Chapter 1

Let 10,000 Projects Bloom

> While our national government enjoys virtually unlimited credit, the initiators of urbanization projects, local governments, have little. Public faith in the economic success of governmental undertakings in the area of urban renewal and revitalization is not yet to the point that significant securities issues of pending or completed projects can be floated on capital markets.
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> —*Chen Yuan, governor of China Development Bank, on CDB Web site, 2005*

Loudi is one of countless cities with millions of inhabitants that few outside of China have ever heard of. Its economic mainstay is a state-owned steel mill that lost 2 billion yuan in 2010.[1] (One dollar is around 6.38 yuan.) Of course, it's booming. A two-hour drive west of the Hunan capital, Changsha, via a new expressway, its streets are lined with karaoke parlors and new apartment complexes featuring palm trees and pastel tones. One complex, called "Wealthy City," is surrounded by billboards showing pictures of Caucasian women strolling through shopping malls featuring brands like KFC and Microsoft.

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At the edge of the city on what used to be farmland is a brand-new, shiny 30,000-seat steel stadium and an aquatic center, where workers chisel out the Olympic rings by night-lights years after the event has ended in the capital more than 800 miles to the north. Loudi has had its own party: Land prices tripled in the city from 2007 to 2010, and a high-speed rail line will soon stop here. China Railway Construction Corp. mixes cement day and night to make that a reality. Sitting on top of it all and somehow mysteriously controlling the trigger, local government officials come and go in black Audis from an imposing compound that is complete with white-colonnaded façades and domed arches, nicknamed "the White House" by locals. The tinted windows don't show whether they're proud or worried: The whole country is on the move, and growth is the mantra.

Li Liguang, a young married man in a vest top with a hoarse laugh and short cropped hair, is the first generation to move off the farm in this hilly city where beans and rice are farmed. A subsistence farmer for most of his life, he's building a new house on the 750-square-foot plot of land the government gave him after taking his old land for the new stadium. He hauls bricks all day long to construction sites in his cobalt-blue East Wind truck. With all the new apartment complexes going up, there's enough work. At night, he settles down in his makeshift, tarpaulin-covered home that he shares with his wife, two children, and stooped grandmother, the only light in the surrounding darkness the gleaming work site across the road for the new sports complex. He has bigger dreams. Once he finishes the house, he hopes to rent part of it out to earn money to help pay the medical insurance that comes with being a new urban citizen. "After we were moved everyone had to depend on themselves to make money," Li said at a nearby restaurant, drinking a hot, fiery liquor one hot and humid summer night as fireworks celebrating a marriage lit up the sky in this city in the middle of Mao Zedong's home province of Hunan. "Without land we had to find our own work."

From Li's dreams and hundreds of millions more like it come the building blocks of China's economic miracle. The urbanization of the country is the secret sauce of its success. Until 2009, Li grew beans and rice on his almost half-acre of land and was happy to use whatever extra money he had to buy his favorite White Sand brand cigarettes. Now, instead of dealing with tens of yuan, he's thinking in units of tens of thousands, if not hundreds of thousands. Farmer Li has become *Homo economicus*.

Multiply Li's experience by 400 million and you begin to see why China's economy has not grown by a respectable 5 or 6 percent a year but at extraordinary rates, averaging about 9 percent a year for the last three decades. In 2011, China became a predominantly urban country for the first time in its 5,000-year history. The process of transforming farmers into city dwellers—maybe working construction, maybe at a factory—ignites an economic alchemy that adds about 3 percentage points a year to China's economic growth as people move from low-productivity agrarian jobs to high-productivity urban jobs.[2]

Li's experience also has a dark side. Although he has big ambitions, he really should have already arrived on Easy Street. Property records show that land he once farmed is worth millions of yuan, many times more than the 280,000 yuan he says his family of nine received in compensation when a city-owned company forced him to sell his land. Nationwide, at least 50 million farmers have lost their land as cities expand, often receiving a fraction of the fair market price.[3] It's a reversal of one of the core principles of the Communist Revolution, when Mao redistributed land from rich landlords to penniless peasants. Powerful local officials have snatched it back, sometimes violently, to make way for apartment blocks, bullet trains, malls, "development zones," and sports complexes in a building binge that has been financed by more than 10,000 so-called local-government financing vehicles (LGFVs; 地方融资平台), companies set up by local governments to allow them to spend beyond the limits of their budgets. These hidden and unregulated companies have been the unseen hand powering China's investment-led economic growth over the past decade, which has so impressed foreign visitors. No city, from the skyline of Shanghai to the western mega-city of Chongqing, has been without one, or sometimes handfuls, and they have been the main conduit through which the savings of the Chinese people have been channeled into investment and construction. But the result has led the state banking system to hold trillions of yuan of debt. Even the authorities don't know how much debt is out there. What does all this investment have to do with China Development Bank (CDB)? Everything. The bank invented the secret sauce.

The Wuhu Model

Deng Xiaoping, the short, squat, chain-smoking paramount leader of China in the early 1990s, decided that the country needed to accelerate growth and build momentum for reform just over a decade after China had started to open up its economy and as it faced international isolation for killing student demonstrators in Tiananmen Square. His famous southern tour to what would become the manufacturing heartlands of China urged local officials to "be bold" in tackling problems. Local governments spent wantonly on hotels, villas, golf courses, and stock market speculation, getting around difficulties in borrowing money by setting up trusts and selling bonds in Japanese yen overseas. A Bloomberg headline in 1995 summed up the mood: "China Says Central Governments in Order, Provinces Not."[4] In 1992, bank lending for investment grew by almost 50 percent, and two years later, inflation was over 20 percent. Local governments set up over 8,000 developmental zones, and by the end of 1992, there were over 12,000 real estate companies. Who could keep track of it all? Since branches of the central bank were under local control, getting approval for funds from the supplicant banking system wasn't difficult. China's Communist Party structure reaches right down to the county level, but local governments had started a long game of cat-and-mouse with central authorities.

The crackdown swiftly followed. Rampant inflation led China's financial czar and later premier Zhu Rongji to cut local governments off from direct borrowing in 1994, with a strict budget law that forbade them from running deficits or selling bonds. The central government would take the lion's share of tax revenue and transfer some of it to local governments; as one newspaper put it at the time: "The central government eats a rising loaf and the local government eats a stale loaf."[5] Local governments couldn't introduce their own taxes or change tax rates, yet they still had the same requirements to spend and provide infrastructure and services.

The reforms were in part political, based on centuries-old fears by the central government that it was losing control to the provinces, exacerbated by the collapse of the Soviet Union only three years earlier. China's central government had been losing its share of tax since 1978, with its share of revenue falling to less than 15 percent of gross domestic product (GDP). Central government revenues jumped in the years after

1994 as a result, while local governments saw their share of revenues fall from 78 percent in 1993 to 45 percent in 2002. The Japanese "samurai" bonds did not end well, and in 1998 and 1999, international investors were losing millions of dollars with the collapse of a local investment trust, Guangdong International Trade and Investment Company, in southern China. At the same time, banks were saddled with dud loans to state-owned companies that had also lent among themselves. The Asian financial crisis in 1998 that started in Thailand and spread throughout the region couldn't have come at a worse time.

For CDB, though, the Asian crisis was an opportunity. The founding of these special-purpose vehicles, which came to be known as local-government financing vehicles, or LGFVs, had its roots in the restrictions imposed on local governments. Just as in 2008, it required spending to stimulate the economy and China was entering its golden period of urbanization, but local governments were strapped for cash. Commercial banks were insolvent and being reformed to list overseas. The country was entering a fundamental change from a largely agricultural economy laced with Soviet-era heavy industry to the China you see today: the glitzy skyscrapers, expressways, ports, and apartment complexes. Gao Jian, who sports severe Germanic glasses and a full, vertically growing head of hair, is a Harvard-educated vice governor of CDB who is widely credited as the father of China's modern-day bond market. In a 2010 article[6] he pointed out that local governments had 30 percent of the country's tax intake, but they still needed to "eat" and to build, and their tax intake could cover only the basic eating part. They had no property tax, as municipalities in America have, and couldn't sell bonds directly or run a deficit. So CDB bankers headed to the Yangtze River city of Wuhu in Anhui—home province to then–vice president Hu Jintao—where they helped the city get around limits on direct borrowing set up only a few years earlier. As Gao explained in his essay, CDB was used to provide the "seed money" that no commercial bank would be willing to provide, transforming as if overnight the savings of the Chinese people into construction.[7] At that time in China, there were no sources of long-term funds. CDB, unique among Chinese banks, is and was financed by bonds instead of deposits, most with maturities of ten years or more that are bought by China's commercial banks. That, plus the backing of the state, gave it an advantage in funding long-term infrastructure projects.

