952), Yang Yingjie (June 1952-November 1952), and Yang Yichen (January 1953-August 1954); party secretary of Shenyang was Huang Oudong (March 1953-July 1954); party secretaries of Luda were Ouyang Qin (March 1953-July 1954) and Guo Shushen (July 1954); party secretary of Anshan was Han Tianshi (March 1953-July 1954); party secretaries of Fushun were Yu Ping (March-April 1953), Zhao Shi (April 1953-April 1954), and Du Li (May-July 1954); and party secretaries of Benxi was Jin Tiejun (April 1953-July 1954). The party secretary of the newly formed Liaoning Province was Huang Oudong.⁶⁶

Initially, Shanghai was directly managed by the East China Bureau. Rao Shushi, head of the East China Bureau, was concurrently party secretary of Shanghai, from May 1949 to January 1950. When Shanghai's party committee was separated from the East China Bureau in January 1950, Chen Yi became the first party secretary. Although Chen Yi continued to be Shanghai's first party secretary, Chen Pixian (No. 4 party secretary) became acting first party secretary in March 1952. In October 1954, Ke Qingshi was transferred from Jiangsu to be the first party secretary of Shanghai.⁶⁷ Ke's vacancy in Jiangsu was filled by Jiang Weiqing.

Similarly, Shandong was managed by the Shandong Sub-Bureau from 1949 to 1954. Kang Sheng was the founding party secretary of the Shandong Sub-Bureau in March 1949. But Kang took a sick leave in December 1949. Fu

⁶⁴ Ibid., pp. 844-847.

⁶⁵ Ibid., pp. 206-211. About Wang Zhen's removal, see <http://hi.baidu.com/duzuijiangbian1/blog/item/6d7f8edc3d6cc3a5cd1166d0.html>.

⁶⁶ Ibid., pp. 315-344.

⁶⁷ Ibid., pp. 417-420.

Qiutao took it over as acting party secretary. When Fu was transferred to the Central Military Commission in August 1950, Xiang Ming was in charge. Xiang was appointed the second party secretary and acting party secretary in December 1952.⁶⁸ In August 1954, Shandong Sub-Bureau was changed to Shandong Provincial Party Committee; Shu Tong was elected party secretary.⁶⁹

Zhejiang had seen several party secretaries by 1954. Tan Zhenlin was the founding party secretary of Zhejiang. He served in the post from May 1949 to November 1951, but he was still party secretary of Zhejiang until September 1952. Tan Qilong took over in November 1951 but was appointed as party secretary of Zhejiang in September 1952. Tan Qilong was succeeded by Jiang Hua in August 1954.

Li Xiannian was the founding party secretary of Hubei. He served in the post from May 1949 to May 1954 when he was promoted to vice premier and minister of finance. Li was replaced by Wang Renzhong in May 1954. Su Zhenhua was the founding party secretary of Guizhou. He was in the post from November 1949 to May 1954. Zhou Lin was appointed party secretary of Guizhou in December 1954.

Changes in party leadership in Shaanxi, Gansu, and Qinghai were related. At the beginning of 1954, Pan Zili was party secretary of Shaanxi (since October 1952); Zhang Desheng was party secretary of Gansu (since July 1949); and Zhang Zhongliang was party secretary of Qinghai (since September 1949). Pan Zili was replaced in October 1954 by Zhang Desheng, who had been replaced as party secretary of Gansu in August 1954 by Zhang Zhongliang, who had been replaced as party secretary of Qinghai in June 1954.

The third peak, a relatively small one, came in 1961 when six provincial party secretaries were replaced. Provinces involved were Shandong, Henan, Guangxi, Gansu, Qinghai, and Ningxia. Tan Qilong replaced Zeng Xisheng⁷⁰ as party secretary of Shandong in April 1961; Liu Jianxun, first party secretary of Guangxi since June 1957, replaced Wu Zhipu as the first party secretary of Henan in July 1961; Wei Guoqing replaced Liu Jianxu as first party secretary of Guangxi in July 1961; Wang Feng replaced Zhang Zhongliang as the first party secretary of Gansu in January 1961; Wang Zhao replaced Gao Feng (Gao Xiaoping) as acting first party secretary of Qinghai in August 1961; and Yang Jingren replaced Wang Feng as first party secretary of Ningxia in January 1961.

⁶⁸ *Ibid.*, pp. 190-192.

⁶⁹ *Ibid.*, pp. 541-543.

⁷⁰ Zeng was concurrently party secretary of Anhui.

The fourth peak came in 1965 when eight provincial party secretaries were replaced. Provinces involved included Shanxi, Heilongjiang, Shanghai, Guangdong, Sichuan, Guizhou, Tibet, and Shaanxi. Tao Lujia served as party secretary of Shanxi for almost 13 years from December 1952 to August 1965. He was replaced by Wei Heng in August 1965. Similarly, Ouyang Qin, party secretary of Heilongjiang since July 1954, was replaced by Pan Fusheng in October 1965. Ke Qingshi, first party secretary of Shanghai since October 1954, passed away in April 1965 and was replaced by Chen Pixian in May 1965. Chen was subsequently appointed first party secretary of Shanghai in November 1965.⁷¹ Li Jingquan, the founding party secretary of Sichuan since September 1952 and concurrent first party secretary of the Southwest Bureau since October 1960, was replaced in February 1965 by Liao Zhigao as first party secretary of Sichuan.⁷² In Guizhou, Zhou Lin was dismissed as first party secretary of Guizhou in November 1964 and Li Dazhang was made an acting first party secretary in the same month. In May 1965, Jia Qiyun was appointed as first party secretary of Guizhou.⁷³ Zhang Jingwu, party secretary of Tibet since March 1952, was replaced in September 1965 by Zhang Guohua.⁷⁴ In Shaanxi, First Party Secretary Zhang Desheng took a sick leave in November 1964 and Hu Yaobang was made acting first party secretary. Hu was subsequently appointed first party secretary in May 1965 and was replaced by Huo Shilian in October 1965.⁷⁵

Guangdong presents a unique case. Guangdong Provincial Party Committee was not established until July 1955. Guangdong was under the leadership of South China Sub-Bureau (later South China Bureau). Ye Jianying was the founding head of the Bureau, and he served in the post from August 1949 to May 1955. Yet beginning in May 1953, Tao Zhu became acting first party secretary of the Bureau. Tao Zhu was made party secretary in July 1955 when Guangdong Provincial Party Committee was established. He continued to serve on the post until February 1965 when he was transferred to Beijing as vice premier. He was replaced by Zhao Ziyang.⁷⁶

The fourth and fifth peaks came in 1966 and 1967, respectively, when the Cultural Revolution took a toll on China's provincial party leadership as a whole. More than one third of provincial party secretaries were replaced in

⁷¹ *Ibid.*, pp. 420-424.

⁷² *Ibid.*, pp. 693.

⁷³ *Ibid.*, pp. 704-711.

⁷⁴ *Ibid.*, pp. 741-746.

⁷⁵ *Ibid.*, pp. 770-771.

⁷⁶ *Ibid.*, pp. 197-200, 625-631.

1966, and all provincial party secretaries but two were dismissed in 1967. Even in those two provincial units (Inner Mongolia and Tianjin) that seem to have survived the onslaught of the Cultural Revolution in 1967, the provincial party leadership did not escape the fate of their colleagues in other provincial units. Ulanhu, first party secretary of Inner Mongolia since July 1947, was removed in August 1966. Xie Xuegong was appointed as first party secretary of Inner Mongolia in the same month but he did not assume the post.⁷⁷ Wan Xiaotang, first party secretary of Tianjin, passed away in September 1966 due to illness. Xie Xuegong was transferred from the North China Bureau to be in charge. He was appointed first party secretary of Tianjin in January 1967 when Tianjin was elevated to the status of a centrally administered municipality.⁷⁸

The sixth peak came in 1971 when more than 75 percent of provincial party leaders were appointed. This was the year in which most provincial party committees were reestablished. After the Ninth National Party Congress in April 1969, Mao Zedong and the Central Party Leadership made efforts to restore provincial party committees. Jiangsu, Jiangxi, Hunan, and Guangdong were among the first provinces to reestablish provincial party committees. Their party committees were reestablished in December 1970. They were followed by Liaoning, Shanghai, Zhejiang, and Anhui in January 1971; Guangxi and Gansu in February 1971; Beijing, Jilin, Qinghai, Hubei, Shaanxi, and Henan in March 1971; Shanxi, Fujian, and Shandong in April 1971; Tianjin, Inner Mongolia, Guizhou, Xinjiang, and Hebei in May 1971; Yunnan in June 1971; and Heilongjiang, Tibet, Ningxia, and Sichuan in August 1971. By the end of August 1971, provincial party committees were reestablished in the 29 provincial units on the Mainland.

