China's Political-Economic Institutions and Development

Chenggang Xu

After more than three decades of economic reform, China has transformed from being one of the poorest economies in the world to being the second-largest economy measured by nominal exchange rates, or the largest economy measured by purchasing power. As such, it is important to elucidate the determinants of China's future development.

This article will focus on China's institutions. I argue that although the size of China's economy is extremely important in terms of its impact on the global economy, it is misleading to ignore political and economic institutions. Indeed, forecasts based on extrapolating past trends could be erroneous (see Pritchett and Summers 2014). China was the largest economy in the world before the end of the 19th century but then lost ground to Western nations that established the rule of law and free trade. To understand China's past and future development, one has to examine its institutions.

The existing literature presents two contradicting views of China's future: one optimistic, the other pessimistic. The late economic historian and Nobel laureate Robert Fogel predicted that by 2040 the

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Chinese economy would account for 40 percent of global GDP while the U.S. share drops to 14 percent (Fogel 2010). His prediction is consistent with a standard growth model, which takes market institutions as given. Other authors, such as Gordon Chang (2001, 2011) and Zoe Zhang (2014) are less sanguine. They claim that China faces serious problems and may collapse because of political and economic crises.

Treating China as a monolithic entity can be misleading. Recent research has shown that Chinese counties where privately owned firms are concentrated experienced significantly higher growth rates—and less income inequality—than other counties (Guo et al. 2014). Another recent study found that China's state-owned firms are significantly less efficient than their counterparts in 27 other transition economies, while China's private firms are significantly more productive (Kim, Wang, and Xu 2014). Yet one of the major problems in China is that it is difficult for private firms to enter and to grow in many economic sectors due to institutional barriers and discriminations against the private sector. Meanwhile, state-owned firms obtain most of the resources from the government, which reduces their capital productivity and total factor productivity (TFP).[1]

In the remainder of this article, I first compare China with other countries from a historical perspective and present cross-country data on distance from the "world frontier," measured by the ratio between a country's per capita GDP and that of the most advanced country, such as the United States.[2] This measure indicates the effects of institutions on long-term growth. Next, I provide an analysis of China's institutions and their origin, and illustrate their effects on China's economic performance. The concluding section argues that institutional reform is essential for China's sustainability and stability.

Institutions and Development: Understanding China's History

In the last 30 years, China has been on the path of returning to its historical status relative to other countries. President Xi Jinping has

[1]Recently, the state sector has strengthened relative to the private sector. In China's policy circle and media, this observation is summarized as "*guojin mintui*."

[2]A ratio of 1 implies no distance from the world frontier, whereas a low ratio indicates a large distance. According to Gerschenkron (1962), everything else being equal, a more backward economy has a higher potential to grow than a more advanced economy.

referred to this development as "China's dream," and it has brought positive reactions and hope from the Chinese people. However, will China be able to return to its previous international status? Will China be able to achieve more than merely returning to its historical status? To understand how far China can continue to develop, we should first comprehend the reason China drastically declined since the late 19th century for nearly 100 years, and how China managed to catch up since 1978. We can then evaluate whether the particular catch-up mechanism of China is sustainable. I will argue that the outcome will depend on the underlying Chinese institutions.

China Is Returning to Its Historical Past

China has the second-largest economy in the world by nominal GDP level, but its status remains distant from its global status in 1850, when China was by far the largest economy in the world. Even more strikingly, 200 years ago, China's GDP accounted for one-third of global GDP (Maddison 2003). Table 1 shows that China has returned to its historical status in 1890, as the world's second-largest economy. However, by 1913, the United States far outpaced China in terms of GDP, and the United Kingdom, Germany, and Japan were undergoing rapid industrialization.

In June 1898, China attempted constitutional reform during the *Wuxu* Restoration, but that effort ended quickly, in September. Enlightened Chinese intellectuals and politicians advocated the so-called Hundred Day Reform. They believed that China's imperial

TABLE 1
GDP, Selected Countries, 1850–2013
(PPP, billions, 1990 Geary–Khamis dollars)

	1850	1870	1890	1913	1950	1980	2000	2013
China	247	190	205	241	240	1,047	4,330	13,395
U.S.	43	98	215	517	1,456	4,231	7,942	16,800
U.K.	63	100	150	225	348	728	1,180	2,391
Germany	48	72	116	237	265	1,105	1,528	3,233
Japan		25	41	72	161	1,568	2,625	4,699

Source: Maddison (2003); IMF, World Economic Outlook Database (2014).

TABLE 2
Relative Shares of World GDP, 1871

	GDP (PPP, $, millions)	Percentage of World GDP
World	1,101,369	100.0
British Empire	265,000	24.1
Chinese Empire	189,740	17.2
U.K.	100,179	9.1
U.S.	98,374	8.9
Russian Empire	83,646	7.6
France	72,100	6.5
Germany	71,429	6.5
Japan (Meiji Era)	25,393	2.3

Source: Maddison (2003).

institutions were major obstacles to development and were responsible for its rapid decline relative to the rising world powers. Table 1 shows the stagnation of the Chinese economy from 1890 to 1950, after decades of wars and the collapse of the Chinese empire subsequent to the failures of two constitutional reforms.

