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Scale and Utilization of China's Public Sector Resources: Impact of Public Resource Allocation on the Growth Pattern of Strong Supply vs. Weak Demand

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Abstract

In recent years, China's insufficient consumption and the pattern of strong supply vs. weak demand have had multiple underlying causes. At a deeper level, these outcomes are closely related to a catch-up–oriented allocation of public sector resources that has long been concentrated on the supply side. To examine both the long-term positive effects and the current constraints of this allocation pattern, this paper provides a quantitative estimation of the overall scale and structural allocation of China's public resources. Preliminary results show that in 2023, the total scale of public sector resources was roughly equivalent to 48.01% of China's GDP same year. Of the total, larger part of about 25.5% of GDP was allocated through various forms of investment and production support schemes to promote technological upgrading, industrial development, and the expansion of supply side capacity. While about 22.5% of GDP was channeled through different mechanisms to support government and household consumption. Empirical evidence indicates that although China's fiscal spending in recent years has increasingly tilted toward people's livelihood, overall public resource allocation remains heavily focused on supply-side investment.

Against the background of a well-established market mechanism and a strong supply responsiveness of the private sector to market demand, the above catch-up–oriented public resource allocation, while actively advancing supply-side productivity catch-up, has also tended to reinforce structural imbalances associated with weak consumption and insufficient domestic demand. This has contributed to the continued intensification of the strong supply and weak demand pattern in recent years. Under current conditions, a propriate rebalancing consideration through divert part of the public resources originally used in supply side towards supporting social security and household consumption would allow economic growth to

benefit on both the supply and demand sides, and could provide a new transition opportunity for China to move from the strong supply vs. weak demand pattern towards a new one with supply and demand both strong.

0．Introduction

In 2025, China's economy achieved new progress by "pressing ahead under pressure," and the annual GDP growth target of 5% set at the beginning of the year is on track to be met. However, the economy once again showed weakening momentum in the second half of the year, indicating that the long-standing issue of insufficient domestic demand and a consumption shortfall has not been fundamentally resolved. Against this backdrop, the Central Economic Work Conference held at the end of 2025, while fully affirming economic growth, pointed out that China's economic development still faces many "old problems and new challenges," among which "strong supply vs. weak demand in domestic economy" is highlighted. It emphasized that these "problems in development and transition can be solved through sustained efforts." The new assessment by policymakers regarding the contradiction between strong supply vs. weak demand captures a key structural feature of China's current economic growth. It accurately elucidates the real-world context and scientific rationale for the principle of "upholding domestic demand as the main driver and building a strong domestic market," and provides important guidance for understanding the future trajectory of China's economic transformation and its underlying dynamics.

My two previous two posted essays examined the overall manifestations of recent economic growth being constrained by consumption shortfalls and the imbalance of strong supply vs. weak demand,[2] and identified five factors underlying China's persistently weak consumption. [3]To understand why certain institutional rooting causes have remained difficult to be solved over many years, it is necessary to further analyze the "causes behind the causes" and to explore in depth the mechanistic effects of China's catch-up–oriented approach with public-sector resource allocation. The relevant historical backdrop is that, in pursuit of the fundamental economic development objective of catching up with international advanced level in technological and industrial supply-side capabilities, China's public sector has mobilized large-scale resources and, over an extended period, has prioritized investment aimed at strengthening supply-side capacity. Meanwhile, increasing attention has been paid to social welfare and social security during the course of economic development, and related expenditures have exhibited a clear upward trend. Nevertheless, in quantitative terms, such spending has yet to reach a level sufficient to broadly align supply and demand and achieve overall balance.

This catch-up–oriented public resource allocation has exerted different effects on the structure and balance of economic supply and demand at different stages of China's economic development and transformation, particularly across various phases of the economic growth in the reform and opening-up era. These effects have depended on differences in the formation and evolution of the market system, especially variations in the maturity and supply capabilities of private enterprises. Against the current

reality, the open market economic system has been firmly established and operated for several decades. The private sector has achieved historic improvements in technological innovation and output capacity, and has long developed a relatively flexible and effective supply responsiveness to growth in market demand and changes in price signals. Meanwhile, the efficiency with which public sector resource investment translates into supply capability has also risen. In this new context, the catch-up allocation of public resources continues to play a critical role in pushing forward upgrading of supply side capability, but also increases the difficulty in achieving overall balances needed for sustainable growth, and even contributes to the sustained intensification of the contradiction between strong supply vs. weak demand.

Therefore, to truly achieve the consumption-boosting strategic objectives long set out by the central authorities, and to substantively alleviate the constraints on economic growth in recent years stemming from the imbalance of strong supply vs. weak demand as well as persistent consumption shortfalls, it is necessary to focus on the deep-seated role of the catch-up allocation mode of public resources and to optimize and refine it in a timely manner. In methodological terms, adjustments to the public resource allocation framework should adhere to a two-pronged approach. On the one hand, given that China remains in a stage of development characterized by its transition toward a moderately developed economy, public resource allocation should continue to provide sufficient support for sustained innovation and progress on the supply side upgrading. This is essential for consolidating and strengthening the momentum of China's technological advancement and the rapid development of new-quality productive forces, thereby ensuring robust supply-side capacity to support sustained growth and continued catch-up. On the other hand, there is an urgent need to optimize and rebalance the traditional approach of public resources allocation through gradual and orderly diverting part of the resources originally to investment and supply side to supporting social security and consumption. Such marginal and gradual adjustments would effectively boost consumption and promote economic structural rebalancing, while enhancing the sustainability of China's economic catch-up and better advancing broader development objectives, including common prosperity, the construction of a unified national market, and the smooth functioning and strengthening of the domestic economic circulation.

Given the fact that the existing official statistics do not provide systematic data on the scale of resources controlled by the public sector and the composition of its expenditures, examining economic balance and the conditions for sustainable growth from the perspective of public resource allocation requires two basic quantitative estimation exercises. The first is to estimate the total scale of resources held or revenues obtained by the public sector; the second is to estimate the relative shares of public resources devoted to supporting investment and supply-side productive capacity versus those allocated to social security, people's livelihoods, and other consumption components. This paper selects 2023 as the year of observation and undertakes these quantitative estimations in several steps.

Section 1 discusses the general concept of the public sector and the characteristics of China's public sector. Section 2 estimates the total scale of resources controlled or revenues received by China's public sector in 2023. Section 3 estimates the total amount and relative scale of public-sector resources used for investment and other production or supply side expenditures, including components such as supply-side

spending from the general public budget, the expenditure of the government fund revenues, and public-sector fixed asset depreciation etc. Section 4 estimates the total scale and relative share of public-sector resources used to support people's livelihoods and total consumption taking into account of social insurance accounts expenditure, social transfers in kind, and government actual final consumption. Section 5 synthesizes the above preliminary estimates and further explores the analytical insights and policy implications of the catch-up allocation of public resources for understanding China's macroeconomic structural characteristics and the prevailing contradiction of strong supply vs. weak demand. Section 6 summarizes the main points of the paper as the conclusion.

1．The Concept of the Public Sector and China's Characteristics

Modern society is built on the foundations of highly specialized division of labor and urban population agglomeration. The sustained operation of economy and society gives rise to growing demands for public affairs administration as well as the supply of public goods and services. The institutions and organizations that manage public affairs and provide public goods and services constitute the core entities of the public sector. Compared with pre-modern economic and social formations, in post-industrial modern societies as well as economies undergoing industrialization-driven transformation, the functions of the public sector have expanded markedly alongside a rise in its significance. The efficient operation of the public sector has become a fundamental component of a country's generalized governance capacity. Although the public sector exists universally across contemporary nations, the specific scope, structure and functions of the public sector vary significantly from country to country, in response to their respective historical evolution, realistic institutions and governance frameworks.

The concept of a country's public sector is generally defined as the aggregate of organizations centered on government support and aimed at realizing public interests. It can be broadly understood as the general government sector plus public enterprises. For example, the System of National Accounts 2008 (SNA 2008), jointly compiled by five international organizations—the United Nations, the European Union, the OECD, the IMF, and the World Bank—devotes Chapter 22 to defining the "general government and public sectors." It defines the public sector as comprising the general government plus "public corporations."

Within this framework, the general government sector includes not only the narrow defined government that represents the state in exercising governance as the "sole holder of authoritative power,"[4] but also government-led social security systems and non-profit institutions (NPIs) controlled by the government. Non-profit institutions refer to organizational entities that provide goods and services at prices that are not economically significant and are therefore not classified as public enterprises.[5]

The Government Finance Statistics Manual 2014 (GFSM 2014) [6], issued by the International Monetary Fund in 2014 states, on pages 1 and 18–19, that "the public sector consists of all resident institutional units that are directly or indirectly controlled by resident government units, that is, it includes all units of the general government sector and resident public corporations.[7]" This definition is essentially consistent with that provided by the United Nations and other institutions mentioned above. However, under this framework, public corporations are further classified into

public non-financial corporations and public financial corporations.[8]

Owing to differences in historical background, national institutions, and development paths, China's public sector exhibits at least two major and profound characteristics in an international comparative perspective. On the one hand, with respect to the public sector itself, it encompasses a broad range of entities, performs a wide array of functions, and operates on a large scale. On the other hand, and more fundamentally, the Communist Party of China, as the long-term governing party, exercises comprehensive leadership across all levels of China's public sector.

China's public sector is mainly composed of the following components. First are the state organs, which occupy the core position and constitute the center of authority within the public sector. These state organs consist of several parts. The first is the legislative organs, including the National People's Congress and its Standing Committee, as well as people's congresses at all local levels and their standing committees, which are responsible for enacting laws and overseeing the government. The second is the administrative organs, commonly referred to as the government in the narrow sense. These include the State Council (the Central People's Government) and its ministries and commissions, as well as people's governments at all local levels and their constituent departments (such as development and reform commissions, education bureaus, public security bureaus, and health commissions), which are responsible for implementing laws and managing social affairs. The third is the supervisory organs, including the National Supervisory Commission and supervisory commissions at all local levels, which exercise oversight over all public officials who wield public power. The fourth is the judicial organs, including the Supreme People's Court and people's courts at all local levels (adjudicatory bodies), as well as the Supreme People's Procuratorate and people's procuratorates at all local levels (organs of legal supervision).The fifth is the military organ, namely the Central Military Commission, which leads the country's armed forces.

The second component consists of public institutions (shiye danwei). These are entities established by the state and led by the government, positioned to provide public services such as education, healthcare, scientific research, and cultural services, and characterized by a high degree of public-interest orientation and policy relevance. Typical examples include public schools (primary and secondary schools as well as universities), public hospitals, research institutes (such as institutes under the Chinese Academy of Sciences and the Chinese Academy of Social Sciences), public libraries, museums, and radio and television stations. They differ from public institutions in the general international sense in several respects.

First, a small number of public institutions (shiye danwei) operate under public institutions (shiye danwei) staffing arrangements while exercising governmental functions. For example, the China Securities Regulatory Commission and the former China Banking and Insurance Regulatory Commission are ministerial-level public institutions (shiye danwei) that undertake important financial regulatory responsibilities. Second, major public institutions (shiye danwei) are typically assigned administrative ranks, and their principal leaders or senior management are appointed in a unified manner by relevant state authorities. Third, funding for public institutions (shiye danwei) relies primarily on fiscal appropriations; however, as examined later, some public institutions (shiye danwei) are permitted to obtain a portion of market-based revenue through the provision of services. Fourth, in certain

fields in which public institutions (shiye danwei) perform their functions—such as education and healthcare—relevant administrative authorities impose varying degrees of entry restrictions on other market participants. Taken together, the degree of control and regulation to which public institutions (shiye danwei) in China are subject is higher than that applied to public institutions in the general international sense.

The third component consists of public or state-owned enterprises. These are enterprises wholly owned by the state (or government) or in which the state holds a controlling stake, and which engage in production and business operations in specific industries and sectors. Examples include state-owned banks, public utility companies (providing services such as water supply, electricity, and public transportation), as well as enterprises in energy, manufacturing, transportation, construction, and related sectors. Their operating principles typically seek to balance social public-interest objectives with market-oriented profitability.

