

# Why China isn't like Anything We've Ever Seen

Vincent Wilmet

June 2022

## History

Before deep-diving in the conversation of China and Russia, let's first do some history. How did we get here? Have there been any similar sagas in the past that can provide context for what we're experiencing now? What is different this time?

### Ancient China

China was once at the center of its own world. A middle kingdom, as they like to say [1]. Following the mythological Xia and Shang dynasties with their Three Sovereign “god-kings” and Five Emperors [8], and the Warring States period wherein much of the philosophical doctrines seen in China today were established [3], the Qin dynasty emerged. It lasted 15 years, until the death of Emperor Zheng, but importantly stamped and solidified the foundation of China’s dominant autocracy via Legalist reforms [16]. For example, there was a forced standardization of Chinese characters, measurements, road widths (i.e., cart axles’ length == width of two horses), and stratification of the Four Occupations [16]. In this ancient history the holy power of The State emerged, and where we first see the efficiency of top-down technological enforcement.



Figure 1: China: Han dynasty in 100BC

## Early Imperial China: 221 BCE - 907 CE

It is thanks to these top-down, though harsh and authoritarian policies, that the Han dynasty could focus primarily on the expansion of their empire rather than internal governance. The silk road was established, and an international trade of goods and ideas fostered 400 years of (relative) peace and progress [8]. To finance its military campaigns and the settlement of newly conquered frontier territories, the Han government established a standard coinage system [7] and nationalized the private salt and iron industries in 117 BC, primarily in an effort to produce cast iron weapons and steel. Science and technology during the Han period saw significant advances, including the process of papermaking, the use of negative numbers in mathematics (accounting), the raised-relief map, and a seismometer employing an inverted pendulum that could be used to discern the cardinal direction of distant earthquakes [19], to name a few.

Fast tracking through the Three Kingdoms, Jin, and Sui dynasties, we see more examples of technological progress coming from government subsidization and instruction. There were institutional reforms of agriculture resulting in surplus and population growth, land redistribution systems, the implementation of an imperial examination system, construction and expansion projects like the Great Wall and the Grand Jing-Hang Canal, stirrups for military cavalry, and a patronization/adoption of Buddhism [13, 19].

The coinage issued by the Han Dynasty minting facilities in 119 BC remained the standard coinage of China until the Tang dynasty Emperor Gao Zong changed them in an attempt to overcome a shortage of copper [7]. Later, Emperor Wu Zong, a fervent follower of Taoism, destroyed the Buddhist monasteries and used the copper bells, gongs, incense burners and statues to cast coins in various localities [13, 7]. Buddhism incidentally declined in popularity and in its place the religious respect of The State emerged more strongly.



Figure 2: China: Tang Dynasty in 907

## Late Imperial China: 960 CE - 1912 CE

The Song were the first government in world history to issue paper money [7] and the first Chinese polity to establish a permanent standing navy which was supported by the developed shipbuilding industry along with the sea trade [19].

Advancing on the inventions of the Tang dynasty's (Yi Xing's) clockwork escapement mechanism (the earliest striking clock) [13], Song inventors improved designs of astronomical clocks to a very accurate margin. Not to mention, the groundbreaking inventions of gunpowder (bombs, fire arrows, etc) & wood-block printing (spreading law, accounting, Confucianism, poetry and legends) ordained by and further solidified the State's central authority [19]. Economically, the Song dynasty was unparalleled with a gross domestic product roughly three times larger than that of Europe during the 12th century [2].

They built this economic golden age primarily on the backs of population booms. According to the census in 742 recorded in the New Book of Tang [13], Chang'an (Xi'an) was the world's first million person city, with 362,921 families with 1,960,188+ people. Across China in 1120, the Northern Song census recorded 20 million households (90 million people), double of the Han and Tang dynasties [4]. Before the Mongol invasion, the population of Song China was 120 million citizens; this was reduced to 60 million by the time of the census in 1300 [4]. This quickly recovered into 200 million within a century of ruling by the Yuan dynasty just before being overthrown by the 1351-1368 Red Turban Rebellions (whomst used Song military inventions) and establishment of the Ming dynasty [4].