The seventh peak came in 1975 when Deng Xiaoping was in charge of national affairs in China. Eight provincial party secretaries were replaced that year, representing 27.6 percent of the total. Provinces involved include Shanxi, Liaoning, Anhui, Hubei, Guangdong, Guangxi, Sichuan, and Yunnan. Wang Qian replaced Xie Zhenhua as first party secretary of Shanxi in May 1975; Zeng Shaoshan replaced Chen Xilian as first party secretary of Liaoning in September 1975; Song Peizhang replaced Li Desheng as first party secretary of Anhui in May 1975; Zhao Xinchu replaced Zeng Siyu as first party secretary of Hubei in May 1975; Wei Guoqing replaced Zhao Ziyang as first party secretary of Guangdong in October 1975; Zhao Ziyang replaced Liu Xingyuan as first party secretary of Sichuan; An Pingsheng replaced Wei Guoqing as first party secretary of Guangxi in October 1975; and Jia Qiyun replaced Zhou Xing as

⁷⁷ Vol. 6, pp. 175-177.

⁷⁸ Vol. 6, pp. 143-145.

first party secretary of Yunnan in October 1975.⁷⁹ There are three characteristics in these changes. First, in many cases, civilian leaders replaced military leaders as in the cases of Anhui, Hubei, and Liaoning. Second, two provincial leaders were rotated among provincial units. Zhao Ziyang went from Guangdong to Sichuan; and Wei Guoqing went from Guangxi to Guangdong. Third, several leaders were put in place for reform efforts in a few years. Zhao Ziyang of Sichuan and An Pingshan of Yunnan later became pioneers of economic reforms in China.

The provincial party reshuffles that occurred in 1977 and 1978 were related to the clean-up of the Gang of Four followers in provinces. Twelve provincial party secretaries were replaced in 1977, followed by purges of another nine in 1978. Wang Enmao replaced Wang Huaixiang as first party secretary of Jilin in February 1977;⁸⁰ An Pingshan replaced Jia Qiyun as first party secretary of Yunnan in February 1977;⁸¹ Ma Li replaced Lu Ruilin as first party secretary of Guizhou in February 1977;⁸² Tan Qilong replaced Liu Xianquan as first party secretary of Qinghai in February 1977;⁸³ Wan Li replaced Song Peizhang as first party secretary of Anhui in June 1977;⁸⁴ Song Ping replaced Xie Henghan as first party secretary of Gansu in June 1977;⁸⁵ Yang Yichen replaced Liu Guangtao as first party secretary of Heilongjiang in December 1977;⁸⁶ Lin Hujia replaced Xie Xuegong as first party secretary of Tianjin in June 1978;⁸⁷ Ren Zhongyi replaced Zeng Shaoshan as first party secretary of Liaoning in September 1978;⁸⁸ Lin Hujia replaced Wu De as first party secretary of Beijing in October 1978;⁸⁹ Zhou Hui replaced You Taizhong as first party secretary of Inner Mongolia in October 1978.⁹⁰ Duan Junyi replaced Liu Jianxun as first party secretary of Henan in October 1978.⁹¹ Shaanxi presented an interesting case. Wang Renzhong, second party secretary of

⁷⁹ Vol. 6, pp. 170, 191, 253, 304, 346, 371.

⁸⁰ Vol. 7 (1), p. 532.

⁸¹ Vol. 7 (2), p. 1011.

⁸² Vol. 7 (2), p. 988.

⁸³ Vol. 7 (2), pp. 1138-1141.

⁸⁴ Vol. 7 (2), pp. 673-678.

⁸⁵ Vol. 7 (2), pp. 1106-1108.

⁸⁶ Vol. 7 (1), p. 563.

⁸⁷ Vol. 7 (1), pp. 372-376.

⁸⁸ Vol. 7 (1), pp. 494-495.

⁸⁹ Vol. 7 (1), pp. 337-339.

⁹⁰ Vol. 7 (1), pp. 470-471.

⁹¹ Vol. 7 (2), pp. 781-785.

Shaanxi since August 1978, was promoted to first party secretary in December 1978 to replace Li Ruishan. But Wang was transferred to Beijing as vice premier in the same month. Wang was then replaced by Ma Wenrui as first party secretary of Shaanxi in December 1978.⁹²

Of course, not all changes in these two years were purges. For instance, Peng Chong was replaced as first party secretary of Jiangsu in February 1977 by Xu Jiatusun because Peng had been transferred to Shanghai as third party secretary in October 1976.⁹³ An Pingsheng was replaced as first party secretary of Guangxi in February 1977 by Qiao Xiaoguang because An was transferred to Yunnan as first party secretary.⁹⁴ Tan Qilong, first party secretary of Zhejiang, was transferred to Qinghai as first party secretary in February 1977, and he was replaced by Tie Ying.⁹⁵ Wang Feng replaced Seypidin Eziz, as first party secretary of Xinjiang in January 1978 when Seypidin was transferred to Beijing as vice chairman of the Standing Committee of the National People's Congress.⁹⁶ Zhao Xinchu, first party secretary of Hubei, was transferred to the Central Planning Commission as deputy director in August 1978, and he was replaced by Chen Pixian.⁹⁷ Hua Guofeng, first party secretary of Hunan since December 1970,⁹⁸ was replaced by Mao Zhiyong in June 1977 so that Hua would focus on his job as chairman of the CCP.⁹⁹ Wei Guoqing was replaced as first party secretary of Guangdong by Xi Zhongxun in December 1978¹⁰⁰ because Wei had been transferred to Beijing as director of the General Political Department of the PLA in August 1977. Kang Jianmin, first party secretary of Ningxia, passed away due to illness in January 1977, and Huo Shilian took it over.¹⁰¹

Moreover, a few provincial party secretaries survived the purges of 1977 and 1978. Liao Zhigao, first party secretary of Fujian since November 1974, continued his position until February 1982 when he was replaced by Xiang

⁹² Vol. 7 (2), pp. 1074-1076.

⁹³ Vol. 7 (2), pp. 596-599, 625-626.

⁹⁴ Vol. 7 (2), pp. 909-910.

⁹⁵ Vol. 7 (2), pp. 654-655, 1141.

⁹⁶ Vol. 7 (2), p. 1195.

⁹⁷ Vol. 7 (2), p. 815.

⁹⁸ Hua was transferred to Beijing in the aftermath of the "Lin Biao Incident" of September 1971. He became vice premier and minister of Public Security in January 1975.

⁹⁹ Vol. 7 (2), p. 843.

¹⁰⁰ Vol. 7 (2), p. 878.

¹⁰¹ Vol. 7 (2), p. 1070.

Nan.¹⁰² Similarly, Jiang Weiqing, first party secretary of Jiangxi since December 1974, stayed in his position until August 1982 when he was replaced by Bai Dongcai.¹⁰³ Bai Rubing, first party secretary of Shandong, also stayed in his position from November 1974 to December 1982.¹⁰⁴ Zhao Ziyang, first party secretary of Sichuan since October 1975, stayed in his position until March 1980 when he was made vice premier of the State Council. Ren Rong, first party secretary of Tibet since August 1971, was not replaced until March 1980.¹⁰⁵

The peaks in the early 1980s such as 1980, 1982, 1983, and in particular 1985 represent the retirement of veteran leaders at the provincial level. Seven provincial party secretaries were replaced each year in 1980, 1982, and 1983, representing about a quarter of the total provincial party secretaries of the year. In 1985, more than half of the provincial party secretaries were replaced. In September 1985, one Politburo standing member (Ye Jianying), nine Politburo members (Deng Yingchao, Xu Xianqian, Nie Rongzhen, Ulanhu, Wang Zhen, Wei Guoqing, Li Desheng, Song Renqiong, and Zhang Tingfa), and 54 other central committee members and alternate members retired from the Central Committee of the CCP. In the meantime, these leaders also retired from their official posts in the Party and the government. Provincial party secretaries that were retired in 1985 include Gao Yang of Hebei (aged 76)¹⁰⁶, Guo Feng of Liaoning (aged 70),¹⁰⁷ Qiang Xiaochu of Jilin (aged 67), Li Li'an of Heilongjiang (aged 65), Chen Guodong of Shanghai (aged 74), Bai Dongcai of Jiangxi (aged 69), Su Yiran of Shandong (aged 67), Liu Jie of Henan (aged 69),¹⁰⁸ Ren Zhongyi of Guangdong (aged 71), Qiao Xiaoguang of Guangxi (aged 67), Chi Biqing of Guizhou (aged 67), An Pingsheng of Yunnan (aged 68), Yin Fatang of Tibet (aged 63), Zhao Haifeng of Qinghai (aged 64), and Wang Enmao of Xinjiang (aged 72).