State-owned enterprises are required to take the lead in implementing national economic and industrial policies and constitute an important instrument through which the government promotes economic development and regulates economic activity. Major state-owned enterprises are often endowed with administrative status within the system; for example, a small number of centrally administered state-owned enterprises hold ministerial-level administrative rank, and their principal leaders are appointed in a unified manner by higher-level organizational authorities. A limited number of state-owned enterprises operate under conditions of exclusive monopoly or entry restrictions (such as tobacco processing, railways, and oil and natural gas), while a larger number of state-owned enterprises operate in relatively competitive market environments.

It is generally understood that China's public sector comprises the three components outlined above. However, viewed from the basic defining criterion of being subject to government control, China's people's organizations and mass organizations may also be regarded as a peripheral extension of the public sector with Chinese characteristics. China's people's organizations include eight groups that hold consultative seats in the Chinese People's Political Consultative Conference, such as the All-China Federation of Trade Unions, the Communist Youth League of China, and the All-China Women's Federation etc. In addition, there are more than a dozen social organizations commonly referred to as "mass organizations," including the China Law Society, the Chinese People's Association for Friendship with Foreign Countries, and the All-China Journalists Association etc.

In 2000, the General Office of the Communist Party of China Central Committee and the General Office of the State Council, for the first time through an official document, clarified that 21 people's organizations and social organizations whose staffing and establishment were directly administered by the Central Office for Organizational Structure Management were collectively classified as mass organizations. In 2006, the China Family Planning Association was added to this category, forming a total of 22 mass organizations whose staffing and establishment are directly managed by the Central Office for Organizational Structure Management. These organizations serve as bridges and links between the Party and the government and specific social groups, with approval authority over their administrative staffing vested at the central level.[9]Given that these social organizations occupy a special position in China's political and social life, undertake public management or service

functions entrusted by the government to varying degrees, and operate under direct government guidance and financial support, some views consider them to be part of the public sector. However, this paper focuses on the economic resources controlled by the public sector and their modes of allocation. Since these organizations do not, on a routine basis, obtain income of significant scale through market activities, they are not included in the scope of analysis in this study.

On the other hand, it must be emphasized that the centralized and unified leadership of the Communist Party of China constitutes a fundamental principle of China's political system and state governance. This principle determines the Party's core leadership position over the public sector, which is manifested in the Party's overall direction-setting of lines and policies, its control over ideology, the establishment of Party organizational structures[10], and its authority over appointments and removals to key positions, thereby achieving unified leadership over the government and the public sector. In this process, the Party does not directly substitute for the government in exercising administrative functions, nor does it itself constitute a specific component of the government or the public sector. Rather, it operates above the public sector as a political leadership force, institutional designer, policymaker, personnel authority, and ideological leader, occupying a role akin to that of a "meta-governor" in the system of governance. [11]

2. Estimating the Scale of China's Public Sector Resources

Based on a conventional understanding and definition of the public sector, it is first necessary to estimate the scale of economic resources that the public sector centrally controls through various channels, and then to examine the directions and structure of their actual use. On this basis, the impact of public-sector resource allocation on consumption and on supply–demand relations can be analyzed. In general, the scale of resources centrally controlled by the state can be measured by generalized fiscal revenues encompassing the four budgetary accounts, which also provides one perspective on the quantitative balance between state- and market-based resource allocation. From the perspective of the public sector emphasized in this study, however, the resources under its control extend beyond generalized fiscal revenues and include at least several additional sources. These include: (i) the portion of state-owned enterprise profits that is not transferred to the fiscal budget through state capital operating revenues account; (ii) revenues earned by certain public institutions （shiye danwei） through market-based provision of services; and (iii) resources embodied in the depreciation of the extensive stock of fixed assets owned by the public sector. There is a lack of ready-made systematic statistical data for measuring the scale of these resources. Thus, it is necessary to sort out, integrate and estimate the data in light of the specific conditions of the three components of the public sector, so as to put forward a preliminary estimate of the scale of resources controlled by China's public sector in recent years.

The discussion proceeds in several steps. First, generalized fiscal revenue data are reported. Second, the portion of net profits of state-owned enterprises that is independent of the generalized fiscal accounts is compiled and estimated. Third, market-based service revenues of public institutions, beyond fiscal appropriations, are estimated. Fourth, the resources implied by depreciation of fixed assets owned by the public sector are discussed and estimated.

2.1 Generalized Fiscal Revenues of the Government and Their Relative Scale

We begin by examining the total scale, composition, and share of GDP of China's generalized fiscal revenues in recent years—namely, the so-called "four budgetary accounts." This constitutes the most basic and core component of the resources controlled and utilized by the public sector. The four budgetary accounts of generalized fiscal revenues include general public budget revenues, government fund budget revenues, state capital operating budget revenues, and social insurance fund budget revenues.

Figures 1 and 2 show that the generalized public budget is the largest component, followed by government fund budget revenues and social insurance fund budget revenues, while state capital operating budget revenues are relatively small in scale. Total revenues from the four budgetary accounts increased continuously from RMB 18.78 trillion in 2012 to RMB 45.69 trillion in 2024. However, growth rates differed across periods and did not always move in line with GDP growth. As a result, the ratio of generalized fiscal revenues to GDP rose from around 35 percent in earlier years to peaks of 38.2 percent and 39.1 percent in 2019 and 2020. In recent years, however, largely due to the deep adjustment in the real estate sector and the associated decline in government fund revenues—especially local government land conveyance revenues—the ratio of generalized fiscal revenues to GDP fell back to 35.0 percent in 2023 and 33.9 percent in 2024, representing a decline of 5.2 percentage points compared with 2012. Over the same period, the share of government fund revenues in GDP declined from 13.6 percent to 8.26 percent, a decrease of 5.34 percentage points.

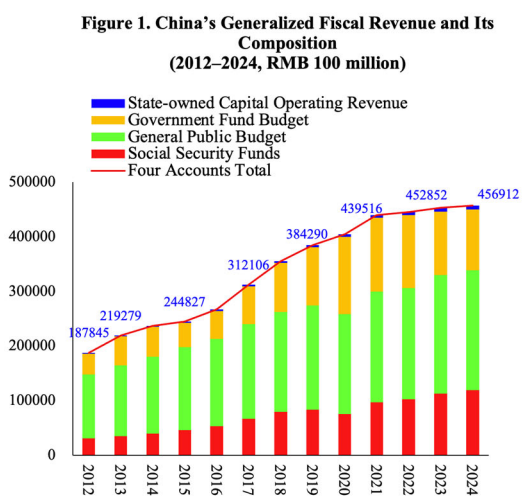


Figure 1. China's Generalized Fiscal Revenue and Its Composition (2012–2024, RMB 100 million)

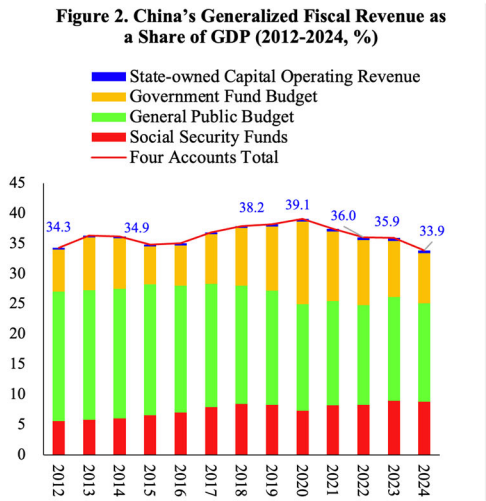


Figure 2. China's Generalized Fiscal Revenue as a Share of GDP (2012-2024, %)

Data sources: National Bureau of Statistics of China, CEIC, and the Wind database.

The generalized fiscal revenue, based on the official statistical data of the "Four Budgets", is inherently quite authoritative, yet it may be subject to overestimation biases for two reasons. First, if the revenue of a particular item in the "Four Budgets" overlaps with the expenditure of another item, the aggregated data may be statistically overestimated due to double counting. As Mr. Lou Jiwei, the former Minister of Finance, pointed out: "Fiscal subsidies from the general public budget to the social insurance fund budget reached RMB 2.5 trillion in 2023. This sum is recorded as a revenue item in both the government fund budget and the social insurance fund budget, and such cross-duplication must be deducted during aggregation to avoid

double counting." [12]We will take this factor into account to avoid potential overestimation biases in the subsequent discussion on social insurance expenditures of other parts of the public sector that are relatively independent of fiscal subsidies.

Second, the failure to deduct the costs incurred by local governments in land supply may lead to the overestimation of land transfer income, a point also explicitly raised by Mr. Lou Jiwei: "Land transfer income is gross income, from which the costs of land acquisition, demolition and site development (including the seven connections and one leveling) must be deducted; only the net income is comparable to international revenue metrics. Affected by growing difficulties in land market transactions, falling land prices and rigid costs that are hard to reduce, the current ratio of net income to gross income stands at only 30%, a notable decline from the level of around 45% in 2017 and even as low as 10% in some regions with low land prices. Accordingly, the net land transfer income of China in 2023 was only about RMB 1.9 trillion, which represents the truly comparable and meaningful revenue scale." [13]

The view that a simple aggregation of generalized fiscal revenues may lead to overestimation is well grounded. However, government expenditures on cost compensation also represent specific economic activities undertaken by the public sector. In the context of this study, therefore, the use of gross revenue indicators may be appropriate. Moreover, from the perspective of the resources controlled by the government and the broader public sector, the above “four budgetary accounts” may also involve sources of underestimation. In recent years, for example, government debt issuance in China has expanded rapidly. Under the current statistical framework of the “four budgetary accounts,” part of the proceeds from special-purpose bonds and ultra-long special treasury bonds has been recorded as debt revenue and included in the government fund budget. However, in accordance with the statistical principle that “debt revenue does not constitute fiscal revenue,” [14]proceeds from the issuance of general government bonds used to finance general budget deficits are not included in the revenue side of the “four budgetary accounts.”

From a perspective more consistent with the focus of this study—namely, the scale of generalized public resources under government control—it would in fact be more appropriate to adopt expenditure-side indicators. Based on information aggregated from the Ministry of Finance’s Report on the Implementation of Central and Local Budgets for 2024 and on the Draft Central and Local Budgets for 2025, submitted to the National People’s Congress in March 2025, total expenditures under the generalized fiscal “four budgetary accounts” amounted to RMB 49.638 trillion in 2024, equivalent to about 36.79 percent of GDP (RMB 134.9 trillion) for that year. This figure is significantly higher than the 33.87 percent share obtained by simply aggregating generalized fiscal revenues in the same year. In light of these considerations, this study provisionally adopts the official figures for generalized fiscal revenues and their ratios to GDP.

2.2 Undistributed Net Profits of State-Owned Enterprises

The resources controlled by the public sector include not only generalized fiscal revenues, but also the undistributed portion of net profits of state-owned enterprises (SOEs) and the revenues earned by Public Institutions (shiye danwei) through market-based service provision. Under current laws and regulations in China, SOE profits are

subject to corporate income tax and required remittances to the state capital operating budget. These two components enter government accounts through the tax system and the state capital operating budget, and therefore already constitute part of generalized fiscal revenues. However, the residual portion of SOE profits after these payments represents a relatively independent component of public-sector resources beyond generalized fiscal revenues. This component should be appropriately estimated and incorporated into an overall assessment of the scale of public-sector resources. The following provides a preliminary estimate of this income component for 2023.