With the budding of capitalism, Ming dynasty philosophers such as Wang Yangming further critiqued and expanded Neo-Confucianism with concepts of individualism and equality of the Four Occupations to accommodate (politically & culturally) for the expansion of trade with the Portuguese, Spanish, Dutch, Japanese and Americans [9]. The scholar-official stratum became a supporting force of industry and commerce, though perniciously invited bribery and corruption. China enjoyed another golden age, building upon the previous dynasty foundations to complete the Great Wall of China and develop one of the strongest navies in the world. It was during this period that admiral Zheng led the state-sponsored Ming Treasure Voyages throughout India, Persia and Africa, often passing through Melaka and Singapore [20].

Prince Rui banned private foreign trade, especially maritime trading, in 1647 as an isolationist strategy to deal with endemic Japanese piracy and smuggling issues. Later, the Qianlong Emperor famously proclaimed that 'Our land is so wealthy and prosperous that we possess all things. Therefore, there is no need to exchange the produce of foreign barbarians for our own' [9].

However, Tang Chen, a retired Chinese scholar and failed merchant described a dismal picture of the market economy of the preceding decades in his writing in the early 1690s. He wrote:

"More than fifty years have passed since the founding of the [Qing] dynasty, and the empire grows poorer each day. Farmers are destitute, artisans are destitute, merchants are destitute, and officials too are destitute. Grain is cheap, yet it is hard to eat one's fill. Cloth is cheap, yet it is hard to cover one's skin. Boatloads of goods travel from one marketplace to another, but the cargoes must be sold at a loss. Officials upon leaving their posts discover they have no where-

withal to support their households. Indeed the Four Occupations are all impoverished!” [17].

Even though the living standard of this era was low, the Chinese population’s numeracy rate—an index which measures numerical skills of a society and shows a strong correlation to the later economic development—was comparable to those in north-western European countries and therefore among the highest in the world [17].

Later in the Qing dynasty, foreign food crops, like the potato, were introduced during the 18th century on a large scale. These crops, along with the general peace in the 18th century, encouraged a dramatic increase in population, from approximately 200 million during the Ming dynasty to over 400 million during the Qing dynasty [4]. However, all trade came through the Thirteen Factories (warehouses and stores), which were the principal and sole legal site of most Western trade with China between 1757 to 1842 [14]. The factories were destroyed by fire in 1822 by accident, in 1841 amid the First Opium War, and in 1856 at the onset of the Second Opium War [14]. The final imperial dynasty of China could not last against Western imperialism and its internal rebellions (Taiping Rebellion, Dungan Revolt, Boxer Rebellion, Xinhai Revolution) [9].



Figure 3: China: Qin dynasty in 1912

### Modern China: 1912 CE - Present

On 1 January 1912, the Republic of China was established, and Sun Yat-sen of the Kuomintang (the KMT or Nationalist Party) was proclaimed provisional president. Politically, China was fragmented and powerless; regional warlords controlled most of its territory. Economically, there was a great increase in demand for Chinese goods during World War I. For example, China’s textile industry had 482,192 needle machines in 1913, while by 1918 (the end of the war) that number had gone up to 647,570. The number increased even faster to 1,248,282 by 1921. In addition, bread factories went up from 57 to 131 [18]. The late great doyen of Economic History Agnus Maddison quantifies these improvements in China’s overall GDP, which even withstood the Great Depression: 28.8 billion in 1932, before falling to 21.3 billion in 1934 and recovering to 23.7 billion by 1935 [12, 18].

Intentionally skipping over the complex and contentious political and economic events of the mid century, on December 18, 1978, Deng Xiaoping and reformists within the Chinese Communist Party (CCP) announced plans to open a socialist market economy – the zeitgeist of Boluan Fanzheng period. This marked China’s transition from a planned economy to a mixed economy with an increasingly open-market environments.

The purpose of the reform program was not to abandon communism but to make it work better by substantially increasing the role of market mechanisms in the system and by reducing—not eliminating—government planning and direct control. The process of reform was *incremental*. New measures were first introduced experimentally in a few localities and then were popularized and disseminated nationally if they proved successful.

We now live downstream from these remarkable events.



Figure 4: China: CCP in 2022

## Comparisons to Russia

When Khrushchev pounded his shoe on the U.N. podium and declared, “We will bury you” [5], it was an economic rather than a military boast. [10]

Khrushchev, like Deng Xiaoping, planned for “small doses of socialism until you will finally wake up and find you already have Communism” [5]. However, this is not what happened in reality.