The bank was simply "the best match" for LGFVs, Gao wrote. And after the chaos of the early 1990s, the central government needed and began to take control of China's economy.

The new urban focus in China in the late 1990s unleashed a wave of state capital boosted by growing Chinese savings. As commercial banks plowed this money into CDB bonds, the bank helped channel it into companies set up by another arm of the state, the local governments. In China, not only can local governments act like fiefdoms, they can act literally as companies. Given confidence by CDB, the commercial banks then piled in, too. The model was unique and relied on CDB's view of itself as creating markets—it was supposed to put local government funding on a market basis by setting up independent companies that could finance construction and raise funds, thus improving the credit and market discipline of the local government. But that discipline quickly broke down. The companies could be stuffed with whatever assets were needed: equity, land, stakes in local state-owned companies, and city banks. More assets meant more borrowing. Many assets benefited the public only: parks, hospitals, and schools. Since the assets generated no money themselves, local governments could provide subsidies to "beautify" the balance sheet, and companies could count it as profit. CDB's purpose was to create a market out of nothing: It could bring in the other commercial banks, private lenders such as trust companies, and set up myriad different companies handling different projects. China was growing, and the money stayed in the system. The model sounded good in theory: It would combine public benefit with capital market finance. It would turn fiscal revenue into equity. Bad projects even could be combined with good projects. Gao saw it as part of the evolution of the Chinese economy ever since it had started up reforms in 1978: "Since reform and opening, China's industrial focus has changed from heavy industry to light industry, and again from basic industries (coal, electricity), and so bank credit will also migrate," he wrote in 2010. "Urbanization has become the new main driving force of the new round of economic growth and bank credit will gradually shift to urban construction. Since public utility investment is led by the government, objectively speaking you need to set up local financing vehicles."[9]

But why would banks lend to companies with such weak credit and little history of earnings? Chen Yuan's overriding belief was in urbanization. "Urbanization is the most important and enduring motive force in stimulating consumption and investment in China's domestic economy today," he said in 2005.[10] And in 1998, Chen foresaw that the property market and urbanization would cause land prices to rise, according to Yu Xiangdong, a scholar at a CDB-affiliated think-tank in Shanghai who works closely with Chen and was influenced by the experience in Hong Kong and Singapore. Chen saw that China could stoke half a century of development with urbanization at its core, he said. The state had an advantage over the private sector: It owned all the land. Land revenues are also extrabudgetary revenue and don't have to be included on the central government's accounting of local budgets, meaning there is little oversight on its use. Local governments were sitting on one of the world's most valuable resources and didn't even have any oversight on what it did with it. While Shanghai had created a company to sell bonds in 1996, no one had worked out how to leverage that resource. CDB worked out how to leverage the future value of the land into large up-front loans, such as one it gave the port city of Tianjin in 2003. As more infrastructure was built, land values could only ever go up, as would housing prices. All the bank needed was to work with the local government to create a system that worked. And now was the chance: Between 1996 and 1997, as the Asian crisis started, spending on infrastructure in China doubled, and by 2002, it had risen by nearly three times, according to a book written by CDB and Renmin University.[11] So, too, did CDB's loans to the sector rise, from 226.9 billion yuan in 2003 to over 1 trillion yuan by the end of 2009, 28 percent of the whole market. China and local officials became addicted to investment. What was better than an ever-rising state-owned asset that could be used as collateral?

A photo shows Chen Yuan, the new head of CDB, wearing suspenders and a white shirt on a hot August night in 1998, four years after Zhu's reforms, clinking what looks like champagne with the then-governor of Anhui Province, Hui Liangyu. Wu Keming, who was the deputy mayor of Wuhu at the time, also played a key role. In the background is Chi Jianxin, who would later go on to run the bank's African investment fund. CDB provided 1.08 billion yuan in loans to Wuhu that year for urban infrastructure, and by the end of 2010, it had given 5.39 billion yuan. CDB executives put together a slide-show that featured how what they called the "Wuhu Model" managed to transform a sleepy city into a bustling metropolis that today is home to one of China's most prominent carmakers. The company, Chery Automobile Co., just happens to be owned by one of the first LGFVs. In Wuhu in 1998, a single platform designated by the government was used, the Wuhu Construction Investment Co., to mobilize land sales and bank loans to fund infrastructure investments. As Figure 1.1, taken directly from a CDB presentation, shows, land expropriation and the transfer of land rights are central to making the machine work, used for paying back the loan. "The city had land but no way to turn it into cash, so the government couldn't get money," researcher Yu says. "At that time, no one realized what Chen Yuan knew: that once the land price goes up, you have a second source of income." But the Wuhu government had also promised to use its future fiscal revenue to pay back the loan after ten years if it couldn't sell the land, he said.

Wuhu officials bypassed the central government for approval of their pioneering plan, turning to the local People's Congress—China's answer

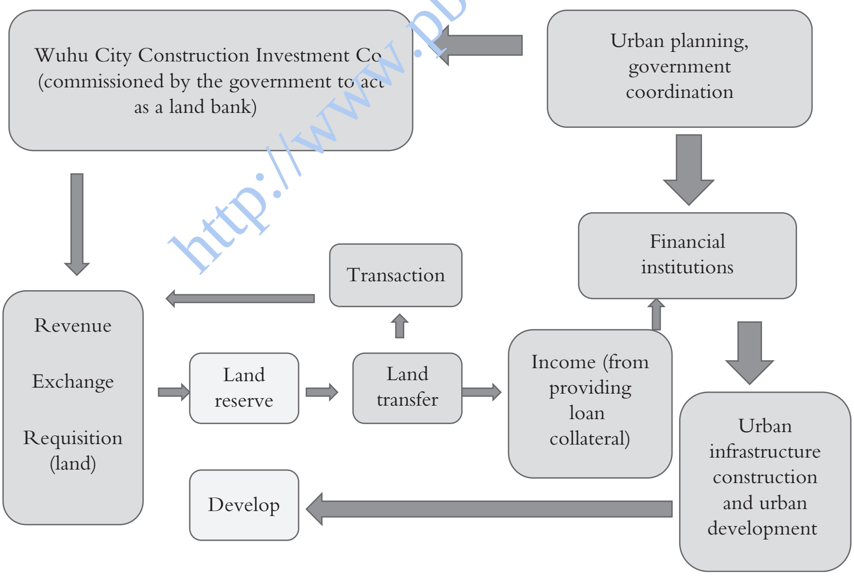

Figure 1.1 Wuhu Model Operating Method

Source: CDB slide on the Wuhu Model from June 20, 2008 (translated from Chinese).

to a town council—for approval. The city was greatly aided by Chen's prestige. As Chen and the Wuhu officials saw it, they were creating a virtuous cycle. Public works like roads would boost home prices, which in turn would boost land prices. Higher land prices would mean more local government income, hence more spending. CDB built Wuhu Construction into a giant; eventually its assets grew from 319 million to 21.4 billion yuan, and it bought equity stakes in 21 local companies, including Chery, which is now using CDB backing to expand into every corner of the developing world, from Africa to Latin America. "From then on, the Wuhu Model was extensively applied across the country," the bank's official history says, boosting urbanization, leaving a "precious legacy in the field of financing for urban infrastructure construction."[12] But what on earth had it started? CDB's lending to local governments did not crowd out other lenders of capital, as some say state-owned development banks can do. Instead, it sucked them all in. The model's success in Wuhu was replicated across the country, with CDB lending money to LGFVs in Shanghai (home to former president Jiang Zemin) and Tianjin (home to Premier Wen Jiabao) as well as the canal city of Suzhou. In the central city of Wuhan, it consolidated all the local government financing companies into one large company. Over 500 bond prospectuses, almost all of which contain details about bank loans and the history of LGFVs, paint the picture of CDB granting its seal of approval to a city through a loan. Getting a CDB loan was like obtaining the government's Good Housekeeping Seal of Approval. Then—like the Pied Piper—CDB loans led the ostensibly commercialized "big four" banks—Industrial & Commercial Bank of China, China Construction Bank, Bank of China, and Agricultural Bank of China—to make their own loans. The rest of the national banks and the local "city" banks followed suit. Every province in China—even Tibet—has now set up such companies to finance infrastructure investments.

