

Industrial Policy with Chinese Characteristics: The Political Economy of China's Intermediary Institutions

In this article, the term ‘industrial policy’ refers to the aggregate of all policies undertaken by the state to influence the development, catch-up, and innovation of specific industries. According to this definition, industrial policy is a selective policy that focuses on specific industries, rather than a universal or functional policy applied broadly to most industries. The origins of this definition can be traced at least as far back as the theory of the developmental state.¹ In contrast to this definition, some argue that industrial policy encompasses universal or functional policies such as strengthening infrastructure, promoting human capital investment, maintaining fair competition, and creating an efficient market environment. This alternative definition has two drawbacks: First, it tends to blur the boundaries between industrial policy and other policies such as investment policy, export policy, human resources policy, and even macroeconomic regulation. Second, it is susceptible to being co-opted by (neo)liberal economics, using the guise of universal policies to oppose selective industry policy.

In a 2023 working paper published by the US National Bureau of Economic Research (NBER), several scholars, including the renowned economist Dani Rodrik, defined industrial policy as ‘those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal... a key characteristic is the exercise of choice and discretion by the public authorities, as in “We promote X but not Y”, though the latter part of this statement is typically left implicit’.² In effect, what these scholars highlight is the role of selective industry policy in reshaping the division of labour within society. Similarly, in a speech delivered at the Brookings Institution in spring 2023, US National Security Advisor Jake Sullivan interpreted the Biden administration’s industrial and innovation strategy through the lens of selective industry policy: ‘A modern American industrial strategy identifies specific sectors that are foundational to economic growth, strategic from a national security perspective, and where private industry on its own isn’t poised to make the investments needed to secure our national ambitions’.³

The formulation and implementation of industrial policy are critical aspects of economic governance in China’s socialist market economy. Industrial policy is essential in achieving socialist production objectives, addressing market failures, and promoting high-quality economic development. On the surface, industrial policy appears as a system that integrates specific goals and means. However, a deeper examination reveals that this system consists of particular institutional forms collectively comprising the institutional framework of industry policy. These institutional forms can be analysed from two perspectives. The first perspective is the general institutional foundation, which includes the fundamental leadership system (the leadership of the Communist Party of China [CPC]) and the basic economic system during the primary stage of socialism. The second perspective includes specific institutions, referred to as intermediary institutions. Four

intermediary institutions are particularly noteworthy: constructive markets, the socialist capital market with Chinese characteristics, intra-government competition, and inter-local government competition. These four institutions are interconnected, with constructive markets occupying the central position. The socialist capital market with Chinese characteristics serves constructive markets, and the integration of the two markets reflects the behavioural patterns of the state economy under the conditions of a socialist market economy. Similarly, the two forms of competition – intra-government competition and inter-local government competition – are premised on and directed toward developing constructive markets.⁴ Examining these intermediary institutions helps us understand how China’s industrial policy has evolved into a nationwide system for mobilising resources while fully leveraging the decisive role of the market.

I. Constructive Markets

Constructive markets represent a unique form of markets that emerge in strategic and foundational sectors. In theories of market formation, two contrasting perspectives exist. The first is Friedrich Hayek’s view that markets emerge through spontaneous evolution and cannot be rationally constructed by the state. The second is the Marxist view that markets are created through the state’s active intervention. Karl Polanyi further argued that although markets have a tendency for self-expansion, the notion of a completely autonomous and self-regulating ‘disembedded’ market has never existed in reality and remains a utopian ideal.⁵ This article adopts the latter perspective. In strategic and foundational sectors, the state acts as the architect of the market, guiding its developmental trajectory and coordinating the division of labour in society through various means and to varying degrees.

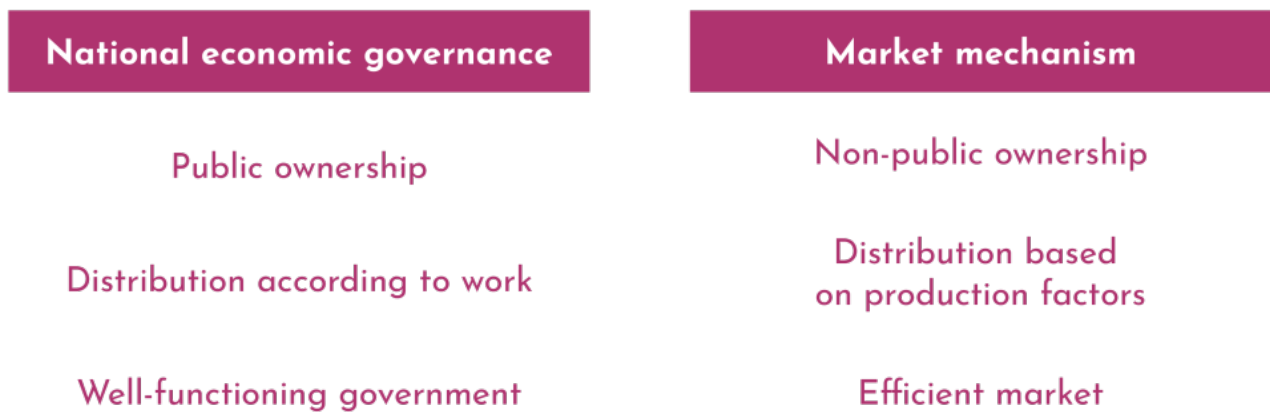


Figure 1: The Dual Integration Within the Basic Economic System in the Primary Stage of Socialism.

The analysis of constructive markets must start from the basic economic system in the primary stage of socialism. In previous research, the author of this paper proposed that in the socialist market economy, state economic governance and market regulation are distinct yet interconnected mechanisms of resource allocation and economic coordination, and their relationship forms the core of the basic economic system at the primary stage of socialism. This system comprises three dimensions: ownership, distributive relations, and the socialist market economy to organise social labour. These three dimensions are vertically integrated, interconnected, and mutually inclusive (Figure 1). At the same time, a dual structure exists within each dimension, representing a horizontal integration. This horizontal integration reflects the combination of state economic

governance – characterised by public ownership, distribution according to work, and a well-functioning government – and market regulation mechanisms – represented by non-public ownership, distribution based on production factors, and efficient markets. Through this integration, both state economic governance and market regulation combine, with the state operating outside the market and also actively participating within it through state-owned capital and state-owned enterprises (SOEs).