Table 2 lists the share of global GDP in 1871 and further elaborates my point. In 1871, one of the most devastating civil wars in Chinese history ended, and the Chinese Empire rapidly declined and eventually collapsed. If we only look at the statistics of 1871 without knowing the institutional background, China's global share of GDP (17.2 percent) looks even more impressive than today's (15 percent).

Development Level of China

Although China is the second-largest economy in the world, China's development level is still significantly below that of the world frontier. Based on per capita GDP, the development level of China is similar to that of Peru and is only about 19 percent that of the United States.[3] The most important message of Tables 3 and 4 is that China has not made any progress since the Industrial Revolution (or since 1850), in terms of per capita GDP ranking and distance

[3]Measured by PPP, the 2013 per capita GDP of Peru ranks 86th, whereas China ranks 93rd (IMF 2014).

from the world frontier, regardless of its high share in global GDP in certain periods.

In 1850, the Chinese economy was the largest in the world and significantly larger than the combined economies of the next three highest-ranked nations. However, China ranked last among the 24 nations based on per capita GDP. Moreover, the development distance of China from the world frontier increased steadily and rapidly from 0.25 in 1850 to 0.05 in 1950 (a lower ratio means more backwardness). If backwardness always has advantages for catching up, then China's economy would have advanced rapidly since 1950, after the wars and the nation reunited. Yet, the gap only marginally narrowed from 0.05 in 1950 to 0.06 in 1980, because of the lack of progrowth institutions—namely, the rule of law and free markets.

Tables 3 and 4 also show cross-country historical data to illustrate the impediment caused by certain institutions to economic growth. A substantial part of China's contemporary institutions stem from the Soviet Union while others are inherited from the Chinese Empire, which may arguably be even worse in terms of fostering growth. The

TABLE 3
Country Rankings, GDP Per Capita, 1850–2013

	1850	1870	1913	1950	1980	2013
No. of Nations Ranked	24	48	51	132	132	187
France	8	10	12	16	8	23
Germany	10	12	11	20	13	15
Italy	11	16	18	24	18	31
The Netherlands	1	4	8	13	10	12
U.K.	2	2	4	11	20	21
U.S.	5	6	1	4	4	6
USSR/Russia		25	29	28	37	58
China	22	45	50	123	102	93
India		44	48	110	112	133
Japan		31	30	51	15	22
Hong Kong		34	31	40	24	7
Singapore		35	31	39	27	3

Source: Maddison (2003); IMF, World Economic Outlook Database (2014).

TABLE 4
Distance from the World Frontier, 1850–2013

	1850	1870	1913	1950	1980	2013
France	0.67	0.59	0.66	0.55	0.81	0.67
Germany	0.60	0.58	0.69	0.41	0.76	0.75
Italy	0.57	0.47	0.48	0.37	0.71	0.57
The Netherlands	1.00	0.86	0.76	0.63	0.79	0.79
U.K.	0.98	1.00	0.93	0.73	0.70	0.70
U.S.	0.76	0.77	1.00	1.00	1.00	1.00
USSR/Russia		0.30	0.28	0.30	0.35	0.34
China	0.25	0.17	0.10	0.05	0.06	0.19
India			0.13	0.06	0.05	0.08
Japan			0.26	0.20	0.72	0.69
Hong Kong			0.24	0.23	0.57	0.99
Singapore			0.24	0.23	0.49	1.22

Note: The distance is the ratio between the per capita GDP of a nation (PPP, 1990 Geary-Khamis dollar) and that of the world frontier level, which is the highest national per capita GDP achieved in each year (for 2013, I used the U.S. level as the frontier because all nations with higher per capita GDP than that of the United States are small city-states, which may result in problems regarding comparison).
Source: Maddison (2003); IMF, World Economic Outlook Database (2014).

USSR (for the years before the Soviet era, the area is defined by the USSR geography) is included in Tables 3 and 4 to illustrate the extent of Soviet achievement in terms of economic development. The USSR was a super power at an aggregate level.

However, due to its institutions, the USSR's distance from the world frontier has not significantly improved compared with the tsarist Russian Empire. To illustrate this point, an important fact is that the USSR's research and development expenditure as a percentage of GDP was the highest globally at the peak of the Soviet Union's power, and was significantly higher than that of the United States and Japan. However, the Soviet Union failed to narrow technological and economic gaps from the frontier economies. After more than seven decades of Soviet central planning, the country only produced two of the world's 200 most important inventions and innovations (Kornai 2014).

An extensive literature explains the adverse effects of Soviet institutions and Chinese imperial institutions on economic growth. Yet, Tables 3 and 4 show that the current development level of China is significantly lower than that of the USSR and far lower than that of the Chinese Empire in 1850 in terms of distance from the world frontier.