According to data from the Ministry of Finance, total profits of state-owned enterprises in 2023 amounted to RMB 4,633.28 billion. This figure represents pre-tax profits and does not include the profits of centrally administered state-owned financial enterprises. To estimate the remaining profits, several adjustments are required. [15]First, corporate income tax is deducted at the statutory rate of 25 percent in order to avoid double counting with tax revenues recorded under the general public budget within generalized fiscal revenues. After this adjustment, net profits of the non-financial SOE sector amount to RMB 3,474.9 billion. As preferential tax treatments—such as the 15 percent reduced rate applicable to some high-tech SOEs—are not taken into account, this estimate is likely to be understated. Second, remittances to the state capital operating budget in 2023, totaling RMB 674.4 billion, are deducted to avoid double counting with revenues recorded under the corresponding budget account within generalized fiscal revenues. This implies that the remaining undistributed net profits of non-financial SOEs in 2023 amounted to at least RMB 2,800.5 billion. Third, based on annual financial reports and publicly disclosed information, the combined net profits of 27 centrally administered state-owned financial enterprises in 2023 totaled RMB 2,565.94 billion. After deducting the profits remitted to the state in the same year—amounting to RMB 59.71 billion[16]—the remaining RMB 2,506.18 billion is estimated to represent undistributed net profits of state-owned financial enterprises.

Table 1. Net Profits of China's Central Financial Enterprises in 2023

No.	Enterprise Name	Net Profit (RMB 100 million)	No.	Enterprise Name	Net Profit (RMB 100 million)
1	China Investment Corporation	7500	15	China Investment Corporation	
2	China Development Bank	874	16	China Development Bank	20
3	Export-Import Bank of China	88	17	Export-Import Bank of China	15.5
4	Agricultural Development Bank of China	360	18	Agricultural Development Bank of China	15.3
5	Industrial and Commercial Bank of China Ltd.	3639.9	19	Industrial and Commercial Bank of China Ltd.	58.2
6	Agricultural Bank of China Ltd.	2693.6	20	Agricultural Bank of China Ltd.	
7	Bank of China Ltd.	2319	21	Bank of China Ltd.	1
8	China Construction Bank Corp.	3326.5	22	China Construction Bank Corp.	
9	Bank of Communications Co., Ltd.	927.3	23	Bank of Communications Co., Ltd.	
10	CITIC Group Corporation	2400	24	CITIC Group Corporation	
11	China Everbright Group Co., Ltd.	500	25	China Everbright Group Co., Ltd.	56.5
12	People's Insurance Company (Group) of China Ltd.	227.3	26	People's Insurance Company (Group) of China Ltd.	31.1

13	China Life Insurance (Group) Company	461.8	27	China Life Insurance (Group) Company	60
14	China Taiping Insurance Group Co., Ltd.	84.3		China Taiping Insurance Group Co., Ltd.	25659.39

Data Sources and Notes: 2023 annual reports of the respective central financial enterprises. The net profit of China Investment Corporation is converted from USD 107.857 billion into RMB using the applicable exchange rate. The net profit of CITIC Group Corporation is aggregated from CITIC Financial Holdings, CITIC Bank, CITIC Limited, and other major segments. The net profit of China Everbright Group Co., Ltd. is aggregated from Everbright Bank, Everbright Securities, and other major segments.

Taking the above considerations together, it is estimated that in 2023 the net profits of state-owned enterprises made an additional contribution of approximately RMB 5,306.68 billion to the resources controlled by the public sector, equivalent to about 4.21 percent of GDP[17] in that year (RMB 126.1 trillion).

2.3 Market-based Revenues of Public Institutions (shiye danwei)

Assessing the additional contribution of public institutions (shiye danwei) to the resources controlled by the public sector involves more complex considerations. In general, China's system of public institutions (shiye danwei) relies primarily on fiscal appropriations for funding. A small number of public institutions (shiye danwei) with regulatory functions, as well as public institutions (shiye danwei) for purely public welfare, have their operating expenditures fully financed by fiscal budgets. However, under the current regulatory and policy environment, certain public institutions (shiye danwei) continue to obtain sizable market-based revenues through various channels. These revenues constitute an additional component of the resources controlled and utilized by the public sector.

Since the reform and opening-up period, China's management system for public institutions (shiye danwei) has undergone a prolonged process of evolution and transformation, with the 2011 reform establishing the basic framework of the current system. In 2011, the Central Committee of the Communist Party of China and the State Council issued the Guiding Opinions on Promoting the Reform of Public Institutions (shiye danwei) by Category (hereinafter referred to as the Guiding Opinions), followed by a series of supporting policy documents released by the State Council. This reform redefined the principle of "scientifically classifying public institutions (shiye danwei)." For example, prior to the reform, some public institutions (shiye danwei) had been established without proper authorization or were created to undertake temporary and specific tasks. The Guiding Opinions required that "existing public institutions (shiye danwei) be cleaned up and standardized; those established in violation of regulations or whose original specific tasks have been completed should be abolished." Moreover, before the reform, the functions of public institutions (shiye danwei) in China were broad, encompassing not only the provision of public-interest services but also the exercise of certain administrative functions and engagement in production and business activities. The reform required public institutions (shiye danwei) to refocus on public-interest service provision. Accordingly, "those undertaking administrative functions should gradually transfer such functions to administrative organs or be transformed into administrative organs; those engaged in production and business activities should be gradually transformed into enterprises." The Guiding Opinions further stipulated that "going forward, no public institutions (shiye danwei) undertaking administrative functions or engaging in production and business activities shall be approved for establishment."

Under the new institutional framework, public institutions (shiye danwei) engaged in the provision of public-interest services are further classified into two major categories, with differentiated rules governing their funding mechanisms. The first category consists of Category I public-interest public institutions (shiye danwei), which are positioned to provide basic public services that cannot or should not be allocated through market mechanisms. These include compulsory education (such as public primary schools), foundational scientific research, public culture, public health, and basic primary-level medical services (such as community health centers). Given their public-interest nature, these public institutions (shiye danwei) are generally not permitted to charge fees, or are only allowed to levy nominal, cost-recovery charges.

The second category comprises Category II public-interest public institutions (shiye danwei), which include institutions engaged in higher education and non-profit medical services etc. [18]These public institutions (shiye danwei) may partially rely on market-based resource allocation, that is, they are allowed to make limited use of market mechanisms. Accordingly, they are permitted to charge reasonable fees, provided that such activities are not undertaken for profit-making purposes. Overall, under the current institutional framework, public institutions (shiye danwei) in sectors such as healthcare, education, culture, and science and technology in China are predominantly of a non-profit nature. [19]However, among them, Category II public-interest public institutions (shiye danwei) partially operate under principles of market-based resource allocation and may obtain reasonable market-based revenues through the provision of paid services.

Due to the lack of readily available statistical data, it is necessary to estimate the scale of market-based fee income obtained by non-profit Category II public institutions (shiye danwei). Given that the vast majority of such market-based income accrues to public institutions (shiye danwei) in the healthcare and education sectors, the following analysis focuses primarily on these two sectors.

Public institutions (shiye danwei) in the healthcare sector, particularly public hospitals, generate a relatively large volume of market-based income. According to data from the National Health Commission and the Ministry of Finance, total national health expenditure in 2023 amounted to RMB 9,057.58 billion. Funding sources consisted of three main components. First, government health expenditure totaled RMB 2,414.79 billion, accounting for 26.7 percent. Second, social health expenditure amounted to RMB 4,167.68 billion, or 46.0 percent. Third, out-of-pocket payment (OOP) by patients reached RMB 2,475.11 billion, accounting for 27.3 percent. [20]Government health expenditure is already included in the generalized fiscal accounts and therefore does not require separate consideration here. Out-of-pocket payment refers to medical expenses paid directly by households to healthcare providers at the point of service and constitutes the primary source of market-based income for the healthcare sector. Within social health expenditure, after deducting total expenditures of the national basic medical insurance (including maternity insurance) fund amounting to RMB 2,820.84 billion,[21] the remaining RMB 1,346.84 billion reflects funding from sources such as commercial health insurance premiums, private healthcare spending, social donations and assistance, and administrative and institutional service charges. These items should likewise be regarded as market-based income obtained by the public healthcare sector through various channels.

Taken together, market-based income earned by healthcare-sector Category II public

institutions (shiye danwei) amounts to approximately RMB 3.815 trillion (RMB 1.347 trillion plus RMB 2.475 trillion). Taking into account that private healthcare providers are estimated to account for roughly 15 percent of total social health expenditure[22], the additional market-based income accruing to public healthcare public institutions (shiye danwei), beyond generalized fiscal revenue, is estimated at approximately RMB 3.23 trillion. [23]This estimate does not incorporate informal or illegal income—such as so-called "red envelope" payments occasionally received by a small number of medical staff within the public hospital system—and therefore should be regarded as a lower-bound estimate.

Next, we turn to the market-based revenues of Category II public institutions (shiye danwei) in the education sector. These revenues mainly include tuition and accommodation fees paid by students enrolled in public higher education institutions, social donations, research funding, and income from cooperative education programs, which together constitute a substantial share of total funding for public universities. In addition, public vocational education institutions and adult education institutions also obtain a certain proportion of their funding through market-based channels. Prior to the large-scale rectification of the education and training industry in 2020, some primary and secondary schools in the compulsory education stage were also involved, to varying degrees, in generating income from extracurricular tutoring activities.

According to the Statistical Bulletin on the Implementation of National Education Expenditure jointly released by the Ministry of Education and the Ministry of Finance, total national education expenditure in 2023 amounted to RMB 6,459.504 billion, representing a year-on-year increase of 5.33%. Of this total, government fiscal education expenditure reached RMB 5,043.947 billion, up 4.06% from the previous year. [24]Fiscal education expenditure includes education spending arranged through the general public budget, education spending financed by government fund budgets, enterprise appropriations for schools operated by state-owned or state-controlled enterprises, as well as income from school-run industries and social services used for educational purposes. Among these components, expenditures financed through the general public budget and government fund budgets are already covered by the government's generalized fiscal accounts, while enterprise appropriations and income from school-run industries and social services conceptually constitute additional revenues obtained by the education sector of the public sector. However, there is a lack of disaggregated data to precisely measure the magnitude of each component. As a rough estimate, subtracting fiscal education expenditure from total national education expenditure yields RMB 1,415.56 billion in non-fiscal education spending in 2023, which may be regarded as a lower bound for the market-based revenues of the education sector. According to the Statistical Bulletin on the Development of National Education in 2023, enrollment in private schools across all levels reached 49.4 million students, a decrease of 3.4319 million from the previous year, accounting for 16.96% of total enrollment nationwide. [25]Assuming that public and private education institutions account for approximately 80% and 20% of non-fiscal education expenditure, respectively, the non-fiscal education expenditure attributable to the public sector is estimated to be around RMB 1.13 trillion in 2023.

Based on the above analysis, in 2023 the healthcare sector, dominated by public hospitals, generated approximately RMB 3.23 trillion in market-based income outside fiscal channels, while public education institutions generated additional income of

about RMB 1.13 trillion. The combined market-based income of these two sectors is therefore estimated at RMB 4.36 trillion. Taking into account that public institutions (shiye danwei) in fields such as culture and science and technology also obtain market-based income of varying magnitudes, it may be reasonable to infer that the overall market-based income of China's public institutions (shiye danwei) in 2023 provided the public sector with approximately RMB 4.5 trillion as additional resources.[26]

It is necessary to further deduct the taxes and fees payable on such income. Public hospitals and public higher-education institutions fall under the category of "other organizations obtaining income" as defined by the Corporate Income Tax Law and are, in principle, subject to income taxation. In addition, their service income is theoretically subject to value-added tax (VAT) and other related taxes and surcharges. Under current regulations, medical service income earned by public hospitals is generally exempt from corporate income tax, and income obtained by public higher-education institutions from degree education provided to enrolled students under approved enrollment plans is also exempt from corporate income tax. Moreover, such income is typically exempt from value-added tax.