Scrutinising the state's economic role requires further analysis of the principles governing state economic behaviour. Under the socialist planned economy, Stalin proposed that state economic behaviour is governed by the fundamental economic law of socialism and the law of planned proportional development of the national economy.⁶ The fundamental economic law of socialism is the allocation of resources according to social need. The law of planned proportional development refers to state-defined strategic objectives to plan and adjust intersectoral relationships. These two laws represent a relationship between goals and means. Under market economy conditions, the fundamental economic law of socialism continues to operate through mechanisms such as national development plans. Meanwhile, the law of planned proportional development evolves into two distinct dimensions.⁷ The first dimension is state coordination of markets, where the state engages in macroeconomic management to balance the national economy. This includes addressing supply-side bottlenecks in areas such as population, land, environment, and knowledge production; while on the demand side, it involves mitigating insufficient effective demand to stabilise short-term growth and employment. The second dimension is state construction of markets, whereby the state assumes the role of market creator and leader by altering proportional relationships between targeted sectors or creating new sectors through long-term investments to fulfil national strategic objectives.

It is worth reflecting that when Stalin proposed the two aforementioned laws of state economic behaviour, he also stated that the object of socialist political economy is the relations of production. However, for Stalin, these relations of production were no longer the civil society or the free-market economy studied by Karl Marx in *Das Kapital* but the state itself. In other words, by examining the laws governing state economic behaviour, Stalin regarded the state as possessing a dual character. On the one hand, the state remains part of the superstructure. On the other hand, it also constitutes part of the economic base, becoming an object of political economy. Recognising this duality represents a significant theoretical contribution by Stalin.⁸ In the socialist market economy, the law of state behaviour in constructing markets is a new manifestation of this duality.

Viewing the constructive market as a product of the laws governing state economic behaviour helps to conceptualise industrial policy as a subject of socialist political economy. Constructive markets in the socialist market economy have two main characteristics. First, the state assumes the task of constructing markets on both the supply and demand sides, often acting as a special agent embedded in the market in various ways to continuously guide market development and coordinate the division of labour. Second, the state's development strategy introduces a use value goal into the market which interacts with the exchange value objectives pursued by enterprises, placing the former in a relatively dominant position.⁹ Such a constructive market embodies the integration of the state and the market, serving as a critical institutional intermediary for achieving industrial policy objectives.

It should be noted that in the concept of a constructive market, the term 'market' is derived from Volume II of *Das Kapital*.¹⁰ Unlike the mainstream view of the market as merely a system of transactions, Marx defines

the market (or circulation) as the sphere of capital movement, characterised by the unity of production and exchange. This market comprises the circuits of many individual capitals (here limited to industrial capital), expressed by the formula: $M - C \dots P \dots C' - M'$, where $M - C$ (buying) and $C' - M'$ (selling) represent the process of exchange, and P represents the process of production.¹¹ Due to the repetitive nature of this circuit, the stages of production and exchange not only condition and mediate each other but also occur sequentially in time and coexist spatially. Marx's formula simultaneously expresses the movement of individual capital and, when abstracting factors such as differences in capital turnover time, can also represent the unified movement of all capital within the market. In other words, it can express the movement of capital in a constructive market. Since the circulation of capital of each market mediates that of others, when the capital of one market is in the $M - C$ stage, the capital of other markets must be in the $C' - M'$ stage and vice versa. This implies that each individual market transcends itself through such interconnections, joining the general market and becoming embedded in the overall division of labour. In this sense, the state's construction of markets is also a process of reshaping the division of labour and its internal connections.

II. Intra-Governmental Competition

The state is not an abstract concept but an entity comprising a series of institutions and their structural relationships. As British Marxist political scientist Ralph Miliband suggested: 'These are the institutions – the government, the administration, the military and the police, the judicial branch, sub-central government and parliamentary assemblies – which make up “the state”, and whose interrelationship shapes the form of the state system. It is these institutions in which “state power” lies'.¹² This view leads to two conclusions.

First, the state system is defined by its internal relationships, which can be roughly divided into two interconnected dimensions. The first is the vertical dimension, which includes the central decision-making bodies at the top of the socialist party-state pyramid, the various ministries, and the hierarchical or administrative relationships between central and local governments. The second is the horizontal dimension, which contains two types of relationships: the relationships among various ministries within the central (or local) government and the relationships between local governments. These different dimensional relationships delineate the state system.

Second, this state, defined by its internal relationships, undergoes various stages of change in the course of reform. As a result, the state, as the main body implementing industrial policies, is not a fixed entity. Not only does the adjustment of central-local relations affect internal relationships, but the changes in the relationships between local governments and among government departments also continually redefine the distribution of power and responsibilities within the state, thus influencing the state system itself. Based on this consideration, this article introduces the concepts of intra-government and inter-local government competition to provide a more detailed analysis of the state's role in implementing industrial policies. This section briefly introduces intra-government competition, while the next section will address inter-local government competition.

A considerable body of literature in economics and political science that examines intra-governmental competition. These studies generally analyse intra-government competition from the perspectives of resources and autonomy, which influence the motivations behind government agency behaviour, resulting in two complementary viewpoints. One viewpoint suggests that government departments, driven by the need to maximise power and resources (including internal and external resources), will seek new functions and

compete with other departments over related resources. The other viewpoint posits that, in addition to competing for more resources, government agencies' motivations are also related to administrative autonomy (i.e., autonomy relative to other government agencies, rather than the economic autonomy emphasised by developmental state theory). This is because, in many cases, acquiring more resources often leads to increased oversight or evaluation by higher-level departments. In general, government agencies' pursuit of autonomy is more intense than their pursuit of resources.

It is important to emphasise that while the above viewpoints help us understand the motivations for intra-governmental competition, they also have limitations. These viewpoints abstract the relationship between the government and the market. In other words, they express the broadest common denominator of different factions' views on the issue. As a result, these viewpoints only define the motivations for intra-government competition in an abstract sense without connecting the government's relationship with the market to define these motivations further or outline the behavioural patterns of intra-governmental competition. To better understand intra-governmental competition, we need to develop the above model to reflect both the particularity of the relationship between the government and the market in the socialist market economy and the specific content of intra-governmental competition in this context. To this end, I have proposed that the intra-governmental competition that emerged during the autonomous innovation process of high-speed rail has more direct motivations – specifically, the pursuit of leadership and organisational power within the industry. To obtain this power, relevant government departments promote institutional reforms, implement corresponding industrial development strategies, and, in doing so, achieve both decision-making autonomy and resource maximisation.

Intra-governmental competition revolves around leadership and organisational power within the industry. This proposition implies the following: First, this competition is ultimately a manifestation of the national coordination and market construction laws discussed in the previous section. Intra-governmental competition does not occur solely within the political superstructure; it spans both the political and economic domains. Second, this competition has both deviation and constraint effects. On the one hand, due to the need for departments to acquire resources and autonomy, the competitive behaviour of individual departments may deviate from the development goals initially set by the central decision-making bodies, which reflect the socialist production purposes for the relevant industry. On the other hand, intra-governmental competition also constrains this deviation effect, ultimately steering it back toward the goals set by the central decision-making bodies.