The Chongqing Model

Long before Bo Xilai, the charismatic former Communist Party boss of Chongqing, became famous because of his wife's alleged murder of a

British citizen, Huang Qifan, a portly man with pockmarked cheeks, arrived in the hilly southwest city that sits aside a muddy stretch in the Yangtze in 2001 to be deputy mayor. He had previous experience creating the Pudong district in Shanghai, which had grown from a cabbage patch into the city's financial center, where now the towers of Bank of China, HSBC, and Citibank overlook the colonial Bund across the river. A keen talker and proponent of the city's reforms, his press conferences have been known to go on for hours. He was helped by the arrival of Huang Zhendong as Chongqing party secretary; Huang had moved from the position of transport minister, where he'd learned a thing or two about roads. But before they could start spending on infrastructure, they needed funds and to deal with the problem of the ailing state-owned companies that littered the city's landscape and were making huge losses but providing the bulk of employment. So they turned to CDB. In 2004, they set up Chongqing Yufu Asset Management Group, which would later become known as China's Temasek, after the Singaporean sovereign wealth fund. Yufu went on to take local bad loans off company books so that the companies didn't have to close, firing workers and not paying their pensions. No commercial bank would lend to the company to buy bad loans off another bank's books. But the company needed funding. Yufu took CDB funding to buy 15 billion yuan of bad assets off the Industrial and Commercial Bank of China Limited (ICBC), now the largest listed bank in the world.[13] The model, of course, involved land. Many of the bankrupt local state-owned companies had their factories on valuable city-center land; Yufu sold this land for them, moved them out to the suburbs, and used the money to buy their bad loans from ICBC. It was a perfect example of how the state could shift risk to help clean the balance sheets of state-owned companies and avoid the recognition of losses in the banking system.

CDB had done a similar move in Tianjin, where it had worked with the local government to eliminate 2 billion yuan of bad loans to automaker Tianjin FAW Xiali Automotive Co., which was almost bankrupt, transforming it in a decade into a company with a market capitalization of almost $2 billion in mid-2012. A commercial bank would have no way of resolving the problem, Chen said. But CDB was not a commercial bank. So it negotiated with the mayor and party secretary, proposing that CDB could lend 10 to 20 billion yuan to redevelop old parts of the city. CDB stepped up with the money, as long as the government got rid of the bad loan. After two years of efforts by the city, the bad loan disappeared. "The story stunned some foreign investment banks, but I told them it was possible in China," Chen said.[14]

In Chongqing, CDB sent an advisor from the bank to Yufu to help the company buy up nonperforming loans from local state-owned enterprises (SOEs). Yufu helped Chongqing Machinery, a local SOE, with a debt restructuring that would have made the financial alchemists in New York or London proud.[15] In 2003, the company was reporting 80 million yuan of losses; by 2005, it was recording profits of 200 million yuan. After itself having had its bad loans taken off its books by the state in 1999, as we will see in the next chapter, CDB was now helping Chongqing to do the same. It helped restructure a local bank, securities companies, and a rural credit cooperative. By 2008, Chongqing's state-owned companies had grown their assets some four times over, to 700 billion yuan. Yufu was an embodiment of the rise of the state in the city, and CDB had funded it.

While in the 1990s the city had borrowed in Japanese yen to finance expressways, LGFVs were the key to accessing China's growing domestic funds that were piling up in the nation's state-owned banks. The year after Huang had arrived, Chongqing set up eight LGFVs with the help of CDB funding. Its GDP grew by an average of 11 percent between 2001 and 2006, and infrastructure investment grew by 200 percent.[16] It was an unparalleled building boom. Now the city's hills are littered with new apartment blocks, its riverbanks are ringed with highways, and a metro system snakes along the tops of the hills. The huge number drew the World Bank's attention and made the city an early poster-child for this type of funding. The first funding source that the World Bank named in an article on the city's funding[17] was CDB soft loans, which accounted for the bulk of lending to the city's LGFVs. CDB accounted for 64 percent of loans to Chongqing Expressway Development Corporation, one of the largest such companies, which built the city's biggest motorways. Such companies could also set up endless subsidiaries and funnel money any which way they liked. By 2006, they had assets of 191.9 billion yuan, or 42.5 percent of the city's state-owned assets. Once the market became stronger, then this state-owned capital could gradually withdraw, the city's mayor, Huang, said in a March 2006 speech.[18] Yet that did not happen. By 2011, the city's financing vehicles had debts of over 157 billion yuan, as GDP growth that year reached 16.4 percent.[19] In May 2012, CDB and its chairman, Chen Yuan, pledged further funding for the city as it faced a political crisis: Its former party secretary had been suspended from the Politburo. Finding private capital would prove harder than first thought. The city was an emblem of China's investment-led state capitalism, a model based on bank lending that had been responsible for the lion's share of the country's extraordinary growth.

Cities like Wuhu, Tianjin, and Chongqing were pioneers in using the CDB-invented LGFV model. The system spread across the country, and came into its own in 2008 when it helped shield China from the worst effects of the global financial crisis, this time from across the Pacific Ocean from California's overindebted housing buyers.

Global Financial Crisis

The global financial crisis of 2008 made its way to China from the office towers of New York and the stucco homes of southern California with vicious speed. As the Chinese New Year dawned in February, the government put the number of jobless migrants at 20 million as demand for the exports they produced in coastal factories collapsed along with the US housing bubble fueled on home-equity loans. Many migrants would go home for the holidays and not return to their jobs. China faced the prospect of its exports falling off a cliff as the worst downturn since the Great Depression hit its biggest customer. The global financial titans were bleeding cash and would create $1 trillion of losses related to subprime debt, according to the International Monetary Fund.

On November 5, 2008, China announced a 4 trillion yuan stimulus, equivalent to 12.5 percent of 2008 GDP.[20] The news was broadcast around the world, with China receiving praise for its authoritarian decisiveness. But the central government would fund only 1.18 trillion yuan of the stimulus; where would all the other money come from, and where would it all go? Despite calling it a fiscal stimulus, China decided to fund its program through its state-owned banking system. CDB took center stage and provided a ready-made model to push Chinese growth back on track: the LGFVs. The secret sauce invented by CDB was about to help China sail through the global economic slowdown fomented by the financial crisis. While Goldman Sachs, Citigroup, and Lehman Brothers were all central to the financial crisis that paralyzed the United States in 2008, CDB showed why it was the world's most important bank. The relative advance of China as the big Western economies faltered put the nation in its strongest position in at least two centuries, back to the height of the Qing Dynasty, when the Qianlong emperor could spurn Lord George Macartney's 1793 mission and address Britain and the other European powers as lesser states.

Just as China spent its way out of the Asian financial crisis in the late 1990s, the CDB-fueled funding model served a similar purpose a decade later. The 10,000-odd LGFVs from the Russian border to the South China Sea would keep China afloat. Bank lending to the companies rose from 1.7 trillion yuan of outstanding loans at the beginning of 2008 to nearly 5 trillion just two years later.[21]

Local governments could not have been more willing beneficiaries. In China, there are only so many opportunities for free money, and this was one of them. Now, favorite local projects could be built. Within a month of the document's publication for the stimulus, 18 provinces had proposed projects with a total budget of 25 trillion yuan, over 80 percent of annual GDP.[22] The vast majority of the money did not go toward health and education or to households but to infrastructure projects and railways. Nationwide, fixed-asset investment grew 28.8 percent year on year in the first quarter of 2008. In particular, new urban construction projects nationwide rose 87.7 percent year on year, after declining 4.4 percent a year earlier.

In two years, 2009 and 2010, China increased its debt at the same speed that America did in the five years before the housing market bust in 2007.[23] By the end of 2010, local governments were strapped with 10.7 trillion yuan of debt, according to a national audit released in the summer of 2011, nearly a third of the country's GDP, and analysts were predicting nonperforming loan (NPL) rates at banks of over 10 percent or more for the major state-owned lenders, levels not seen since the days of the state-led bad loan binge in the late 1990s, when NPLs hit 25 percent in 1997.[24] Of that total 10.7 trillion, almost half was debts borrowed for new projects since 2009. To put that in perspective, China spends about 2.5 percent of its GDP on health, according to a World Bank and Development Research Center report. There were 360 companies backed by local governments when the World Bank did a survey in 2007; by the end of 2010, there were over 6,000, according to a national audit. The central bank estimated there were more than 10,000 such vehicles. The government's official debt had barely budged, but though few would admit it, no one had a clue how much debt was out there.