By contrast, non-basic medical service income of public hospitals, such as cosmetic and aesthetic services and income earned by public universities through commercial training programs, asset leasing, and other business activities are subject to VAT at rates of 3%–6%, plus additional surcharges such as the urban maintenance and construction tax and education surcharges, which together amount to approximately 12% of the VAT liability. The resulting effective tax burden is therefore estimated to be in the range of 3.36%–6.34%. Based on these considerations, this paper applies an assumed composite tax rate of approximately 5% to estimate the taxes payable on the market-based income of public institutions (shiye danwei), yielding an estimated tax liability of RMB 225 billion and a post-tax net income of approximately RMB 4.28 trillion.

Using the 2023 GDP level of RMB 126.1 trillion as the benchmark, this amount is equivalent to about 3.39% of GDP. When combined with the additional contribution of state-owned enterprise profits to public-sector resources—equivalent to 4.21% of GDP—the total amounts to approximately 7.6% of GDP in 2023.

2-4. Depreciation of Fixed Assets in the Public Sector

Fixed assets refer to production assets with relatively long service lives (generally exceeding one year), relatively high unit values, and the preservation of their original physical form during use. They include buildings and structures, specialized equipment (such as medical equipment, teaching instruments, and research apparatus), general-purpose equipment (such as office equipment and transportation vehicles), infrastructure (such as roads, bridges, and pipeline networks), and other long-term assets. Fixed assets owned by the public sector refer to such assets held by various public-sector entities for the provision of public services and the conduct of operational activities. Centered on the government, the public sector has accumulated a substantial stock of fixed assets[27] through historical inheritance and sustained long-term investment, forming an essential material foundation for supporting productive capacity in sectors vital to national welfare and for delivering basic public services.

Fixed assets undergo wear and tear over time, and maintaining their normal functioning requires the consumption of a corresponding share of social output. According to China's recent income-based GDP accounting data, economy-wide fixed asset depreciation accounts for approximately 15% of GDP. [28]The depreciation expenses incurred by the public sector to ensure the continued normal functioning of its fixed assets thus represent, in a specific form, the public sector's occupation and utilization of scarce social resources. Accordingly, an assessment of the total volume of resources controlled and utilized by the public sector should consider whether depreciation of public fixed assets constitutes an additional source of public resources independent of the public-sector income components discussed above. To this end, it is first necessary to estimate depreciation expenses across different segments of the public sector and then, in light of the ways through which depreciation expenses are compensated via depreciation accounting, to assess whether such expenses should be treated as an independent component of public resources.

The following section separately estimates the scale of fixed assets and depreciation for state-owned enterprises and administrative and institutional units. Under the current management and statistical framework, financial data for state-owned enterprises are compiled and reported separately for non-financial state-owned enterprises and financial state-owned enterprises (mainly central SOEs). Depreciation expenses for these two categories are estimated separately and we begin with non-financial state-owned enterprises.

Non-financial state-owned enterprises hold the largest stock of fixed assets among the three main components of China's public sector. Their depreciation expenses can therefore be estimated on the basis of total state-owned enterprise assets, combined with the ratio of fixed assets to total assets observed among listed state-owned enterprises and an assumed depreciation rate.

According to the Comprehensive Report of the State Council on the Management of State-Owned Assets in 2023, total assets of state-owned enterprises amounted to approximately RMB 371.9 trillion in 2023. [29]In addition, based on annual reports of listed companies, China's 1,435 listed non-financial state-owned enterprises reported total assets of RMB 70.63 trillion in 2023, of which fixed assets amounted to RMB 15.85 trillion, implying a fixed-asset-to-total-asset ratio of approximately 22.44%. [30]Considering that large infrastructure-intensive and capital-heavy state-owned enterprises in sectors such as telecommunications, transportation, and energy hold substantial strategic assets that are not publicly listed, the fixed-asset share of unlisted state-owned enterprises is likely to be significantly higher. [31]Assuming that the overall fixed-asset ratio for non-financial state-owned enterprises is around 30%, the corresponding stock of fixed assets is estimated at approximately RMB 111 trillion.

Table 2. Fixed Asset Statistics of Listed State-Owned Non-Financial Enterprises (trillion RMB)

Industry Category	Fixed Assets	Total Assets	Share (%)	Number of Firms
Total	15.85	70.63	22.44	1,435
Materials	2.8	7.37	37.93	250
Real Estate	0.1	5.6	1.85	64
Industrials	2.98	27.24	10.92	438
Utilities	4.46	8.27	53.95	98
Consumer Discretionary	0.49	3.59	13.51	148
Energy	2.3	8.93	25.79	49
Consumer Staples	0.2	1.32	15.24	79
Communication Services	1.58	4.26	36.95	61
Information Technology	0.79	2.84	27.75	170

Health Care	0.16	1.2	13.1	78

Source：Annual reports of listed companies; data extracted from the Wind database.

Turning next to state-owned financial enterprises, the asset structure of this category of SOEs is dominated by financial assets, debt investments, and other liquid assets. Fixed assets mainly consist of office premises and information technology systems, and their overall scale is relatively limited, resulting in a low fixed-asset share.

According to the Comprehensive Report of the State Council on the Management of State-Owned Assets in 2023, total assets of state-owned financial enterprises nationwide amounted to RMB 445.1 trillion in 2023. [32]Based on annual report data of 80 listed financial enterprises extracted from the Wind database, as of 2024 the total assets of listed state-owned financial enterprises amounted to approximately RMB 287.73 trillion, of which fixed assets totaled about RMB 1.58 trillion. Fixed assets therefore accounted for only 0.55% of total assets. On this basis, the overall fixed-asset ratio of state-owned financial enterprises is estimated to be in the range of 0.5%–1%. Accordingly, the total stock of fixed assets held by state-owned financial enterprises nationwide is estimated to be approximately RMB 2–4 trillion.

Table 3. Fixed Asset Statistics of Listed State-Owned Financial Enterprises(trillion RMB)

Fixed Assets	Total Assets	Share (%)	Number of Firms
1.58	287.73	0.55	80

Source：Annual reports of listed companies; data extracted from the Wind database.

Considering that a portion of fixed assets held by state-owned enterprises depreciates relatively quickly, a depreciation rate of 5% is applied to estimate depreciation expenses for state-owned enterprise fixed assets. Based on the estimates above, total fixed assets held by non-financial and financial state-owned enterprises amounted to approximately RMB 115 trillion in 2023, implying annual depreciation expenses of about RMB 5.63 trillion, equivalent to roughly 4.5% of GDP in that year.

We next consider the scale of fixed assets and depreciation expenses of administrative units and public institutions(shiye danwei). According to the Regulations on the Administration of State-Owned Assets of Administrative and Institutional Units issued by the Ministry of Finance and related official statistics, the total assets of administrative units (government agencies) nationwide in 2022 amounted to approximately RMB 10–15 trillion. Owing to their non-commercial functional positioning in administrative management and the provision of public services, the majority of their assets take the form of fixed assets such as office buildings, official vehicles, and office equipment, with an estimated scale of about RMB 8–12 trillion.[33]

Fixed assets held by public institutions (shiye danwei) are mainly concentrated in the fields of education, science, culture, healthcare, and related sectors. Based on statistics from the Ministry of Finance, the Ministry of Education, the National Health Commission, the Ministry of Science and Technology, and other relevant authorities, total assets of public institutions nationwide (including fixed assets) amounted to approximately RMB 30–40 trillion in 2022. Fixed assets—such as school buildings, hospital equipment, scientific research instruments, and library collections—account for a relatively high proportion, estimated at around RMB 20–30 trillion.[34] For the

purpose of estimation, we assume total fixed assets of administrative units and public institutions of approximately RMB 42 trillion. Applying a relatively low depreciation rate of 4% yields annual depreciation expenses of RMB 1.68 trillion, equivalent to about 1.33% of GDP in that year.

Depreciation expenses are compensated differently across the three components of the public sector and should therefore be assessed separately in determining whether they constitute an independent component of public-sector resources. Two cases can be distinguished. The first concerns depreciation of state-owned enterprises. As depreciation expenses have already been deducted ex ante in the previous estimation of net profits of the state-owned enterprise sector as a component of public-sector resources, this implies that state-owned enterprises allocate part of the resources they obtain for necessary depreciation expenditures. Since the earlier estimation of public-sector resources did not include depreciation charges treated as “pre-collection and pre-expenditure” within state-owned enterprises, such depreciation expenses should be regarded, from the perspective of this paper, as a constituent component of the resources controlled and utilized by the public sector.

The second case concerns depreciation of fixed assets held by administrative units and public institutions. The associated expenses are financed mainly through resources provided by the general public budget. Under the current accounting rules for administrative and institutional units, depreciation of fixed assets is explicitly recorded under both “operating expenses” (covering core activities such as school instruction, hospital services, and government office operations) and “administrative expenses” (covering administrative, logistical, and managerial support activities). In practice, part of the depreciation expenses of public institutions may also be financed using their market-based income. Given that the earlier estimation of public-sector resources already includes general public budget revenue and the market-based income of public institutions, depreciation expenses of administrative units and public institutions should not be treated as an independent component of public-sector resources. Accordingly, in estimating the total volume of resources controlled by the public sector, this paper includes only the depreciation expenses of the state-owned enterprise sector, amounting to approximately 4.5% of GDP.

2-5. Estimated Results on the Scale of Resources Controlled by the Public Sector

Summarizing the results of the above analysis, in recent years the resources controlled and utilized by the public sector have consisted of generalized fiscal revenue equivalent to approximately 35.9% of GDP, supplemented by state-owned enterprise profits and market-based income of public institutions (shiye danwei) amounting to about 7.6% of GDP, as well as depreciation expenses equivalent to roughly 4.5% of GDP. Taken together, these components amount to approximately 48% of GDP (35.9 + 4.2 + 3.4 + 4.5 = 48).

Allowing for potential estimation errors in different directions, it can be broadly concluded that the public sector controls a large volume of resources exceeding 45% of GDP. Since the reform and opening-up period, China has transitioned from a planned economy toward a socialist market economy, with the 14th National Congress of the Communist Party of China establishing the goal of building a market economy under a framework of state macroeconomic regulation. In this institutional context, the concentration of substantial economic resources in a government-centered

public sector constitutes the fundamental resource base for embodying this institutional arrangement and for enabling strong and effective macroeconomic regulation.

Table 4. Estimated Scale of Resources Controlled by China's Public Sector in 2023

Public Sector Component	Amount (trillion RMB)	Share of GDP (%)
(1) "Four Accounts" Generalized Fiscal Resources	45.29	35.92
(2) Undistributed Profits of State-Owned Enterprises	5.31	4.21
(3) Depreciation Provision of State-Owned Enterprises	5.63	4.49
(4) Market-Based Revenue of Public Institutions (shiye danwei)	4.28	3.39
Total	60.5	48.01

Source: Estimated results based on relevant sections of this paper.

3. Public Resource Allocation for Enhancing Supply-Side Capability

From the perspective of maintaining the balance between supply and demand required for sustained economic growth—the central focus of this paper—an inquiry into the causes of weak consumption must pay particular attention to how public resources are allocated between enhancing supply-side capacity and supporting final consumption. How are public resources distributed between these two uses, and how well are they matched? What implications does this allocation ratio have for structural balance in the economy and for adjustment mechanisms? How have these mechanisms evolved across different stages of China's economic development? In particular, under the current environment, what new issues and requirements do structural adjustment and rebalancing pose for public resource allocation?

Addressing these questions requires, as a preliminary step, an examination and estimation of the relative scale of public resource expenditures on the supply side and the demand side. Given that final consumption constitutes the fundamental and ultimate component of aggregate demand, while investment projects exhibits demand-side characteristics during the phase of project implementation but ultimately transforms into productive capacity at later stage, a dichotomy method is adopted in estimation of allocation of Chinese public resources between two purposes. On the one hand, part of the resources are used to enhance supply-side capacity through various investment projects and production schemes, while rest of the resources are devoted to support household livelihood and total consumptions.