In a previous article, I analysed the competition between the Ministry of Railways (China Railway Corporation) and the Ministry of Science and Technology, which manifested as competition between different government departments through their respective strategies.¹³ This competitive process of differentiated strategies is also a process of autonomously 'interpreting' industrial policy, and therefore, it may trigger corresponding knowledge production. Therefore, this competition can be viewed as a mechanism for the production of 'local knowledge'. This local knowledge is in contrast to the 'collective knowledge' which is possessed by the state and underpins all industrial policy. During the evolution of industrial policy, if this local knowledge can be effectively coordinated and used to produce new collective knowledge, it will become an important factor influencing industrial policy performance.

III. Inter-Local Governmental Competition

In a socialist market economy, local governments are critical economic entities and, together with enterprises and the central government, form the ‘three-dimensional market economy’.¹⁴ Local governments have become economic entities with independent behaviours and goal-setting models, based on the devolution of fiscal and administrative powers between the central and local governments in the reform process. Under the socialist system, fiscal and administrative powers often have dual characteristics, serving as political power in the superstructure and economic power within the economic base. Therefore, the fiscal and administrative devolution inherent in China’s tax-sharing system implies the political and economic power of adjusting production relations.¹⁵ This adjustment in the vertical dimension of production relations further changes how local governments acquire and use surpluses, shaping horizontal competition between local governments. From an income perspective, non-tax revenue, such as land transfer fees, has become an important form of local government revenue. From an expenditure perspective, local governments provide public goods while engaging in regional strategic investment and formulating and implementing industrial policies, the latter two of which overlap. This overlap means that the rules governing market construction by the state are not only a central government phenomenon but also apply to local governments. However, at the local level, this rule is often mediated through local government competition.

Local governments’ strategic investments have two implications. First, local governments engage in strategic investments, under the banner of operating cities, to attract investment. The costs incurred by local governments for attracting investment can themselves be seen as investments. On the one hand, government spending has a significant incentivising effect on fixed capital investment by enterprises. On the other hand, it increases government revenues through methods such as tax growth, equity appreciation, and land value increases. In this sense, local government spending is an investment to obtain expected returns. Second, beyond operating cities, local governments also play a more direct role as strategic investors. This refers to local governments using local state-owned capital and enterprises to invest in strategic, foundational industries. Local governments have certain advantages in making such strategic investments because, compared to higher-level governments, they possess more knowledge and information relevant to local development, and compared to non-public investors, they are more willing to bear investments with higher uncertainty and longer time horizons.

Given the above roles of local governments, industrial policy must be examined in conjunction with central-local relations and local government competition. Wan-wen Chu has pointed out that, unlike the two-tier system of East Asian developmental states such as Japan and South Korea, China’s industrial policy system is a multi-tier system. The so-called two-tier system refers to the central government as the maker and implementer of industrial policy, with local governments typically not involved in the industrial policy process. As a result, officials from central government economic departments directly engage with the industrial sector. This relationship between the central government and the industrial sector is often referred to as ‘embedded autonomy’.¹⁶ On the one hand, decision-making departments have relative autonomy when engaging with the industrial sector or enterprises, while on the other hand, they maintain channels of communication with enterprises to gain timely information on the actual situation of industrial development, thus having the ability to formulate and implement feasible policies. Due to China’s large scale, implementing a two-tier industrial policy system is difficult. China’s system can be described as a multi-tier model where the central government sets the policy, and local governments implement it. Since local governments have their own strategies for implementing central policies, modifying or even violating these policies to varying degrees, this creates an experimental space for assessing industrial policy performance. Without sufficient market

information at the central decision-making units, the practices of different regions enrich the policy's content and expand its potential options. In response to the experimental results from local governments, the central government will actively or passively select the best practices, leading to a multi-tier industrial policy system characterised by 'local experimentation and central selection of the best results'.¹⁷

The policy changes in China's automotive industry around 2004 were an important empirical foundation for the formation of the above concepts. In 1994, China introduced its first Automobile Industry Policy, encouraging large state-owned automobile enterprises to form joint ventures with foreign automobile companies. The policy also strictly defined the qualifications of automobile manufacturers and models through a production catalogue, focusing on supporting the 'Big Three' (China FAW Group, Dongfeng Motor Corporation, and SAIC Motor Corporation) and the 'Small Three' (BAIC Group, Tianjin Automotive Industry Group, and Guangzhou Automobile Group), all of which are state-owned. Under this industrial policy, models like the SAIC-Volkswagen Santana, FAW-Volkswagen Jetta, and Shenlong's Fukang dominated the domestic car market in the 1990s. Enterprises outside the production catalogue could only produce cars labelled as micro-cars. Therefore, some companies sought ways to enter the production catalogue to grow, with Chery Automobile being a typical example.

Chery Automobile Co., Ltd. was established in March 1997 as a state-owned enterprise invested in by the Anhui provincial and Wuhu municipal governments. In December 1999, the first Chery Fengyun sedan rolled off the production line. By 2000, Chery's production had exceeded 2,000 vehicles. However, despite the production of cars, Chery faced a major issue: it lacked a car production licence and could not be listed in the national passenger car production catalogue, meaning it could not legally sell cars nationwide. To resolve this issue, Chery affiliated itself with SAIC Motor. In early 2001, Chery transferred 20% of its registered capital (approximately 350 million yuan) to SAIC Motor without compensation, officially joining SAIC Motor through a share transfer and obtaining a car production licence. The company was renamed SAIC Chery. After the partnership with SAIC, Chery's Fengyun quickly gained market acceptance, rapidly entering mass production and competing at a price one-third lower than that of older models like the Santana. In 2001, Chery's sedan sales reached 28,200 units (3.9% market share), with a sales revenue of over 2 billion yuan. By 2002, sales had increased to 50,200 units (4.45% market share), with revenue exceeding 4 billion yuan.

The development of domestic brands like Chery and Geely has played a significant role in promoting the evolution of national industrial policies. In 2004, the National Development and Reform Commission introduced a new Automobile Industry Development Policy to support the growth of domestic, independent automotive brands. Prior to this, in June 2003, Chery exited SAIC Motor; in September, the National Development and Reform Commission announced its approval for SAIC-Chery Automobile Co., Ltd. to produce all products listed in the Announcement on Road Motor Vehicle Manufacturers and Products, and the company name was changed from SAIC-Chery Automobile Co., Ltd. to Chery Automobile Co., Ltd.