Since 1995, China's local government debt had risen fivefold compared to GDP, and more than 80 percent had gone to infrastructure. Like subprime debt in the United States, these off-balance-sheet vehicles have infected the balance sheets of all China's major banks. Local governments had cashed in and not worried about the consequences. As long as their GDP grew, they could be assured of a promotion. The problem was, now it needed to start providing some returns.[25]

The financing companies turned toward the bond market to make up for bank lending, and the CDB-conceived system of local finance has generated hundreds of Chinese-language bond prospectuses. They detail—some more than others—how at least 10.7 trillion yuan was borrowed on shaky or nonexistent collateral to companies that often have cash flows running at a trickle. Local officials knew that the central government would never stop the flow of credit once projects were started, and the bigger the debt, the more they would be helped. When investors turned to the bond market, they believed that the companies were backed by local governments and implicitly by the bureaucrats in Beijing, as did the ratings agencies, whose reports endlessly detail accounts of zero cash flow and little profit but AAA or AA ratings. Above all was the belief that as long as China's economy grew, there would be no problem. But most of all, in China, the state-owned banks are the biggest buyers of bonds, companies that they themselves lend to.

CDB's imprint on the companies is indelible. In the three years from 2009 to 2011, among 422 bond prospectuses issued by 341 LGFVs, some 147 said they had received bank loans from CDB, had CDB as their bond underwriter, or had their bonds guaranteed by a CDB-funded guarantor. In all, the 147 companies reported loans and lines of credit from CDB amounting to 928.6 billion yuan.[26] It is important to note that this is a very small subset of total LGFVs—as low as 3 percent of the total—and that many bond-issuing companies that disclosed they had loans from CDB didn't say how much they were. Disclosure in bond prospectuses in China—a Leninist authoritarian country where transparency is not a way of life—is spotty at best. The LGFVs that issue bonds are usually among the biggest in the country, such as provincial expressway companies.

One item few prospectuses omit: homage to CDB. Tianjin Binhai Construction and Investment Group, which was set up in 2005 in an agreement between the city and CDB, said it "relied on CDB from the outset." Huainan Urban Construction Investment Co. in Anhui, which won a 7.1 billion yuan loan from CDB at the beginning of 2008, said it relied on CDB loans to finance most of its projects. In Jiamusi, an Amur River city near the Russian border in Heilongjiang, a 2010 prospectus bragged that the local investment company, Jiamusi New Era Infrastructure Construction Investment Group Co., was "among the top 100 cities that get CDB support."[27] In the South, on the border with Myanmar, Yunnan Highway Development Investment Co.—more on them later—was created in 2006 through an agreement with CDB.

A Town Called Loudi

The stimulus had a profound effect in Loudi. It brought work for farmer Li Liguang, as the city boomed from government-funded infrastructure projects, including the stadium and the high-speed rail line. CDB underwrote the LGFV's 1.2 billion yuan bond sale in early 2011 with the bank listed first among a parade of lenders providing financing to the city. The LGFV, Loudi City Construction Investment Group, was set up in 2000 and injected with land and other assets to borrow money for construction. In 2009, the government gave it more assets than ever before: The company was incorporated with eight subsidiaries, including a tap-water company, a musty government-run hotel, and a series of construction companies. It was handed 20 percent of state-owned equity in a local gas company. All told, during the year of the stimulus, its assets increased by 50 percent, with landholdings increasing by 394 percent. Documents show that the highway into town was paid for by an expressway company using borrowed money, a lot of it. A June 2011 prospectus reveals that Hunan Provincial Expressway Construction Group had lines of credit with Chinese banks totaling 205.1 billion yuan. CDB led the pack with a 73.1 billion yuan credit line, followed by China Construction Bank, ICBC, and Bank of China, plus credit lines from many smaller banks. Debt is increasing at a much faster clip than toll collections, which come to 4 mao (6.2 cents) per kilometer for cars on the Changsha–Loudi expressway.

A stadium was paid for in part of the bond offering underwritten by CDB, plus bank borrowing. How would the company pay for all of this? The answer lay in land sales. Eighteen tracts of land valued at $1.5 million an acre were the collateral, according to a January 2011 prospectus. That's the price recently offered for an acre of land adjoining a private golf course on Indian Hill Road in Winnetka, Illinois, one of the wealthiest towns anywhere in the world. Average family income in Winnetka: $250,000 a year. In Loudi, average yearly take-home pay is $2,323. And yet the bond was rated AA by Beijing-based Dagong Global Credit Rating Co., one level higher than the same company rated US sovereign debt in 2012. The company that gave the land appraisal was in the same office as the city government's land bureau. "The income from selling land is a reliable guarantee for the timely payment of interest on this bond," the bond's prospectus said.

"The debt isn't a problem as Loudi is not a developed place," Yang Haibo, an official at Loudi City Construction, said as he sat with colleagues in a smoke-filled meeting room under a No Smoking sign one early June day. "It's an emerging city."

Loudi City Construction's debt has exploded, a story that is repeated across the country. Total liabilities have grown from 1.43 billion yuan at the end of 2007 to 3.02 billion yuan in the first half of 2010, according to the prospectus, even as the company bled money, posting negative operational cash flows every year, as shown in Figure 1.2. Yang is a small, gruff man, who carries his mobile phone in a leather case on his belt and has swept-over hair, as do many officials. After he tried to call the local propaganda bureau for permission to speak to a foreign reporter, he agreed to lunch in a busy new restaurant opposite his office, where he and his colleague were more interested in drinking beer than talking about how they would pay their debt. He said the company has around 800 million yuan in loans from CDB, or around a third of its

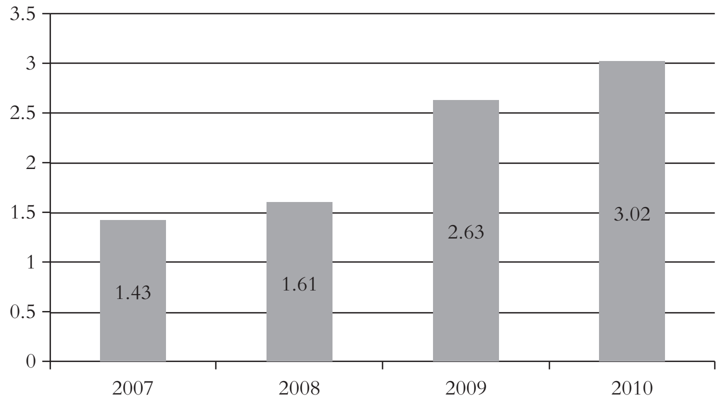

Figure 1.2 Loudi City Construction's Total Liabilities (billion yuan)
Source: Loudi City Bond Prospectus, January 2011.

total debt. Every year CDB invites him for training in the provincial capital of Changsha. "I know Chen Yuan, but I don't think he knows me," he said, laughing. "Their loan rate is much lower than other banks," Yang said.

Yang's office was in one of the most imposing buildings in town, next to a traffic circle where an ugly, twisted metal sculpture is supposed to be the logo for the money-losing state-owned steel company. But the prize was the local government office, which had been built right on the edge of town as far away from the population as possible, a trend popular in China as it leaves valuable city-center land available to sell. Looking like the US Capitol, it is known as the White House. Opening in 2006 at a cost of 500 million yuan,[28] its construction caused the Communist Party secretary of the day to be detained and charged with "sloppy management of city finances."[29] Hundreds of yards from the main entrance to the building, a small door has a gold plaque that says petitioners can be received there. Petitioning is a practice dating from imperial times by which people take their complaints either to local officials or directly to the capital. For the mandarins in Loudi, public infrastructure like the stadium may not be a great cash generator. The city has no major sports teams, few bands and pop singers ever put Loudi on their tour list, and swimmers at the pool pay 20 yuan every morning for a dip, 30 yuan if they're extravagant enough to swim in the afternoon. But in China, focusing on that kind of return on investment is missing the point. A stadium boosts the value of the surrounding land, and that means more money for the local government, which can sell that land to developers of apartment blocks. But first of all, the city needs to acquire that land and bring it into its control so it can count it as an asset, as most of it is classified as rural. That's where the farmers of Dawu enter the picture.

Li's Story

The rice-and-bean plot Li Liguang's family farmed for generations still lies empty, weeds sprouting from the red earth, just behind the stadium. It is surrounded on all sides by new pastel-colored apartment blocks. The land where the family lived was countryside until the city simply took it a few years ago. By rezoning the land as urban, officials could incorporate it into their development plan, which allows them to sell the land for a wider range of uses than agricultural, according to its bond prospectus. Villagers initially were relocated to the alleyway, where they built shanties with tarp and corrugated-tin roofs. The sports bureau took about 47 acres of land in Dawu and another village, issuing notices—and verbal threats—in 2006, saying the land was needed for the stadium. "They told us if we didn't move, they would send a lot of people to destroy our house," Li says. "If you didn't agree, they would detain you." The only bright notes in his new place are the red scrolls bearing the Chinese character for good fortune that adorn some front doors. The only beans the family grows now are cultivated by Li's mother on a 43-square-foot plot behind the temporary home, where the stench of a putrid bright-green stream hangs in the air. Stooped, with gray hair, she recalls the clear well water they had access to before that was so clean she could wash with it. Inside their home the only decoration is a calendar celebrating the sixtieth anniversary of the Communist Party victory and a bunch of yellow plastic flowers on top of an old television.