Before proceeding with the estimation, one point merits clarification. Although China's public resources have long been oriented toward supporting production and supply-side capacity, their allocation has undergone continuous adjustment in response to changing domestic and external environments and evolving structural contradictions, exhibiting a pattern in which a persistent basic orientation coexists with periodic adjustments. The fundamental objective has been to achieve rapid "catch-up and overtaking" in technological and productive capacity relative to international advanced levels, which has shaped the long-term supply-side orientation of public resource allocation. This, however, does not imply that public resource allocation has mechanically or unconditionally pursued a strategy of maximizing supply-side investment. For example, in the early 1960s and during the initial period of reform and opening up, fiscal resources were either sharply reduced in supply-side

investment or significantly redirected toward agriculture and light industry in response to prevailing economic conditions and the need to meet basic living and consumption needs. Since the beginning of the new century—especially over the past decade—support for social security, public services, and consumption has shown a clear upward trend. Nevertheless, overall, the supply-side investment focus in China's public resource allocation remains evident and continues to influence the emergence of weak consumption and a supply–demand imbalance in recent years. Estimating the configuration of public resource allocation in 2023 may therefore help deepen understanding of these issues.

In this paper, public-sector resources are defined to include generalized fiscal revenue, retained profits of state-owned enterprises, resources used for depreciation of fixed assets of state-owned enterprises, and market-based income of public institutions. Given that generalized fiscal revenue encompasses the "four budget accounts," public-sector resources in total consist of seven components. In 2023, revenue from the general public budget accounted for 16.3% of GDP. Even after deducting the portion transferred as subsidies to social insurance funds—equivalent to approximately 1.93 percentage points of GDP[35]—it remains the largest component among the seven. An examination of how fiscal resources are allocated between investment for supply-side enhancement and support for household and government consumption therefore involves the effects of reforms and changes in fiscal revenue and expenditure rules, making the analysis more complex.

Accordingly, we first examines the approximate allocation of general public budget revenue between supply-side investment and consumption support, before turning to the allocation patterns of other public-sector resources. While the primary focus is on estimates for 2023, data from other years are also referenced where necessary to aid interpretation, and in cases where 2023 data are unavailable, estimates are constructed using data from adjacent years.

3-1. Fiscal Expenditure Classification Methods and the Evolution of Expenditure Structure

Prior to the era of reform and opening up, in order to accommodate the operational requirements of a planned economy, China developed a distinctive "fund-management–oriented" approach for fiscal expenditure classification. The defining feature of this system was the use of the "nature of funds" as the core classification criterion, with fiscal expenditures categorized by the "type of use" of funds rather than by government functions. Major categories included administrative expenditures (to support the day-to-day operation of government agencies), institutional expenditures (budgetary allocations to public institutions such as schools and hospitals), capital construction expenditures (for fixed asset investment), funds for enterprise capacity expansion and technological upgrading (to support state-owned enterprise modernization), and agricultural support expenditures. This classification system was well suited to the economic and social conditions of the time and played a positive role; however, it also exhibited notable limitations, including the absence of functional classification, fragmentation across administrative lines, incompatibility with international standards, and a lack of transparency. During the reform and opening-up period, China implemented two major reforms of its fiscal revenue and expenditure classification system in 1999 and again in 2007. The former addressed some shortcomings of the traditional approach, while the latter introduced a more

comprehensive and far-reaching reform. [36] The core of the 2007 reform was the adoption of a combined functional and economic classification of government expenditures, with expenditure data comprehensively covering multiple government budget accounts. This reform significantly enhanced fiscal transparency and aligned China's fiscal statistics more closely with international practices. [37]The 2007 reform of government revenue and expenditure classification marked a foundational advance in the development of China's public finance system and represented an important step toward improving the country's fiscal governance capacity.

Based on expenditure classification data prior to the 2007 reform, it is evident that in the early period the majority of general budget expenditures were devoted to investment and other uses aimed at maintaining and enhancing production and supply capacity. At that time, the category of "main items of state fiscal expenditure" comprised eleven types of outlays: (1) capital construction expenditures; (2) additional working capital allocated to enterprises; (3) funds for capacity expansion, technological upgrading, and science and technology ("three categories of funds"); (4) geological exploration expenditures; (5) institutional expenditures for industry, transportation, and commerce departments; (6) institutional expenditures for supporting agricultural production; (7) expenditures on culture, education, science, and public health; (8) expenditures on pensions, compensation, and social welfare relief; (9) national defense expenditures; (10) administrative management expenditures (which also included capital construction and other supply-capacity-related spending); and (11) policy-based subsidies.[38] Among these, six categories—capital construction expenditures, additional enterprise working capital, funds for capacity expansion and technological upgrading, geological exploration expenditures, institutional expenditures for industry/transportation/commerce, and expenditures supporting agricultural production—were either directly used for infrastructure investment and enterprise technological upgrading or provided direct support for enterprises' day-to-day production and operations, and thus clearly constituted expenditures aimed at strengthening the supply side or production capacity.

In addition, although several categories of expenditure were primarily intended to support livelihood-related consumption, part of the associated resources were nevertheless used to enhance supply-side capacity. For example, fiscal expenditures classified as "cultural, educational, scientific, and health operating expenditures" reflect government support for residents' basic consumption through the provision of public services, while also to some extent incorporating supply-side spending in the form of infrastructure investment within these sectors. Similarly, during the gradual liberalization of consumer goods prices in the 1980s, "policy-based subsidies" initially included subsidies for urban households' consumption of food and other necessities to offset the impact of price increases, but later were mainly redirected toward fiscal support for the supply side of specific sectors and enterprises. Likewise, "administrative management expenditures" and "national defense expenditures" primarily represent government consumption derived from the fulfillment of public goods provision functions; however, these categories also contain components related to infrastructure investment and other expenditures associated with supply-side capacity. By contrast, "pensions, compensation, and social welfare relief expenditures" are entirely aimed at supporting income and consumption of specific population groups, though their relative scale has been small—accounting for only 1.51% and 1.68% of total fiscal expenditure in 1978 and 2002, respectively.

Fiscal expenditures were also historically grouped into five functional categories: (1) economic construction expenditures, (2) social, cultural, and educational expenditures, (3) national defense expenditures, (4) administrative management expenditures, and (5) other expenditures. Among these, economic construction expenditures were by far the largest. In 1978, spending on economic construction alone accounted for 64.1% of total fiscal expenditure, and even by 2002 this category still represented 30.2% of total fiscal spending. Other categories likewise included varying degrees of fixed asset investment. This pattern further indicates that fiscal expenditures in earlier periods were primarily oriented toward investment and spending aimed at enhancing supply-side capacity, reflecting the historical characteristics of a development and construction oriented fiscal system.

Following the 2007 reform of the fiscal revenue and expenditure classification system, the new methodology accounts for fiscal funds from two complementary perspectives: the "purpose and objectives of expenditure" and the "specific economic nature of expenditure," together forming a comprehensive framework for classifying fiscal expenditures.[39] After the reform, fiscal revenue was classified into six categories. Fiscal expenditures were classified on the basis of two complementary approaches: they are grouped into seventeen categories on the basis of functional approach such as general public services, social security and employment, science and technology, and urban and rural community affairs; and into twelve categories on the basis of economic approach including compensation of employees, goods and services expenditures, transfers to individuals and households, debt principal repayments, and capital construction expenditures. In subsequent periods, the scale and composition of these expenditure categories evolved in response to changes in the economic environment.[40]

3-2. The Scale and Proportion of Public Resources Allocated to the Supply Side in Recent Years

Taking 2023 as a representative year, this subsection discusses and estimates the scale of public sector resources allocated to the production and the supply side of the economy, as well as their shares relative to GDP. As no official statistics are available on the total amount of resources controlled by the public sector or on the breakdown of public resources between supply-side uses and livelihood-oriented consumption, it is necessary to distinguish different modes of public resource utilization and to conduct quantitative estimation based on available data. In some cases, the supply-side orientation of public resource use is relatively easy to identify, whereas in other cases public resource are used simultaneously to support production and final consumption; in such cases, judgment-based estimation is required to determine the proportion attributable to supply-side uses.

First, it is indicated by the decomposition data for GDP on the basis of income approach, the total depreciation expenditure in China amounts to roughly 15% of GDP, representing the portion of national income or scarce resources devoted to maintaining the productive capacity of fixed assets. Based on the above estimates, public-sector fixed asset depreciation in 2023 accounted for approximately 5.79% of GDP. Of this amount, RMB 1.68 trillion (about 1.33% of GDP) corresponds to depreciation of fixed assets conducted by administrative bodies and public institutions (shiye danwei) and is financed through the general public budget, while depreciation of fixed assets of state-owned enterprises (about 4.46% of GDP) is treated as a cost

deduction. Given that the primary function of fixed assets is to support the supply capacity of goods and services across different sectors, and that depreciation has the nature of replacement investment, serving to maintain existing productive capacity, this estimated 5.79% of GDP in public-sector fixed asset depreciation should be regarded as public resources allocated to the production end and the supply side.

Second, public resources under public sector control include both the retained net profits of state-owned enterprises and the market-based revenues of public institutions (shiye danwei). The retained net profits of state-owned enterprises are, by regulation, largely used for expanded reproduction, technological upgrading, and enhancement of production and supply capacity, clearly reflecting a supply-oriented allocation pattern. Market-based revenues of public institutions (shiye danwei) may partly be used to increase employee compensation and thus indirectly support final consumption; however, the majority of such revenues may have been used to maintain and upgrade hardware capacity and infrastructure for the provision of specific public services. Based on these considerations, this paper assumes that all retained profits of state-owned enterprises (equivalent to 4.21% of GDP) and 80% of the market-based revenues of public institutions (shiye danwei) (3.39% × 0.8 = 2.71% of GDP) are allocated to supporting production and service-side supply capacity, totaling approximately 6.92% of GDP.

Third, the expenditure orientation of government funds. According to the 2014 revision of the Budget Law, government funds refer to fiscal funds collected by governments and their departments in accordance with laws and administrative regulations, for specific designated purposes, to support particular public undertakings. [41]Government fund revenues constitute an important component of non-tax fiscal revenue, but differ from general public budget revenues in that they are earmarked for specific uses and are therefore managed through separate accounts within the framework of generalized public finance. An examination of the 24 categories of government fund expenditures in 2022 shows that the majority are directed toward supporting production and supply-side capacity. Examples include land conveyance revenues used for subsequent land development and urban infrastructure construction, land reserve and compensation costs; transportation-related funds such as the Railway Construction Fund (supporting national rail network construction and maintenance) and the Civil Aviation Development Fund (supporting airport construction and route subsidies); and the National Major Water Conservancy Construction Fund, which finances projects such as the South–North Water Diversion and follow-up investments related to the Three Gorges Project.

At the same time, a significant portion of government fund revenues is used to support household consumption and livelihoods, including compensation to land-expropriated farmers and collective economic organizations under “land finance,” welfare-related expenditures financed by lottery public welfare funds (such as elderly care institutions, orphanages, and disability services), and expenditures from the Central Reservoir Resettlement Support Fund. In terms of expenditure structure, spending financed by revenues from the conveyance of state-owned land use rights has historically accounted for a large share of total government fund expenditures—around 80% in earlier periods, declining to roughly half in recent years. Within land-related expenditures, items such as land acquisition and resettlement compensation, land development, agricultural support, urban construction, and other earmarked

expenditures are included; among these, compensation and social security subsidies received by land-expropriated farmers have in recent years accounted for roughly half of total spending. Based on these considerations, this paper assumes that 70% of the RMB 10.1339 trillion (equivalent to about 8.04% of GDP) in government fund expenditures in 2023 was allocated to supporting production and enhancing supply-side capacity, which amounts to approximately 5.63% of GDP.[42]

Fourth, other supply-side expenditures within the general public budget. These can be examined in three parts. The first consists of items in the 2022 "major expenditure categories of the central and local general public budgets," such as science and technology expenditure (RMB 1.0032 trillion), resource exploration and industrial information (RMB 1.4098 trillion), and grain and materials reserves (RMB 189.22 billion), whose spending objects are directly related to maintaining and enhancing production-side supply capacity and should therefore be classified as supply-side resource inputs. The second part includes expenditures on energy conservation and environmental protection, agriculture, forestry and water affairs, and transportation, which contain substantial infrastructure investment or capacity-maintenance components. The third part includes expenditures on social security and employment, foreign affairs, and national defense, which also contain certain proportions of fixed asset investment and thus contribute to public service supply capacity. The first group of expenditures is estimated to exceed 2 percentage points of GDP in 2023; assuming the second and third groups together amount to roughly 3 percentage points, the total of these other supply-side expenditures is estimated at approximately 5% of GDP.