Finally, the peaks between 1987 and 2004 seem to have something to do with political cycles around Party congresses. Starting in 1982, the CCP began to hold party congresses on a regular basis. The Twelfth National Congress was

¹⁰² Vol. 7 (1), p. 263, Vol. 7 (2), pp. 705-709.

¹⁰³ Vol. 7 (1), p. 274, Vol. 7 (2), pp. 730-733.

¹⁰⁴ Vol. 7 (1), p. 283, Vol. 7 (2), pp. 754-758.

¹⁰⁵ Vol. 7 (2), p. 1048.

¹⁰⁶ <http://www.hebeidaily.com.cn/20040813/ca399315.htm>.

¹⁰⁷ http://news.xinhuanet.com/newscenter/2005-04/22/content_2865945.htm.

¹⁰⁸ Liu Jie recalled that he went to Henan the second time at the age of 63. He became governor of Henan in September 1979. Therefore, he would be 69 years old in 1985 when he retired. <http://www.radiohenan.com/zfzx/xglj/200512/3014.htm>.

held in 1982, followed by the Thirteenth National Congress in 1987. The Fourteenth through Seventeenth National Congresses were held in 1992, 1997, 2002, and 2007, respectively. The first two peaks came one year after the National Party Congress. Following the Thirteenth Party Congress in 1987, about one third provincial party secretaries were replaced in 1988. He Zhukang replaced Gao Di as party secretary of Jilin; Li Zemin replaced Xue Ju as party secretary of Zhejiang; Lu Rongjing replaced Li Guixian as party secretary of Anhui; Mao Zhiyong replaced Wan Shaofen as party secretary of Jiangxi; Jiang Chunyun replaced Liang Buting as party secretary of Shandong; Xiong Qingquan replaced Mao Zhiyong as party secretary of Hunan; Liu Zhengwei replaced Hu Jintao as party secretary of Guizhou; and Hu Jintao replaced Wu Jinghua as party secretary of Tibet. In 1988, Hainan was established as a province and Xu Shjie was appointed as the founding party secretary.

Similarly, following the Fourteenth Party Congress in 1992, one third provincial party secretaries were replaced in 1993. Cheng Weigao replaced Xing Chongzhi as party secretary of Hebei; Hu Fuguo replaced Wang Maolin as party secretary of Shanxi; Gu Jinchi replaced Quan Shuren as party secretary of Liaoning; Chen Huanyou replaced Shen Daren as party secretary of Jiangsu; Jia Qinglin replaced Chen Guangyi as party secretary of Fujian; Wang Maolin replaced Xiong Qingquan as party secretary of Hunan; Ruan Chongwu replaced Deng Hongxun as party secretary of Hainan; Xie Shijie replaced Yang Rudai as party secretary of Sichuan; and Yan Haiwang replaced Gu Jinchi as party secretary of Gansu.

The Fifteenth Party Congress was held in 1997, and provincial party secretaries were replaced in large numbers in both 1997 and 1998. In 1997, 10 provincial party secretaries were replaced, representing about one third of the total. Jia Qinglin replaced Wei Jianxing as party secretary of Beijing; Wen Shizhen replaced Gu Jinchi as party secretary of Liaoning; Xu Youfang replaced Yue Qifeng as party secretary of Heilongjiang; Shu Huiguo replaced Wu Guanzheng as party secretary of Jiangxi; Wu Guanzheng replaced Zhao Zhihao as party secretary of Shandong; Cao Bochun replaced Zhao Fulin as party secretary of Guangxi; Ling Hu'an replaced Gao Yan as party secretary of Yunnan; Li Jianguo replaced An Qiyuan as party secretary of Shaanxi; Tian Chengping replaced Ying Kesheng as party secretary of Qinghai; and Mao Rubai replaced Huang Huang as party secretary of Ningxia. In 1998, nine provincial party secretaries were replaced. Ye Liansong replaced Cheng Weigao as party secretary of Hebei; Wang Yunkun replaced Zhang Dejiang as party secretary of Jilin; Zhang Dejiang replaced Li Zemin as party secretary of Zhejiang; Hui Liangyu replaced Lu Rongjing as party secretary of Anhui; Ma Zhongchen replaced Li Changchun as party secretary of Henan; Yang

Zhengwu replaced Wang Maolin as party secretary of Hunan; Li Changchun replaced Xie Fei as party secretary of Guangdong; Du Qinglin replaced Ruan Chongwu as party secretary of Hainan; and Sun Ying replaced Yan Haiwang as party secretary of Gansu.

In 2002 when the Sixteenth Party Congress was held, 12 provincial party secretaries were also replaced, representing almost 40 percent of the total. Liu Qi replaced Jia Qinglin as party secretary of Beijing; Bai Keming replaced Wang Xudong as party secretary of Hebei; Chen Liangyu replaced Huang Ju as party secretary of Shanghai; Li Yuanchao replaced Hui Liangyu as party secretary of Jiangsu; Xi Jinping replaced Zhang Dejiang as party secretary of Zhejiang; Zhang Gaoli replaced Wu Guanzheng as party secretary of Shandong; Li Keqiang replaced Chen Kuiyuan as party secretary of Henan; Zhang Dejiang replaced Li Changchun as party secretary of Guangdong; Wang Qishan replaced Du Qinglin as party secretary of Hainan; Huang Zhendong replaced He Guoqiang as party secretary of Chongqing; Zhang Xuezhong replaced Zhou Yongkang as party secretary of Sichuan; and Chen Jianguo replaced Mao Rubai as party secretary of Ningxia.

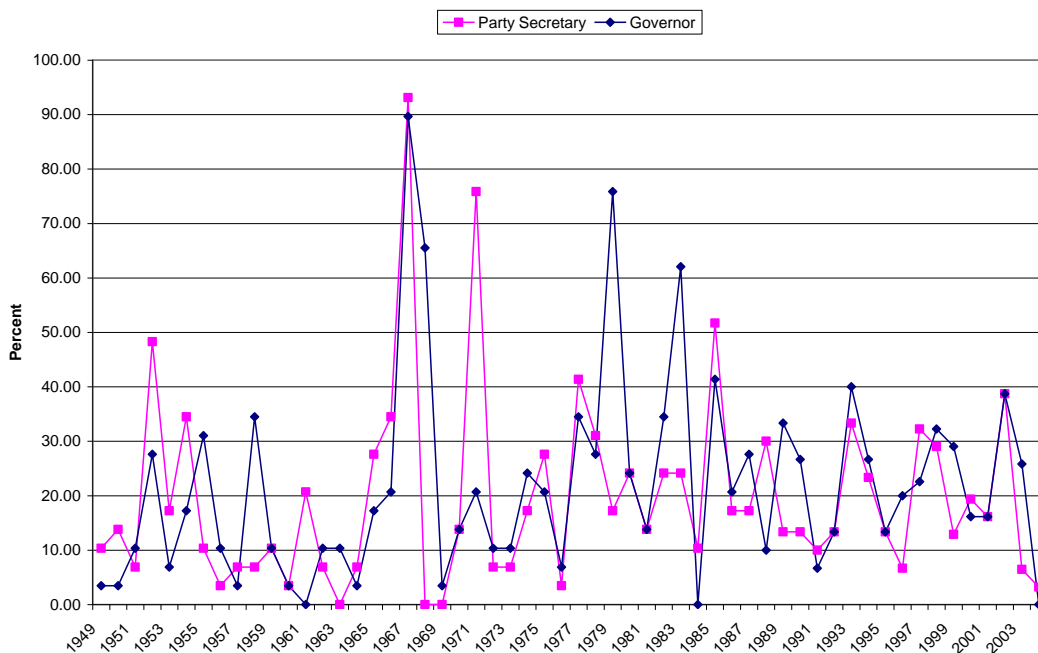
In sum, China's provincial party leadership has been basically very stable over the years but there have been several peaks of changes in select years. The changes came for different reasons. In the 1950s, provincial party secretaries were replaced because of structural transformations; in the 1960s and 1970s, they were mostly purged because of political campaigns; and in the early 1980s, they were retired en masse for younger generations. Since 1987, the changes in provincial party leadership tend to follow the national Party congress. Provincial party secretaries have been reshuffled as a result of the leadership change at the national level.