The changes in the national automotive industry policy exposed significant flaws in previous policies. Chu pointed out that using the catalogue to limit automobile manufacturers reflected the planning mentality of policymakers. Achieving economies of scale for production efficiency was the policymakers' primary goal at the time. As a result, factors such as the number of manufacturers and industry concentration became key policy constraints, and approval rights became the main policy tool. However, as Chu correctly emphasised, the number of manufacturers and the high concentration of industries are characteristics that emerge in a

mature market. For an emerging industry that is still developing, restricting the number of manufacturers before market competition has fully taken effect is ineffective.¹⁸

The shift in China's automotive industry policy around 2004 highlighted the important role of local governments in implementing and formulating industrial policies. Central-local interaction in the multi-tier industrial policy system can largely be seen as a collective knowledge production and coordination mechanism. Under the constraints of old planned-economy thinking and policy tools, central government decision-makers often lacked the necessary knowledge to formulate rational industrial policies. This gap has now been filled by the practices of local government competition. The diversity of new phenomena or behaviours within the industry brought about by local government competition is accompanied by the production of 'local knowledge'. If this knowledge is respected and utilised, it can help overcome subjectivity in industrial policy formulation. From this perspective, the recent debates on the effectiveness of industrial policies between Lin Yifu and Zhang Weiying are largely irrelevant, as both sides fail to incorporate the multi-tier industrial policy system and the intra-governmental competition discussed in the previous section into their analysis.¹⁹

IV. Socialist Capital Market with Chinese Characteristics

A constructive market refers to a market where production and exchange are unified. Correspondingly, the capital market serves the constructive market. As early as 2010, China's State Council issued the Decisions on Accelerating the Cultivation and Development of Strategic Emerging Industries, which encouraged the government to establish industry-guided funds (such as special funds and industrial investment funds) to support the development of strategic emerging industries, including new electric vehicles (NEVs). This decision emphasised the role of multi-tier capital markets in expanding investment in emerging industries and directing social funds to innovative enterprises in the early and middle stages of entrepreneurship. The Outline of the 12th Five-Year Plan for the National Economic and Social Development of the People's Republic of China, released in 2011, reiterated these policy directions.²⁰

From its inception, China's capital market has been tasked with financing basic strategic industries. After multiple major reforms, especially the establishment of the SSE STAR Market (Shanghai Stock Exchange Science and Technology Innovation Board) in 2019 and the pilot implementation of the registration-based system, the focus of China's capital market has further shifted towards innovative enterprises related to the new technological revolution. The development of new finance capital forms, such as venture capital, private equity, and state-owned capital investment platforms, has attracted and encouraged more entrepreneurs and innovators to engage in foundational industries aligned with the country's major strategic goals. This has played a crucial role in promoting the development and innovation of these industries. As Yi Huiman, chairman of the China Securities Regulatory Commission, pointed out 'The capital market's mechanism of shared risk and shared benefits not only provides financing support but also plays an important role in improving corporate governance and motivating entrepreneurial spirit'.²¹

It is important to emphasise that the development of China's capital market in recent years is closely linked to the reform of state-owned capital and SOEs. The Third Plenary Session of the 18th Central Committee of the CPC, held in November 2013, marked the beginning of a new stage in deepening SOE reform. The related reforms mainly include: promoting the classification of SOEs based on function, improving the state-owned asset management system with a focus on capital management, reforming the state-owned capital

authorisation system, and reorganising state-owned capital investment and operating companies. Moreover, these reforms also aimed to strengthen the comprehensive leadership of the CPC over SOEs, integrate CPC leadership into all aspects of corporate governance, clarify and implement the statutory status of Party organisations in the corporate legal structure, and ensure the implementation of national policies and major decisions.

Following the 2013 reforms, SOEs were divided into two categories: commercial SOEs and public welfare SOEs. Commercial SOEs were further divided into two subcategories: Category I includes enterprises operating in competitive sectors and Category II includes enterprises operating in strategic sectors related to national security and the national economy. The category-based reform of SOEs was necessary for clarifying the role of China's SOEs. In a socialist market economy, state-owned capital and SOEs are tools for economic governance, helping the nation achieve the following important functions. First, SOEs provide public goods and services that meet societal needs. Second, SOEs coordinate the relationships within the national economy to overcome market failures such as overproduction or insufficient effective demand, thereby maintaining economic stability and full employment. Third, SOEs make strategic long-term investments in foundational industries to build and lead the development of the market. This function is especially necessary for latecomer nations to achieve economic catch-up and ensure national economic security. The category-based reform of SOEs was significant as it helped to optimise the organisation of state-owned capital and establish a modern corporate system with Chinese characteristics.

The 2013 guidelines also proposed improving the system for state-owned asset management and supervision. To that end, it encouraged establishing state-owned capital investment and operating companies, which would exercise shareholder responsibilities and bear limited liability up to the amount of their investment. These companies would be responsible for improving the distribution of state-owned capital, improving the performance of state-owned capital operations, and maintaining and increasing the value of state-owned assets. Essentially, these guidelines were about using the operating principles of modern finance capital to strengthen and optimise the state-owned economy.

The implications of drawing from and using the principles of modern finance capital to promote reforms in the management of SOEs and state-owned assets have profound consequences for China's capital market. From a political economy perspective, finance capital is the capital of financial institutions operating in the capital market and a special form of capital arising from the fusion of finance capital with functional capital (such as industrial, merchant, and platform capital).²² Finance capital represents a power relationship in controlling social production. According to Rudolf Hilferding and Vladimir Lenin, finance capital tends to dominate functional capital.²³ In the institutional environment of the primary stage of socialism, the state uses state-owned finance capital to influence or even control production and achieve major national development goals. The Chinese capital market is, in essence, a socialist capital market with Chinese characteristics. Through this market, the relationship between the government and an effective market is deepened, the position of SOEs in strategic foundational sectors is consolidated and strengthened, and the basic economic system in the primary stage of socialism is reproduced in a new form.

As the focus of China's capital market shifts to technologically innovative enterprises and the capital management-oriented reform of SOEs, this will inevitably transform state-owned finance capital into a bridge linking industrial policy with the capital market. Through the capital market, state-owned finance capital integrates with functional capital to form a new type of state-owned finance capital, which plays a

significant role in guiding the development of constructive markets and shaping industrial chains and the social division of labour. However, a capital market dominated by state-owned finance capital also has dual implications. On the one hand, this market can become a tool for national economic governance, playing a significant and positive role in driving the development of constructive markets. On the other hand, developing a capital market with Chinese characteristics must also address and prevent the new contradictions and issues it might bring. One prominent issue in finance capital operations is that the circulation of functional capital, such as industrial capital ($M - C \dots P \dots C' - M'$), is integrated into the cycle of finance capital ($M - M'$). The former becomes a means of maintaining and increasing the latter's value. In this context, finance capital may focus on boosting the short-term profitability of functional capital, potentially harming its ability to conduct long-term collective learning or innovation, which would hinder the realisation of national development plans and strategic objectives.²⁴ To address this, it is necessary to guide and regulate the behaviour and goals of state-owned finance capital to ensure that it serves national development and socialist production goals effectively.