Effects of Constitutionalism on Long-term Growth

Empirical evidence indicates that constitutionalism is a determining factor of long-term growth (e.g., North 1990, Acemoglu and Johnson 2005, Acemoglu and Robinson 2012, Acemoglu et al. 2014). I use constitutionalism to refer to institutionalized rules that limit the power of government, particularly its power to violate property and political rights. The key element of constitutionalism is the separation of powers and political pluralism—also known as the rule of law.[4]

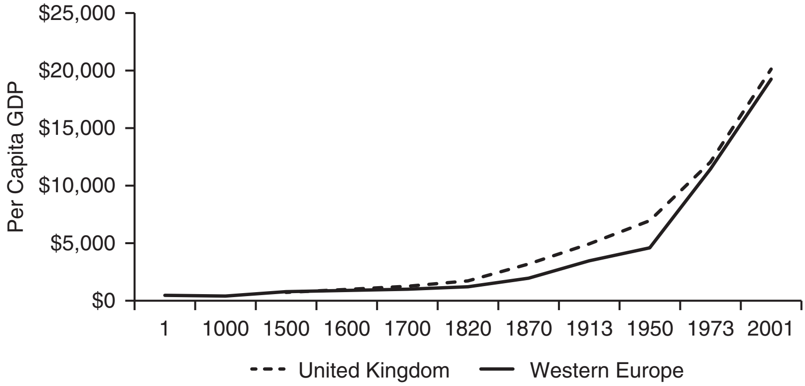
Based on a 60-year post-war dataset and a strict definition of democracy as adherence to constitutional rules and the rule of law, Acemoglu et al. (2014) provide cross-country evidence that democracy determines long-term economic growth. This evidence is consistent with the observation that all the developed economies in the world today (i.e., all members of the Organization for Economic Co-operation and Development) follow constitutional rules and thus the rule of law.

In the following paragraphs, I provide three figures to illustrate that industrialization occurred after the establishment of the rule of law, not the other way around. The same observation is true for the early sustainable catching up and modernization in other countries. This sequence of historical events indicates the causality between institutional change and long-term growth.

Figure 1 shows that the divergence of per capita GDP (measured in terms of purchasing power parity, 1990 Geary-Khamis dollars) between the United Kingdom and the rest of Western Europe started from the Glorious Revolution of 1688—that is, constitutional rule preceded the Industrial Revolution (North 1990). The convergence between the United Kingdom and Western Europe occurred after World War II, following the establishment of the rule of law in all Western European nations.

[4] I am purposely not using the term "democracy" because different authors use that term in different ways to include a variety of institutions.

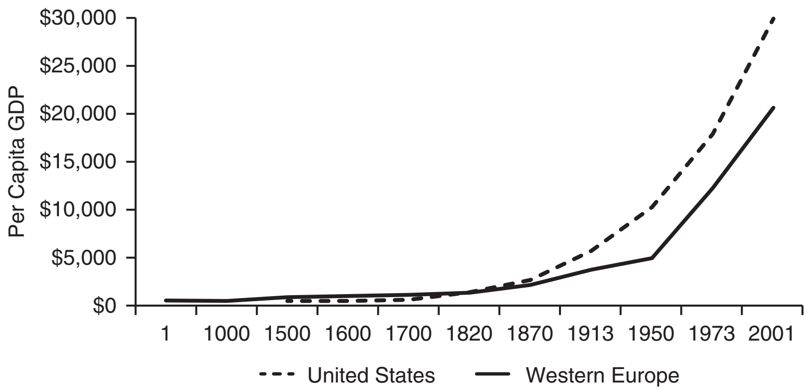
FIGURE 1
U.K. vs. Western Europe:
Constitutionalism and Industrialization



Source: Maddison (2003).

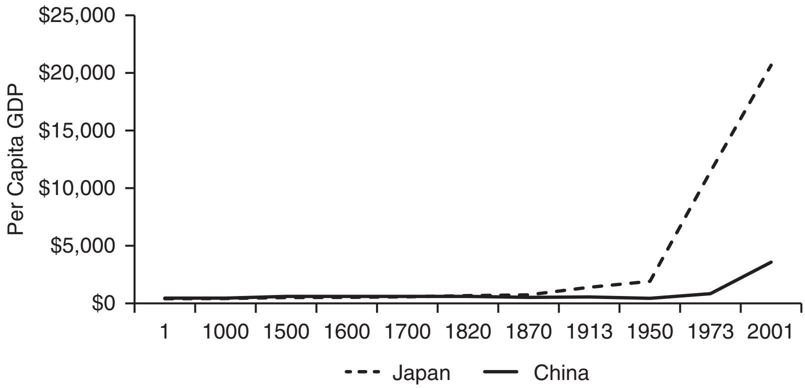
Figure 2 shows a similar historical trend to that of the United States versus Western Europe. Under British colonial rules, American settlers did not have full constitutional rights enjoyed by U.K. citizens and did not have a representative in Parliament. As such, they did not have the right to determine taxes, and King George III denied them ownership rights over land obtained after

FIGURE 2
U.S. vs. Western Europe:
Constitutionalism and Industrialization



Source: Maddison (2003).