2.2.2 Governors

Changes in provincial government leadership in China parallel those of provincial party leadership. Over the period of 55 years, there were 360 changes, representing 22 percent of the total (Figure 12). The first peak came in 1952, the same year when the provincial party leadership also went through major changes. Provincial units involved include Tianjin, Hebei, Shanxi, Jilin, Heilongjiang, Hunan, Shaanxi, and Qinghai. In Tianjin, Wu De replaced Huang Jing as mayor in October 1952 while Huang Huoqing was made acting party secretary of Tianjin in the same time. Huang Jing had doubled as party secretary and mayor of Tianjin, now the two offices were assumed by Wu De and Huang Huoqing separately. Similarly, when Lai Ruoyu, party secretary and governor of Shanxi, took a sick leave in July 1951, his offices were later

taken by Gao Kelin and Pei Lisheng, respectively. This is also true in Shaanxi when Ma Mingfang, party secretary and governor, was replaced by Pan Zili as party secretary and by Zhao Shoushan as governor in October-November 1952. In contrast, Lin Tie, party secretary of Hebei, became concurrent governor of Hebei instead of Yang Xiufeng in December 1952; Zhang Zhongliang, party secretary of Qinghai, became concurrent governor instead of Zhao Shoushan. In Jilin, both party secretary (Liu Xiwu) and governor (Zhou Chiheng) were purged in 1952; they were replaced by Li Mengling as party secretary and Li Youwen as governor. Zhao Dezun, party secretary of Heilongjiang, became concurrent governor in November 1952 but he was soon transferred to the Northeast Bureau in April 1953. In Hunan, Cheng Qian, former general of the KMT, was appointed governor in December 1952 instead of Wang Shoudao, who was transferred to Beijing as vice minister of Communications.

Figure 12 Changes in Provincial Leadership in China (1949-2004)



The second peak came in 1955, one year after the second major reshuffle of the provincial party leadership. When Mayor Wu De of Tianjin was transferred to Jilin as first party secretary in February 1955, he was replaced by Huang Huoqing, concurrent party secretary of Tianjin. Hui Yuyu replaced Tan Zhenlin as governor of Jiangsu in February 1955; Sha Wenhan replaced Tan Qilong as governor of Zhejiang in January 1955; Huang Yan replaced Zeng Xisheng as governor of Anhui in March 1955; Zhao Jianmin replaced Kang Sheng as governor of Shandong in March 1955; Wei Guoqun replaced Zhang

Yunyi as governor of Guangxi in February 1955; Guo Yingqiu replaced Chen Geng as governor of Yunnan in February 1955; and Saifuding Aizezi replaced Baoerhan as governor of Xinjiang in September 1955.

The third peak came in 1958, the beginning year of the Great Leap Forward. More than one third governors were replaced, while very few provincial party secretaries were reshuffled. Huang Huoqing, party secretary and mayor of Tianjin, was transferred to Liaoning as first party secretary in June 1958, and he was replaced by Wan Xiaotang as party secretary and by Li Gengtao as mayor. Liu Zihou succeeded Lin Tie as governor of Hebei in April 1958 while Lin Tie remained as party secretary of Hebei. Huang Oudong was demoted from first party secretary to second party secretary of Liaoning in June 1958 when Huang Huoqing was transferred to Liaoning, and he replaced Du Zheheng as governor of Liaoning in October 1958. Li Fanwu replaced Ouyang Qing as governor of Heilongjiang in September 1958; Ke Qingshi replaced Chen Yi as mayor of Shanghai in November 1958; Zhou Jianren replaced Sha Wenhan as governor of Zhejiang in January 1958; Tan Qilong replaced Zhao Jianmin as governor of Shandong in November 1958; Yu Yichuan replaced Guo Yingqiu as governor of Yunnan in March 1958; Sun Junyi replaced Sun Zuobing as acting governor of Qinghai in March 1958, and Yuan Renyuan replaced Sun Junyi as governor of Qinghai in the following month; and Liu Geping became the founding chairman of Ningxia Hui Autonomous Region in October 1958.

Governors were mostly purged in the years of 1966 and 1967. Six governors were replaced in 1966, and 26 governors were purged in 1967. Those who were purged in 1966 include Mayor of Beijing (Peng Zhen), Chairman of Inner Mongolia (Ulanhu), Governor of Heilongjiang (Li Fanwu), Governor of Zhejiang (Zhou Jianren), Governor of Guangdong (Chen Yu), and Governor of Shaanxi (Li Qiming). All but three governors were purged in 1967. In Zhejiang and Shaanxi, governors had been purged in 1966. Guangxi is the only exception among all provincial units. Wei Guoqing, party secretary of Guangxi since July 1961, governor of Guangxi Province between February 1955 and March 1958, and chairman of Guangxi Zhuang Autonomous Region since March 1958, was not able to continue in his functions in January 1967. But he was entrusted with organizing a task force preparing for a revolutionary committee in Guangxi in November 1967.¹⁰⁹

Provincial revolutionary committees were established in lieu of provincial governments in 1967 and 1968, three or four years ahead of the reestablishment of provincial party committees. In the aftermath of the

¹⁰⁹ Appendix 1 (1), p. 638.

“January Revolution” of 1967 in which revolutionary rebels stormed the party and government apparatuses in Shanghai and grabbed power from the power holders, 11 provincial units established provincial revolutionary committees. Those include Shanghai, Beijing, Tianjin, Shanxi, Inner Mongolia, Heilongjiang, Shandong, Guangxi, Guizhou, and Qinghai. In 1968, 19 out of 29 provincial units formed provincial revolutionary committees, representing 66 percent of the total.

Similar to the provincial party leadership reshuffles in 1977 and 1978, the followers of the Gang of Four were also purged from the provincial government leadership in these years. Ten governors were removed in 1977. Wang Enmao replaced Wang Weixiang as chairman of Jilin Revolutionary Committee in February 1977; Xu Jiatun replaced Peng Chong as chairman of Jiangsu Revolutionary Committee in February 1977; Tie Ying replaced Tan Qilong as chairman of Zhejiang Revolutionary Committee in February 1977; Wan Li replaced Song Peizhang as chairman of Anhui Revolutionary Committee in June 1977; Mao Zhiyong replaced Hua Guofeng as chairman of Hunan Revolutionary Committee in November 1977; Qiao Xiaoguang replaced An Pingshan as chairman of Guangxi Revolutionary Committee in February 1977; Ma Li replaced Lu Ruilin as chairman of Guizhou Revolutionary Committee in February 1977; An Pingsheng replaced Jia Qiyun as chairman of Yunnan Revolutionary Committee in February 1977; Song Ping replaced Xie Henghan as chairman of Gansu Revolutionary Committee in June 1977; and Tan Qilong replaced Liu Xianquan as chairman of Qinghai Revolutionary Committee in February 1977.

Eight governors were replaced in 1978. Lin Hujia replaced Xie Xuegong as chairman of Tianjin Revolutionary Committee in June 1978, and Lin was replaced by Chen Weida in October 1978; Lin Hujia replaced Wu De as chairman of Beijing Revolutionary Committee in October 1978; Kong Fei replaced You Taizhong as chairman of Inner Mongolia Revolutionary Committee in October 1978; Ren Zhongyi replaced Zeng Shaoshan as chairman of Liaoning Revolutionary Committee in September 1978; Duan Junyi replaced Liu Jianxun as chairman of Henan Revolutionary Committee in October 1978; Chen Pixian replaced Zhao Xinchu as chairman of Hubei Revolutionary Committee in August 1978; Wang Renzhong replaced Li Ruishan as chairman of Shaanxi Revolutionary Committee in December 1978 but stayed in his position for less than a month; and Wang Feng replaced Saifuding Aizezi as chairman of Xinjiang Revolutionary Committee in January 1978.

The second largest reshuffles occurred in 1979 when provincial revolutionary committees were abolished and were replaced by provincial governments. In

the meantime, governors were no longer concurrent provincial party secretaries. More than two thirds (22) of provincial government leaders were replaced. The only provincial units that experienced no changes include Beijing, Tianjin, Hebei, Inner Mongolia, Liaoning, Jilin, and Hubei.