They are convinced that the city has sold the land to developers, even though they can't prove it. "They flattened the land and still haven't used it," Li, a wiry man, says as he sits inside his house, cradling his baby. "If the government gives you a million yuan to buy the land, only 80 percent will go to the farmers. And us ordinary folk don't know where the missing money's gone." Li said he didn't worry about feeding his family of nine—including his wife, first child, parents, and brother's family—in his old place, and he was able to pay for extras by selling vegetables a couple of times a month in the city and doing odd jobs. Now he makes about 100 yuan on a good day driving his beat-up, cobalt-blue East Wind truck hauling bricks to construction sites, wages that are almost all spent on groceries. "It was a reliable income," he says. "Before we had food to eat. Now if I don't work as a laborer we don't have anything."

Li's story is replicated across China, in a nationwide urbanization drive that economists credit with boosting China's productivity and sociologists and political scientists blame for widening the country's already yawning wealth and income gaps and fomenting unrest.[30] Nationwide, income for local governments from selling land-use rights totaled 7 trillion yuan from 2006 through 2010, according to China's Land Resource Bureau. In 2010 alone, local governments took in 2.7 trillion yuan by selling land rights of farmland for nonagricultural use.[31] A survey that Landesa, a Seattle-based nongovernmental organization, conducted with Beijing's Renmin University, found that 60 percent of China's farmers were not satisfied with their compensation.[32] Li has a farmer's fear of having no land for future generations. "The next generation will face bigger problems, as they have no land," he said.

While Zhu Rongji's 1994 reforms centralized tax collection, they perversely allowed local governments greater control over the usage rights of land, allowing them to keep all land-leasing revenues. This growing, valuable state-owned resource was now totally in the hands of local governments, and they had no obligation to publish their budgets to the public. As CDB has done overseas with oil, land-revenue streams can be used to secure loans, with the debt service paid off by land sales whose value has increased thanks to the infrastructure financed by the loans, meaning projects have to cover operating costs only. CDB has also been more innovative than other banks in finding means to collateralize loans, using many different local-government revenue streams. In Shanghai, it funded a river cleanup project using the drainage assessment charge from affected users of the river as collateral. As Chen Yuan said in 2005, "Unlike many commercial banks, CDB doesn't sit back and just review data when loan requests are presented."[33] Tying many projects together into packages backed by land as collateral, as CDB does in Africa, means that some projects can subsidize others. But relying on land to repay loans means the costs of kicking people off have to be kept lower than the market price.

Those costs are apparent in the village. The compensation that Dawu villagers say they received works out at about 6 percent of what the city was selling land for in 2008, a year after they were evicted. Dawu natives said they received 38,000 yuan per mu, a Chinese measure of land that is about one-sixth of an acre. That's less than half the average of 85,420 yuan the Loudi city government says it paid, according to a notice on the Web site of its State Land Resources Bureau. The land is worth many times even the higher figure. Loudi city in 2008 sold its land to developers for 600,000 yuan per mu, according to the bond prospectus. Around the stadium, land earmarked for high-rise apartment blocks can fetch 2 million yuan per mu, according to one real estate agent. At those prices, it would take Li 92 years to earn enough to buy back his still-vacant plot, based on his current wage rate.

China's LGFVs are the unseen hand that has created anger among citizens at widening inequality as the administration of President Hu Jintao and Premier Wen Jiabao strives to create a "harmonious society." A total of 60 percent of all large-scale protests in China are due to land grabs and compensation disputes.[34] Loudi is one of 186 local authorities, from Guangxi on the Vietnamese frontier in the south to Heilongjiang on the Russian border in the north, that issued bonds or short-term notes through financing vehicles in the first nine months of 2011. Some 105 of them said they engage in *chaiqian*, according to their prospectuses, a word that has come to mean the heavy weight of the state's hand when it takes away your home and tosses you out. Normally the character is painted in clear red on your wall. Across China, compensation given to farmers is at least 15 times lower than prices sold for development, according to Landesa. That way, local governments, through their LGFVs, can make payments on the bank loans and bond coupons that financed the stadiums, roads, and "White House." "Without suppressing land compensation, local governments can't make the margins to pay back the banks," says Victor Shih, the US scholar. "In essence, they [LGFVs] are the engines of inequality in China. Land development is the redistribution of income from average households to rich households."[35]

Zou Fuqiu is a short, stout man born in 1949, the year fellow Hunanese Mao Zedong proclaimed the founding of the People's Republic. Zou, as is the fashion for working-class men across China, rolls his white shirt up above his stomach to cool himself from the midsummer heat. He points to the remains of his house: clumps of stone and rubble 20 feet below the mud ridge that marks the end of the construction site. Zou says he got nothing at all when forced from his house in April 2010 to make way for the stadium. He moved 200 yards away and built a new place with his own hands amid the leftover bits of farmland where the farmers struggle to grow corn and beans in earth that has washed down from the construction site. The Zous were moved off of their land by a subsidiary of Loudi City Construction. In his dark, cinderblock home, where he has two old black-and-white photos of his parents in revolutionary jackets and a portrait of Chairman Mao, he talks about the day he got a strongly worded notice ordering him out. "My wife saw the notice and was terrified, she was in a panic so I comforted her to tell her it was scare tactics," Zou says, in a thick Hunanese accent. "They tore my house down without regard for where I would live, but they themselves live in high-class houses," he says of government officials.

There's more to come. Some 60 million farmers will be uprooted over the next two decades as China's urbanization gathers speed, according to an estimate by the Chinese Academy of Social Sciences in Beijing.[36] In many cases, officials take land they don't use, an August 2011 report from the academy said. The inequality in some cases has led to violence, far away from the confines of the state-banking system. That was certainly the case in Fuzhou, a city in Jiangxi Province, just to the east of Hunan. There, a land dispute with the government was central to a May 2011 bombing that killed three people. Qian Mingqi allegedly set off three blasts at or near government buildings in the city amid a dispute over compensation he had been offered in a resettlement, according to reports by the official Xinhua News Agency. Qian died in one of the explosions. He had been asking for more compensation after being resettled in 2002 to make way for a highway.

Three months before the bombings, Fuzhou's investment vehicle went to the country's bond market for the first time, raising 800 million yuan. In its prospectus, in which it said it received CDB loans, the company said its main business included construction, land development, and "resettlement."

"Manhattan" in China

The CDB-led stimulus-induced lending boom that spawned Loudi's stadium was supposed to slow down as China's economy recovered, which it quickly did as 2009 gave way to 2010. Instead, it's becoming increasingly clear that China is addicted to the infrastructure, capital-intensive growth perfected by CDB's Wuhu model. In 2011, the total debt reported by some 231 LGFVs that sold bonds that year rose by about 20 percent, according to a Bloomberg study of all bond prospectuses issued by the banks that year.[37] Nowhere is the Wuhu model being taken further and the promise of endless urbanization greater than in the city of Tianjin, where China is building a Manhattan.

Tianjin Binhai New Area Construction & Investment Group Co. is a creature of CDB. Tianjin itself is a Lebanon-size municipality of 13 million people and Binhai is its heavily industrialized port region on the Bohai Gulf, where ships appear to be sailing through fields amid the countless channels cutting through the land. It is there, within sight of the ruins of imperial-era forts stormed by French and British troops in 1860 during the Second Opium War, that Tianjin Binhai and other financing vehicles have embarked on what may be the most grandiose project in a nation of grandiose projects.

Two years ago, planners began leveling the old center of Tanggu—home to China's oldest railway station—to make way for China's version of Manhattan, complete with a Rockefeller family–invested building and office towers developed by New York real estate developer Tishman Speyer Properties LP. The East River and Hudson are there, too, with water bounding three sides of the planned financial center, which lies on an oxbow of the Hai River. So is Lincoln Center, which is advising the local government on setting up a new arts center in the development, called the Yujiapu Financial District.