FIGURE 3
Japan vs. China: Meiji Restoration and Growth



Source: Maddison (2003).

the seven-year British–French war (Linklater 2002). The establishment of constitutional rule (independence) in the United States led to the Industrial Revolution and divergence from Western Europe, as shown in Figure 2.

The last case in this group of historical cases compares China with Japan. The focal point is the Meiji Restoration. Enlightened Chinese scholars since the late 19th century have agreed on the importance of the Meiji Restoration in explaining the divergence between China and Japan. Figure 3 confirms that intellectual agreement and indicates that the development levels of China and Japan were similar before the Meiji Restoration occurred. However, following the Meiji Restoration, Japan developed rapidly while China remained stagnant. The gap between the two economies has rapidly widened for 100 years, particularly after 1950. This gap reflects not only the rapid catching up of Japan to the world frontier but also the backwardness and stagnation of the Chinese economy relative to the rest of the world until 1980.[5]

[5]Given the major negative impacts of Mao Zedong's "Great Leap Forward" and "Cultural Revolution," China's average GDP growth rate from 1952 to 1978 was only 4.4 percent (Perkins and Rawski 2008), which was considerably lower than the growth rate of Japan in the same period.

These three figures illustrate the fundamental importance of constitutionalism in determining long-term growth.[6] After China's defeat by post-Meiji Japan at the end of the 19th century, enlightened Chinese intellectuals and politicians realized the vital importance of constitutionalism (*xianzheng*) to the economy and launched two constitutional reforms imitating those of the Japanese and those of the British, but they all failed. Russia also launched similar reforms in 1905, but failed; the Bolshevik Revolution then ensued.

China's Regionally Decentralized Authoritarian (RDA) Regime

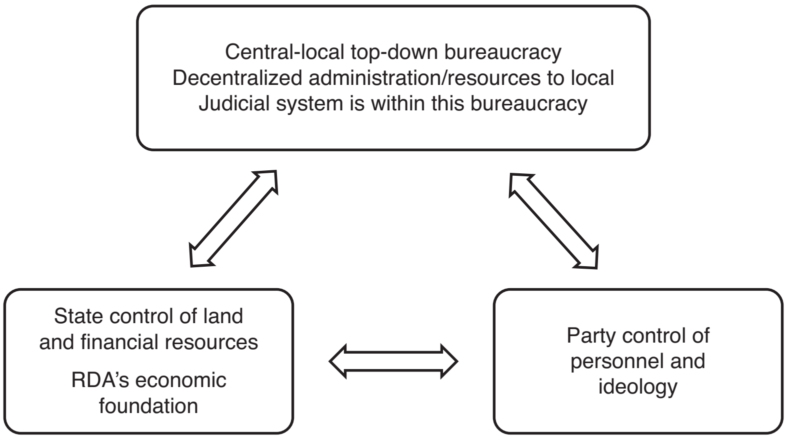
Understanding how Chinese institutions operate poses a great challenge to economics and political science. To address that challenge, I characterize the governing institution of China as "regionally decentralized authoritarianism (RDA)" (Xu 2011). As an institution, RDA is highly centralized in terms of political power and personal control, in which the Chinese Communist Party (CCP) is at the core. Yet, RDA is highly decentralized in terms of administrative implementation and economic resource allocation. This combination of a high degree of centralization and decentralization accounts for the uniqueness of the RDA regime, which has evolved over the long imperial history of China and the transplantation of Soviet institutions in the early period of the People's Republic of China. The RDA regime relies on two powerful mechanisms—regional competition and regional experimentation—that are responsible for the success of reforms since 1978, as well as the serious social-economic-political problems in China, including those related to gradual growth, sustainability, and stability.

Governance Structure of China's RDA Regime

Figure 4 illustrates the governance structure of RDA, which I call "an institutional trinity" because this structure comprises three basic institutional building blocks. The building block in the center is the party-state bureaucracy that is responsible for centralized political and personal control by the party and the central government. The party-state bureaucracy is also involved in decentralized administrative

[6]For cross-country empirical evidence on this issue, see Acemoglu et al. (2014) and Persson and Tabellini (2008).

FIGURE 4
GOVERNANCE STRUCTURE OF CHINA: AN INSTITUTIONAL TRINITY OF THE RDA REGIME

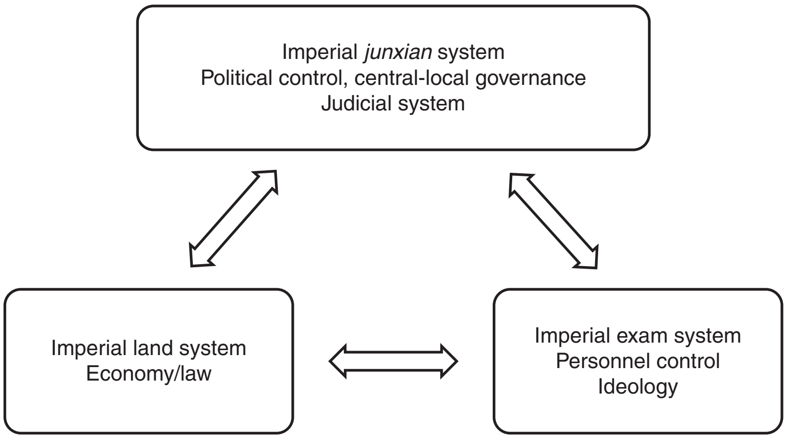


implementation and resource allocation at the local level. The judicial system is also an integral part of the same top-down bureaucracy. The building block on the lower left in Figure 4 shows the complete state control over land ownership and financial resources. State ownership of land is both an important economic and legal foundation of the RDA regime. The building block on the lower right shows the CCP's control over personnel and ideology. The power of centralized control over those matters allows a high degree of decentralization under an authoritarian regime.