Similar to the trend in the changes of provincial party leadership, governors who were replaced in the early 1980s were mostly retired. They were massively retired in 1982-83, two years earlier than the massive retirement of provincial party leaders. In 1983, for instance, 18 governors were replaced, representing 62 percent of the total. They include Jiao Ruoyu of Beijing, Liu Bingyan of Hebei, Luo Guibo (aged 75) of Shanxi, Chen Puru (aged 65) of Liaoning, Han Peixin (aged 63) of Jiangsu, Li Fengping of Zhejiang, Zhou Zijian (aged 71) of Anhui, Ma Xingyuan (aged 65) of Fujian, Liu Jie of Henan, Han Ningfu of Hubei, Sun Guozhi of Hunan, Liu Tianfu of Guangdong, Tan Yingji (aged 67) of Guangxi, Liu Minghui (aged 69) of Yunnan, Ngapoi Ngawang Jigme (aged 73) of Tibet, Yu Mingtao (aged 65) of Shaanxi, Li Dengying of Gansu, and Hei Boli of Ningxia.

In 1985, 12 governors were replaced, representing 41 percent of the total. They include Zhao Xiu of Jilin, Chen Lei of Heilongjiang, Wang Daohan of Shanghai, Zhao Zengyi of Jiangxi, Liang Buting of Shandong, Liu Zheng of Hunan, Liang Lingguang of Guangdong, Yang Xizong of Sichuan, Pu Chaozhu of Yunnan, Duojie Caidan of Tibet, Huang Jingbo of Qinghai, and Ismail Amat of Xinjiang.

Political cycles for the provincial government leadership seem to have lagged those of provincial party leadership by one term of five years. Although the pattern of provincial party leadership reshuffles exhibited some tangible patterns of changes beginning in 1987, a similar pattern is not observable until the early 1990s. Since provincial people's congresses are held one year after provincial party congresses, the political cycles of provincial government leadership have lagged those of provincial party leadership by one year.

In 1993, for instance, 40 percent of governors were replaced along with one third of provincial party secretaries. In that year, Li Qiyuan replaced Chen Xitong as mayor of Beijing; Zhang Lichang replaced Nie Bichu as mayor of Tianjin; Ye Liansong replaced Cheng Weigao as governor of Hebei; Sun Wensheng replaced Hu Fuguo as acting governor of Shanxi; Uliji replaced Buhe as chairman of Inner Mongolia; Wan Xueyuan replaced Ge Hongsheng as governor of Zhejiang; Ma Zhongchen replaced Li Changchun as governor of Henan; Ruan Chongwu replaced Liu Jianfeng as governor of Hainan (and replaced Deng Hongxun as party secretary of Hainan); Xiao Yang replaced Zhang Haoruo as governor of Sichuan; Chen Shineng replaced Wang Chaowen as governor of Guizhou; Yan Haiwang replaced Jia Zhijie as governor of Gansu;

and Abdul'ahat Abdulrixit replaced Tomur Dawamat ¹¹⁰as acting chairman of Xinjiang. Among those who were replaced, some became provincial party secretaries (such as Chen Xitong, Cheng Weigao, Hu Fuguo, and Li Changchun); some were promoted to the Center as a form of retirement (such as Buhe and Tomur Dawamat); some were transferred to the Center (such as Zhang Haoruo, Liu Jianfeng, and Ge Hongsheng); some were transferred to other provinces (such as Jia Zhijie); and some were retired to the provincial people's congress of the original province (such as Wang Chaowen).

In 1998, 32 percent of governors were changed along with 29 percent of provincial party secretaries. Provincial units involved include Tianjin, Hebei, Jilin, Jiangsu, Anhui, Henan, Hainan, Guizhou, Tibet, and Gansu. In that year, Li Shengli replaced Zhang Lichang as mayor of Tianjin; Niu Maosheng replaced Ye Liansong as governor of Hebei; Hong Hu replaced Wang Yunkun as governor of Jilin; Chai Songyue replaced Zheng Silin as governor of Jiangsu; Xu Zhonglin replaced Hui Liangyu as governor of Anhui; Li Keqiang replaced Ma Zhongchen as acting governor of Henan; Qian Yunlu replaced Wu Yixia as governor of Guizhou; Legqog replaced Gyalcan Norbu as chairman of Tibet; and Song Zhaosu replaced Sun Ying as acting governor of Gansu.

In 2003, 39 percent of governors were reshuffled along with the reshuffle of about seven percent of provincial party secretaries. Provincial units involved include Beijing, Inner Mongolia, Heilongjiang, Shanghai, Zhejiang, Henan, Hunan, Guangdong, Guangxi, Hainan, Tibet, and Xinjiang. In that year, Meng Xuenong replaced Liu Qi as mayor of Beijing in January and then Meng was replaced by Wang Qishan in April; Yang Jing replaced Uyunqing as acting chairman of Inner Mongolia; Zhang Zuoji replaced Song Fatang as acting governor of Heilongjiang; Han Zheng replaced Chen Liangyu as mayor of Shanghai; Lu Zushan replaced Xi Jinping as governor of Zhejiang; Li Chengyu replaced Li Keqiang as governor of Henan; Zhou Bohua replaced Zhang Yunchuan as acting governor of Hunan; Huang Huahua replaced Lu Ruihua as governor of Guangdong; Lu Bing replaced Li Zhaozhuo as chairman of Guangxi; Wei Liucheng replaced Wang Xiaofeng as acting governor of Hainan; Qiangba Puncog replaced Legqog as acting chairman of Tibet; and Ismail Tiliwaldi replaced Abul'ahat Abdurixit as chairman of Xinjiang.

In sum, governors in China have experienced changes for different reasons during different periods. In the 1950s, they were replaced because of structural transformations; in the 1960s and 1970s, they were mostly purged because of political campaigns; and in the 1980s, they were retired for younger generations. Since 1993, the changes in provincial government

¹¹⁰ For his bio, see http://news.xinhuanet.com/ziliao/2002-01/23/content_250825.htm.

leadership tend to occur as a result of provincial people's congresses. The patterns of political cycles are discernable but not obvious.

2.3 Provincial Economic Development

China's provinces experienced rapid economic growth in the period of 1949-2004 (Table 5).

Table 5 Economic Growth of China's Provinces (1949-2004)

Province ^a	Obs	Mean	Std. Dev.	Min	Max
Beijing	53	12.15	21.70	-40.6	137.3
Tianjin	53	9.33	10.89	-35.9	33.4
Hebei	55	9.18	9.74	-37.0	26.2
Shanxi	52	8.24	10.81	-34.6	37.4
Inner Mongolia	52	8.82	10.96	-34.7	38.7
Liaoning	52	9.39	13.51	-57.1	43.7
Jilin	52	8.13	9.28	-31.2	28.3
Heilongjiang	52	7.63	9.34	-41.7	40.5
Shanghai	55	10.64	12.16	-36.9	38.5
Jiangsu	52	9.00	7.59	-10.8	25.6
Zhejiang	52	9.67	8.19	-21.9	22.0
Anhui	52	7.20	10.12	-28.6	27.4
Fujian	53	10.02	9.26	-28.3	24.8
Jiangxi	55	8.33	9.41	-12.7	53.8
Shandong	52	9.33	8.91	-21.9	29.2
Henan	53	8.01	9.90	-40.6	32.9
Hubei	52	8.44	10.40	-30.0	29.8
Hunan	52	7.53	8.28	-35.5	19.8
Guangdong	53	9.65	7.60	-22.0	22.3
Guangxi	52	8.15	6.72	-14.3	26.6
Hainan	17	11.48	8.36	4.3	40.2
Chongqing	8	9.81	1.67	7.6	12.2
Sichuan	26	9.44	2.73	2.6	13.0
Guizhou	55	7.81	11.28	-37.4	35.3
Yunnan	55	8.18	8.80	-24.0	32.2
Tibet	53	7.99	8.86	-9.2	45.8
Shaanxi	53	8.90	12.09	-33.4	45.2
Gansu	52	8.14	10.99	-37.4	27.3
Qinghai	55	8.87	11.12	-36.4	42.3
Ningxia	53	9.84	10.57	-26.6	40.9
Xinjiang	52	8.48	8.88	-22.0	30.0
Total	1533	8.87	10.43	-57.1	137.3

The average annual growth rate was 8.9 percent with a standard deviation of 10.4. The slowest growth rate was -57.1 percent (Liaoning in 1961), and the fastest growth rate was 137.3 percent (Beijing in 1953). The frontrunners are Beijing, Shanghai, and Fujian. They all witnessed a double-digit growth in 50-plus years. Beijing's economy grew at a rate of 12.2 percent annually from

1952 to 2004, with the largest standard deviation (21.7) among all provincial units. The gap between the best year (1953) and the worst year (1961) is 177.9 percent. Its growth rate in 1953 was 137.3 percent, and its growth rate in 1961 was -40.6 percent. Shanghai saw similar growth rates with less volatility. Its annual growth rate from 1950 to 2004 was 10.6 percent, with a standard deviation of 12.2. Its record year was also 1953, with 38.5 percent, and its worst year was also 1961, with -36.9 percent. Similarly, Fujian also experienced fast growth with still smaller swings. Its average annual rate of growth was 10 percent with a standard deviation of 9.26 over the period of 1952-2004. Its record year was 1956, with 24.8 percent of growth, and its worst year was 1961 at -28.3 percent.