In works such as *Extraordinary Growth: China's Economy from 1979 to 2049*, published in 2013, the author Shi Zhengfu analysed the role of state-owned finance capital.²⁵ He argued that in a socialist market economy, promoting long-term growth and overcoming economic crises is achieved by leveraging the state's macro-strategic investments. These macro-strategic investments focus on strategic foundational industries and related production factors that benefit long-term national economic development. The state can coordinate and deploy such investments through medium- and long-term development strategies and plans, with the government and state-owned capital investment companies jointly establishing national development strategic funds to carry out these investments. The National Development Strategic Fund is backed by national credit, with various specialised sub-funds under its umbrella operating in a market-oriented manner.

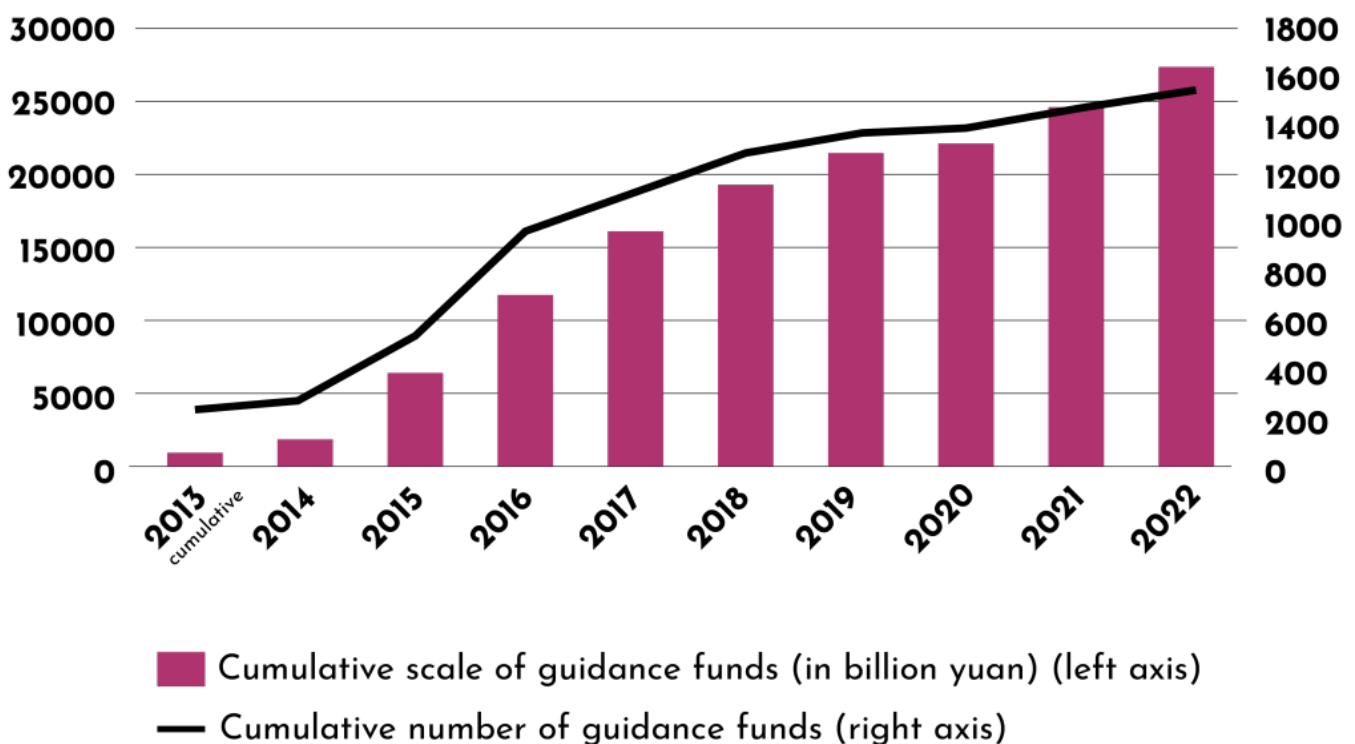


Figure 2: Number and Scale of Industry Guidance Funds Set Up by All Levels of Government (2013-2022)

Over the past decade, we have witnessed the role of state-owned finance capital and the capital market in implementing industrial policies for strategic foundational industries (Figure 2). The state's role in utilising the capital market to construct markets is a common feature in the history of global industrial development. British evolutionary economist Mariana Mazzucato has studied practices in developed capitalist countries and noted that the role of public sector investment goes far beyond fixing market failures. By being more willing to participate in Knightian uncertainty and invest in the early stages of technological development, the public sector can actually create new products and related markets.²⁶ Here, Mazzucato deliberately distinguishes between the state's role in overcoming market failure and its role in constructing markets, emphasising the latter's importance. The state's role in constructing markets means that the state itself takes on the functions of an entrepreneur. Mazzucato calls this an 'entrepreneurial state', whose role includes: making choices about the direction of technological innovation, being willing to bear the investment risks and uncertainties related to market creation, and building a reasonable distributional relationship between bearing risks and obtaining rewards. Mazzucato particularly emphasises the last point, stating that public investment in innovation must also obtain public returns. However, under the capitalist system, this distributional relationship is often difficult to achieve, thereby weakening the role of the entrepreneurial state.²⁷ The socialist capital market with Chinese characteristics, as an institutional intermediary serving industrial policy, has largely validated Mazzucato's views.

The successful operation of state-owned finance capital outlined above can be summarised using the relationship between finance capital and functional capital mentioned earlier. When these two types of capital combine, the following cyclical formula emerges:

$$M - \{M - C \dots P \dots C' - M'\} - M' \quad (1)$$

The capital movement summarised by this formula has the following characteristics:

First, it reproduces the finance capital (the fusion of banking capital and industrial capital), examined by Hilferding and Lenin. The distinction lies in the fact that in the case of China, finance capital is socialist state-owned capital, which reflects state-owned production relations. When combined with non-public capital, it recreates the ownership relations in the primary stage of socialism, i.e., a symbiotic structure between public and other forms of ownership.

Second, the relationship between the two types of capital movements also reflects the relationship between the constructive market and the capital market with Chinese characteristics. State-owned finance capital and the other social capital it leverages bear the uncertainty of investments, ultimately serving the development of the constructive market. Unlike the banking capital examined by Hilferding and Lenin, state-owned finance capital does not necessarily seek to dominate functional capital. Its leadership and coordination roles are primarily reflected in its influence on the industrial value chain and social division of labour.

Third, the finance capital cycle is a realisation of the rule of the constructive market, reflecting the combination of use values set by national development plans and the exchange value objectives of enterprises. When state-owned financial institutions invest in emerging industries, they need to be able to exit with a reasonable profit to invest in new projects. This cyclical nature reflects the predictable behaviour of the

constructive market.

