

The Business of K-12 Education in China

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Working Paper 22-022



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Funding for this research was provided in part by Harvard Business School.

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Abstract

This working paper examines the evolution of K-12 education in China, especially between 1985 and the present day, drawing extensive interviews with participants in the educational sector. China has been hugely successful in reaching almost 100 percent literacy, overcoming gender inequality in educational provision, and performing well in harmonized test scores. However, the model is not readily transferable to other emerging markets as it rested on a complex intermeshing of public and private interests seen in the “walking on two legs strategy.” This sanctioned the provision of K-12 education both by the Central Government and by “social forces,” including local governments, state-owned enterprises and the private sector. The paper describes how three different types of capital – political, financial and educational – became involved in the industry with their relative importance fluctuating over time. The resulting marketization of educational provision after 1985 led to excessive profit-driven strategies symbolized by heavy investments by the real estate sector in K-12 education. There were major quality issues, including in the vast private supplemental tutoring industry. The level of dysfunctionality was exacerbated by a rigid examination system in China that determined future life opportunities. The score in the *gaokao* examination determined which college a student could attend, which in turn fundamentally shaped their future careers. This encouraged parents to spend heavily on children’s education, which became a form of conspicuous consumption, often undertaken at the cost of the happiness of the children themselves. Since 2016, the Central Government has sought to address some of the major challenges through radical policy shifts. In 2021, it was ruled that core parts of tutoring company business had to be conducted on a non-profit basis. This caused stunning losses in value of leading Chinese private tutoring and edtech companies, who were listed in the United States. However in the absence of a modification of the *gaokao* system, it is unlikely that parental demand for educational services will decline, suggesting that new forms of excessive profit-making and dysfunctionality may arise going forward, despite the radical shifts in public policy.

Key Words: K-12 education, China, *gaokao* examinations, shadow education, supplemental tutoring; real estate.

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1 Introduction

This working paper examines the evolution of K-12 education in China, especially between 1985 and the present day. The correlation between education and economic and social development is well-established in economics, even if there is plenty of room for controversy about specifics.¹ Among economic and business historians, variations in educational levels are oft-cited explanations for why the West grew rich in the nineteenth century, and the rest of the world lagged behind. For example, Goldin has attributed American economic growth in the nineteenth century to the availability of free public education.² Conversely, the low educational levels of British India in the nineteenth and early twentieth centuries have been seen as a major constraint on that country's development.³ The educational challenges of most emerging markets have not gone away. In some countries widespread inadequacies in public education systems have encouraged extensive private sector interventions in educational systems. A recent study documented the extensive philanthropic investments in educational provision by businesses in Africa, Asia and Latin America.⁴

Within the context of emerging markets, the People's Republic of China – which has the world's largest educational system - appears an enormous success, at

least as measured by conventional metrics. When the People's Republic was established in 1949, it is often asserted that only about 20 per cent of the population was literate. However such a figure disguises major regional variations, and probably reflects a restrictive definition of literacy, as the numbers able to read something were likely much higher.⁵ Whatever the actual percentage in 1949, by 2000 literacy stood at 85 per cent. Today it is close to 100 per cent.⁶ The World Bank's Human Capital Index (2020) reports that a child who starts school at age 4 in China can expect to complete 13.1 years of school by her 18th birthday. China also made massive strides to reduce gender inequality in education. By the end of the twentieth century there were only small gender differences in enrollment and literacy in China. A RAND Corporation study in 2008 noted a huge contrast with India: in that year the female literacy rate in India was almost 40 percentage points lower than in China.⁷ Much has since improved in India since the Right to Education Act in 2009, yet India still has a problem educating girls. Perhaps 40 per cent of 15-18 year old girls are out of school, mostly because of the demands of housework and agricultural work.⁸ Meanwhile, the Chinese higher education sector has achieved remarkable advances in both quality and quantity. It now includes multiple world-class institutions.⁹

There are other measures of success. On the basis of harmonized test scores, students in China complete 13.1 years of school by age 18 and score 441 on a scale where 625 represents advanced attainment and 300 represents minimum attainment. The equivalent figures for India, the host of the world's second largest education system, are 11.1 and 399. The figures for leading African nations are lower still. In both Nigeria

and South Africa a child can expect to complete 10.2 years of school, whilst harmonized test scores are 309 and 343 respectively. In Brazil, the largest Latin American economy, a child can expect to spend 11.9 years at score and the harmonized test score is 413.¹⁰

These standardized metrics have considerable limitations, but it can be generally agreed that the era of the People's Republic witnessed achieved major success compared to most other emerging markets in terms of the numbers of people educated and the level of educational achievement. This working paper suggests that, broadly in accordance with much longer Chinese traditions, business was as much a driver of success as policy-makers, or to put it more exactly, the boundaries between public and private were deeply porous. The porous nature of these boundaries had a darker side which is harder to measure but very apparent. A prominent example was the private tutoring industry. While in China most children attend state schools – in contrast to only one-half in India – a vast private tutoring sector developed worth \$100 billion annually. Industry leaders such as TAL Education, New Oriental Education and Gaotu Techedu were listed in the United States. In order to circumvent restrictions on foreign ownership, these companies established so-called variable interest entities that involved established in a holding company in an offshore financial center such as the Cayman Islands, the British overseas territory in the Caribbean. These offered foreign investors dividends but not control.¹¹ This sector had some very negative features, eventually prompting a strong policy response in recent years.

Government policies began to tighten after 2016 in the context of President Xi Jinping's broader anti-corruption policies. Among the new regulations were the

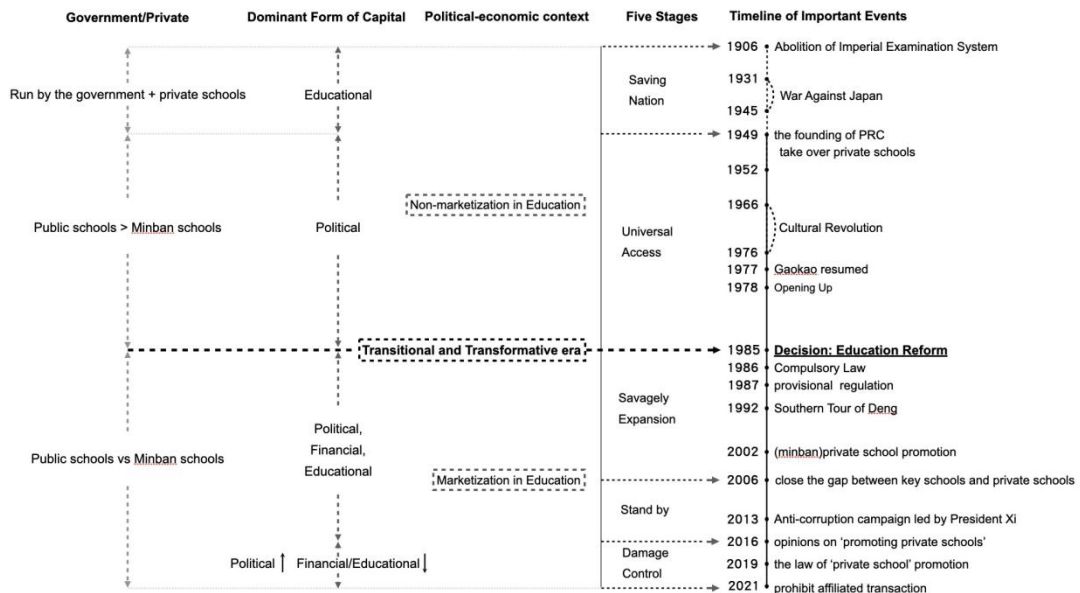
“Opinion on Promoting Private Schools” in 2016 and the Private School Promotion Law in 2019.¹² In March 2021, President Xi observed that this tutoring sector was “a chronic disease.”¹³ In the following May a directive on private education sought to reduce the private sectors role in the sector. The targets, which were not included in the policy itself, was to suppress private school share to 5 per cent at provincial level and 15 per cent at country level within provinces. In provinces such as Dongguan the existing ratio was a round 40 per cent, so this policy shift had huge potential consequences.¹⁴ In July, the government ruled that core parts of tutoring companies’ business could only be conducted on a non-profit basis, and ruled that they could no longer use offshore vehicles that enabled their shares to be traded abroad. The shares of TAL Education, New Oriental Education and Gaotu lost over 109 billion yuan (\$17 billion) in the space of a few days.¹⁵