Fifth, Other Supply-Side Allocations of Public Resources. The first component concerns supply-side support through the state capital operation budget. According to earlier academic discussions, the state capital operation budget is in principle intended to reflect a policy orientation whereby part of state-owned enterprise (SOE) profits are used to support social welfare and social security. At the central level, it has also been explicitly stipulated that a portion of profits from central SOEs be transferred to the general public budget, with the objective of achieving universal sharing of state capital returns and supporting basic public services. However, an examination of the Ministry of Finance's functional classification of expenditures under the state capital operation budget shows that, in practice, a large share of resources remains allocated to the internal production and supply side of the SOE system.[43] Major expenditure items include capital injections into state-owned enterprises, policy-based subsidies to SOEs, and costs related to SOE reform.[44] A smaller portion of resources is transferred to the general public budget to supplement public services and livelihood-related expenditures, reflecting the principle of "state capital owned by all and shared by all.[45]" In concrete terms, the final accounts for state capital operation budget expenditures in 2022 amounted to RMB 339.523 billion. The two largest items were capital injections into state-owned enterprises (RMB 198.673 billion) and policy-based subsidies to state-owned enterprises (RMB 70.638 billion), which together accounted for 79.3% of total expenditures[46]. On this basis, it is estimated that in 2023 approximately RMB 300 billion of spending under this account was used to directly or indirectly support production and supply capacity in the SOE sector.

The second component consists of industrial funds established by governments at various levels in recent years to promote the development of targeted industries and new-quality productive forces. Government industrial funds (or government-guided

funds) are policy-oriented funds established with fiscal contributions from governments at the central, provincial, municipal, or district levels. They operate through equity investment, staged shareholding, and risk compensation mechanisms to guide and leverage private capital toward specific industries, innovation projects, or strategic sectors. Unlike traditional fiscal appropriations or direct subsidies, these funds operate in a market-oriented manner, use financial instruments such as equity investment and fund-of-funds structures, and emphasize leverage and amplification effects. As such, they represent a supply-side form of public-sector support for innovation-driven development and new-quality productive forces.

Available data indicate that since 2015, the cumulative scale of government industrial funds has reached several tens of trillions of yuan, with annual investments on the order of several hundred billion yuan. The emergence of industrial funds in China can be traced back to 2002, when the Zhongguancun Administrative Committee established a venture capital guidance fund inspired by Israeli experience. [47]More commonly, however, the establishment of the China Bohai Industrial Investment Fund[48] by the Tianjin municipal government in 2005, followed by the issuance of the Interim Measures for the Administration of Industrial Investment Funds by the National Development and Reform Commission in 2006, is regarded as marking the formal launch of industrial funds as a key national industrial policy instrument. On January 14, 2015, the State Council decided to establish the National Emerging Industry Venture Capital Guidance Fund to support entrepreneurship, innovation, and industrial upgrading, prompting rapid follow-up by local governments. This marked the beginning of an explosive growth phase for government-guided industrial funds. Representative examples include Phase I of the National Integrated Circuit Industry Investment Fund (“Big Fund”), with a scale of RMB 138.7 billion in 2014, and Phase II, with RMB 204.15 billion in 2019, focusing on chip design, manufacturing, packaging and testing, and equipment and materials. Since 2019, alongside continued expansion in scale, greater emphasis has been placed on structural optimization, efficiency, and performance, ushering government-guided industrial funds into a more standardized development stage. Based on publicly available information, the total outstanding scale of government-guided industrial funds nationwide is estimated to be on the order of RMB 10 trillion, corresponding to an average annual input of close to 1% of GDP.

The third component consists of policy measures implemented under special circumstances to support enterprises and maintain supply capacity. During the COVID-19 pandemic, China provided enterprises with extensive tax and fee reductions, exemptions, and subsidies to help them withstand the shock of the pandemic and preserve production capacity. In 2023, a series of tax and fee relief policies continued to be implemented, with a focus on supporting small and micro enterprises, self-employed businesses, manufacturing firms, and technology-oriented enterprises. These measures included VAT relief for small-scale taxpayers, corporate income tax incentives for small and low-profit enterprises, enhanced R&D expense super-deductions (raised to 100% in some cases), extensions of social security contribution deferrals for hard-hit industries, and optimized VAT credit refunds with a focus on advanced manufacturing. In addition, policies promoting a new round of large-scale equipment upgrades were introduced, with fiscal inputs of RMB 150 billion in 2024 and RMB 200 billion in 2025. Fiscal support measures for distressed enterprises and employment stabilization policies in recent years have also been

largely directed toward maintaining enterprise capacity.

The fourth component involves routine tax and fee concessions provided by government departments—especially local governments—for investment attraction and economic development purposes. According to available information, total tax and fee reductions implemented by local governments nationwide in 2023 are estimated to be in the range of RMB 1.8–2.2 trillion. In the same year, the State Council decided to extend and optimize certain temporary tax and fee relief policies, with an expected annual burden reduction exceeding RMB 480 billion. While such measures do not appear as fiscal expenditures in budgetary statistics—since the reduced taxes and fees never enter government revenue accounts—their economic substance represents supply-side support in terms of opportunity cost. From an economic perspective, they are equivalent to subsidies provided through a "collect first, refund later" approach and generate similar effects in supporting production and supply. Taken together, the above channels suggest that direct supply-side allocations amount to roughly 1.5 percentage points of GDP, while indirect supply-side support also exceeds 1.5 percentage points, implying a combined effect of about 3 percentage points of GDP.

Based on the above analysis, Table 5 reports that in 2023 China's public resources allocated to the supply side through five channels—(1) depreciation, (2) state-owned enterprises and public institutions (shiye danwei), (3) government funds, (4) other supply-side expenditures under the general public budget, and (5) additional supply-side inputs through the four channels discussed above—amounted to approximately RMB 33.2 trillion, equivalent to 26.35% of GDP (5.80% + 6.92% + 5.63% + 5.00% + 3.00% = 26.35%). This rough quantitative estimate indicates that more than half of the vast economic resources controlled by China's public sector are allocated to the production and supply side of the economy through various forms of investment and support for output and operations.

Table 5 Estimated Scale of Public Sector Resources for Investment and Supply-Side in China, 2023

Public Sector	Amount (Trillion RMB)	Share of GDP (%)
(1) Depreciation	7.31	5.8
(2) SOEs and Public Institutions (shiye danwei)	8.73	6.92
(3) Government Funds	7.09	5.63
(4) General Public Budget Projects	6.3	5
(5) Other Public Sector Resources	3.78	3
(6) Total	33.21	26.35

Source：Estimated results based on relevant sections of this paper.

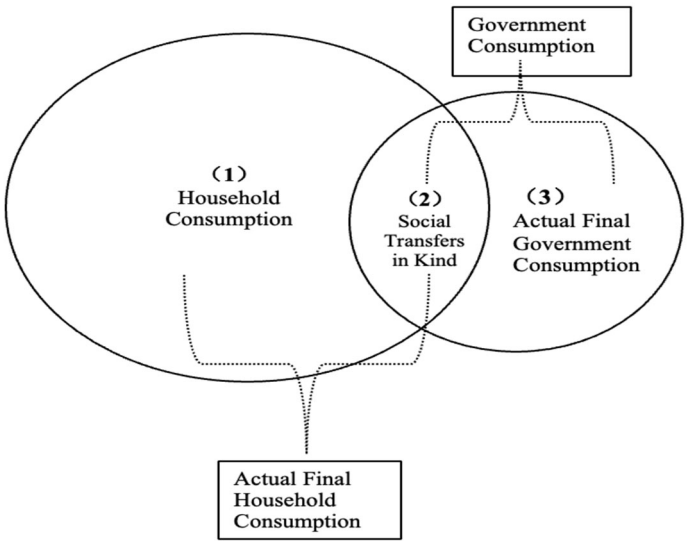
4. Estimating the Scale of Public Resources Supporting People's Livelihood and Consumption

From a standard national accounting perspective, total consumption in an economy consists of two main components: household (or resident) and government consumption. Government consumption further includes consumption undertaken by public institutions involved in public administration and the public goods provision. Official statistical agencies provide data separately for household consumption and government consumption.

In modern economies, however, the government’s contribution to consumption is not limited to its direct consumption expenditure. It also includes a substantial volume of publicly provided goods and services known as social transfers in kind (STIK). Although STIK is recorded within the statistical category of government consumption, the final beneficiaries of these goods and services are households, as they are transferred to the household sector for consumption.

As illustrated in Figure 3, government actual final consumption is obtained by subtracting social transfers in kind from headline government consumption, while actual final household consumption equals household consumption plus social transfers in kind.

Figure 3. Relationships among Different Components of Total Consumption



As China's economic development progresses, policymakers are placing increasing emphasis on the well-being and livelihood of the people, and the scale of public sector resources allocated to supporting residents’ income and consumption has shown an expanding trend. Especially since entering the new century, China has gradually built a social security network covering total population. The government has continuously strengthened policy support for residents’ consumption through in-kind transfers, and public policies have achieved remarkable results in sustained support for people's livelihood and welfare. In addition, in response to the objective needs of modernizing national governance and expanding and upgrading public service functions, the scale of government’s own consumption has also shown a gradual increase trend.

Based on the above framework, examining the quantitative scale of public resources supporting the consumer demand can generally be approached through three channels. First, the social security system covered by the public sector, whose basic function is to provide institutional and regular social security such as pension and medical care for the public. Social security resources are directly converted into residents’ generalized income and promote consumption growth, which can be observed through the social insurance fund account in the "Four Budgets" of generalized finance. Second, the cost-based consumption expenditures incurred by public sector institutions such as government departments and relevant public institutions (shiye

danwei) to provide social public goods, or the government's actual final consumption[49]. Third, the government provides monetary income subsidies to specific low-income and disadvantaged groups through redistribution channels, and offers social transfers in kind (STIK) such as education, medical care, elderly care, and affordable housing to the household sector. The following discusses each item in turn.

4-1. Household Consumption Supported by the Social Insurance Account

Modern social insurance, as an institutional arrangement, encompasses two fundamental dimensions. First, through legally mandated or voluntary mechanisms, individuals and employers jointly contribute to social insurance funds. By applying the law of large numbers, risks faced by insured populations are statistically assessed and pooled, enabling financial risk-sharing and protection for individuals confronted with low-probability but high-impact events such as old age, illness, unemployment, work-related injury, and childbirth. In this way, social insurance provides financial buffering and economic security, realizes social mutual assistance and risk sharing, and thereby enhances social stability and public welfare. Second, the government establishes the legal framework and intervenes in the management process to ensure the orderly and sustainable operation of the social insurance system. At the same time, based on principles of equality, universality, and fiscal sustainability, the government provides necessary fiscal subsidies to guarantee basic living standards. Government leadership in rule-making and fiscal support plays an indispensable role in ensuring the compulsory nature of social insurance, its mutual-aid character, the symmetry between rights and obligations, and its effectiveness in safeguarding citizens' basic livelihoods.