It is worth emphasising that although this cycle achieves the maintenance and appreciation of state-owned capital, making profits is not the primary goal. The primary goal of state-owned capital is to implement the objectives of socialist production and fulfil the tasks set by the national development plans and strategies. The above formula suggests that the cycle must simultaneously achieve the dual objectives of use and exchange value.

V. Embedding and Institutions

Industrial policy in a socialist market economy often means that the state is embedded in the economic structure in some form. This embedment is not only a characteristic of socialist market economies but also of modern market economies. However, in a socialist market economy, the state's embedment is more universal and intentional, leading to the national economic behavioural rule of state coordination and market construction discussed earlier.

At this point, it is necessary to further explore the theoretical meaning of the concept of embedding or embeddedness. The term 'embedding' was introduced by Polanyi, who pointed out that pre-capitalist economies were never independent but 'embedded' within other systems such as politics, religion, and ethics. The rise of capitalism brought about a trend to free the economy from these systems, making it increasingly autonomous and self-regulating. In his terminology, this was a process of 'disembedding'. However, Polanyi also pointed out that this trend toward disembedding was utopian, because disembedding was predicated on the emergence of a series of fictitious commodities such as labour, land, and money. The existence of these fictitious commodities would bring the risk of social disintegration, ultimately leading to crises, wars, or even revolutions, which could threaten capitalism. Therefore, in Polanyi's view, modern market economies are always under the dominance of two tendencies: one is the disembedding favoured by liberalism, which is the tendency for the market to expand infinitely, and the other is what Polanyi calls the 'social protection', which is the tendency to re-embed institutions into the market to limit the latter's endless expansion.²⁸

In his study of industrial policy, American scholar Peter B. Evans used the concept of 'embedded autonomy' to describe the role of developmental states in East Asia. Evans, as part of the second generation of developmental state theorists following Chalmers Johnson and others, argued that in studying the role of the government, scholars should not focus solely on the relative autonomy of state decision-making and its sources. Instead, attention should be paid to the relationship between the government and the business sector. According to Evans, state autonomy refers to the government's ability to make independent decisions free from the economic influence of special interest groups. However, in policy matters, the government must rely on the assistance of economic interest groups to ensure smooth implementation. Therefore, the government remains autonomous while maintaining close links with businesses to gather information and make informed decisions.²⁹

It is worth noting that while Evans' concept of embedded autonomy adopts Polanyi's terminology, it does not fully utilise the entire content of Polanyi's concept. This point seems to be rarely mentioned by researchers. Evans' notion of embedding tends to emphasise the epistemological function of the government-business connection, specifically for the purpose of acquiring relevant industry information, but overlooks the broader implications of Polanyi's concept of embedding. French anthropologist and Marxist Maurice Godliet

borrowed, interpreted, and developed Polanyi's thought from a Marxist perspective. For Godlier, embedment can be understood as a certain institutional form outside the realm of social production that performs the functions of production relations, determining the ownership of production materials and the distribution of products, and coordinating the social division of labour, thus becoming a component of the economic base. As for modern market economies, although their initial development displayed a clear trend of disembedment, in later stages of development the state's embedment became inevitable again. Keynesianism is a theoretical expression of this trend of embedment.³⁰

From the discussion in this paper, the formation and development of China's industrial policy also represent the process by which the state is embedded in the economy. However, this embedding is not limited to Evans' understanding, but carries the deeper implications endowed by Polanyi and Godlier. Based on the cases discussed in this paper, we attempt to categorise the state's embedding into the following types (Table 1).

Table 1: Types of State Embedment in the Implementation of Industrial Policy

Category	Method of Embedment	Case	Conceptual Category
Embedment in the production or value creation process.	Direct establishment of state-owned enterprises; using market power to coordinate the division of labour.	Role of the Ministry of Railways (China Railway Corporation) in the independent innovation of high-speed rail.	Polanyi-Godlier style embedment.
Embedment in the investment process.	Using state-owned finance capital to participate in the functional capital cycle to alter industrial chains and the regional division of labour.	State-owned finance capital leveraging capital markets to develop strategic emerging industries.	
Embedment in the exchange and consumption process.	Altering relative prices, restructuring demand systems and the social division of labour.	Various financial subsidies supporting the purchase and use of NEVs.	
Establishing communication channels with industry.	Coordinating policy recommendations and consultations.	China EV100 Forum.	Evans-style embedment.

As shown in Table 1, the different types of state embedment form a spectrum, varying in modes and the levels at which they occur. Polanyi-Godlier style embedment always involves a deep engagement with production relations, as the state is tasked with performing certain production functions. In the first of three types of Polanyi-Godlier style embedding, the state takes on a more comprehensive role in production relations, manifested in its deep involvement in value creation within the production process. In the second form, the state changes the social division of labour or value chain patterns in a region through investment (also a form of production relation), without directly engaging in the value creation within the production process itself. The third type, commonly found in East Asian developmental states, is characterised by reshaping demand systems and social division of labour by altering relative prices of factors or products to achieve dynamic economic efficiency.

Compared to the aforementioned forms, Evans-style embedment does not necessarily require the state to take on the functions of production relations. Evans-style embedment seeks to address the issue of information asymmetry in industrial policy formulation and implementation. However, the issue is that, for Evans, the coordination mechanisms within embedded autonomy primarily involve the communication of information, without necessarily requiring the production of local knowledge through Polanyi-Godlied style embedding, which would provide knowledge and information sources to verify policies and expand policy options. The successful implementation of industrial policy needs to be based on appropriate knowledge production and information sources. If the guiding agencies in a leading role lack the necessary information, they cannot successfully implement industrial policies. However, according to China's experience, this issue is not simply resolved through pure information exchange but rather through creating a knowledge production and coordination mechanism that includes local knowledge. The formation of this mechanism, in turn, is predicated on the state's embedment in the economy and its role in regulating production relations. On the surface, this may seem like a paradox of the chicken and the egg, but this paradox is ultimately resolved through practice or 'learning by doing'.

VI. Conclusion

The four intermediary institutions discussed in this paper – constructive markets, the socialist market economy with Chinese characteristics, intra-government competition, and inter-government competition – are formed on the basis of the basic economic system in the primary stage of socialism. Specific institutions serve as intermediaries for the reproduction of the basic system. These four intermediary institutions are interconnected and sometimes overlap, collectively forming an intermediary system that defines industrial policy with Chinese characteristics. The system of industrial policy with Chinese characteristics has three main features.