This working paper positions recent major policy shifts on education in the context of a broader historical and systems-wide view of the Chinese educational system. The paper draws both on official reports and other published sources, and 45 semi-structured interviews with educational practitioners in China.¹⁶ These interviews permit a more nuanced view of the situation at ground level rather than the more typical reliance on macro-level data. Appendix 1 lists the names and occupations of people interviewed. Section 2 looks at the evolution of China’s strategy in K-12 education. Section 3 examines the different types of school which grew in China. Section 4 turns to negative consequences of the profit-driven nature of much of the system.

2 The Evolution of China's Strategy in K-12 Education

China's K-12 strategy experienced abrupt changes and reversals over the course of the twentieth century. Figure I summarizes the changes in the system over the following hundred years which will be discussed in the following sections. It identifies five major stages in the development of the education system and identifies the dominant type of school in each era. As explained later, the author's conceptualize three different types of capital active in the industry – political, financial and educational – and the figure shows how their relative importance changed over time.

Figure 1 Evolution of the Chinese educational system 1906-2021



Source: Authors research

2.1 Shifting Policies 1906-1985

China (like India) had an elitist tradition in education extending over more than two thousand years.¹⁷ State-provided education was focused on the imperial examination system, which lasted for thirteen centuries, and in particular the diffusion of core values to elites. The 1906 abolition of the imperial examination system in 1906 was thus a dramatic change.¹⁸ Significantly, the Qing dynasty collapsed in 1912, just a few short years after this abolition.¹⁹ In contrast, the state in Imperial largely left the provision of elementary education for most of the population to local communities, gentry, lineages and charities.²⁰

From the early twentieth century there was a transformation in attitudes and policies towards mass education. From 1904, the government sought to create a formal system of modern schools. These endeavors persisted after the formation of the Republic following the 1911 Revolution. An education system introduced in 1912 established four years of compulsory lower primary school for 6-10 year olds, after which a student could either enter a higher primary school (10-14 year olds) or a lower vocational school, secondary school, or higher vocational school (14-18 year olds). Co-education for boys and girls aged 6 to 10 was permitted for the first time. Lower primary schools could be established by several layers of government, including district, rural townships, towns and cities. Lower and higher primary schools could be established privately, and such private schools became widespread.²¹ During the interwar years, the educational system was buffeted by major challenges posed by civil war compounded by Japanese aggression after 1931. Insofar as there was still a functioning system, there was some investment in the K-12 education, often motivated by patriotic

concerns to save and strengthen the nation. Educators and foreign religious institutions contributed to private-sector education primarily through philanthropy.²²

The founding of the People's Republic of China in 1949 ended the era of turbulent military conflict. In the first three years after the founding of the People's Republic, the Central Government took over all the private schools, most of which were turned into public schools.²³ The new government continued the long tradition of prioritizing higher education, though, which was restructured with universities divided into specialized colleges, and there was a rapid growth in university students.²⁴ The government also sought to continue to expand basic education for the mass of the population. However, primary education experienced decline under the Great Leap Forward that began in 1958. Mao proposed that local governments and the private sector should be allowed to participate in education.²⁵ The adoption of simplified Chinese characters in 1965 is sometimes said to have boosted to literacy levels, but the era of the Cultural Revolution (1966–1976) saw much of China's educational infrastructure destroyed.²⁶

2.2 The Educational Reforms of 1985: Education Embraces the Market

The death of Mao and the rise of Deng Xiaoping began a process of the transformation of the Chinese economy and society. In 1978, the government launched a policy of “Opening Up” China. This policy shift had a significant impact on education as well as the economy. Academic standards were re-introduced. In 1977, the *gaokao* exams, suspended in 1966, were resumed.²⁷ In 1986, a compulsory nine year education

policy was adopted.²⁸

More broadly, there was a major shift at this time from a nonmarket educational system to a market educational system in 1985 with the “walking on two legs” (两条腿走路) policy. This phrase had been coined by Chairman Mao Zedong in 1956 in the context of a policy that China should pursue the simultaneous development of industry and agriculture.²⁹ In 1958, this concept was applied specifically to education in the context of the Great Leap Forward strategy, as Mao sought to eliminate illiteracy through expanding education.³⁰ However, the Great Leap Forward policy notoriously resulted in catastrophic disruption, including famine, and also greatly disrupted the educational sector. At an education conference in 1964, Mao picked up the “two-legs” concept again and suggested implementing two educational systems – one owned by the Central Government and the other by local governments and other entities - as a way to cope with the financial constraints at that time.³¹ The start of the Cultural Revolution in 1966, however, once more wholly disrupted the educational sector. The idea re-emerged in 1980, when the Central Committee of the Chinese Communist Party and the State Council elaborated: “Education cannot be wholly handled by the Central Government, so we must stick to “walking on two legs.” With the state as the main body, we should fully mobilize all aspects of running schools, such as collective teams, factories, and mining enterprises.”³²

The two legs were the Central Government and, basically, everything else in China, including local governments, state-owned enterprises, public service units and the private sector. It needs to be noted, however, that the two legs concept was slightly

misleading, as the Central Government retained ultimate control over the second leg. In 1987 the Central Government provisionally regulated what was described as social forces (社会力量)—the combined resources of local governments and the private sector.³³ During his famous Southern Tour in 1992, Deng Xiaoping supported uniting of local government resources and private resources.³⁴ In 2002, the Central Government also began promoting *minban* schools (民办学校). These were schools established by local governments using private-sector resources, and vice versa.³⁵

2.3 *Unintended Consequences of the 1985 Educational Reforms*

The original plan was that the second, non-Central Government leg envisaged by the 1985 Act would resolve the financial constraints on expanding the K-12 education system. According to the Ministry of Education, 4 percent of GDP has been allocated to education, while social forces added an extra 1 percent of GDP in 2014.³⁶ The overall expansion of educational provision indicated that walking on two legs strategy achieved its primary goal. However, there were unintended consequences arising from different incentives motivating the two legs. While the Central Government had a consistent, long-term, agenda to expand educational access, the second leg of Chinese educational policy – the so-called social forces - were more influenced by short term and financial considerations, sometimes to ensure organizational survival, and sometimes to simply earn a profit.