At the time, the Western world was panicked that this Eastern power would soon overtake Western ideals. Illustrative of the tone of discussion was a 1957 article by Calvin B. Hoover. [10] Like many Western economists, Hoover criticized official Soviet statistics, arguing that they exaggerated the true growth rate. Nonetheless, he concluded that Soviet claims of astonishing achievement were fully justified:

”Their economy was achieving a rate of growth twice as high as that attained by any important capitalistic country over any considerable number of years [and] three times as high as the average annual rate of increase in the United States.” He concluded that it was probable that “a collectivist, authoritarian state” was inherently better at

achieving economic growth than free-market democracies and projected that the Soviet economy might outstrip that of the United States by the early 1970s.

Replace the above with China and one can see a familiar dogma reemerge in the 21st century. Here we see how the top-down (economic and political) policy implementations in China's history make such projections and claims of high efficiency so much more understandable.

## Economics

In a famous 1968 paper [15], MIT Professor Robert Solow explored the macroeconomic patterns of growth. On one side are increases in "inputs": growth in employment, in the education level of workers, and in the stock of physical capital (machines, buildings, roads, and so on). On the other side are increases in the "output per unit of input"; such increases may result from better management or better economic policy, but in the long run are primarily due to increases in knowledge [10, 15].

Powell found that Soviet growth was based almost entirely on rapid growth in *inputs* — expansion of employment, increases in education levels, and, above all, massive investment in physical capital [15]. However, the economically naive projections of their past growth rates into the future greatly overstated their real prospects. These are one-time changes in behavior that cannot be repeated. Within a generation the percentage of people employed had almost doubled; it cannot double so rapidly again [12, 10]. A half-educated work force had been replaced by one in which the bulk of workers has high school diplomas; it is unlikely that a generation later everyone will have PhD's.

All of the USSR's growth can be explained by increases in measured inputs. There was no sign at all of increased output per unit of input. the rate of *efficient growth* was not only unspectacular, it was well below the rates achieved in Western economies. Indeed, by some estimates, it was virtually nonexistent.

If the Soviet economy had a special strength, it was its ability to mobilize resources, not its ability to use them efficiently. It was obvious to everyone that the Soviet Union in 1960 was much less efficiently than the United States [10]. The surprise was that it showed no signs of closing the gap.

Powell concluded that technological progress (efficiency) has accounted for 80 percent of the long-term rise in U.S. per capita income, with increased investment in capital explaining only the remaining 20 percent [15]. These numbers were later proved incorrect but the idea generally holds in theory.

Chinese paramount leader Deng Xiaoping was no stranger to understanding this. But he approached tackling these economic reforms in a different way. On June 30, 1984, in a talk with the Japanese delegation to the second session of the Council of Sino-Japanese Non-Governmental Persons [21], he posits:

"What is socialism and what is Marxism? We were not quite clear about this in the past. Marxism attaches utmost importance to developing the productive forces.

We have said that socialism is the primary stage of communism and that at the advanced stage the principle of from each, according to his ability, to each, according to his needs, will be applied. This calls for *highly developed productive forces and an overwhelming abundance of material wealth*.

Therefore, the fundamental task for the socialist stage is to develop the productive forces. The superiority of the socialist system is demonstrated, in the final analysis, by faster and greater development of those forces than under the capitalist system.

As they develop, the people's material and cultural life will constantly improve. One of our shortcomings after the founding of the People's Republic was that we didn't pay enough attention to developing the productive forces". [21]

It is here that we begin to see the differences in the post-communist reforms of China and Russia.

## Discussion

In Russia, the uncoordinated and rapid shock therapy transition process was particularly abrupt. Within the chaotic monetary and political context of the Russian transition, small groups of individuals were able to amass large quantities of vouchers at relatively low prices, and obtained highly profitable deals with public authorities (e.g., via the loans-for-shares agreements) [6]. Together with capital flight and the rise of offshore wealth, this process is likely to have led to the extreme levels of income and wealth concentration we now see in Russia [6].

In contrast, the gradual privatization process in China — where the government is still the majority owner of corporate assets — has limited the rise of income concentration [11, 6].

Not only that, but by drawing parallels between contemporary China and the historical narratives described in (e.g. Four Occupations, merited education, etc), it is no surprise that China's reforms were much more egalitarian and healthy long term.