To comprehend the behavior and predict the future of the RDA regime, it is important to understand the origin of this regime. For this purpose, Figure 5 illustrates a stylized governance structure of the Chinese Empire (581 to 1911).

The governance structure of the Chinese Empire is similar to the current RDA regime. The resemblance of the unique features of currently governing Chinese institutions and those that prevailed in history is even more notable compared with institutions in other countries. The building block in the middle of Figure 5 represents the imperial *junxian* system, a top-down bureaucracy from the imperial court that governed all local governments. In this system, the emperor exerted political control and the judicial system was an integrated part of such control. The building block on the lower left corner denotes the imperial land system, in which the emperor had

FIGURE 5
Governance Structure of Imperial China:
An Institutional Trinity



ultimate control rights over all land, particularly for political purposes. The building block on the lower right corner denotes the imperial examination system, which had dual functions: controlling personnel and controlling ideology. The Chinese Empire is the first in human history to establish a systematic ideological control institution by the state. The critical institutional difference between the current RDA regime and the imperial system is the CCP, which has replaced the imperial court and penetrated the entire society. Indeed, the RDA regime, by strictly regulating ideological and personal matters, is even more centralized than the Chinese Empire.

Incentive Problems in the RDA Regime

The adverse effects of Chinese imperial and Soviet institutions on economic growth, entrepreneurship, and innovation are well recognized. Among the major issues in these regimes are the incentive problems of subnational government bureaucrats. For instance, the Soviet Union failed in its reform attempts because of unresolved incentive problems. The challenging question is, if the RDA institutions stem from the Chinese Empire and the USSR, how do we explain China's remarkable reforms and growth during the past three decades? In the following, I present a brief summary of the basic points.[7]

[7]For a lengthier discussion, see Xu (2011).

One of the features of the RDA regime that differentiates Chinese from Soviet institutions and other authoritarian regimes is the manner by which China is decentralized. In the RDA regime, each subnational government, including provincial levels and municipal levels, is self-contained in terms of government functions. The sections of each subnational government report to a local leader instead of upper-level sections or central ministries. A similar governance structure applies to all levels of government—from the central to the county level. Therefore, upper-level bureaucrats regularly appoint and assess all subnational government bureaucrats in the RDA regime to determine job tenure. Moreover, all subnational governments, including county governments, exhibit self-contained powers to perform tasks without directly referring and reporting to central ministries, as long as these subnational governments fulfill the assessment criteria. The self-contained powers allocated to each subnational government create conditions for regional tournament competitions and experimentations. These mechanisms are the key factors to understanding China's past and future, including the reforms in the last three decades.

In contrast to reforms in the Soviet Union, economic reforms in China resolved incentive problems by implementing regional tournament competitions. These competitions include the assessment of subnational bureaucrats based on how well they meet their GDP growth targets compared with the performance of other subnational governments. Regional tournament competitions are powerful and effective mechanisms that aid in resolving incentive problems when the objective of the competition is well defined and measured, which is a strong condition that can rarely be satisfied. Moreover, local governments are encouraged via regional competitions to conduct reform experiments.

Even when the conditions of tournament competitions are satisfied, the functions of this powerful machine depend on the objectives of the CCP. During the Great Leap Forward campaign at the end of the 1950s and the Cultural Revolution from 1966 to 1976, regional competitions and experiments led to catastrophic consequences. Thus, another factor beyond the RDA governance structure may explain why China's fast catching up only began in the late 1970s. The critical factor that determined the timing of the turning point was the political change at the end of the Cultural Revolution in 1976. The devastation caused by the Cultural Revolution led many party-state leaders and bureaucrats to call for changing the objectives of the CCP from revolution or class struggle to economic development, which happened officially in 1978. Since that time, highly motivated local governments have used regional experimentations to introduce all major reforms.

Nevertheless, how far China can develop without constitutionalism —that is, without thoroughly reforming the RDA regime—is a grave challenge. Regional tournament competitions and regional experimentations worked well in the early stages of Chinese reforms because the CCP assigned subnational governments a single objective—to increase economic growth at all costs. However, the role of any government involves multiple dimensions. Imposing a single objective (fast growth), without reforms that protect property rights and personal freedom, leads to socioeconomic problems such as widening inequality gaps, environmental degradation, and corruption.