The upshot was a merging of the two legs, often around financial rather than educational development goals. Private schools evolved into *minban* schools.³⁷ Key schools (重点学校), that are public service units (for a definition, see below), founded

educational management groups and took charge of both public and *minban* schools. These *minban* schools borrowed prestigious school names and even poached teachers from public schools. They developed after-school programs that delivered high financial returns, and served as places to poach students and charge illegal school choice fees (校校). These developments posed challenges for the Central Government. In 2000, the UCLA educational professor John N. Hawkins contended that central leaders “remain conflicted over the need to maintain control while at the same time respond creatively to the needs of the new market economy.”³⁸

It is helpful to disaggregate the amorphous category of “social forces” which comprised the second leg. If degree of influence could be quantified, local government would be the most influential actor among the social forces. China has five major levels of administrative units: central, provincial, municipal, county, and town. Local governments play a huge role in education in China, but their efforts vary in different provinces and at different levels. There are 34 provincial administrative regions, including 23 provinces, 5 autonomous regions, and 4 municipalities directly under the Central Government, as well as 2 special administrative regions.³⁹ Even though local governments carry out assignments from the Central Government, they also have their own political agendas. According to several interviewees, GDP in the local government’s jurisdiction serves as the most crucial and often sole metric for evaluating the political performance of the local government and appraising local government leaders.⁴⁰

Public service units (事业单位), another important component of “social forces,”

are non-profit enterprises supported by and controlled by the Central Government. Around one-third are located in health, and one-half are in education. Overall there are 816,429 public service units in China.⁴¹ All public schools are public service units. In fact, more than half of public service units are public schools.⁴² They join with the non-governmental entities, providing them with a brand, management, and even sometimes offer shares to the public. All universities are also public service units – there are many private higher education institutions, but they lack graduate schools and research capabilities.

A section of state-owned enterprises provided another component of social forces. The State Council's State-Owned Assets Supervision and Administration Commission lists 96 central state-owned enterprises, while the National Bureau of Statistics claims that there are 266,434 ordinary state-owned enterprises⁴³. Central state-owned enterprises are enterprises at national level, the same level as the Ministry of Education and thus seek to serve the Central government's political agenda. In contrast, the lower-level ordinary state-owned enterprises, which form part of the social forces category, are diverse. Most are profit-driven. Since 2013, state-owned companies at the local level have invested in the education sector.

To understand how the two legs became entwined, this working paper proposes that there are three different types of capital were at work in the Chinese educational system. They can be conceived of as political, educational and financial capital. Political capital comprises political power, and it subdivides into political power wielded by the Central Government and at local government level. Educational

capital comprises educational resources (teachers and the like). There is public and private educational capital. Finally, there is financial capital, which can be broken down into public capital and private capital. The Central Government's leg employed both types of political capital, public financial capital from state-owned enterprises, and the public educational capital of public service units. The second leg relied on all the types of capital, except for central political capital.

The interactions of these different types of capital explain why outcomes became far more complex than the Central Government anticipated. Its expectation was that it would just need to supervise, guide, and exercise some political influence on the social forces. In the 2000s, the Central Government urged central state-owned enterprises to establish independent institutions (private colleges) that borrowed the names of prestigious public universities. Local political capital exerted influence on state-owned enterprises and public service units, and in some cases built campuses to invite public service units to establish new school branches, hoping to draw more population and raise land prices.⁴⁴

State-owned enterprises established public schools and in some cases *minban* schools. They also established and owned new-type schools (新型学校), a type of school run by the government which expanded greatly from 2016. Public service units, especially prestigious public schools, became extremely competitive and evolved into educational management groups, which borrowed the names of prestigious schools, owned shares in schools, and managed dozens of public schools and *minban* schools.⁴⁵

Meanwhile private financial capital also expanded in education, especially real estate investors. The real estate sector in China grew exponentially from the late 1980s. The Chinese constitution promulgated in 1988 and the Law of Land Administration of the People's Republic of China in the same year allowed the paid use of state-owned land. Real estate investors could not buy and own land, but they were able to pay to use the land for typically 70 years. Real estate investment rose from 5 per cent of China's GDP in 1995 to 12 per cent in 2019.⁴⁶ Fortunes were made, and some of the profits from real estate went into education. The Education Promotion Plan of Action for the 21st Century, approved in 1999, enabled more private investment in bachelor degree awarding institutions. This in turn increased the demand for K-12 educational provision, and encouraged more real estate investment in that. As of August 2021, 27 out of top 30 listed real estate groups were invested in education, according to their official websites.

According to the people interviewed for this project, there were four major reasons for real estate investors to invest in education. First, independent institutions-private colleges -and *minban* K-12 schools – were well integrated with policy makers, and so had experience exploiting and arbitrating regulatory rules.⁴⁷

Second, local governments urged, or even demanded, real estate companies to assign slices of land out of larger commercial pieces for educational purposes. The dual-relationship between the local government and Central Government is demonstrated by this pervasive practice. Local governments had to respond to the goal set by the Central government: universal access to education through expansion. However, they also

exploited every possible means to achieve their own political priorities.⁴⁸ The provision of good education facilities was a valuable tool to attract people to an area, driving up land prices and taxes. The impact of Social Forces do not end here. Real estate companies typically hired, and most of the time poached principals from prestigious public schools. The combination of private financial capital (provided by the real estate sector) and public educational capital (faculty mostly came from public schools) rendered the *Minban* school a unique type of school in China.⁴⁹

Thirdly, some real estate investment in education was driven purely by profit-seeking, accompanied by a desire to stimulate the values of affiliated commercial housing. School district housing is a term coined and advertised by the real estate sector, and also by local governments in some cases. Few of the real estate investors appear interested in education as such. The principals they appoint to run schools are more like managers, rather than educators.⁵⁰ These values appear to permeate through the system.⁵¹

Fourthly, an element of follow the leader behavior can be discerned. A number of real estate companies established profitable educational management groups when public policy was highly supportive, while others followed, “often opportunists with bad luck,” according to two interviewees.⁵²

The flood of real estate money into schools often resulted in tensions between investors and the heads of schools and colleges. Several interviewees identified conflict between the investors and principals.⁵³ In some cases, these heads sought profit for themselves--so called “small treasure”(小金库), which caused conflict

with the investors. In most cases, however, the problem was that investors were reluctant to make the investment necessary to increase quality levels, which caused tensions with the principals. Multiple interviewees maintained that there was a high turnover of principals, who often moved school every three years or less.⁵⁴