Tianjin's history with CDB goes back to 2003, when the bank signed the biggest loan agreement in China at the time with the city's land bank, a loan of 50 billion yuan, which was later handed over to the financing vehicle. In 2003, CDB vice governor Yao Zhongmin held talks with newly arrived major Dai Xianglong, who had beaten out Chen for the top job at the central bank five years earlier. Yao proposed using revenue from land sales to guarantee the loans from CDB. The Tianjin delegation said CDB was too slow with a previous subway line. So Yao upped the stakes. He said quickly, "We can improve our efficiency." Dai asked how quickly they could do it. "One month, we can complete the appraisal in one month." Dai was very happy and promised to give any materials to CDB that they wanted.

CDB was the panacea that allowed expansion based on leverage. Before the bank turned up, Tianjin had been able to afford maintenance of its existing infrastructure only, not new building, according to a book on the case published by CDB and Renmin University.[38] From 1999 to 2003, Tianjin's average fiscal funds every year for city infrastructure were a measly 6.3 billion yuan, it said. Setting up the financing vehicle put the infrastructure funding on a "market basis." Under a new regulation, the land bank had the rights to sell the land in the central city and would pay back the proceeds straight into its account at Tianjin's CDB branch before being transferred to the city's account in the same bank. CDB could thus automatically take the money it was owed and could supervise the process of funds transfer. This model of capturing the resource directly is something CDB would use again when it made resource-backed loans later in Latin America and Africa. The loan was split into a 24 billion yuan soft loan and 26 billion yuan hard loan, with a total maturity of 15 years. For the first five years the city only had to pay back interest on the soft loan. The interest rate was 10 percent below the benchmark rate for the soft loan and 10 percent below the benchmark rate for the hard loan for the first five years: In total, it was 8 percent below normal loans at the time, according to the book.

The key was that Tianjin could use 15 years of land usage rights sales to secure the loan, both to act as collateral and as a source to pay back the funds. The city also had to promise to use its own infrastructure fund to pay back the money if land sales ran into difficulties. The bankers forecast that the land sales income would increase every year by 10 percent. That turned out to be a conservative bet: In reality, the income increased by 20 percent. By 2006, land income was 10.3 billion yuan, up from

2.4 billion yuan in 2004. By 2009, it was a different story: China Index Academy estimated the city's land sales revenue was 73.2 billion yuan, a 67 percent increase over 2008.

While the outbreak of severe acute respiratory syndrome (SARS) in 2003 in Beijing intervened and prevented Chen Yuan from visiting Tianjin to sign the deal, it was eventually signed in June of that year. The original loan contract was signed with the city's land bank; in 2004, the city set up an LGFV with four subsidiaries to handle the different projects, including two subway lines, greening of the city, and riverside infrastructure development. The importance of land as collateral acted in the same way that CDB would use oil overseas in Africa and Asia. The income from the subway, the book notes, only needed to cover operating costs; it doesn't need to pay back the loan. The money to pay back the loan for all the projects will nearly all come from government income from selling land rights. The investment that CDB started helped bring in the property developers, too: The riverside construction project saw 10 billion yuan of investment in infrastructure but drew a total of 80 or more billion yuan of property construction, according to the book.

Yet there's a point where ambition and enthusiasm becomes recklessness and hubris, and Tianjin may have crossed that line. There's no better place to witness the physical manifestation of hubris than Yujiapu, Tianjin's planned Manhattan.

There, Xu Fei, an official at the Tianjin Binhai New Area Central Business District, stands in front of a brightly lit model of the future city, and says the total planned investment in the project, plus parks, residential towers, and the twin city across the river called Conch Bay, is 200 billion yuan. The first phase opens up in 2013 with the inauguration of a high-speed rail station. Both cities are under construction simultaneously, with 14 of a planned 122 buildings being erected in Yujiapu, plus all 48 of the planned Conch Bay skyscrapers as of the end of 2011. Construction cranes crowd the field of vision on both sides of the river, and thousands of workers are teeming about the work sites. The cities will be serviced by five subway lines, Xu says.

The area is meant to attract banks, brokerages, and other investment companies, with a planned 164 million square feet of office space for Yujiapu and Conch Bay. That's more than one-third of the 450 million square feet in Manhattan, a city that took more than three centuries of organic growth to build out its skyline. That includes a 1,930-foot-high tower, taller than the 1,770-foot-high 1 World Trade Center currently under construction in the real Manhattan. Tianjin officials are employing the philosophy of the 1989 movie, *Field of Dreams*: If you build it, they will come.

Tianjin isn't headquarters to a world-class bank, let alone a leading Chinese bank that could occupy those offices, as Goldman Sachs, Citigroup, and J.P. Morgan Chase fill Manhattan buildings. Xu mentions local banks Tianjin Rural Commercial Bank and Bohai Bank—minnows in the world of Chinese banking, let alone global banking—as future tenants. Yujiapu also must compete with financial centers in Tianjin proper, which is building one of the world's tallest buildings, and Beijing, with its own financial district and another one under construction. "It's a difficult question to answer," Xu says when asked what companies will fill up the new city.

Xu says the buildings in Yujiapu are all being occupied by state-owned companies, including a steel company and a mining company turned real estate developer that is putting the finishing touches on Tianjin's answer to Rockefeller Center. Asked if any private companies were setting up shop there, she pointed to a hotel. A giant billboard in Conch City—red background with white characters—quotes Chinese president Hu Jintao, who visited the area in April 2011, as saying "Put all your strength into storming the fort to win the battle of developing and opening the Binhai New Area, work hard to become the lead soldiers in the battle to realize scientific development." Not words you'd find in Adam Smith's *Wealth of Nations*.

To build Yujiapu, Tianjin officials are piling onto borrowing that was already half a trillion yuan by the end of 2011—equivalent to half the annual per-capita income of the city's 13 million people. More than 5,000 people were moved out of the area starting in 2008 to make way for the project, among the millions nationwide evicted from homes to make way for China's urbanization projects. Tianjin Binhai New Area Construction & Investment Group Co. sold 10 billion yuan worth of bonds in December 2011, earmarking 1 billion yuan from the sale to fund the construction of the district's transport hub, which includes a high-speed rail line that will cut travel time to Beijing to 45 minutes. In the first half of that year, its debt, mostly from bank loans and led by

CDB, rose 11.9 percent from the end of 2010 to 71 billion yuan, according to a bond prospectus. To finish all the projects, more money is needed, said Tianjin's vice mayor, Cui Jindu.

In 2011, Yujiapu was the most indebted LGFV in the country to disclose its finances. Not only are Tianjin's debts rising, but its ability to pay them through land sales—the foundation of CDB's Wuhu model—is vulnerable to downturns in the real estate market, such as one that hit in 2011 as the government put curbs on home buying and revenues from government-run land sales plummeted. Land provided 41 percent of the city's income in 2009, according to the China Index Academy. "Our local-government backed financing vehicles in Tianjin have no risk," Tianjin's mayor, Huang Xingguo, said during a meeting at China's National People's Congress in 2011. "CDB has given a lot of support to Tianjin. We are very thankful." Sounding a confident note in the hot stuffy room full of journalists, he put the total amount of CDB loans at around 80 billion yuan and said Tianjin's property prices are controllable.

Credit Risk in a One-Party State

In China, no bond has ever publicly defaulted, making investment in local governments akin to a one-way bet. Even though the cities and counties turned to the bond market, fulfilling Chen Yuan's belief in shifting infrastructure investment to a market-based system, banks and ratings agencies overlooked details on collateral and cash flow, believing in the backstop of the local government. With ever-rising land and property prices, there was little incentive for transparency. When CDB lent to an LGFV this, too, acted like a "credit guarantee" from the center, further reducing the need for investors to look at details of collateral or credit risks. At the bottom were the LGFV assets, often in the form of land. Over the last decade local governments have strengthened their control over land, one of their only sources of revenue, in an effort to trap some of its rising value, making sure all land is sold through local government Land Resource Centers. And in many cases, the company that values the land is in the same office as the city's state land bureau, as is the case in Loudi. Once the LGFV could be dressed up with land assets or subsidies for bond issuance, investors like the state-owned banks could buy the bonds. In turn, the bonds could be packaged into so-called wealth-management products, high-yielding short-term investments that banks could sell to clients, offerings that have boomed in China over the last few years as depositors seek to beat inflation.[39] Having got the stamp of approval for selling a bond, LGFVs could then guarantee credit and borrowing for other LGFVs from the same area, so they, too, could join in. In theory, the companies should have a record of three years of profit and outstanding bonds to net assets of below 40 percent to sell debt in China. But who has been in charge of approving these bond deals? Most LGFV bonds have been approved by the powerful economic planning agency, the National Development and Reform Commission. Among other jobs, it also approves China's investment projects, from power stations to highways. So why would it deny funding to its own projects? Was the market really providing any checks and balances?