China's social security system has undergone a long process of evolution alongside economic development and institutional change. During the planned economy period, social security was built on stable employment relationships between workers and their work units. In the reform era, as institutional conditions evolved, the system gradually shifted toward a modern social insurance framework adapted to a market economy and based on a broad social safety net. This historic transformation is still being advanced and refined. Table 6 reports the composition of revenues, the scale of expenditures, and their shares of GDP in China's social insurance budget accounts over the past decade. Social insurance fund revenues increased from RMB 4.601 trillion in 2015 to RMB 11.894 trillion in 2024, representing a 1.585-fold increase. Within this total, premium contributions from enterprises and individuals rose from RMB 3.252 trillion to RMB 8.826 trillion, a 1.714-fold increase, with their share of total social insurance revenues rising from 70.67% to 74.21%. Fiscal subsidies increased from RMB 1.024 trillion to RMB 2.628 trillion, a 1.565-fold rise, while their share of total social insurance revenues declined slightly from 22.26% to 22.09%. Social insurance expenditures expanded from RMB 3.912 trillion to RMB 10.606 trillion, a 2.71-fold increase. With the exception of 2020, when the COVID-19 pandemic caused an unusual shock, social insurance revenues exceeded expenditures in all other years, generating annual surpluses. Social insurance expenditures as a share of GDP increased from 5.57% to 7.86%, providing important support for the expansion and upgrading of household consumption during this period.

Table 6 Revenue and Expenditure of China's Social Insurance Fund (2015-2024, Trillion Yuan, %)

Year	Social Insurance Fund Revenue				Social Insurance Expenditure	Annual Surplus	Expenditure as a Share of GDP (%)
	Premium Income	Fiscal Subsidies	Other Income	Total Revenue			
2015	3.25	1.02	0.32	4.6	3.91	0.69	5.57
2016	3.65	1.11	0.6	5.36	4.36	1	5.73
2017	4.24	1.24	1.24	6.72	4.87	1.85	5.74
2018	5.75	1.77	0.41	7.93	6.74	1.19	7.2
2019	6	1.91	0.45	8.36	7.47	0.88	7.43
2020	4.92	2.1	0.53	7.55	7.84	-0.29	7.57
2021	6.91	2.26	0.52	9.69	8.67	1.02	7.39
2022	7.5	2.29	0.46	10.25	9.06	1.19	7.34
2023	8.34	2.43	0.55	11.32	9.91	1.41	7.86
2024	8.83	2.63	0.44	11.89	10.61	1.29	7.86

Data source: Annual Reports on the Execution of Central and Local Budgets, Ministry of Finance of the People's Republic of China.

4-2. The Concept and Scale of Government Consumption

In addition to supporting household consumption through giving guidance to and subsidizing the social security system, the government also exerts a significant influence on total consumption through government consumption, which encompasses two broad components. Government consumption expenditure denotes the expenditure on public services and individual consumption goods and services borne by the general government sector. In this sense, government consumption includes two parts. The first part is public service expenditure borne by the general government sector[50], which mainly covers spending on national security and defense, public administration, the maintenance of social order, and environmental protection. This component is also referred to as actual final government consumption, and its economic meaning lies in the cost-type consumption expenditures incurred by the general government sector in providing public goods and maintaining the operation of the state apparatus.[51]

It should be noted that the subject of "government consumption" here is the general government sector. Its scope extends beyond party and government agencies staffed under the civil service system, and also includes a limited number of public institution (shiye danwei) that perform administrative or public service functions. These currently include, for example, agencies such as the Meteorological Administration and the Earthquake Administration that combine public management functions; departments within the Chinese Academy of Sciences, public universities, and research institutions that undertake government-funded research tasks; and the public health service components of public medical and health institutions. The operating budgets of these institutions are fully or largely financed by fiscal appropriations, and they perform "general government functions" such as public administration, social management, and public service provision in their respective fields.

The second part of government consumption includes individual consumption goods and services provided by the government, namely the various forms of social transfers in kind delivered through livelihood-related programs. Such expenditures mainly comprise government spending on healthcare, elderly care, education, culture and entertainment, and social security, and are measured as the market value of goods and services that government departments provide to residents free of charge or at prices without significant economic meaning, net of any fees charged to residents. [52]Typical examples include compulsory education provided free of charge to school-age children in public primary and secondary schools, and public health institutions

offering free vaccinations for infants and young children under the national immunization program. In addition, fiscal subsidies provided by the government to higher education institutions and public hospitals, as well as subsidies for the New Rural Cooperative Medical Scheme[53], community cultural and recreational services, community-based elderly care, and affordable housing programs[54], also possess—fully or to varying degrees—the nature of social transfers in kind.

The scale and relative importance of government consumption expenditure can be directly observed from expenditure-based GDP statistics. The data in Table 7 report government consumption expenditure and its share of GDP. Total government consumption increased from RMB 11.42 trillion in 2015 to RMB 22.25 trillion and RMB 22.44 trillion in 2023 and 2024, respectively. Over the same period, the share of government consumption in GDP fluctuated between 16.2% and 17.5%, standing at 17.2% in 2023 and 16.6% in 2024.

Table 7 Expenditure-Based GDP Components and Their Share of GDP (Trillion Yuan, %)

Year	GDP	Resident Consumption		Government Consumption		Gross Capital Formation		Net Exports	
		Amount	Share of GDP (%)	Amount	Share of GDP (%)	Amount	Share of GDP (%)	Amount	Share of GDP (%)
2015	70.42	26.74	38	11.42	16.2	30.02	42.6	2.23	3.2
2016	76.07	29.81	39.2	12.48	16.4	32.08	42.2	1.7	2.2
2017	84.51	33.01	39.1	13.98	16.5	36.06	42.7	1.46	1.7
2018	93.36	36.45	39	15.76	16.9	40.54	43.4	0.61	0.6
2019	100.67	39.58	39.3	17.25	17.1	42.92	42.6	0.92	0.9
2020	104.22	39.5	37.9	18.22	17.5	44.06	42.3	2.45	2.4
2021	117.31	45.04	38.4	19.19	16.4	50.1	42.7	2.97	2.5
2022	123.34	46.62	37.8	20.56	16.7	52.27	42.4	3.89	3.2
2023	125.86	49.32	39.2	20.81	16.5	53.04	42.1	2.68	2.1
2024	134.92	53.86	39.9	22.44	16.6	54.79	40.6	3.83	2.8

Data Source：National Bureau of Statistics of China

4-3. Actual Final Government Consumption and Social Transfers in Kind to Households

The relative proportions of actual final government consumption and social transfers in kind within government consumption can be examined in two ways. One approach is to use the data on actual final government consumption reported in the flow-of-funds accounts and, together with expenditure-based GDP data on government consumption, infer the magnitude of social transfers in kind. The second approach is to rely on the officially released data on social transfers in kind in recent years and, combined with information on government consumption, derive actual final government consumption. This subsection adopts the second approach. The resulting estimates of actual final government consumption differ only marginally from the figures directly reported in the flow-of-funds accounts.

The 2020 edition of the China Statistical Yearbook provides the 2018 Flow of Funds Accounts (Non-financial Transactions), which for the first time report data on social transfers in kind. According to these data, social transfers in kind amounted to RMB

5.25 trillion in 2018, accounting for 5.623% of that year's GDP of RMB 93.356 trillion. In subsequent editions of the China Statistical Yearbook, the flow-of-funds accounts for two years earlier have continued to report corresponding data on social transfers in kind. As shown in Table 8, social transfers in kind have expanded rapidly in recent years, rising from RMB 5.25 trillion in 2018 to nearly RMB 7.99 trillion in 2022—an increase of more than 50% over four years. Their share of GDP increased from 5.62% in 2018 to a peak of 6.57% in 2020, before edging down slightly to 6.47% in 2022. This paper assumes that social transfers in kind accounted for about 6.5% of GDP in 2023. Given that government consumption amounted to 17.2% of GDP in 2023, subtracting the estimated 6.5% share of social transfers in kind implies that actual final government consumption accounted for approximately 10.7% of GDP in that year.

Table 8. Social Transfers in Kind, Government Consumption, and Actual Government Consumption in China and Their Shares of GDP (2018–2023)

Year	Total GDP	Government Consumption		In-Kind Social Transfers		Actual Government Consumption	
		Total Amount	Share (%)	Total Amount	Share (%)	Total Amount	Share (%)
2018	936010	157592	16.84	52496.8	5.61	105095	11.23
2019	1005872	172517	17.15	58469.6	5.81	114047	11.34
2020	1034868	182176	17.6	68019.2	6.57	114156	11.03
2021	1173823	191934	16.35	73321	6.25	118613	10.1
2022	1234029	205623	16.66	79883.5	6.47	125739	10.19
2023	1260582	208113	16.51	81938	6.5	126175	10.01

Data notes and sources: All data except actual final government consumption are taken from successive editions of the China Statistical Yearbook (2020–2024). The data for actual final government consumption are derived by subtracting social transfers in kind from government consumption.

4-4. Resident Consumption Supported by Market-Based Revenues of Public Institutions (shiye danwei)

In the previous estimation of the scale and share of public resources allocated to the supply side, it was assumed that 80% of the market-based revenues of public institutions (shiye danwei) are used to maintain and upgrade sector-specific hardware capacity and infrastructure, and are therefore classified as resources allocated to the broad production and supply side. The remaining 20% of such market-based revenues are used to increase the incomes of employees in these institutions, thereby indirectly supporting final consumption. Accordingly, it is estimated that in 2023, about 20% of the market-based revenues of public institutions (shiye danwei) contributed to supporting people's livelihoods and consumption, amounting to roughly 0.7% of GDP.

4-5. Discussion and Preliminary Summary

Based on the above analysis, public-sector resources supporting residents' consumption can be grouped into four main components.

First, social insurance fund expenditures amounted to RMB 9.91 trillion in 2023, equivalent to 7.66% of GDP. It should be noted that not all of these resources are directly converted into household consumption. For example, pension payments

provide social security income to retired elderly individuals, and the extent to which such monetary income is translated into consumption depends on factors such as marginal propensities to consume. Second, actual final government consumption reached RMB 12.62 trillion in 2023, accounting for 10.01% of GDP. This component directly constitutes part of total final consumption. Third, social transfers in kind (STIK) provided by the government to households in the form of goods and services or subsidies amounted to RMB 7.988 trillion in 2022, equivalent to 6.47% of GDP for that year. This paper assumes the ratio for 2023 to be 6.5%. Abstracting from possible losses during the transfer process, this component can largely be regarded as being directly transformed into total consumption. Given that government consumption amounted to RMB 20.56 trillion in 2023 (about 16.51% of GDP), and adding social insurance expenditures, a rough estimate suggests that public-sector resources supporting residents' consumption accounted for about 24.17% of GDP in 2023. Fourth, approximately 10% of the market-based charges within the public institution (shiye danwei) system are converted, through various channels, into employee incomes and thus affect household consumption, which is estimated at about 0.68% of GDP. Taken together, these four components sum to approximately 25.05% of GDP in 2023.

However, in light of two statistical and accounting considerations, this rough estimate is likely to involve some upward bias. First, government consumption as measured in national accounts includes depreciation of fixed assets of administrative agencies and public institutions (shiye danwei). From the analytical understanding of this paper, depreciation represents expenditures required to maintain supply capacity and should therefore be excluded from consumption-support estimates. Under current accounting rules for administrative agencies and public institutions (shiye danwei), both "operational activity expenses" (e.g., teaching in schools, medical services in hospitals, and routine administrative operations) and "unit management expenses" (e.g., administration, logistics, and management support) include detailed items for "fixed asset depreciation." This reflects the GDP accounting principle that the costs incurred by government entities in providing public services are counted as government consumption, which therefore includes depreciation of fixed assets of administrative and public institutions. As estimated above, depreciation of the administrative and public institution (shiye danwei) system is equivalent to about 1.33% of GDP, which should be deducted from the estimated contribution of public resources to consumption.

Second, government fiscal subsidies to medical insurance accounts are statistically included as part of social transfers in kind within government consumption.[55]Treating these subsidies as an independent component of public resources allocated to consumption would therefore result in double counting. Government subsidies to medical insurance funds enable residents to obtain medical services through insurance reimbursement and thus fall under social transfers in kind. Since social transfers in kind have already been accounted for independently when assessing public resources supporting household consumption, this portion of fiscal medical insurance subsidies should be deducted to avoid double counting[56]. In 2023, total fiscal subsidies provided by the government to social insurance accounts amounted to about RMB 2.42 trillion. It is estimated that the majority of these subsidies were directed to pension accounts, while roughly 25% (about RMB 605 billion) were allocated to medical insurance, equivalent to 0.48% of GDP in 2023. To avoid double counting, this portion should be

deducted.