3 Four Types of Schools

For the purposes of analysis, we will classify schools in China as four types. They are “new schools” run by the government (‘新型’公☒学校), public schools (公立学校, *minban* schools (民☒)) and private schools (私立学校). As a starting point, it is evident that the broad political-economic context has impacted each types of schools. Thus purely private schools have had a hard time in China except between the 1900s and 1940s. The public schools and *minban* schools are the vehicles of the two legs of Chinese policy after 1986. The new schools run by the government are a unique type of schools serving the Central Government’s political agenda, but under supervision of local governments, in the form of governmental platform bodies--a special form of State-Owned Enterprises, and can be regarded as either public or *minban* school by parents. In any case, the political-economic context, the source of funding and the priority of investors can impact the nature and future of schools

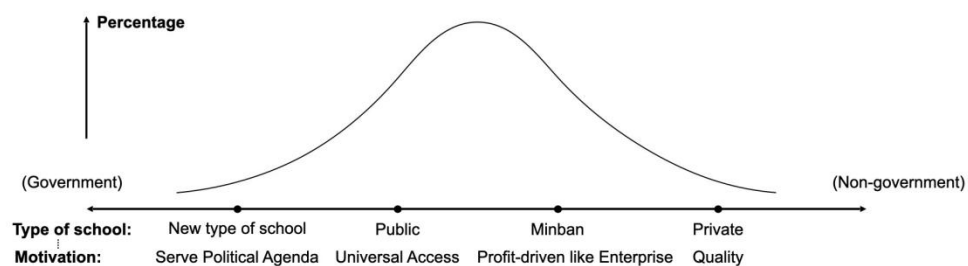
The ownership of the four types of school is both complex and varied. The new schools run by the government are majority held by State-Owned Enterprises. Public schools are held by Public Service Units. *Minban* schools are owned by a mixture of “social forces,” including local governments, State-owned Enterprises, Public Service

Units and the private sector. Finally, private schools are held within the private sectors.

The boundaries between these types of school are porous. For example, international schools should according to government definitions serve only the children of foreigners, whose parents work in China. Yet, there is a special type of in-campus international school serving Chinese students whose parents plan to send them abroad after K-12. This type of so-called international school is in reality affiliated to a public or *minban* school. Interestingly, the government itself classifies this type of international school as *minban* school. According to an independent report, there are 1309 of both sub-types of international schools in China.⁵⁵

Figure 2 depicts the relative importance of each type of school currently, and the relationship with the government in the present day, reflecting major policy changes since 2016. This is not based on quantitative data, but is merely an impressionistic diagram to illustrate the overall situation. Broadly, the public schools and the *minban* schools comprise the majority of schools. The private schools have been marginalized since 2016, while the schools run by the government has been rising in the same period.

Figure 2 Types of School in China and their estimated relative importance, 2021



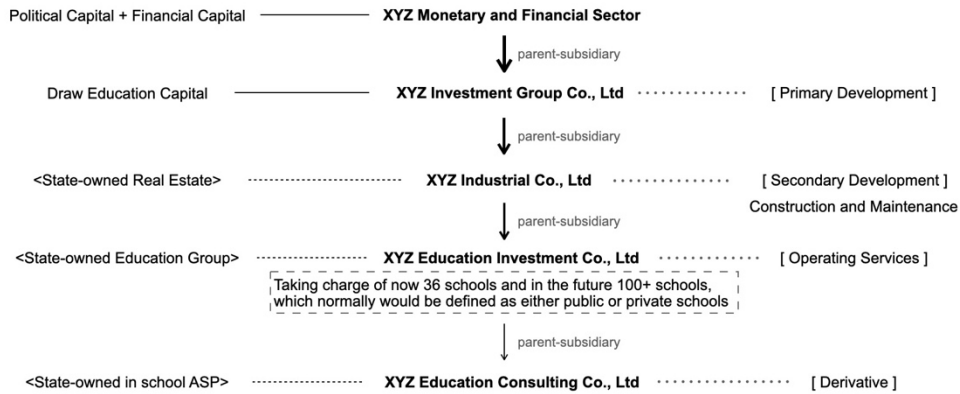
Source: Authors Research

The following sections briefly describe each type of school, and in particular their ownership structure and activities. It uses the cases of four real schools in Chengdu. The names of the schools and their investors are hidden.

3.1 *New Type of School* (‘新型’公办学校)⁵⁶

Fig 3 provides a diagrammatic representation of the shareholding structure of a new type of school that have expanded rapidly after 2016. Like the other example, it is based on a real life example in Chengdu.

3 Shareholding Structure of a New Type of School



Source: Qichacha 企查查 and Tianyancha 天眼查, accessed August 1 2021.

The ultimate owner, the XYZ Monetary and Financial Sector, is a unique type of local government body, which combines traditional monetary and financial activities. It wields, in the language of this working paper, vast political and financial capital. It controls a cascading order of other entities. The XYZ Investment Group is a mega government investment platform. The XYZ Industrial Co. is a state-owned real estate company building and maintaining schools. The XYZ Education Investment Co., the major management body of all the schools, is currently in charge, of 36 prestigious new schools. All the schools are labeled either new type of public school or new type of private schools. The XYZ Education Consulting Co., handles all of the derivative business opportunities, holding in-school after-school programs, field studies, and summer camps.⁵⁷

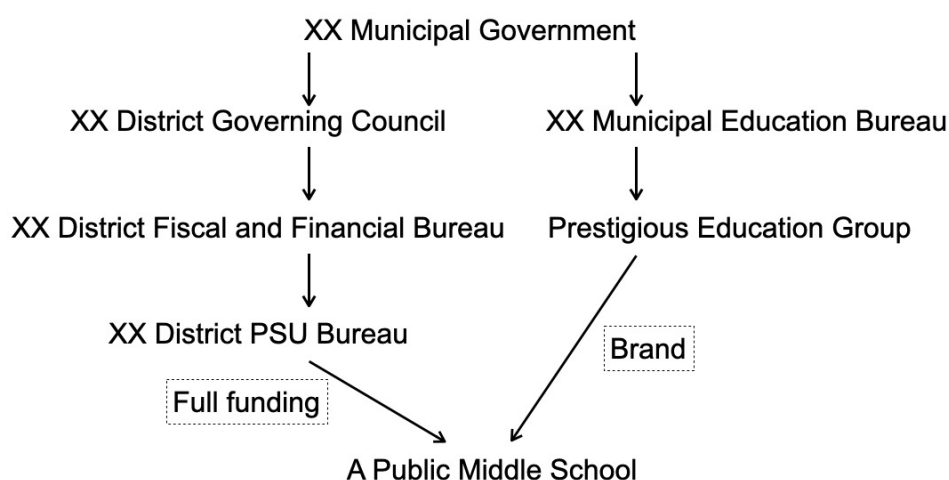
Although much remains unclear about the motivation behind the new type of

school, the policy appears broadly concerned to re-assert Central government authority over the educational system, as well as respond to some of the problems experienced by public schools and *minban* schools. The Central Government has also on occasion employed this type of school when it wanted to open up a region for development, as such schools drive up the value of land, and consequently have a positive impact on the government's coffers.⁵⁸

3.2 *Public schools*

Public schools date back to the Communist Revolution in 1949, when the Central Government took over the private sector. This type of school is funded by the government and managed by the Public Service Units--ranging from prestigious universities, such as Tsinghua University and Peking University, to rural schools. The public elementary and junior middle schools are free of tuition while public universities are not. Figure 4 provides a breakdown of the ownership structure of a public school in Chengdu.