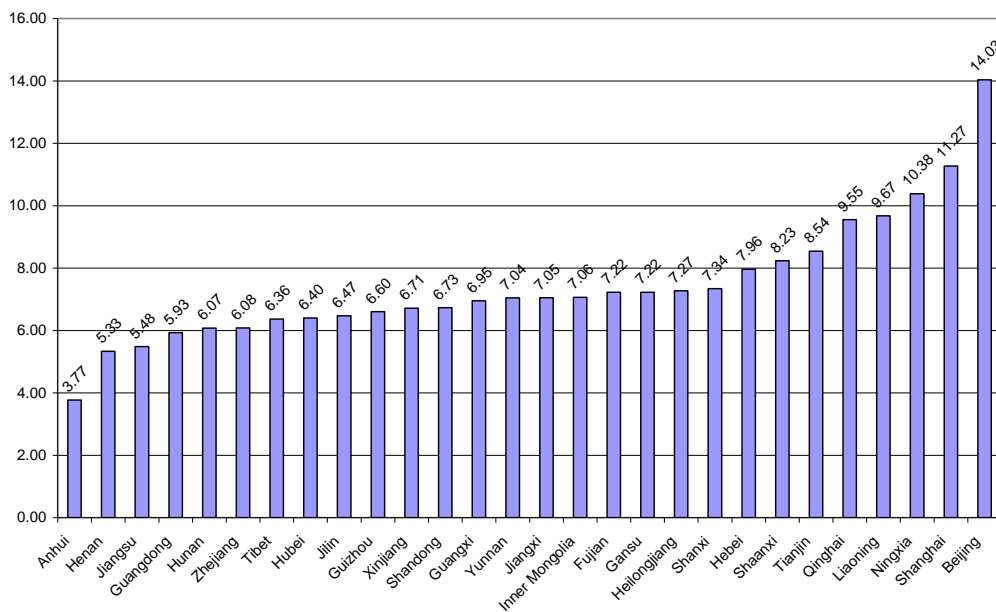
Those provincial units that had the slowest growth rates include Tibet, Guizhou, Heilongjiang, Hunan, and Anhui. Their average annual growth rates were all above 7 percent and less than 8 percent. Tibet saw a growth rate of 7.99 percent from 1952 to 2004; Guizhou had annual rate of 7.81 percent; Heilongjiang, 7.63 percent; Hunan, 7.53 percent; and Anhui, 7.2 percent. It is remarkable that the slowest growing province in China had an average annual growth rate of more than 7 percent for more than five decades.

Take China's provinces as a group, it is clear that they all performed very well economically. The difference between the fastest growing provincial unit (Beijing) and the slowest growing provincial unit (Anhui) is not huge. It is only 5 percent. The variability among the provincial units is much less than the variability of these provincial units over time. The standard deviation for the means of growth rates of all provincial units is only 1.12, while the average of the standard deviations of growth rates of these provincial units in the past five decades is 9.68.

The history of the People's Republic of China can be roughly divided into two major periods: Mao Zedong's era and Deng Xiaoping's era. Maoism was dominant from 1949 to 1977, and Deng Xiaoping's line has been dominant since late 1978. The economic performance of China's provinces in both periods is impressive. During the Maoist era of 1949-1978, China's provinces had an annual growth rate of 7.5 percent with a lot of volatility (Figure 13). Their best record was 137.3 percent, and their worst record was -57.1 percent. The standard deviation of 14 is almost twice as large as the average growth rate. Beijing, Shanghai, and Ningxia were best performers during this period. Beijing's average annual growth rate from 1952 to 1978 was 14 percent with a lot of volatility. In its best year, 1953, Beijing's economy more than doubled. In its worst year, 1961, Beijing's economy was reduced by 40 percent. The standard deviation is 30.4, more than twice as large as its annual growth rate. Shanghai's economy grew at an annual rate of 11.3 percent with less volatility

during the period of 1950 to 1978. It is ranged between 38.5 percent in 1953 and -36.9 percent in 1961, with a standard deviation of 16.5. Ningxia, quite unexpectedly, also did very well during this period. Its growth rate was 10.4 percent on average from 1952 to 1978, ranging from -26.6 percent (in 1961) to 40.9 percent (in 1958). Its standard deviation is 14.6. It should be noted that Ningxia went through two rounds of administrative changes. Ningxia was organized as a province in 1949 when the People's Liberation Army under the leadership of Yang Dezhi liberated the place. In June 1954, Ningxia was merged into Gansu Province. In October 1958, Ningxia Hui Autonomous Region was established. Therefore, between 1954 and 1958, Ningxia was not a provincial unit.

Figure 13 Economic Growth of China's Provinces (1949-1978)



The worst performers during this period were Anhui, Henan, Jiangsu, and Guangdong. Their annual growth rates during this period were 3.8 percent, 5.3 percent, 5.5 percent, and 5.9 percent, respectively. Anhui did not only have the slowest annual growth rate among all provincial units, but its volatility was also the most serious. Its standard deviation (12.3) was more than three times as large as its average growth rate, with a range of -28.3 percent and 27.4 percent. Henan, the second worst performer during the period, had smaller volatility with a much wider range. Its standard deviation was 12.7, and its growth rates ranged from -40.6 percent to 32.9 percent. Jiangsu and Guangdong, star performers during Deng's era, were both

laggards under Mao. Neither of them grew more than 6 percent on an annual basis.

It should be noted that Year 1978 does not necessarily belong to Mao's era. This is because Mao Zedong passed away and the Gang of the Four was arrested in 1976. Although Hua Guofeng, Mao's chosen successor, adopted Maoist slogans, he had begun to switch attention to economic development. Year 1978 does not exactly belong to the era of Deng Xiaoping either. This is because the watershed event, the Third Plenum of the Eleventh Central Committee of the CCP, took place in December 1978. Yet China's provinces mostly did well in 1978. The average growth rate of all provincial units in 1978 was 13.4 percent, one of the highest growth rates in the 1970s and 1980s. To some extent, the growth of 1978, along with that of 1977, could be attributed to Deng Xiaoping's reform policies of 1975.