In the smoky port of Huanghua, the answer is a firm *no*.

The city occupies a tiny slice of Hebei Province wedged between Tianjin and the border with Shandong Province. Somewhere out in the salt marshes is the collateral for Hebei Bohai Investment Co.'s bond. Hebei Bohai is in the business of expanding a port where one really isn't needed. New port terminals line the Bohai Gulf, especially in neighboring Tianjin, the biggest port in north China. Huanghua Port is the terminus for state-owned China Shenhua Energy Co.'s coal railroad. Hebei Bohai is helping to build the port and is majority owner in the marine fuel services company. Stacks of what look like massive concrete jacks, the building blocks for marine jetties, litter the ground on the side of the dirt road leading out to one of the piers. Shenhua's facility is something out of Dante's *Inferno*. More than a dozen smokestacks belch soot into the air. The land seems to just give up, eventually becoming the heavily polluted Bohai Gulf.

The city has seen the mega-port projects and grandiose infrastructure plans of its northern neighbor and has collectively cried out "Me, too!" CDB made it possible. Tianjin at least has an existing port—and an industrial base that includes some of China's biggest steelmakers. That's not the case in Huanghua, a place dominated by smokestacks of a coal-receiving station and surrounded by desolate, drained marshes studded with piles of salt. There the LGFV cannot even identify the land collateral it uses to borrow money on the bond market. Its LGFV, tasked with expanding the port and building roads, parks, and other "green projects," sold 1 billion yuan worth of bonds in May 2011 guaranteed by five tracts of land the company says is valued at more than 1.54 billion yuan, or 462 yuan per square meter. That's more than three times what it paid the local government in December 2009, according to the company's land use permits. Its debt surged during the 2009–2010 stimulus and CDB gave Hebei Bohai a 5.6 billion yuan line of credit in 2007. Other banks lending to the company include ICBC, China Construction Bank, and Bank of Communications. The company's debt is so big that it swamps the local government's total revenue. According to the bond prospectus, Hebei Bohai borrowed 5.08 billion yuan in 2010 alone, a sum almost equal to total local government revenue. The company's debt is equal to about one-third of the local GDP.

Go across town to ask Lu Chunjiang, a Communist Party member and head of the company's asset management department, where his assets are, however, and he can't say. The local state land office (国土资源局) at first was unhelpful when we asked to see the land transaction records identified in the prospectus. Workers eventually gave us more details on the plots than were available in the prospectus, providing cross streets, purchase prices, and lot sizes. "I don't know where that land is exactly," Lu told us when we dropped by, unannounced and uninvited, to his office. "Somewhere north of town. But it is land just like you saw driving into the port area, you know, the fields with the piles of salt."

Some LGFVs even managed to borrow without any collateral at all. That's the case in Yichun, a Maryland-size area of about 1.3 million people. The city raised 1.2 billion yuan through a bond sale in 2009 offering investors a yield of over 7 percent, at the peak of the stimulus. Yichun is a poor city in a poor province. Income of its residents was little more than half the national average in 2010. That hasn't stopped the government from going on a spending spree. The new local police headquarters has a miniature dome reminiscent of that on the Vatican's St. Peter's Basilica. Its LGFV, which gets CDB bank loans, sold the bond backed only by a pledge from the local government and possible future land sales. China International Capital Corporation gave it the lowest debt rating of any city financing vehicle. In contrast, Dagong rates the bonds two levels higher than US debt. Money raised from the sale is being used for the destruction of what the prospectus calls "shantytowns."

Single-floor traditional Russian-looking wooden homes in the valley are being demolished to make way for thousands of low-income apartments. The company also has financed a new reservoir, an airport terminal, and parklands, one featuring faux Corinthian columns topped by winged warrior princesses and bronze sculptures of chariot-riding local gods. Wang Zhongbing, a retired factory worker who spends summer days chatting with friends in a park next to the Yichun River, says the economic development is passing his family by. Only one of his three adult sons has a job, he says. He came to Yichun in 1962 when he was 28 years old to work in a state-run factory.

"I miss Chairman Mao," says Wang, sitting on a red plastic chair in front of a billboard for newly built Pinaster Town, featuring a picture of a woman in high heels stepping out of a Rolls-Royce. "The common people cannot afford these houses." Wang says the advertisement doesn't give an accurate picture of Yichun, which, like much of northeastern China, was hit by layoffs at its state factories in the 1990s and never fully recovered. His own work unit closed.

The Yichun financing vehicle, which supplies the city's heat and therefore has a guaranteed source of income in a place where temperatures are below freezing for much of the year, would have lost money every year from 2006 to 2008 except for direct government subsidies. Its prospectus promised that land from the city "will provide a more substantial cash flow." Two years on, that hasn't come to pass, according to Wu Liangguo, the head of the Yichun City Bureau of Land and Resources and its Communist Party secretary. "The land market in Yichun isn't that great," says Wu, born in 1961, who jogs even in the minus-22-degrees-Fahrenheit chill of the Siberian winter. "The local government financing vehicle may get land in the future but it isn't a certainty."

Cracks in the System

CDB's lending to local governments stems from the failure of Zhu Rongji's 1994 reforms, which left local governments with huge spending burdens—everything from providing water to roads—but no way to raise funds apart from leasing out state land. The prohibition set on borrowing by local governments was a rule observed only in the breach, just pushing the borrowing off the budget and into the arms of the state banks. Without any transparency, and with all of the capital from the state-owned banks rather than private institutions, the market has added no discipline. In one case, a Shanghai LGFV borrowed 2 billion yuan of loans for a high-speed railway project, but ended up using half the money for property projects. After the experience of the late 1990s, when many local government and state-owned enterprise loans were bailed out, the commercial banks were supposed to look after themselves, yet many of the projects they piled into led by CDB had poor returns. An HSBC analysis by Hong Kong–based analyst Zhang Zhiming showed that 33 percent of the local government financing vehicles generated insufficient cash flow to make their debt payments and about 68 percent reported return on capital less than the benchmark lending rate—meaning the banks make a loss. But the nonperforming loan rate at China's banks continued to edge downward from 2010 to 2011, especially at CDB. What was going on?

In the summer of 2011, as land prices fell, some of the first cracks started to appear in the system that CDB had created and helped build, showing how reluctant authorities would be to tolerate a default that could threaten the banking system. In April 2011, one of the biggest LGFVs, Yunnan Highway Construction, which had outstanding loans amounting to 90 billion yuan, sent a letter to bankers saying it was unable to pay principal on a bank loan and would pay only interest, according to the influential *Caixin* financial magazine. Another Yunnan LGFV, Yunnan Investment Group, which according to a November 2008 prospectus had borrowed at least 15.4 billion yuan from CDB, had its bonds put on a watch list by China Chengxin International Credit Rating Co., one of China's best credit ratings agencies, after it announced an asset transfer. Sichuan Expressway Construction & Development Corp., which has at least 49 billion yuan in loans and lines of credit with CDB, was cited for violating rules in June after it transferred its stake in a Hong Kong–listed arm to another company without informing bondholders. The market for the local government bonds plunged and the powerful National Development and Reform Commission stopped issuing them in August 2011. The front page of *Caixin* asked: "Are the defaults starting?"

Not so fast, was the answer. CDB is an arm of the state, and its bonds have de facto sovereign status. It has leveraged that status to lend to local governments across the country from Tibet to Heilongjiang. Should its bad loan rate rise, it will reflect on China's own creditworthiness. CDB has a reputation as China's best-run major bank with the lowest reported nonperforming loan rate of any lender. The recognition of nonperforming loans will be a political process and is likely to come only after a slowdown in the Chinese economy. And CDB is likely to be the last bank they default on, since it prides itself on having more analysis of local government projects than commercial banks and on getting more involved with local governments to structure the loans. "I'm not worried about them defaulting, because CDB has a special relationship with the government," Chen said in a short interview in 2011 in Hainan. "CDB has been financing local governments from the outset." According to a loan officer at the bank, the commercial banks "just went in and lent money, without examining it." CDB's loans also have longer maturities, an average of five to ten years, he said.

In China, the Yunnan letter would have just meant another arm of the state (the banking system) taking the losses, which it wasn't going to do lightly. Yunnan Highway Construction had borrowed 20 billion yuan from CDB to crisscross the mountainous southern province with roads. The Yunnan government agreed to inject 300 million yuan in capital to the company and lend it 2 billion yuan. That summer the government hit back at investors, saying they had "no need to worry" about bonds sold by LGFVs, according to a statement on August 29 by the National Development and Reform Commission, the ministry that approved the bonds. The intention was to bring a touch of the market to local government financing, and Chen had defined development finance as a bridge linking the government and the market.[40] But now the government was saying that couldn't happen.