Fig 4 Shareholding Structure of a Public School in Chengdu



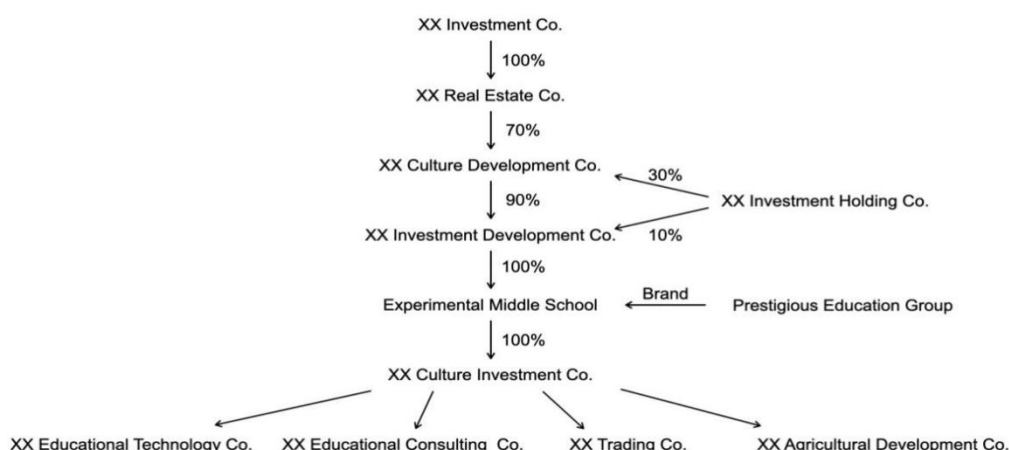
Source: Qichacha 企查查 and Tianyancha 天眼查, accessed August 1 2021.

As Figure 4 shows, public schools are under the authority of the local governments. An educational management group offers the brand, which attracts more enrollment and often supplies principals or staff to support a newly founded branch.

3.3 *Minban schools*

Minban schools, which share ownership between local governments and other social forces, are a product of the marketization of education after 1986. Fig 5 describes the ownership of a *minban* school in Chengdu.

Fig 5 Ownership Structure of a Minban School in Chengdu



Source: Qichacha 企查查 and Tianyancha 天眼查, accessed August 1 2021.

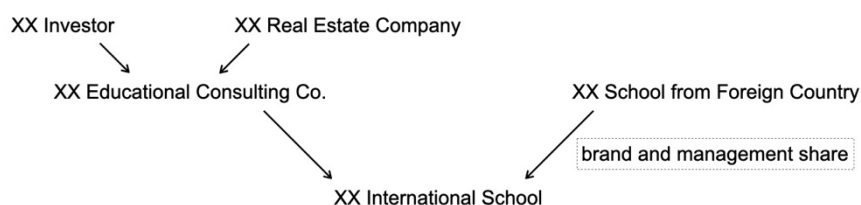
This *minban* middle school is funded by business, primarily real estate, but like public schools, has a link with a prestigious educational management group. Interestingly, this middle school was itself the owner of further educational institutions engaged in affiliated activities. The XX Educational Technology and the XX Educational Consulting provided after-school programs; the XX Trading owned and provided meals in a dining hall; and the XX Agricultural Development supplied food for the dining hall and provided opportunities for field study.

3.4 Private schools

Pure private schools, as opposed to *minban* schools, play a limited role in China, and they have declined in importance since 2016. They are almost all international schools whose pupils take British “A” Levels or US SAT rather than the Chinese *gaokao* exam. Figure 6 shows the ownership of one such private school in

Chengdu.

Figure 6 Ownership Structure of a Private School in Chengdu



Source: Qichacha 企查查 and Tianyancha 天眼查, accessed August 1 2021.

The funding for this school came from the real estate sector and a private investor, while the brand was acquired from a prominent British-based international school. This type of school aspires to offer a more quality education than public or *minban* schools. The tuition fee is high. This particular international school has an annual fee of 150,000 RMB. In comparison, the annual tuition fee for a *minban* school varies between 10,000 and 80,000 RMB. Public schools are free. However, parents are likely to pay a “school choice fee” (择校费) -- a fee used to bribe one’s way into a particular prestigious *minban* school or public school--can range from 10,000 to 500,000 RMB.

3.5 Shadow Education: After School Programs

All four types of schools are involved in After School Programs, although in different ways. Before the 1985 educational reform, public schools dominated. The 1980s promotion of “key schools” (重点中学) which were prestigious public schools

funded with most resources from the government, and widened social stratification.⁵⁹ The gap among schools and the growing desire for exam success by the middle class drove investment in After School Programs. However, after 2000 commercialization pressures led to growing distortions in the sector.

Rural schools – and hence half of China’s population - remained largely disconnected from the After School Program industry, since regulations could be more easily enforced in small towns, and there were far fewer parents able to pay large fees. Rural schools provide elementary level education, while the so-called center schools (中心校) – located in towns rather than villages - provide further level on a mass scale.⁶⁰ There was no need for these institutions to compete for students, and therefore no condition for After School Programs to compete. According to several interviewees, families and faculty regularly left these schools for cities once it was financially feasible.⁶¹

Public schools in the cities competed with each other to offer After School Programs, and later *minban* schools joined the game. By the 2000s, the After School Program industry had gone awry as families sought the very best for their children. There were cases when grade 4 students were sent to learn Mathematical Olympiad level math, regardless of their level of ability.⁶² The *minban* schools as well as some public schools took advantage of the system to gain high-performing students and make profits. Unlike teachers of *minban* schools, those in public schools were not allowed to teach in After School programs.⁶³ The upshot was that *minban* schools increasingly resembled business enterprises, seeking maximum financial returns, rather than

educational institutions. This represented a major deviation from the ambition of the Walking on Two Legs policy.

Although every *minban* school established an After School Program, it was the prestigious schools in tier-1 cities that were able to reap large financial rewards. There was anecdotal evidence that “school choice fees” could reach 500,000 RMB if parents wanted to get a child with poor academic performance into a top *minban* school in Chengdu.⁶⁴ Some *minban* schools even branded their After School Programs after the name of their school, but since the start of more intense regulation in 2016 - the practice subsequently became to set a proxy as major shareholder or outsource the program. Fees were charged in After School Programs to get students into desirable programs, and they also provided tests to judge student quality which *minban* and public schools were prohibited from providing. The programs were also used to poach high-performing students and capture school choice fees from less-performing students. The whole range of activity was in the shadows as their legal status was unclear.