First, the constructive market occupies a core position within the system. Various state institutions guide and coordinate the division of labour within the constructive market, combining use value goals that reflect socialist imperatives and the exchange value goals of enterprises. In this sense, the constructive market is the concrete form of the basic economic system. The organic combination of market and state, as well as public and private ownership, is part of the basic economic system. The other intermediary institutions serve the formation and development of the constructive market.

Second, the state as the main body for implementing industrial policy presents an inclusive, decentralised system, based on unified leadership. The term 'inclusive' here refers to the state's intentional promotion of decentralisation within its structure and institutional arrangements, while maintaining centralised and unified leadership. Inter-government competition and intra-government competition are the main institutional expressions of this system of decentralisation. This system determines the features of industrial policy with Chinese characteristics. On the one hand, from the perspective of local government competition, this is a multi-level industrial policy system. On the other hand, from the perspective of intra-government competition, the state agencies responsible for guidance and coordination also exhibit a diversified nature. With the rise of state-owned finance capital in the socialist capital market with Chinese characteristics, this inclusive decentralised system has gained further momentum for development.

Third, the industrial policy system with Chinese characteristics introduces a unique mechanism of knowledge production and coordination that combines local knowledge and collective knowledge. This avoids the inherent shortcomings of the lack of local knowledge under the planned economy system, thus creating

conditions for the state to reasonably formulate and revise industrial policies. This mechanism consists of two levels: First, differentiated strategies formed within the two types of competition give rise to a mechanism for producing local knowledge. Second, based on this, the issue arises as to whether and how local knowledge can be coordinated at the central level to create collective knowledge (or organisational knowledge). This collective knowledge is the knowledge that state agencies responsible for formulating industrial policies may possess and apply.

Unfortunately, there is a lack of comprehensive and systematic discussion on the knowledge production mechanism mentioned above, especially the mutual transformation between local and collective knowledge. In the existing literature, only a few scholars have recognised this issue and analysed it from specific dimensions. For example, Chu proposed that coordination at the central level requires a certain social value consensus as a prerequisite. She referred to this consensus as the ‘catch-up consensus’, which is ‘the ultimate goal gradually formed by the Chinese people since the Opium War’. Chu’s insight is profound, but it neglects the fact that the catch-up consensus is also the core of the CPC’s ideology. Lu Feng has pointed out a deeply rooted political correctness in China about the need for technology to be primarily developed independently in order to be regarded as an outstanding achievement. This stems from the fact that the CPC relied on the popular demand for independence to seize power, and that political independence was a pre-condition for establishing China’s industrial system. Therefore, whenever industrial development faces fundamental strategic choices, the CPC’s ideology will guide policies back toward independence.³¹

Lu Feng’s perspective highlights that in the Chinese context, the state as the primary entity in the industrial policy process is not an ordinary state, but a socialist party-state. The leadership of the CPC over the state results in the homogeneity between the party’s organisation and the various state agencies in terms of hierarchy, and the party’s leadership in terms of core values and ideology. The CPC is a mission-oriented party with special significance and its leadership is the most fundamental coordinating force in the evolution of industrial policies.³² The CPC’s centralised and unified leadership is the basic premise of the knowledge coordination and inclusive decentralisation that characterises the industrial policy with Chinese characteristics. There is currently a lack of empirical research and comprehensive analysis on this critical issue.

CPC General Secretary Xi Jinping has described the characteristics of this system as follows: ‘We need to improve the new type of national system under the socialist market economy, fully leverage the role of the state as the organiser of major technological innovations, support strategic scientific plans and scientific projects with long cycles, high risks, great challenges, and promising prospects, focus on systematic layout, organisation, and cross-sector integration, and combine the forces of government, market, and society to form a collective advantage for the future’.³³

The intermediary institutional system centred on the constructive market is a part of the primary stage of socialism. This system should also be understood as a tool for reproducing the fundamental leadership system. Understanding this relationship is key to grasping why the industrial policy with Chinese characteristics is a novel system that aims to fully leverage the decisive role of the market for socialist modernisation.

Notes

¹ Wan-wen Chu, a research fellow at Academia Sinica in Taipei, can be seen as a contemporary theorist of the

developmental state whose understanding of selective industrial policy is representative of the Chinese experience. As she puts it, ‘industrial policy means that the government chooses certain specific industries to foster’. For more, read: Wan-wen Chu, *The Development Model of China’s Industries: Exploring the Role of Industrial Policy* [中国产业的发展模式—探索产业政策的角色] (Social Studies Journal Press, 2020), 102; and Wan-wen Chu and Alice Amsden, *Beyond Late Development: Taiwan’s Upgrading Policies* (Peking University Press, 2016).

² Réka Juhász, Nathan J. Lane, and Dani Rodrik, ‘The New Economics of Industrial Policy’, *NBER Working Paper* 31538, (2023): <http://www.nber.org/papers/w31538>.

³ Jake Sullivan, ‘Remarks by National Security Advisor Jake Sullivan on Renewing American Economic Leadership at the Brookings Institution’, The American Presidency Project, 27 April 2023, <https://www.presidency.ucsb.edu/documents/remarks-national-security-advisor-jake-sullivan-renewing-american-economic-leadership-the>.

⁴ This paper does not consider the symbiotic relationship between SOEs and other forms of ownership as an intermediary system, because this is the content of the basic economic system itself. The role of SOEs in the implementation of industrial policy is a poorly studied issue in the academic community. A related analysis can be found in Xudong Gao, ‘Approaching the Technological Innovation Frontier: Evidence from Chinese SOEs’, *Industry and Innovation* 26, no. 1 (2019): 100–120. For a theoretical discussion of this issue, see Jia Genliang, ‘The New Mission of State-Owned Enterprises: The Vanguard of Core Technological Innovation’ [国有企业的新使命：核心技术创新的先锋队], *Journal of Renmin University of China* [中国人民大学学报], no. 2 (2023) and Jia Genliang, ‘The New Mission of State-Owned Enterprises: A Policy Tool for the National Will to Innovate’ [国有企业的新使命：国家创新意志的政策工具], *Teaching and Research* [教学与研究], no. 2 (2023).

⁵ Karl Polanyi, *The Great Transformation* (Zhejiang People’s Publishing House, 2007); Karl Marx, ‘Das Kapital vol. 3, in *The Complete Works of Marx and Engels* 25 (People’s Publishing House, 1974), 884–885. For a related commentary on Marx’s views, see Meng Jie, *Socialist Political Economy with Chinese Characteristics as a Method* [作为方法的中国特色社会主义政治经济学] (Fudan University Press, 2023), 175–176.

⁶ J.V. Stalin, *Economic Problems of Socialism in the USSR* (Foreign Languages Press, 1972).