Realizing those problems, in the last decade the Chinese government has attempted to replace the single target of GDP growth with numerous assessment indicators as targets of subnational governments. The problem is that regional tournament competitions will not function if multiple objectives replace the well-defined objective of GDP growth. Tournament competitions with multiple targets often result in a race to the bottom instead of a race to the top. Furthermore, local governments can easily manipulate targets that are not market based and are difficult to verify independently. Faced with reality, pragmatic subnational governments have often quietly stuck with enforcing a single objective, the GDP growth rate.

The RDA Regime and Economic Performance

In the standard growth model, national income (GDP) or output is determined by several inputs, including capital (K), land (L), human capital (H), and efficiency (A). Thus,

$$(1)\ Y = F(A, K, L, H).$$

This standard neoclassical growth model implicitly assumes that no institution is substantially different from the market. This assumption may arguably represent the reality in Western Europe, North America, Japan, South Korea, and Taiwan, or in OECD nations in general. However, the neoclassical model is inappropriate for understanding developing and underdeveloped economies because it fails to explain the persistence of underdevelopment.

The fact that China's institutions differ substantially from those of Japan, South Korea, and Taiwan during their catch-up stages means that the neoclassical growth model needs to be adapted to account for China's RDA regime. Indeed, the government directly or indirectly allocates a substantial amount of capital, land, and human capital (the state ultimately owns all land and most banks, and also controls migration and universities). Hence, Equation 1 needs to be modified so that

$$(2)\ Y = F\,[A(G), K(G), L(G), H(G)],$$

where G is government, which includes institutions and policies.

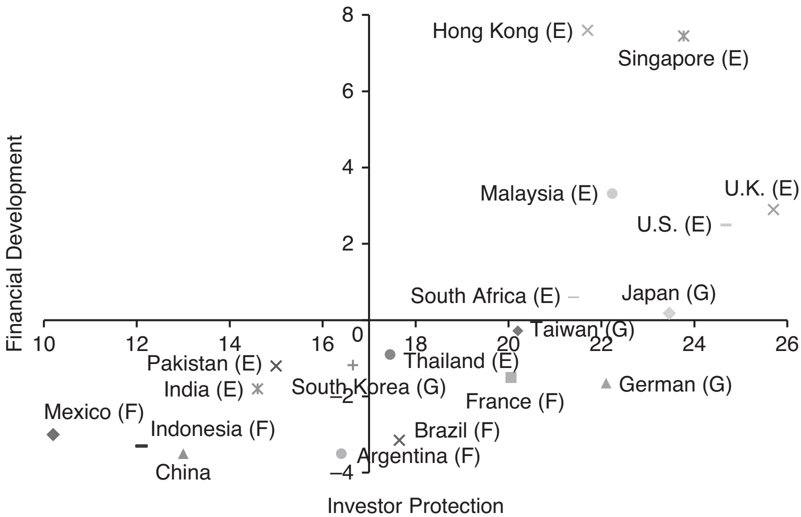
Effects of the RDA Regime on Financial Development

If most resources were in private hands and traded in markets, and if a rule of law exists, then the incentive problems of subnational government bureaucrats may not significantly affect the economy. However, that is not the case in China. The RDA regime strictly controls the financial market, which is one of the major channels through which institutions affect long-term economic growth and development. Figure 6 illustrates that "external finance" (financial development) is positively correlated with "investor protection" (safeguarding property rights).

One of the major findings of the literature on financial development is that well-functioning securities markets require legal protection of private property rights and an independent judiciary to enforce contracts and resolve disputes. China jump-started securities markets in the early 1990s without those institutions. To avoid the worst problems under the RDA regime, China implemented specific policies to mobilize the incentives of subnational governments and resolve serious information problems. These policies and incentives are linked to regional competitions and regional experimentations (Pistor and Xu 2005, Du and Xu 2009). The markets grew rapidly in the early years but still are hampered by the lack of market-friendly institutions, especially private ownership and the rule of law. Indeed, China still ranks among the lowest in terms of financial development, as seen in Figure 6.

Even though China started from an extremely low level of financial development and the real economy grew rapidly, the improvement in financial development has been very limited over the last decade. Table 5 shows that improvement in financial

FIGURE 6
Investor Protection and Financial Development



Notes: The vertical axis measures the level of financial development (external finance normalized by GDP); the horizontal axis measures the degree of investor (shareholder) protection—that is, the security of property rights governing stock markets.
Source: Allen, Qian, and Qian (2005).

development from 2001 to 2011, measured by private-sector credit as a percentage of GDP and by stock market capitalization as a percentage of GDP, has been marginal at best. This lack of progress is associated with the absence of major reform in institutions, including legal institutions and other institutions that control resources.

This observation is also consistent with that in other studies pertaining to the overall distortions and wastage in capital allocation in China (Hsieh and Klenow 2009).