4 Gaokao and Profits

The rigid examination system in China drives the demand for educational services and lies at the heart of the system dysfunctionality. The high school entrance examination determines access to high school, and the *gaokao* examination is the sole metric used in student recruiting to university. Attending a top university is a crucial career step. Many leading companies only employ students who graduate from top schools such as Tsinghua or Peking universities. The average *gaokao* score of each

school is used to assess the quality of education both in official evaluations and in the eyes of parents.

This has major implications. Schools compete with one another by focusing their efforts on improving *gaokao* scores. They poach students who they consider will raise the school's scores. Schools seek to attract high performance students, and avoid poorly performing ones. Frequently schools urge lower-performing students to transfer to inferior schools (more precisely, those with lower *gaokao* scores) or to vocational schools.⁶⁵ In some cases, schools would charge a school choice fee from lower-performing students, but then ask them to register for a degree in another inferior school, or even agree not to take the *gaokao* exam.⁶⁶

. The score-driven fundamentals of the system provide the underpinning for the many elements of rampant profit seeking. After-school programs poach quality students, and contribute to profit-making alongside the provision of student housing and meals, and school choice fees. There are cases of schools taking school choice fees in the form of donation, which may be very large.⁶⁷ Sometimes middle-men charge an extra amount, called a “tea fee” (茶水费). This involved a middle-man drinking tea with political and educational capital holders to negotiate entry of children into good schools.⁶⁸ In turn, prestigious schools with high *gaokao* scores drive up the costs of real estate in surrounding areas earning large profits for the real estate industry.

It can be seen that the primary aim of schools in this system as a whole became not to revolutionize pedagogy, or champion individual student development, but rather to game the *gaokao* system. Schools sought to increase the average score to impress

families, and so increase the opportunities for financial gains. Meanwhile families grew to treat prestigious schools as investments for their offspring to gain social status and access to the most desirable careers. Education became a form of conspicuous consumption. This reflected some deep-seated cultural assumptions about education as a path to wealth, but it was driven also by very practical career choices. The most favored careers, whether in senior government levels or the civil service based in Beijing or in banking and finance based in Shanghai, placed heavy emphasis on high *gaokao* performance and going to a top university are essential re-requisites.⁶⁹ Meanwhile, investors regarded education as an industry to deliver financial and not social returns. Schools pressured parents to take affiliated after-school programs: a way to improve average score and to make profits. The after-school programs can be constructive as an ancillary service providing individualized education to specific needs. However, the majority of after-school programs became in essence affiliated transactions.

The examination system, as a major and for majority the only upward channel, works to override other educational concerns. Vocational schools, separate from *gaokao*, are avoided as much as possible. This was not always the case. During the 1980s, there was considerable emphasis on vocational education, which increased from 18 per cent in 1980 to 45 per cent of secondary education in 1989. However, vocational enrollment began declining in the early 1990s.⁷⁰ In recent years, some vocational schools have even bought students from third parties at an estimated price of 5,000 RMB, according to one interviewee.⁷¹ Rural schools are not favored by either faculty and families, and

people who can, immigrate to cities whenever possible. In cities, K-12 serves the narrowly focused and rigid *gaokao* system rather than encouraging creativity and intellectual ambition. Schools and families both drive the system and are victims of it, while students are purely victims. In 2020, the detection rate of adolescent depression was 24.6%, according to Institute of psychology, Chinese Academy of Sciences.⁷² The comparative figure for the United States is 13 per cent, although definitional and other methodological issues mean these numbers should be treated merely as orders of magnitude.⁷³

The upshot of this system is the much-discussed phenomenon of “student weariness” (☒学症) widely observed in China. The anxiety of students to survive in the school system renders them vulnerable to twisted emotional cognition. Yet, psychological factors are marginalized in the score-driven context. Parents blindly pursue scores while spend little time working on the innate motivation: When parents find unsatisfactory scores, the pressure escalated. Anxieties transfer from parents to students, who would lose focus in studying because of emotional hijack. Losing focus worsens the already unsatisfactory score. A loop has been created. Given the fact that the school hours (including after-school programs) of students are daunting long – 7am to 11pm in some cases after Junior middle school– the vicious loop exerts tremendous and lasting pressure over students.

The desire of parents to avoid the stresses of the *gaokao* system may be one factor behind the growth in the number of Chinese students studying abroad. The number of students leaving the People’s Republic to study abroad increased from

39,000 in 2000 to 662,100 in 2018.⁷⁴ This still only represented 1 per cent of the number of students entering local universities, and clearly also was a product of growing wealth and major income inequality. However the growth of the number of undergraduates going abroad, which surpassed the number of graduate students in 2015, lends support to the theory that a desire to avoid the *gaokao* system is also a driver.⁷⁵

An obvious question is why the Central Government, which is so concerned to reduce the supply of private sector educational services such as the provision of tutoring and to relieve pressures on students, has not sought to radically reform the examination system. One explanation might be that the children of high officials are likely to benefit from *gaokao*, although in practice many chose to send their children abroad for higher education. However, there are likely deeper historical influences. The thousand year history of imperial examinations as the only route to advance based on meritocracy has likely deeply influenced the Chinese psyche. Moreover the abolition of private education following the founding of the People's Republic in 1949 ruled out a U.S.-style system of private universities setting their own admission criteria. This left a rigid examination system as the only workable – and fair – system.⁷⁶ The constraints on changing the examination system appear considerable, therefore, but without such a change, it is implausible to believe that parental demand for supplemental education will decline. More likely, it will simply flow into new channels and pathologies.

5 Conclusion

The education system in China might be seen as a role model for developing

countries, but the lessons for other countries are nuanced. In particular, the development of education was driven by a complex intermeshing of public and private interests, or in the language used here, political, financial and educational capital. This represented a longer tradition in the history of Chinese education. In addition, other key contextual characteristics of China - in particular the *gaokao* system and intense societal pressures on exam performance – both created a powerful market for profit-seeking opportunities, and delivered distinct downsides. Policy shifts by the Central Government in recent years reflected acknowledgment of some of these downsides, and have moved to address them.

These broad generalization needs qualification. First of all, the educational system has passed through several stages after the foundation of the People's Republic in 1949. Initially the government took over all private schools in the country. In 1964 Chairman Mao Zedong discussed “walking on two legs” by permitting a non-governmental sector to co-exist with the public sector. This policy was disrupted by the Cultural Revolution, but picked up again shortly after the new policy of liberalization was introduced. The “walking on two legs” strategy became fundamental to China achieving the rapid advances in literacy and human capital development over recent decades.

There were unintended consequences to the marketization of educational provision. The stratification among schools led to intense competition for students and faculty. The best public schools remained prestigious and favored by parents, but the higher salaries offered by private schools sometimes led to a drift of teachers and

principals to that sector. The best *minban* and private schools resorted to every conceivable means to bolster their reputations – or in the language of this paper, their educational capital - by attracting, even poaching, both faculty and high flying students. This introduced considerable dysfunctionality into the system.