This figure [6] shows the economic transformation has produced much higher growth in China than in Russia. Although in both countries growth has not been equally shared,

TABLE 1—AVERAGE ANNUAL GROWTH RATES 1978–2015

Income group (distribution of per adult pretax national income)	China (1978–2015)	Russia (1980–2015)	United States (1978–2015)
Full population	6.2	1.1	1.3
Bottom 50	4.5	-0.5	0.0
Middle 40	6.0	0.5	0.9
Top 10	7.4	3.3	2.1
Including top 1	8.4	6.2	3.0
Including top 0.1	9.1	9.9	4.0
Including top 0.01	9.8	13.4	4.7
Including top 0.001	10.4	17.0	5.7

*Notes:* Distribution of pretax national income among equal-split adults. The unit is the adult individual. Fractiles are defined relative to the total number of adult individuals in the population. Corrected estimates combine survey, fiscal, wealth, and national accounts data.

*Sources:* China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017); United States: Piketty, Saez, and Zucman (2016).

the outstanding growth experienced in China has very substantially lifted the living standards of the poorest. On the contrary, the bulk of the post-communist growth in Russia has been captured by the top. Over the 1989–2016 period, the top 1 percent captured more than two-thirds of the total growth in Russia, while the bottom 50 percent actually saw a decline in its income [6]. This highlights the importance of post-communist transition policies and institutions in shaping income and wealth inequality dynamics.

China did not just let free market capitalism abruptly "figure it out". They implemented socialist market reform with Chinese characteristics [21]. For example, by magnifying Zheng He's maritime travels [20], many political functions for China arise: it stimulates national pride, shapes national identity, reaffirms a maritime identity, legitimizes the development of maritime power, highlights interconnectedness with the broader world, provides an image of a harmonious and peaceful development (He did not declare/engage in wars directly, but their massive boats were indirect methods of ostentatious military cajoling) - a contrast to the violent nature of western colonialism. As such, the Ming Treasure Voyages [20] play an important narrative role in China's desire to change its strategic paradigm to that of a maritime economic power. We now see this often leveraged in the Belt & Road initiative.

Another example of China's economic history being reenacted is in public housing administration. The "well-field system" was a Chinese land redistribution method existing between the ninth century BC (late Western Zhou dynasty) to around the end of the Warring States period [19]. Revamped by the Sui dynasty into the "equal-field system" which lasted until the Song dynasty. Essentially, most land was owned by the government, which would then assign it to individual families. Everyone, including slaves, were entitled to a certain amount of land, the amount depending on their ability to supply labor. [11].

The system was intended to foster the development of land and to ensure that no agricultural land lay neglected. That prevented aristocrats from developing large power bases by monopolizing the fields and allowed the common people to take part of the land and ensure their livelihood. It also allowed the government to develop a tax base and when people received the land from the government it would make them feel that the government gave them something even though it never left nor was theirs [11].

We see the same system today. The Chinese Communist Party (CCP) owns all property and leases it out for 99 years at a time. Mencius (Meng

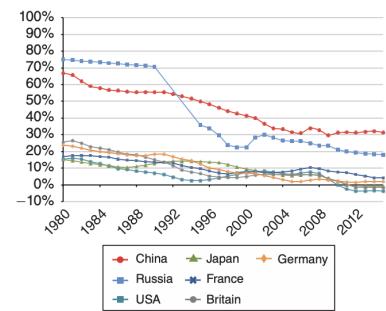


FIGURE 3. THE DECLINE OF PUBLIC PROPERTY: CHINA VERSUS RUSSIA VERSUS OTHER COUNTRIES  
(Share of public wealth in national wealth)

Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017); Other countries: Piketty and Zucman (2014).

Zi), a Confucian doyen, was largely in favor of such land management systems which the CCP loyally upholds. This is obviously different than Russia's policy who let much land get gobbled up quickly. The share of net public wealth was as large as 70–80 percent in both countries in 1980, and fell to 20 percent (Russia) and 30–35 percent (China) in 2015 [6]. As a result, we see this policy distinction play out in the figure below.

More could be said about the modern policies surrounding ancient education systems and e-learning, or woodprinting and patent filing.

## Conclusion

Once again, this highlights the importance of post-communist transition policies and institutions in shaping income and wealth inequality dynamics.