Effects of the RDA Regime on Fiscal and Social Stability

The Chinese Constitution does not recognize any private ownership of land. Article 10 of the PRC Constitution states:

> Land in the cities is owned by the state. Land in the rural and suburban areas is owned by collectives. . . . The state may, in

TABLE 5
Financial Development in China, 2001–11

	Domestic Credit to Private Sector (% of GDP)	Stock Market Capitalization (% of GDP)
2001	111.26	42.27
2002	118.85	34.42
2003	127.15	35.01
2004	120.09	34.88
2005	113.28	32.15
2006	110.73	59.74
2007	107.49	125.23
2008	103.69	110.05
2009	127.19	79.23
2010	129.50	83.71
2011	127.09	58.74

Source: World Bank, Global Financial Development Database (2013).

> the public interest, appropriate or requisition land for its use in accordance with the law, while making compensations. No organization or individual may appropriate, buy, sell or unlawfully transfer land in other ways. The right to the use of land may be transferred in accordance with the law.

This article implies that the ultimate control rights of collectively owned lands are also in the hands of the state. In fact, collective or individual peasants possess no legal rights to rent or sell land or houses to urban citizens.

State ownership of land implies the deprivation of citizen opportunities for investment, wealth, and income, as well as obstruction of development and growth of small and medium enterprises and the service industry. However, our focus in this article is the political and economic consequences of complete land ownership on the relationships between the central and local governments and between the government and the citizens, as well as how this relationship destabilizes the economy.

Since the 1994 fiscal reform, the share of local government revenue has decreased dramatically and steadily. However, the overall responsibilities of local governments in public service and their

TABLE 6
Distribution of Budgetary Expenditures by Government Level, 2007
(Percentage of Total)

Government Level	All Budgetary Expenditures	Education	Health
Central	23.0	5.5	1.7
Provinces	17.7	15.0	17.2
Municipalities	22.2	18.8	26.2
Counties-towns	37.1	60.7	54.9

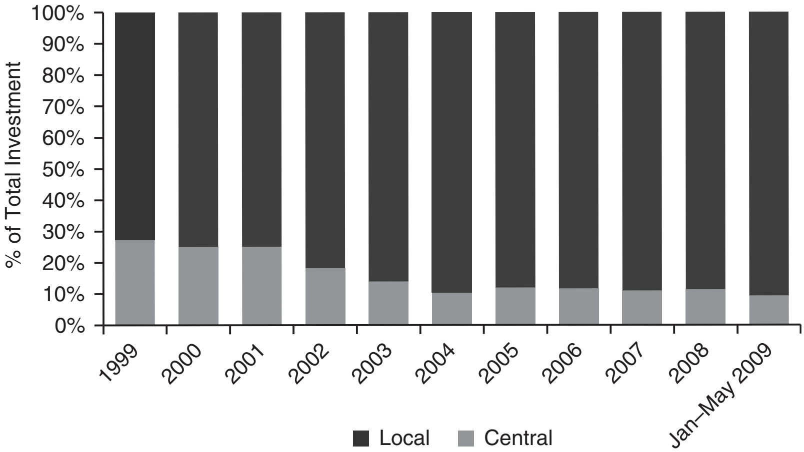
Source: Wong (2013).

expenditures remain unchanged. Table 6 shows that city and county governments provide most of the public services in China.[8] Local governments have assumed most of the responsibilities in infrastructure investments. The share of local governments' infrastructure expenditures has steadily increased from 72 percent in 1999 to more than 90 percent in 2009, as seen in Figure 7. Therefore, almost all of China's local governments are in deficit.

A local government will likely fail in regional competitions if its financial problems remain unresolved. One of the major purposes of opening up—that is, legitimizing the housing and land markets since 1998—is to solve the fiscal revenue problem of local governments. The central government requires local governments to solve fiscal problems by using the land within their respective jurisdictions, including selling and renting such lands. Thus, local governments become aggressive in taking away lands from peasants and urban citizens. Table 7 shows that the largest source of fiscal revenue for municipalities is land, which accounts for more than one-third of the total revenue, based on the national average. By comparison, gross transfers (i.e., revenues from the central government) account for only less than one-eighth of their total revenue.

[8]Table 6 shows only budgetary expenditures, which count for less than half of the total expenditures of local governments. If the nonbudgetary expenditures of local governments were included, their total expenditures would be significantly higher.

FIGURE 7
Central and Local Government Infrastructure Investments, 1999–2009



Source: CEIC, Credit Suisse estimates.

TABLE 7
Revenue Sources, Prefecture-Level Municipalities, 2010
(RMB, Billions)

Revenue Source	All Prefectural Cities	Percentage of Total
Ordinary Budget Revenues	1,296.38	29.9
Gross Transfers Including Tax Rebates	504.65	11.6
Land Revenues	1,513.72	34.9
Government Funds Excluding Land	174.82	4.0
Social Security Fund	847.04	19.5
Comprehensive Budget	4,336.61	100.0

Source: Wong (2013).

Under the RDA regime, local governments are allowed neither to issue debts in the market nor to borrow from banks. However, companies, particularly those backed up by governments, are allowed to borrow from banks and find borrowing easier than others. Under regional competitions and regional experimentations, some local governments invented the Urban Development Investment Corporation (UDIC) to use lands in their jurisdiction as collateral to borrow from banks. UDICs act on behalf of local governments and invest in infrastructure. Many local governments have implemented this "financial innovation" since 2004, and UDICs have become a substantial part of China's urbanization since 2009.