Toward the end of 2011, after receiving the green light from the China Banking Regulatory Commission, banks began rolling over their LGFV debt. Just as in the 1990s, the "commercial" banks had been rescued by the central government. That means billions of yuan in loan income won't be realized as cash flow at banks, and it means more money for China's state sector and less for private companies. It's also risky for banks: The LGFV loans essentially become illiquid loans, constantly rolled over into the future, the opposite of deposits, which are highly liquid and can be withdrawn at a moment's notice. It is also a failure of the market that CDB had created in order to price risk and capital correctly, much like the credit-default swap products the United States had invented to insure against losses in subprime debt. (See Table 1.1.)

From the beginning, CDB got more deeply involved with local governments than any other Chinese bank. Up to half its loan book in 2011 could be local government lending, according to analysts, accounting for one-third of all the local financing vehicle loans and double that of all four of the commercial banks put together. CDB started the platform that allowed other commercial banks to follow, allowing an unleashing of credit in 2008 that had little oversight. As Liu Kegu, an advisor to CDB, put it in March 2012, in comments that were later deleted online, "The backlog of projects from 30 years of reform were nearly all approved, they rushed to projects, with projects that had been killed in the past coming out."[41] With fixed lending and deposit rates and a guaranteed spread between the two, the commercial banks didn't need to worry about making a profit from good projects. "The main problems in local debt occurred when everybody scrambled to lend in a bid to boost domestic demand during the global financial crisis. They broke the

Table 1.1 Top LGFV Recipients of CDB Loans*

Company	Loans and Lines of Credit (billion yuan)
Fujian Provincial Expressway	81.5
Hunan Provincial Expressway	73.1
Beijing State-Owned Assets Operation	58
Tianjin Binhai Construction and Inv.	50
Sichuan Expressway	49
Wuhan Urban Construction	45.9
Shanghai Chengtou	43
Guangxi Communications	41.5
Chongqing Expressway Group	39.4
Tianjin Infrastructure Construction	37.1
Chongqing City Transportation	30.6

*Local government exposure at China's banks in billions of yuan.

Source: Bond prospectuses issued 2009 to 2011.

boundaries set by us," CDB's vice president, Wang Yongsheng, told Bloomberg at the March 2012 National People's Congress in Beijing. He urged the government not to overregulate lest it hurt CDB's lending.

There was a fundamental mismatch: The debts and the companies themselves were left off local government balance sheets, even as investors, banks, and ratings companies viewed them as having the implicit guarantee of local governments. Today, the LGFVs have dozens of subsidiaries, cross-holdings, and cross-guarantees, making it impossible to tell how much one local government is on the hook for if one link in the chain is broken. Some LGFVs have also turned into lenders, passing on money to property companies. While China wanted the institutions and infrastructure of a bond market, at the same time as it expanded, banks did their best to hollow out the integrity and effectiveness of those same institutions. Ratings agencies gave bonds sold by local government-backed companies high ratings because they believed in the implicit back stop of the local government; investors took the yield as free money. At least the ratings agencies themselves were self-conscious enough to recognize the self-destructive behavior. "Whoever gives them the better rating gets the business," Dagong's fiery chairman, Guan Jiangzhong, told us. "This is very dangerous."

While there is no way of telling what assets CDB was left with, the experience of cities like Chongqing, where GDP growth was 16.4 percent in 2011, showed that for all its problems, there is sheer genius behind the model. Chen Yuan of CDB had realized in 1998, before other banks, the force of urbanization and its role in economic growth. China long ago decided that the key to GDP growth is boosting productivity, and few economic events boost the productivity of a populace than moving them from life on a farm to life in the city. And that's exactly what happened in Dawu village to Li Liguang.

Li has been busy creating a new life for himself as a city resident, complete with the coveted urban residence permit (户口) that can grant access to better schools and healthcare. In Li's old place he grew most of his food and spent the rest of his money on groceries. Now he's entered the local economy. Ironically, he wishes officials would start building on his land, giving him the chance to pick up some work. But such moves are never easy: Unlike local government officials, Li can't get bank loans. So he's borrowed 100,000 yuan from family and friends. That still wasn't enough, putting Li in a Catch 22: Without a loan, he can't finish his house, and without a house, he has no collateral for a loan. "The renminbi is appreciating everywhere in the world, but in China it's depreciating," Li said one late August evening, smoking a White Sand cigarette and sipping bootleg liquor in a restaurant overlooking paddy fields. Other villagers say people are borrowing money from underground banks at a rate of up to 40 percent interest.

Such forced urbanization, however, has taken a huge toll. CDB helped the marketization of land in China that has seen millions of farmers kicked off for below-market compensation, at the same time as household deposits have been used as the source of money for lending to infrastructure projects. The use of land as collateral and as a source of income to repay loans means local governments have to acquire it cheaply and sell it at a profit. Local governments have become land monopolists, trying to acquire as much land as possible by expanding cities into rural areas, such as in Loudi, or moving state-owned enterprises out of central locations, as we saw in Chongqing. The lack of compensation given to farmers also has not helped China to boost consumption. In 2011, China's investment-to-GDP ratio was 49 percent, below only that of Mongolia, Sierra Leone, and São Tomé and Principe, according to the International Monetary Fund. Over the past ten years, about 90 percent of China's fixed asset investment has been at the local government level,[42] while since 2003, China's savers have enjoyed a negative real interest rate on savings they put in commercial banks, which then use that money to buy CDB bonds.

The reliance on LGFVs has also created one of the world's biggest property bubbles: Nationwide, housing prices in China have risen at least by 140 percent since 1998. And unlike the welfare, health, and pension expenses that have crippled Europe, China's forced urbanization has left a lot of debt before it even begins to deal with these expenses. By 2011, Standard Chartered was predicting that China's debt levels were in reality around 71 percent of its 2010 GDP, approaching US levels.[43] No one knew how far the debt extended, who else had lent to the companies, and who was liable. There was only one way that China would pay for this debt, and that would be through China's savers, through higher tax, or through more inflation. "China's making a big bet on infrastructure raising growth and that raises incomes and part of those incomes pay for the building of the infrastructure. The big bet is on how efficient this buildout of infrastructure is," Stephen Green at Standard Chartered said.

The creeping power of the state at the expense of private companies since the 1990s has meant that debt-addled state companies building infrastructure projects that won't generate cash flow for years, if ever, get preferential loan rates from 6 to 8 percent a year. In the meantime, private companies that want to expand their workforces, such as one drugstore owner in Zhejiang's Wenzhou city, pay about that much every month. Local governments could get banks to lend to projects with even the smallest amount of revenues, as the central government knew that projects had to continue. After all, you cannot leave a metro system half built. "The local government financing platforms aren't designed for one-off deals," and CDB has "set rather long terms," CDB's vice president, Wang Yongsheng, said. "A project, if stopped halfway, would become a problem." Had local governments won the game in the end?

By July 2012, as China reported its sixth straight quarterly decline in economic growth, it was becoming clear that the country was addicted to the easy stimulus provided by the LGFV model. Official after official in the year previous had pledged to slow down growth in local lending. In March of that year, Premier Wen Jiabao proclaimed in his annual policy speech—China's answer to the US president's State of the Union Address—that the nation would control its lending to local governments and set up an early-warning system to detect problems. Four months later, banks were again being told to boost their lending to LGFVs.[44]

For officials in Loudi, this means the party—and the Party—will continue. In the "White House," the central government building on the outskirts of town, officials sat with their iPads in a room lined with red banners with Communist slogans and a large gold hammer and sickle. The colonnades that linked the white buildings with high domes were cool in the afternoon heat, and black Audis with tinted windows pulled up. They had built a park opposite the building that was a small symbol of misdirected infrastructure: It was empty and concreted over. No office worker would dream of spending a lunch break there. It was a park designed without one single consideration of those who would use it. It was top-down park designing and it hadn't worked.

■ ■ ■

CDB's lending to local governments has helped unleash a wave of infrastructure construction, from expressways to local government stadiums, metro lines, and apartment complexes, helping China become an urban nation at a speed never before seen in history. Intended to bring a touch of the market to local governments and let them get money despite restrictions, it has ended in an untransparent borrowing spree that has left trillions of yuan of debt and millions of farmers without land and with inadequate compensation. Based on the hefty savings of the Chinese people that have been placed in state-owned banks, it's also created a daunting property bubble. The model has been driven by the foresight of one man, Chen Yuan, who recognized the potential of the country's urban drive. How did the bank gain so much power?

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