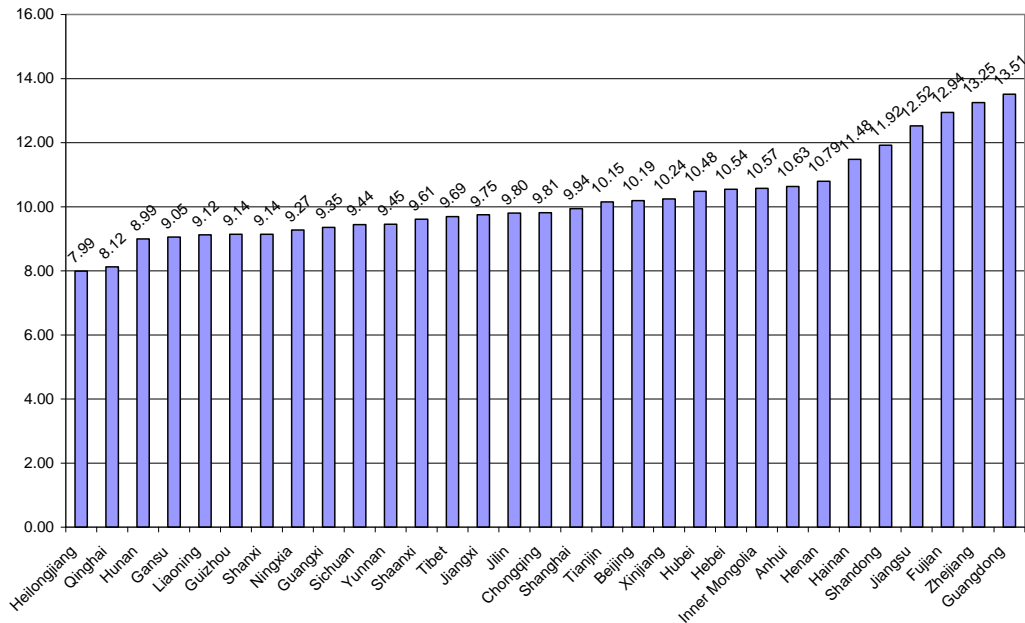
China's provincial units did much better in the era of Deng than in the era of Mao. The average annual growth rate for all provincial units is 10.2 percent, with a range from -9.2 percent to 40.2 percent. The volatility is much smaller. The standard deviation is only 4.6, less than half of the average growth rate. During this period, coastal provinces such as Guangdong, Zhejiang, Fujian, Jiangsu, and Shandong take the lead (Figure 14). The average annual growth rate in Guangdong from 1979 to 2004 was 13.5 percent, with a range from 7.2 percent to 22.3 percent. In contrast to its mediocre performance in the era of Mao, Guangdong became a pioneer in the era of Deng. Guangdong's GRP (gross regional product) was only 18.6 billion yuan in 1978, but it grew to 1,604 billion in 2004 (No. 1 among all provincial units). In real terms, Guangdong's economy in 2004 is 26.4 times as large as in 1978. Guangdong's total economy surpassed that of Singapore in 1998, Hong Kong in 2003, and Taiwan in 2007.¹¹¹ According to Governor Huang Huahua, Guangdong's economy expanded from 1.35 trillion yuan in 2002 to 3.06 trillion yuan (US\$422 billion)¹¹² in 2007.¹¹³

¹¹¹ http://www.ycwb.com/ycwb/2007-11/16/content_1687307.htm.

¹¹² <http://en.wikipedia.org/wiki/Guangdong#Economy>.

¹¹³ <http://www.kuishi.com/gn/news/2008/01-17/1137028.shtml>.

Figure 14 Economic Growth of China's Provinces (1979-2004)



Zhejiang, another laggard under Mao, also emerged as one of the shining stars in economic performance in China. Between 1979 and 2004, Zhejiang's GRP grew 13.3 percent annually, more than twice as fast as its average growth rate in the previous period. Its worst year was 1989. Its economy was reduced by 0.6 percent that year. Its record year was 1993, with a growth rate of 22 percent. Zhejiang's economy in 1978 was 12.34 billion yuan and grew to 1,124.3 billion in 2004 (about 25 times as large as it was in 1978 in real terms). Zhejiang's economy further expanded to 1,864 billion yuan in 2007.¹¹⁴ Ranked the fourth in both the total economy and GRP per capita,¹¹⁵ Zhejiang has been touted as a model of successful economic development based on private enterprises in China.

Fujian, another province that was allowed to take one step ahead of the rest of other provinces in setting up special economic zones (along with Guangdong), also performed well in the era of Deng. Its average annual growth rate between 1979 and 2004 was 12.9 percent, with a range between 5.5 percent and 24.1 percent. Because of tensions across the Taiwan Strait from 1949 to 1978, Fujian was a military front. Its economy was much neglected by the Central Government. The CCP extended an olive branch to Taiwan authorities in 1979, and the Central Government permitted Fujian to set up a special economic

¹¹⁴ http://zjrb.zjol.com.cn/html/2008-01/26/content_2014121.htm.

¹¹⁵ For a detailed comparative study of Zhejiang with other provincial units, see http://www.stats.gov.cn/was40/gtjj_detail.jsp?channelid=57792&record=113.

zone in Xiamen, opposite of Taiwan Island. Its economy grew from 6.64 billion yuan in 1978 to 605.31 billion in 2004 and further to more than 900 billion yuan in 2007.¹¹⁶

Jiangsu, one of the worst performers under Mao, was one of the best performers under Deng. Its annual growth rate from 1979 to 2004 was 12.5 percent, with a range from 2.5 percent to 25.6 percent. Its economy expanded from 24.92 billion yuan in 1978 to 1,551.24 billion yuan in 2004 (about 21 times in real terms) and further to 2.56 trillion yuan in 2007.¹¹⁷ Jiangsu's economy has experienced double-digit growth for 16 consecutive years since 1992, and its growth rate has been over 14 percent since 2004.

Finally, Shandong is also one of the best performers in the era of Deng. Its annual growth rate from 1979 to 2004 was 11.9 percent, with a range from 4 percent to 21.9 percent. Shandong's economy increased from 22.5 billion yuan in 1978 to 1,549.1 billion yuan (more than 18 times in real terms) in 2004 and further to 2.6 trillion yuan in 2007.¹¹⁸ Shandong's economy is the second largest among all provincial units in China.

On the other hand, only three provinces had a slower growth rate than nine percent a year for the period of 1979 to 2004. Hunan, Mao Zedong's home province in central China, had an annual growth rate of 8.99 percent with a range of 3.6 percent to 12.6 percent. Compared with its neighbor, Hubei, Hunan's slow growth is more visible. Hunan had a larger economy than that of Hubei for more than two decades (1952-1974) in the era of Mao. Hubei caught up with Hunan in 1975, but Hunan regained its advantage in 1976. In 1978, the economies of the two provinces had similar sizes. Hunan's GRP was 14.7 billion yuan, and Hubei's GRP was 15.1 billion yuan. Twenty-six years later, Hubei's economy expanded to 631 billion yuan in 2004 due to its faster growth while Hunan's economy increased to 561.2 billion yuan. The net difference increased from 400 million yuan in 1978 to 49.8 billion yuan in 2004. In the meantime, Hunan's population of 66.98 million (in 2004) is larger than that of Hubei (60.16 million in 2004).

Qinghai, the second smallest provincial unit (next to Tibet) in terms of population, also had a relatively slow growth among provincial units in China. Its average annual growth rate for the period of 1979 to 2004 was 8.1 percent, with a range from -9.1 percent to 17.8 percent. One of the fastest growing economies under Mao, Qinghai became the second slowest growing economy

¹¹⁶ http://www.stats.gov.cn/tjfx/dfxx/t20080219_402463118.htm.

¹¹⁷ <http://www.jssb.gov.cn/tjfx/tjfxzl/1200802180119.htm>.

¹¹⁸ http://www.shm.com.cn/newscenter/2008-01/21/content_2229174.htm.

under Deng. Its annual growth rate from 1950 to 1978 was 9.55 percent, faster than that of all other provincial units but four (Beijing, Shanghai, Ningxia, and Liaoning) during the same period.

Finally, Heilongjiang, a province in the Northeast region of China, had the slowest growth record for the period of 1979-2004. Its average annual growth rate was 7.99 percent, with a range from 3 percent to 11.7 percent. Compared to its past, Heilongjiang actually did better. Its annual growth rate from 1952 to 1978 was 7.3 percent, ranging from -41.7 percent to 40.5 percent. But compared to other provincial units, Heilongjiang's performance was at the bottom in the new era of economic reforms. Among the three provinces in the Northeast, Heilongjiang's growth rate was not only slower than that of Liaoning (9.1 percent for the period) but also significantly slower than that of Jilin (9.8 percent for the period). However, Heilongjiang's economic growth has accelerated since 2002. Its average annual growth rate reached 11.5 percent in the period of 2002-2007, and its GRP reached 707.72 billion yuan in 2007, 72.5 percent more than its GRP in 2002.¹¹⁹ Liaoning and Jilin also experienced rapid growth during the past five years. Liaoning's GRP doubled in five years and reached 1,102.2 billion yuan in 2007;¹²⁰ and Jilin's GRP more than doubled in the same period and reached 500 billion yuan in 2007.¹²¹

2.4 Leadership changes and Economic Growth in China's Provinces

What is the impact of political variables such as leadership changes on economic growth in China's provinces? From Model 1 in Table 6, it is clear that the impact of leadership changes on economic growth varies depending on the type of political leaders. Changes of governors seem to bring about positive changes in economic growth, while changes in party leadership may have negative consequences for economic growth. More specifically, when governors are replaced, there is a corresponding 0.76 percent increase in the GRD of the region; when provincial party secretaries are replaced, there is a corresponding 1.65 percent decrease in the GRD of the region. However, the former result is not statistically significant while the latter is at the level of $p=0.05$.