⁷ Meng Jie, ‘A New Theory of Basic Economic Laws in the Primary Stage of Socialism’ [社会主义初级阶段基本经济规律新论], *Academic Monthly* [学术月刊], no. 12 (2022); Meng Jie and Zhang Zibin, ‘Constructive Markets, Intra-Governmental Competition, and Independent Innovation of China’s High-Speed Railway: Explanation From the Perspective of Socialist Political Economy’ [建构性市场、政府内竞争与中国高铁的自主创新—社会主义政治经济学视角的阐释], *Economic Perspectives* [经济学动态], no. 4 (2023).

⁸ Meng Jie, *Socialist Political Economy with Chinese Characteristics as a Method* [作为方法的中国特色社会主义政治经济学] (Fudan University Press, 2023).

⁹ Meng Jie, 'A New Theory of Basic Economic Laws in the Primary Stage of Socialism' [社会主义初级阶段基本经济规律新论], *Academic Monthly* [学术月刊], 12, (2022).

¹⁰ Karl Marx, 'Das Kapital volume 2', in *The Complete Works of Marx and Engels volume 24* (People's Publishing House, 1974).

¹¹ Editor's note: In this formula, M stands for money, C stands for commodity, and P stands for the production process. Furthermore, C' stands for the new commodity with added value created after the production process, while M' stands for the increased quantum of money obtained after selling the produced commodity.

¹² Ralph Miliband, *The State in Capitalist Society* (Weidenfeld and Nicolson, 1969), 54.

¹³ Meng Jie and Zhang Zibin, 'Constructive Markets, Intra-Governmental Competition, and Independent Innovation of China's High-Speed Railway' [建构性市场、政府内竞争与中国高铁的自主创新], *Economic Perspectives* [经济学动态], 3, (2023).

¹⁴ Shi Zhengfu, *Extraordinary Growth: The Chinese Economy 1979-2049* (Shanghai People's Publishing House, 2013).

¹⁵ Editor's note: The tax-sharing system refers to the way in which fiscal responsibilities are divided between local and central government in China. The essence of the 1994 tax-sharing reform was to re-centralise fiscal control, taking most revenue from the provinces back to Beijing. In exchange, Beijing allowed local governments to sell the rights to use land for a certain period of time in order to raise revenue.

¹⁶ Peter B. Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton University Press, 1995).

¹⁷ Wan-wen Chu, *The Development Model of China's Industries: Exploring the Role of Industrial Policy* [中国产业的发展模式—探索产业政策的角色] (Social Studies Journal Press, 2020).

¹⁸ Wan-wen Chu, *The Development Model of China's Industries: Exploring the Role of Industrial Policy* [中国产业的发展模式—探索产业政策的角色], (Social Studies Journal Press, 2020), 134.

¹⁹ 'The Great Industrial Policy Debate Between Lin Yifu and Zhang Weiying' [林毅夫、张维迎“产业政策大辩论”实录], *The Paper* [澎湃新闻], 21 November 2016, https://www.thepaper.cn/newsDetail_forward_1565467.

²⁰ Xinhua News Agency, 'Outline of the Twelfth Five-Year Plan for the National Economic and Social Development of the People's Republic of China' [国民经济和社会发展第十二个五年规划纲要], Central People's Government of the People's Republic of China, 16 February 2011, http://www.gov.cn/2011lh/content_1825838.htm#.

²¹ Yi Huiman, 'Efforts to Build a Modern Capital Market with Chinese Characteristics' [努力建设中国特色社会主义现代资本市场], *Qiushi* [求是], no. 15 (2022).

²² Editor's note: Platform capital refers to platform-based business models in the digital economy. These platforms typically act as intermediaries in the process of buying and selling and make revenue through commissions. Platform capital could be considered as a new form of merchant capital.

²³ Rudolf Hilferding, *Finance Capital* (Commercial Press, 2011); V.I. Lenin, 'Imperialism, the Highest Stage of Capitalism', in *Selected Works of Lenin 2* (People's Publishing House, 1972).

²⁴ Meng Jie, 'On State Capital in the Socialist Market Economy' [略论社会主义市场经济中的国有资本], *Marxism and Reality* [马克思主义与现实], no. 2 (2023).

²⁵ Shi Zhengfu, *Extraordinary Growth: China's Economy 1979-2049*, (Shanghai People's Publishing House, 2013); Shi Zhengfu, 'Functional Monetary Theory and the High-Quality Development of China's Economy' [功能货币论与中国经济的高质量发展], *Wenhua Zongheng* [文化纵横], no. 4 (2020).

²⁶ Editor's note: Knightian uncertainty is a term which refers to the lack of quantifiable knowledge. This kind of uncertainty is different from the economic concept of risk, which refers to the probability of a given outcome. While risk implies action taken knowing the probability of an outcome, uncertainty describes a total lack of information. This concept of uncertainty was articulated by University of Chicago economist Frank Knight. See: Frank Knight, *Risk, Uncertainty and Profit* (Cosimo Inc., 1921).

²⁷ Mariana Mazzucato, *The Entrepreneurial State: Debunking Private vs. Public Sector Myths* (Public Affairs, 2018), 63-64; p. 68; Mariana Mazzucato, 'From Market Fixing to Market-Creating: A New Framework for Innovation Policy', *Industry and Innovation* 23, no. 2 (2016), 140-156.

²⁸ Karl Polanyi, *The Great Transformation*, trans. Feng Gang and Liu Yang (Zhejiang People's Publishing House, 2007).

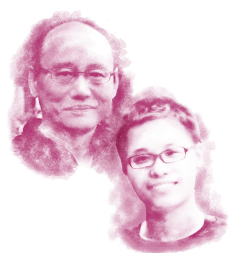
²⁹ Peter B. Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton University Press, 1995).

³⁰ Meng Jie, *Socialist Political Economy with Chinese Characteristics as a Method* [作为方法的中国特色社会主义政治经济学] (Fudan University Press, 2023).

³¹ Lu Feng, 'Breaking Through the Fog: Uncovering the Source of China's High-speed Rail Technology Progress' [冲破迷雾—揭开中国高铁技术进步之源], *Management World* [管理世界] 9, no. 1 (2019).

³² For an explanation of the CPC as a mission-oriented party, see: Meng Jie, 'The Communist Party of China and the Socialist Market Economy with Chinese Characteristics' [中国共产党与中国特色社会主义市场经济], *Open Times* [开放时代], no. 3 (2022).

³³ Xi Jinping, 'Speech at the 20th General Assembly of the Chinese Academy of Sciences, the 15th General Assembly of the Chinese Academy of Engineering, and the 10th National Congress of the China Association for Science and Technology' [习近平：在中国科学院第二十次院士大会、中国工程院第十五次院士大会、中国科协第十次全国代表大会上的讲话], China Government Network, 28 May 2021, https://www.gov.cn/xinwen/2021-05/28/content_5613746.htm.



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