An immediate cause of this dysfunctionality was the excessive profit-driven nature of much of the educational system. *Minban* and other schools received large investments by real estate companies, rather than by firms that have the provision of education as their primary goal. They benefitted from using the brand names of respected public schools. This also led to distortions, including exacerbating the impact on real estate prices of locations offering quality educational provision. This led to severe quality issues. Schools offered multiple ancillary services (such as meals) to enhance their revenue streams. The system can be seen as seeking rents from parents anxious to spend whatever money they have to see their child succeed in a system where the rigid examination system determined future life opportunities. In a society in which the education of children became a matter of conspicuous consumption, there was evidence of unproductive consumer behavior, including wealthy parents offering donations to favored schools to gain access.

There were particular distortions caused by the growth of a large system offering so-called shadow education. Although private supplemental tutoring was ubiquitous in East Asia, China became one of the countries in which the system was most widespread. Over four decades what was originally school-teachers' after-class home tuition grew into a sophisticated industry worth billions of US dollars. This

shadow education system developed multiple dysfunctional characteristics, including mis-selling, making false claims to offer discounts, false promises of guaranteed success, and offering cheap initial prices to attract parents only to raise them later. A further distortion was when shadow schools taught student's curriculum offered only the following year in public schools.

Although excessive profit-seeking was a major immediate cause of these various problems, this working paper has argued that there were underlying problems of the entire system. The rigid *gaokao* system drove parents to invest large sums in private and shadow education in the hope of gaming the system and getting their children into the best schools. The system also introduced further dysfunctions, including the focus of private and shadow schools on affluent urban areas where parents can afford to pay. The prestige of *gaokao* system also contributed to the low status of vocational schools. As employers only wanted to hire graduates from prestigious universities, vocational schools were left scrambling to attract able students.

The whole system had an unproductive impact on the ultimate consumers. Students were worn down by excessively and unimaginative teaching that made them “study weary.” Meanwhile parents were trapped in a mindset in which choosing schools was an act of conspicuous consumption. Their choices were motivated by considerations of brand rather than attempts to assess pedagogical excellence, let alone the happiness of their children. The *Economist* magazine described the phenomenon as an educational “arms race.” It also afflicted other East Asian economies with high-stakes exams, such as South Korea's *suneung* exam.⁷⁷

Since 2016, the Central Government in China has launched a series of regulations that have sought to re-establish ownership of the prestigious public brand in higher education and K-12 education, requiring schools to choose between profit and non-profit type, and banning affiliated transactions. Since 2018, the Central Government has also been providing more resources for vocational schools. There are plans to send 50 per cent of students graduating from junior middle school to vocational schools. These new regulations are shifting the balance between financial, political and educational capital. Financial capital, for example, moved from private education to shadow education in response to regulatory shifts, but this has now been radically curbed by further regulations. The July 2021 government ruling that core parts of tutoring companies' business could only be conducted on a non-profit basis, and forbidding the use of offshore vehicles that enabled their shares to be traded abroad, marked a further move in the government's desire to reverse the marketization of education. However, there were system-wide issues, including parental desires to maximize the achievements of their children, the *gaokao* examination system, and the deep entwining of the educational and real estate industries, which present major obstacles to change. More fundamental changes are likely to require broader solutions than shifts in Central Government policies to reset the public and private relationship in education.

Appendix 1: List of Interviewees

- 1) Chen Chunfa (Principle of Chengdu College of University of Electronic Science and Technology of China), April 19 2021
- 2) Li Quan (Director of foreign affairs center of Chengdu Education Bureau), April 16 2021
- 3) Yin Xiong (Chief of teaching and research section from the Jincheng College of Sichuan University), April 16 2021
- 4) Que Haibao (Principle of the Geely University of China), April 18 2021
- 5) Zhang Xiuhui (Director of teachers' development department of Chengdu Shishi junior middle school), April 15 2021
- 6) Li Qinfen (Director of Yingfei arts school), April 16 2021
- 7) Luo Shuang (Manager of Chengdu Touke Tech), April 16 2021
- 8) Chen Gang (Director of students development center of Chengdu No. 8 middle school), April 18 2021
- 9) Li Qiying (Director of land and Resources Bureau of Daxian County), April 17 2021
- 10) Chen Yanping (Director of students' development center of Chengdu No. 7 high school), April 25 2021
- 11) Zhao Yukun (Officer director of Center for positive psychology of Tsinghua University), April 24 2021
- 12) Guan Yamei (Chairman of Tongwei Group, a listed new energy company), April 24 2021

- 13) Tu Dacheng (Chairman of ZhengCheng Real estate), April 23 2021
- 14) Zhang Xinli (Principle of Aide experimental school), April 22 2021
- 15) Zhang Li (Principle of No.7 experimental school in Guang'an), April 22 2021
- 16) Jiang Na (Director of the personnel department of Jinchen College), April 20 2021
- 17) Xia Weihai (Vice-principle of Tianfu No.4 middle school, a new form of school), April 21 2021
- 18) Chen Xu (Director of Moral Education Department of Xinchuan middle school), April 21 2021
- 19) Li Yan, (Principle of Xichuanhui Jindu K-12 school), April 21 2021
- 20) Liu Qing (Office director of marine awareness education division of Tao Xingzhi Study Association of China), April 27 2021
- 21) Shi Simao (Teaching faculty at The Engineering and Technical College of Chengdu University of Technology), April 29 2021
- 22) Zhang Zhengqiong (Senior lecture of enterprise employee training division of Chengdu Aircraft Industrial (Group) Co., Ltd), April 30 2021
- 23) Ma Tianyong (Principle of Wanyuan No.1 elementary school), May 2 2021
- 24) Zhao Tianchong (A faculty of XiaoChaHuo rural center school and now severs in the local education department), May 6 2021
- 25) Luo Junqing (Vice-principle of Mahu town center school), May 6 2021
- 26) Luo Jun (Founder of the biggest kindergarten in Nanchong), May 7 2021
- 27) He Jiankang (Principle of La'er rural school), May 8 2021
- 28) Wei Yunxiao (Senior teacher of QingBei online education, a K-12 online company

founded by Bitedance, the owner of Tiktok),May 9 2021

29) Song Yonghua (Vice-principle of Xinchuan center school),May 13 2021

30) Li Yulie (Accountant of Center school of Baohua town),May 12 2021

31) Zhu Chuanping (Party secretary and principle of Rongxian vocational and Technical Education Center), May 13 2021

32) Guo Penglei (Team leader of team leader of Mint Reading),May 15 2021

33) He Yun (Staff of sichuan water conservancy vocational college and the founder of Chengdu Huayi Jinsha education company),May 16 2021

34) Li Mingyue (Chemistry teacher of New Oriental School in Hangzhou),May 16 2021

35) Zhang wanming,(General manager of Hongsheng Jiayuan real estate company),
May 17 2021

36) Xu Jian (Dean of studies of Chengdu Industry And Trade College),May 19 2021

37) Lu Daofu, (Principle of Sichuan Normal University Yibin experimental foreign languages school), May 21 2021

38) Zhou Kun (Director of Longxin education of sichuan-chongqing region),May 21
2021