This review of history is not nearly complete and skipped many important details. I wanted to add more about ancient China (economic) philosophy since it forms the bedrock of subsequent dynasties [8], but thought it was more important to provide concrete examples of economic and technological progress. I acknowledge the shortcomings of my time management.

Looking into the future, it will through this lens that I view China's approach to national economic policies. The Deng Xiaoping's ultimate goal was to "deploy highly developed productive forces and an overwhelming abundance of material wealth", but to do so with "chinese realities" [21]. His successors have done a good job at this, going beyond the initial bump in "input" (education, poverty, shelter, etc) [15] and into efficient input/output ratios (decent urbanism, domestic production, etc).

It's a different type of capitalism. A different type of economic theory. It more like... Socialism with Chinese Characteristics, as they would like to say.

## References

- [1] Tongdong Bai. In: *China: The Political Philosophy of the Middle Kingdom*. Zed Books, 2012.
- [2] Stephen Broadberry. "China, Europe and the Great Divergence: A study in historical national accounting from 980–1850". In: *Economic History Association* (2018).
- [3] Mark Cartwright. *Warring States Period*. [https://www.worldhistory.org/Warring\\_States\\_Period/](https://www.worldhistory.org/Warring_States_Period/). 2017.
- [4] John D. Durand. "The Population Statistics of China, A.D. 2-1953". In: *Population Studies* 13.3 (1960), pp. 209–256. ISSN: 00324728. URL: <http://www.jstor.org/stable/2172247>.
- [5] Trinity Farms. *Nikita Khrushchev Speech In 1959*. <https://www.trinityfarms.org/blog/nikita-khrushchev-speech-in-1959/>. 2021.

- [6] Li Yang Filip Novokmet Thomas Piketty and Gabriel Zucman. “From Communism to Capitalism: Private versus Public Property and Inequality in China and Russia”. In: *AEA Papers and Proceedings* 108.113 (2018), pp. 109–113. URL: <https://www.jstor.org/stable/26452715>.
- [7] David Hartill. In: *Cast Chinese Coins*. Trafford Publishing, 2005.
- [8] Charles Hucker. In: *China's Imperial Past: An Introduction to Chinese History and Culture*. Stanford University Press, 1996, pp. 22–23.
- [9] Martin Jacques. In: *When China Rules the World*. Penguin UK, 2012.
- [10] Paul Krugman. “The Myth of Asia’s Miracle”. In: *Foreign Affairs* 73.3 (1994), pp. 62–78. URL: <https://www.jstor.org/stable/20046929>.
- [11] David M. Lampton. In: *The Three Faces of Chinese Power: Might, Money, and Minds*. Berkeley: University of California Press, 2008.
- [12] Agnus Maddison. “Contours of the World Economy 1-2030AD”. In: (2007). ISSN: 9780199227204.
- [13] Song Qi Ouyang Xiu. In: *New Tang History*. , 1060.
- [14] Maria Kar-wing Mok Paul A. Van Dyke. “Images of the Canton Factories 1760–1822: Reading History in Art”. In: (2015). ISSN: 9789888208555.
- [15] Raymond Powell. “Economic Growth in the U.S.S.R”. In: (1968).
- [16] Sima Qian. In: *Records of the Grand Historian*. , (c. 91 BCE).
- [17] Yeh-Chien Wang Ramon Myers. “Economic developments, 1644-1800”. In: Peterson Willard J. (ed.), Part One: *The Ch’ing Empire to 1800, The Cambridge History of China* 9 (2002), pp. 563–647. ISSN: 9780521243346.
- [18] Jian Sun. In: *Economic history of China (1840–1949)*. Vol. 2. China People’s University Press, 2000, pp. 894–895, 1059–1071.
- [19] Robert Temple. In: *The Genius of China: 3,000 Years of Science, Discovery, and Invention*. New York: Simon and Schuster, Inc., 1986.
- [20] Irony Tigon. *Ming Treasure Voyages*. <https://storymaps.arcgis.com/stories/e8555ad979c8491fba234943025e50dd>. 2021.
- [21] Deng Xiaoping. *BUILDING A SOCIALISM WITH A SPECIFICALLY CHINESE CHARACTER*. <http://english.peopledaily.com.cn/dengxp/vol3/text/c1220.html>. 1984.