These results are robust when other variables are included. In Model 2, a new variable, "reform," is included. This is a dummy variable, with pre-reform years (1949-1978) as 0 and reform years (1979-2004) as 1. Economic reforms

¹¹⁹ <http://www.e-gov.org.cn/ziliaoku/news002/200801/83951.html>.

¹²⁰ <http://www.e-gov.org.cn/ziliaoku/news002/200801/83864.html>.

¹²¹ <http://www.jcrb.com/200802/ca676156.htm>.

did make differences for China's provinces. Their economic performances during the reform era are 2.7 percent better than those of the previous years. To a large extent, the economic growth of China's provinces was driven by investment (Model 3). For each additional percent of GRP in investment, there is a corresponding 12.3 percent higher growth. To some extent, increase in labor force is also important (Model 4). For each additional percent of labor force, there is a corresponding 0.87 percent in GRP growth.

Table 6 Leadership Changes and Economic Growth in China's Provinces

Variables	Model 1	Model 2	Model 3	Model 4
Party Secretaries	-1.67 ** (0.705)	-1.66 ** (0.699)	-1.71 *** (0.660)	-1.12 * (0.577)
Governors	0.79 (0.668)	0.52 (0.664)	0.70 (0.625)	0.64 (0.548)
Reform		2.72 *** (0.530)	2.31 *** (0.504)	2.44 *** (0.453)
Investment			0.52 *** (0.038)	0.59 *** (0.038)
Labor				0.77 *** (0.070)
Constant	9.03 *** (0.317)	7.70 *** (0.407)	2.50 *** (0.534)	-0.21 (0.536)
Adjusted R ²	0.004	0.021	0.131	0.243
Observations	1532	1532	1507	1351
χ ²	5.79	32.28	225.33	432.72

Notes:

1. Dependent variable is GDP growth in real terms.

2. Numbers in parentheses are standard errors.

* p < 0.10; ** p < 0.05; *** p < 0.01

3. Comparing India and China at the local level

In order to know whether regime types have any impact on economic development, we will first take a look at the relationship between regime types and economic growth and then introduce economic fundamentals such as capital and labor as control variables. The model is

$$\ln Y_{it} = \alpha + \beta_1 \ln(K_{it}) + \beta_2 \ln(L_{it}) + \varepsilon \dots \dots \dots (1)$$

Where

Y refers to gross regional product (GRP) of the *i*th region at *t* (year),

α refers to the constant,

K refers to capita formation,

L refers to labor force,

β_1 and β_2 are coefficients of $\ln(K)$ and $\ln(L)$, respectively, and

ε refers to the residual.

$$\ln Y_{it} = \alpha + \beta_1 \ln(K_{it}) + \beta_2 \ln(L_{it}) + \beta_3(D_{it}) + \beta_4(R_{2it}) + \varepsilon \dots \dots \dots (2)$$

Where

Y_{it} refers to gross regional product (GRP) of the *i*th region at *t* (year),

α refers to the constant,

K refers to capita formation,

L refers to labor force,

D refers to regime types (1 being democracies; 0 authoritarian regimes)

R refers to reform policies (1 being years of reform; 0 years of non-reform)

β_1 and β_2 are coefficients of $\ln(K)$ and $\ln(L)$, respectively, and

ε refers to the residual.

In order to compare India and China at the state/provincial level, we have pooled our data on two countries and conducted regression analyses.

Table 7 Regime Types and Economic Growth: China vs. India

Variables	Model 1	Model 2
Democracy	-4.66 *** (.476)	-4.05 *** (.479)
Reform		3.25 *** (0.450)
Constant	9.67 *** (.273)	7.91 *** (.364)
Adjusted R ²	0.037	0.058
Observations	2456	2456
F	95.80	74.89

Notes:

1. Dependent variable is GDP growth in real terms.
2. Numbers in parentheses are standard errors.

* p < 0.10; ** p < 0.05; *** p < 0.01

According to Model 1, democracies are inferior to authoritarian regimes in delivering economic performance. Economies under the authoritarian rule grow almost five percent faster than those under the democratic rule. This result is statistically very significant. Reforms seem to be a good thing under either type of regimes (Model 2). After adopting reform measures, an economy could grow more than three percent faster than previously. In other words, democracies are not good at delivering goods but reforms help; authoritarian regimes are good at economic performance and reforms can make things much better.

Since we do not have good data on investment and labor, we have decided not to use these variables.

V. Conclusion

Contrary to the conventional wisdom in the literature, this study has found that regime types matter for economic growth: authoritarian regimes have better records of economic growth than democracies do. For a period of more than half a century, China (an authoritarian regime) outperformed India (a democracy) by a large margin. China's average GDP growth between 1953 and

2009 was 8.1 percent, while India's record for the same period was only 4.8 percent.

India's inferior performance is largely due to its regime type. Because of democratic pressure for consumption, India diverted much more resources on consumption than China did during the same period. Between 1952 and 2004, India's annual consumption constituted 86.8 percent of its GDP on average and China consumed only 66.1 percent of its GDP annually. Consequently, India's investment level is much lower than that of China. India's annual rate of fixed capital was 17.2 percent of its GDP between 1952 and 2004, and China's rate was 27.3 percent of its GDP in the same period. Moreover, because of electoral pressure, Indian politicians appealed to peasants for votes by making substantial investment in agriculture while Chinese leaders can afford to be single-minded about industrialization without concerning for political consequences.

Furthermore, China as an authoritarian regime can have a more effective family planning program and thus has performed even better than India on a per-capita basis. In 1952, China's real GDP per capita was only 43 percent of India's number. But 50 years later, China's GDP per capita was two thirds more than that of India.

Finally, China adopted reform policies much earlier than India, though the difference is not strictly due to different regime types. China officially adopted reform policies in late 1978, and India did not start reform until 1991.

The fact that democracies perform less well than authoritarian regimes holds true at the local levels in India and China. The two local systems were formed around the same time. India began its states system in 1950 when it adopted its constitution and reorganized its states and union territories in 1956. The People's Republic of China consolidated a number of provinces under the Communist control in the early 1950s and established the baseline of the current provincial system in 1954. Currently, the two countries have a similar number of local units. India has 35 states and union territories, and China has 34 provincial units including provinces, centrally administered cities, autonomous regions, and special administrative regions.

In terms of political changes to local leadership, there are different types of changes and different patterns between India and China. There are three major changes to the local leadership in India. First, because of democratic elections, Indian states witnessed regime changes from one political party to another. Over the period of 1950 to 2009, there were 228 party changes in Indian states, representing 16 percent of the total. Second, old leaders of the same ruling are replaced by new ones. In the same period in India, 231 state

leaders were replaced this way. Third, the central government of India could also invoke the article on “President’s rule” to intervene in local affairs. This article has been used more than 100 times in the period of 1950 to 2009. In the early years, this article was abused in the central ruling party’s favor. The central government used various pretexts to dismiss local governments controlled by other political parties. The most well-known example occurred in 1959 when the Indian National Congress of the central government used this article to dislodge a democratically elected communist regime in a state.

In China, there are no regime changes but only leadership changes of two types of provincial leaders. Provincial party secretaries, the most powerful leaders in China’s localities, were replaced quite frequently. Out of 1,649 unit/years over the period of 1949-2004, 323 provincial party secretaries were replaced, representing 19.6%. In the era of Mao, provincial party secretaries were replaced mostly because of political reasons. In the beginning of the Cultural Revolution, in particular, more than 90% of provincial party secretaries were purged. In the 1980s, the reshuffles of the provincial party leaders were related to the institutionalization of the political leadership. In 1985, for instance, more than half of the provincial party secretaries were replaced due to the retirement of elderly leaders. From 1987 to 2004, however, changes to the provincial party leadership occurred mostly around national party congresses. Provincial governors, the chief administrators under provincial party secretaries, had similar experiences over the years.

When we look at the impact of political changes on economic performance separately, we find different patterns in India and China. In Indian states, party changes seem to be conducive to economic growth while leadership changes and President’s rule are not particularly good for economic growth. In China, the replacement of provincial party secretaries is not good for local economic development, while the replacement of provincial governors is not bad for local economic growth. In both countries, however, reform is a good thing because it promotes economic growth.

When we pool the data from Indian states and Chinese provincial units, we have two major findings. One, democracies are not good for economic growth. Two, reform is conducive to economic growth. Since lower economic growth rates are not really intended in the setup of democratic institutions, the negative effect of democracies on economic growth can be regarded as “democratic externalities.” It seems that reform policies can offset these externalities to a large extent and that a right mix of investment and labour inputs might mitigate (or even neutralize) their effects.

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