Local government borrowings from banks via UDICs have grown extremely rapidly, by about 20 percent per year over the last several years. The outstanding debts of local governments have gone from 15 trillion RMB in 2010 ($2.46 trillion) to 30 trillion RMB ($4.92 trillion) at year-end 2013, which is from 27 to 60 percent of GDP. These debts are closely related to the shadow-banking sector. For example, the total 2013 borrowings of local governments from shadow banking were more than twice that in 2012 (Casey 2013, Zhang 2014).

Many local governments fail to pay their debts because of investments in unproductive projects, such as luxury office buildings. Based on an investigation by the state auditor, 151 out of 223 UDICs run by 36 local governments resorted to new loans to pay for their previous debts (Casey 2013). Given that many of these debts are backed by land, the value of the collateral is likely wiped out when the land prices come down. The central government currently allows local governments to issue short-term debts to repay their matured debts. However, without institutional reforms to address the fundamental problems, with rapidly accumulating debts, and given the size and increasing rate of local government debts, the aforementioned method could create conditions that would lead to nationwide fiscal, financial, and other economic crises.

Instability related to the state ownership of land goes beyond financial and economic matters. The strong incentives of local governments to increase fiscal revenues by land conversion, which is legal under constitutional rules, have created conflicts with farmers. A large number of peasants substantially lose when their land is confiscated. The prevailing compensation principle, codified by the central government, is based on the land's value for crop production, not its market value in alternative uses. Government officials can change land use at any time using "forced demolition" (*qiangzhi chaiqian*) to obtain land from peasants for development and revenue. This process has led to numerous social conflicts in China. National legislators have discussed rules to reduce forced demolitions, but local governments retain the legal power to impose forced demolitions under the PRC Constitution provision for state ownership of land.

Conclusion: Institutional Reform Is the Key to China's Future

The land problem and the local debt problem discussed in this article illustrate serious incentive problems faced by China. The operation of the whole government bureaucracy faces fundamental challenges when the objective of the government is changed from growth to the "China Dream," which implies a large number of dimensions.

Facing multiple objectives, regional competition suffers from a serious race-to-the-bottom problem. Instead of a race to the top, required by regional competition, local governments compete in rent seeking and attempts to develop new financing approaches, which may undermine stability.

The rapid deceleration of the Chinese economy also is caused partly by failed incentives of local governments. One of the direct reasons for this decline involves the structural problems of the Chinese economy accumulated for more than a decade. Those problems include low and declining domestic demand (consumption) and household income as percentages of GDP, declining household savings as a percentage of total savings, and the strengthening trend of monopolistic powers of the state sector. In addition to these structural problems, the other institutional problems of China, such as entry barriers imposed on private firms, are also major contributing factors.

Regional competition and experimentation historically led to catastrophic disasters in the Great Leap Forward movement. Provinces, cities, and counties competed against each another, resulting in the distortion of information and chaos. Driven by regional competition, local governments experimented with the people's commune system, which the central government then endorsed and promoted nationwide. In this context, regional competition and experimentation resulted in a race to the bottom, with devastating disasters, including one of the greatest famines in human history.

There is a claim that the market-oriented reform plan passed during the Third Plenum of the CCP's 18th Congress in November 2013 is comparable to the reform launched in 1978. Market-oriented reforms, however, always face serious obstacles and resistance from special interests and existing institutions. Initiatives and efforts from subnational bureaucrats, therefore, are necessary to implement such reforms. Reforms can only occur when many local bureaucrats are highly motivated. There is nothing in the current reform program that addresses the incentive problems under the RDA regime.

If the incentive problems remain unresolved, reform is unlikely to occur. Resolving the incentive problems should be the most important reform target. In the RDA regime, most bureaucrats are only accountable to their superiors, not to citizens. In turn, their superiors have to rely on information obtained from local bureaucrats to conduct assessments. The RDA regime is the source of the problem and should be the major target of reform.

One of the biggest challenges for China's leaders is to limit the power of government by adhering to a genuine constitutionalism and rule of law. In addition, competitive local elections are the key to resolve bureaucratic incentive problems and to get rid of corrupt officials.

Despite its ranking as the second-largest economy in the world, China is still only at about the level of Japan in the 1950s in terms of distance to the world frontier. China is returning to its world status in the late 19th century but is far from becoming a developed economy (as measured by per capita income). World history since the Industrial Revolution indicates that no country will become a developed economy without the rule of law. In this regard, China is not and cannot be an exception. Serious socioeconomic problems in China further correspond to consequences of the RDA regime, in which the government controls land and other resources. However, no checks and balances, as well as separation of powers, are in effect to limit the power of government. For that reason, it is essential for China's future to establish the rule of law or what F. A. Hayek (1960) called "the constitution of liberty."

Replacing the RDA regime with one based on constitutional rules to confine the power of the government to the safeguarding of persons and property would protect citizens' rights and be the surest path toward a brighter future.

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