39) G(anonymous),(Leading member of International Union of Societies for Biomaterials Science and Engineering,IUSBSE), May 21, 2021,

40) Sun Wei (Chairman of Chengdu Wuhou District Federation of industry and Commerce), May 21 2021

41) Chen Chaoqiong (General manager of Chengdu Tianfu Education Consulting Co., Ltd),May 25 2021

42) Liu Haoxing, (Teacher in charge of a class from Wei Ming K-12 school), May 26

2021

43) Peng shijun (Founder of Chengdu number 56 Edtech co.),May 27 2021

44) Fan Wenfeng (General secretary of the principle at the main campus of Chengdu

Jiaxiang Foreign Languages School),May 29 2021

45) Huang Pengxia (Chemistry Teacher of Beijing Chuangzhi road education

technology company), May 31 2021

The authors would like to thank William C. Kirby and Yi Wang, Executive Director for University Programs, Harvard Center Shanghai, for their extensive and enormously helpful comments on earlier drafts. We are also grateful to John Kim for sharing his case on K-12 education in China. John J-H Kim, Haibo Zhao, and Shu Lin, “Entrepreneurship and Innovation Trends in China, K-12,” *Harvard Business School Case No.9-320-022* (June 27, 2019).

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⁵³ Interviews with Chen Chunfa (Principle of Chengdu College of University of Electronic Science and Technology of China), April 19 2021; Que Haibao (Principle of the Geely University of China), April 18 2021; Zhang Li (Principle of No.7 experimental school in Guang'an), April 22 2021

⁵⁴ Interview with Zhang Xinli (Principle of Aide experimental school), April 22 2021; Chen Xu (Director of Moral Education Department of Xinchuan middle school), April 21 2021; Li Yan (Principle of Xichuanhui Jindu k12 school), April 21, 2021.

⁵⁵ 《2019年中国国际学校发展蓝皮书》艾瑞咨询 <2019 nian zhong guo guo ji xue xiao fa zhan lan pi shu> Ai rui zi xun (China International School Development Blue Book, 2019).

⁵⁶ This literally means a new school run by the public sector.

⁵⁷ The details of the ownership structures are derived from https://www.qcc.com/?utm_source=baidu&utm_medium=cpc&utm_term=查查企

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⁵⁸ 《优化生育政策·改善人口结构——国家卫生健康委有关负责人就实施三孩生育政策答记者问》·《人民日报》2021年6月1日。<You hua sheng yu zheng ce, gai shan ren kou jie gou——guo jia wei sheng jian kang wei you guan fu ze ren jiu shi shi san hai sheng yu zheng ce da ji zhe wen>, Ren min ri bao("Optimizing fertility policy and improving population structure -- relevant persons in charge of the National Health Commission answered reporters' questions on the implementation of the three child fertility policy", *People's Daily*, June 1, 2016, accessed through the academic portal of Peking University.

⁵⁹ 《全国重点中学工作会议提出：要集中力量办好一批重点中学》，《人民日报》1980年8月5日。教育部：不给学校下达升学指标、不举办重点学校 <Quan guo zhong dian zhong xue gong zuo hui yi: yao ji zhong li liang ban hao yi pi zhong dian zhong xue>, Ren min ri bao(The national key middle school work conference proposed that we should concentrate on running a number of key middle schools, *People's Daily*, August 5, 1980 <Jiao yu bu: bu gei xue xiao xia da sheng xue zhi biao、 bu ju ban zhong dian xue xiao>(Ministry of Education: do not issue enrollment indicators to schools and do not hold key schools).http://www.moe.gov.cn/fbh/live/2021/53013/mtbd/202103/t20210319_521001.html.

⁶⁰ Interviews with Song Yonghua (Vice-principle of Xinchuan center school), May 13 2021; Li Yulie (Accountant of Center school of Baohua town), May 12 2021

⁶¹ Interviews with Zhao Tianchong (A faculty of XiaoChaHuo rural center school and now severs in the local education department), May 6 2021; Luo Junqing (Vice-

principle of Mahu town center school).May 6 2021; He Jiankang (Principle of La'er rural school),May 8 2021; and Li Yulie (Accountant of Center School of Baohua town), 12 2021.

⁶² Interviews with Lu Daofu (Principle of Sichuan Normal University Yibin experimental foreign languages school), May 21, 2021 ; and Xia Weihai (Vice-principle of Tianfu No.4 middle school, a new form of school), April 21, 2021.

⁶³ Interview with Zhang Xiuhui (Director of teachers' development department of Chengdu Shishi junior middle school), April 15th 2021

⁶⁴ Interviews with Xia Weihai (Vice-principle of Tianfu No.4 middle school, a new form of school), April 21 2021; and Lu Daofu (Principle of Sichuan Normal University Yibin experimental foreign languages school),May 21, 2021.

⁶⁵ Interview with Chen Gang (Director of students development center of Chengdu No. 8 middle school), April 18, 2021.

⁶⁶ Interviews with Chen Gang (Director of students development center of Chengdu No. 8 middle school),April 18th 2021; and Li Quan (Director of foreign affairs center of Chengdu Education Bureau), April 16 2021.

⁶⁷ Interviews with Xia Weihai (Vice-principle of Tianfu No.4 middle school, a new form of school),April 21 2021.

⁶⁸ Interviews with Lu Daofu (Principle of Sichuan Normal University Yibin experimental foreign languages school),May 21, 2021.

⁶⁹ 海淀妈妈“上岸”记 <hai dian ma ma shang an ji> (the story of the mother from Haidian-- landing (of Gaogao)) <https://mp.weixin.qq.com/s/j-UX3KPamaZ8LyF5c6nzLQ>. accessed in August 1, 2021; 焦虑中产的教育争夺战

<jiao lv zhong chan de jiao yu zheng duo zhan> (the battle of education among anxious middle class) <https://mp.weixin.qq.com/s/wADHQUFk4UlpDzUtWmSqMw>. accessed in Aug 1

⁷⁰ Goldman, Kumar and Liu, “Education and the Asian Surge,” p.5.

⁷¹ Interview with Lu Daofu (Principle of Sichuan Normal University Yibin experimental foreign languages school), May 21 2021.

⁷² 《中国国民心理健康发展报告(2019-2020)》<zhong guo guo min xin li jian kang fa zan bao gao> (China national mental health development report (2019-2020))

⁷³ National Institute of Mental Health, “Major Depression,” <https://www.nimh.nih.gov/health/statistics/major-depression>, accessed August 30 2021.

⁷⁴ Bingqin Li, Qian Fang, and Li Sun, “Will Chinese students study abroad post-COVID-19?”(July 11, 2020), <https://www.eastasiaforum.org/2020/07/11/will-chinese-students-study-abroad-post-covid-19>, accessed October 8, 2021.

⁷⁵ The authors are grateful for Yi Wang’s insights on this matter.

⁷⁶ The authors are grateful for Yi Wang’s advice and guidance on this issue.

⁷⁷ “Free Exchange. Assume the positional,” *The Economist*, August 21-27, 2021.