After adjusting for these two sources of overlap, a preliminary estimate suggests that in 2023, public-sector resources used for supporting consumption amounted to approximately 23.24% of GDP (25.05 − 1.33 − 0.48 ≈ 23.24%). Table 9 reports the corresponding estimation results.

Table 9. Estimated Scale of Public-Sector Resources Allocated to Livelihood and Consumption Uses in China, 2023

Public-Sector Component	Amount (trillion RMB)	Share of GDP (%)
(1) Social Insurance Funds	9.91	7.86
(2) Actual Government Consumption	12.62	10.01
(3) Social Transfers in Kind	8.19	6.5
(4) Market-Based Revenue of Public Institutions (shiye danwei)	0.86	0.68
Deductions:		
(5) Depreciation of Administrative and Public Service Sectors	1.68	1.33
(6) Fiscal Subsidies for Government Medical Insurance	0.61	0.48
Total	29.29	23.24

Source：Estimated results based on relevant sections of this paper.

5. The Scale, Allocation, and Effects of Public Resources in China

5-1. Summary of the Estimated Results on Public Resources

Under the leadership of the Communist Party of China, the public sector, with the government at its core together with public institutions (shiye danwei) and state-owned enterprises as key components, has played broad and important roles in promoting economic development and providing governance and public services throughout the historical process of China's modernization since the founding of the People's Republic of China. The distinctive scope and structure of China's public sector, together with the extensiveness of its functions and impacts, display profound characteristics in international comparison and constitute an essential dimension of China's economic and social system and development path.

To empirically examine the role of public resource allocation in advancing China's catch-up in productive capacity and its mechanism-based effects on the evolution of economic structure, this paper—taking the deep-rooted causes of the current "strong supply–weak demand" imbalance as its analytical focus—conducts a preliminary estimation of the total scale of public-sector resources in 2023 and their expenditure composition between the production and supply side and the people's livelihood and consumption side. Table 10 presents a consolidated summary of these estimation results.

Table 10.Estimated Total Volume and Expenditure Structure of Public Sector Resources in China (2023, Trillion RMB)

Public-Sector Resources		Resources Supporting Production and Supply Side		Resources Supporting Livelihood and Consumption	
Amount		Direct Estimate	Adjusted Estimate	Direct Estimate	Adjusted Estimate

	Share of GDP	Amount	Share	Amount	Share	Amount	Share	Amount	Share
60.5	48.01%	33.21	26.35%	32.15	25.52%	29.29	23.24%	28.35	22.49%

Source：Estimated results based on relevant sections of this paper.

The leftmost column of Table 10 shows that, based on the analysis in Section 2, the total scale of resources controlled by China's public sector in 2023 is estimated at approximately RMB 60.5 trillion, equivalent to 48.01% of GDP in that year. Table 10 provides two sets of estimates for the allocation of public resources between the supply side and the consumption side.

First, based on the examination of different components of public resource expenditures in Sections 3 and 4, the total amount of public resources allocated to the supply side and to the consumption side is preliminarily estimated at RMB 33.21 trillion and RMB 29.29 trillion, respectively, summing to RMB 62.51 trillion. These amounts to 26.35% and 23.24% of GDP, respectively, with a combined share of 49.59%. Because the income-side components of public resources and the expenditure-side components are estimated independently, estimation errors on both sides lead to an inconsistency between the two totals. This discrepancy is reflected in Table 10, where the GDP share implied by the directly estimated total public-resource expenditures exceeds the income-side estimate of 48.01% by 1.58 percentage points.

To ensure consistency between the income-side and expenditure-side estimates of total public resources, the ratio of directly estimated total public-resource expenditures to total public-resource income is used as an adjustment coefficient. This coefficient is applied to proportionally adjust the estimated scale of public resources allocated to the supply side and to the consumption side, as well as their aggregate. The adjusted estimates reported in Table 10 indicate that public-sector resources equivalent to approximately 25.52% of GDP are channeled through various forms of investment into enhancing supply-side capacity, including technological progress and productivity development. At the same time, resources amounting to about 22.49% of GDP are allocated, through multiple channels, to supporting household and government consumption.

Overall, although public fiscal expenditures in recent years have increasingly reflected a policy orientation toward improving people's livelihoods, the estimates in this paper suggest that the current allocation of public-sector resources continues to place greater emphasis on supply-side investment, with a scale that remains significantly larger than that devoted to supporting consumption. The overall scale of China's public-sector resources and their allocation structure not only exhibit distinctive features in international comparison, but also provide valuable insights for understanding the long-term trajectory of China's economic development and the nature of its supply–demand imbalances.

5-2. A few of notes on the Estimated Results and Methodology

Before discussing the implications of the quantitative estimates of public resource allocation, several clarifications regarding the methodological characteristics and potential errors of this study should be noted, so as to reducing possible

misunderstandings.

First, the estimates in this paper inevitably consists of possible errors, but they are falsifiable. There is no ready-made, systematic dataset for measuring the total scale of resources controlled by the public sector. Estimating public resources beyond the "four budgets" of the broad fiscal framework, as well as the allocation of public resources between the supply side and the consumption side, requires assembling and inferring from a wide range of related data and information. This process faces substantial methodological challenges and data limitations. As a result, the estimation approach and data treatment adopted here may be debatable or even biased in certain respects. This paper therefore explicitly documents the estimation procedures and methods, maintaining transparency and falsifiability, so as to facilitating scrutiny and critical assessment by other researchers with the aim of enabling future revisions and improvements.

Second, there are adjustment and persistence in the overall scale and allocation structure of China's public sector resources. Across different stages of economic development in the People's Republic of China, both the scale of resources controlled by the public sector and their usage structure have evolved continuously. Consequently, even if the estimates for 2023 presented in this paper are broadly reasonable, they cannot be extrapolated backward to describe the allocation patterns of earlier development stages. For example, during the period of the planned economy, it is plausible that the relative scale of public-sector-controlled resources was smaller than in 2023, while the share allocated to social security and welfare was relatively limited and the share devoted to investment and supply-side capacity expansion was significantly higher than in recent years. Although not invariant, the overarching structural feature—that the public sector controls a large volume of resources and allocates them with relative intensity toward supporting productivity growth and supply-side capacity—remains closely tied to China's economic system and development path and can be expected to persist in broad terms over time.

Third, there exists partial overlap between the allocation of public resources to the production-supply side and to the livelihood and consumption side. In certain areas, investment directly contributes to consumption expansion. For example, investments in urban parks and community environmental improvements directly benefit residents' leisure consumption; large-scale investments in high-speed railways, highways, and passenger aviation infrastructure indirectly stimulate household travel consumption; and investments in public hospitals and schools expand public service capacity and thereby increase public service consumption. Such cross-cutting effects between supply and consumption are widespread, but they do not negate the overall pattern that China's public resources continue to be allocated on a large scale toward supporting technological progress, industrial development, and infrastructure construction.

Fourth, based on the economic property that investment ultimately becomes supply, this paper adopts a specific methodological dichotomy that distinguishes between supply-side investment and final consumption in estimating public resource allocation. In standard macroeconomic analysis, investment is treated as a core component of aggregate demand, which is unquestionably correct insofar as investment spending absorbs current output during the implementation phase and generates immediate demand. However, from a long-term perspective, this paper

emphasizes investment as a fundamental condition for expanding supply capacity and therefore focuses on the allocation of public resources between investment-driven supply expansion and final consumption. This methodological choice is motivated by two main considerations.

On the one hand, final consumption is emphasized in light of the empirical reality of the "strong supply vs. weak demand" pattern observed in recent years, in which insufficient consumption, particularly household consumption, has emerged as a key constraint. [57]From a historical perspective, relatively weak growth in household consumption has persisted, to varying degrees, since the late 1990s, constituting a central element in understanding the structural imbalance between supply and demand.

On the other hand, and more importantly, under conditions of supply–demand balance, investment exhibits a dual and transitional nature: during the investment project implementation phase, it functions as a major source of domestic demand; once the project completed and put into operation, investment effectively transforms into production capacity, shifting from the demand side to the supply side. Both aspects have important policy implications. In the short run, the demand-side role of investment underpins a key policy instrument of countercyclical macroeconomic management. In the long run, however, technological upgrading, industrial development, and productivity gains in an economy rely heavily on large-scale investment. To analyze the current structural contradiction of strong supply vs. weak demand, it is therefore necessary to situate the analysis within the long-term context of persistently subdued consumption growth since the late 1990s. Accordingly, unlike short-term macroeconomic analysis that focuses on the immediate demand effects of investment, this paper stresses the ultimate supply-side role of investment, treating it as a key driver of supply expansion in the long-run development process. This leads to an analytical framework that matches supply-side investment with consumption demand. As such, the long-term analytical perspective adopted here is fully compatible with short-term macroeconomic policy that emphasize boosting investment to support aggregate demand, and it does not conflict with the policy imperative—particularly relevant for 2026—of stabilizing and expanding effective investment.

Quantitative estimates of public resource allocation provide multiple points of reference for understanding China's actual economic conditions and policy challenges. The discussion here focuses briefly on three aspects: First, the explanatory power of public resource allocation patterns for China's macroeconomic structure. Second, the relationship between catch-up–oriented public resource allocation and the current contradiction of strong supply vs. weak demand. Third, the policy implications of the findings presented in this study.

5-3. Relationship with Macroeconomic Structural Characteristics

At the macroeconomic level, China's economy has long exhibited a structural pattern of a high investment rate and a relatively low consumption rate, a feature that becomes particularly clear when viewed in comparison with other major economies. As shown in Figure 4, over the past 15 years China's investment rate has followed a downward trend, declining from 46.1% in 2010 to 40.6% in 2024[58]. By contrast, the average investment rate of G20 members excluding China has fluctuated broadly

around 24%. In 2010, China's investment rate exceeded that of other G20 members by nearly 22 percentage points. Although this gap has narrowed gradually over time, it still stood at close to 17 percentage points in 2024.

Figure 4. Investment Rates of G20 Members: China and the Average of Other Members (2010–2024, %)

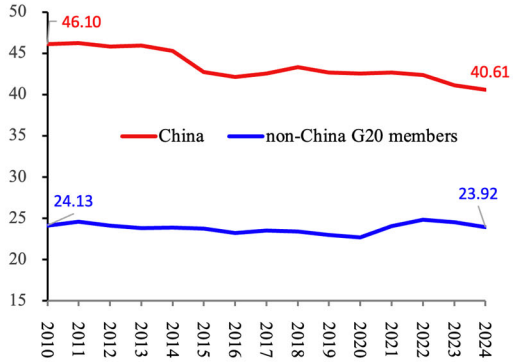
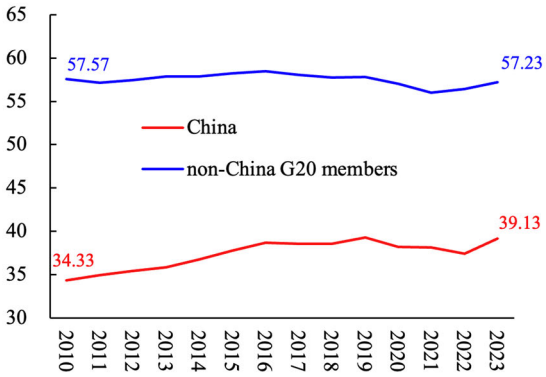


Figure 5. Household Consumption as a Share of GDP: China and Other G20 Member Countries (2010–2023, %)



Data Source: The World Bank

For large economies, international differences in investment and consumption rates tend to exhibit an inverse relationship: a higher investment rate is usually associated with a lower consumption rate. As shown in Figure 5, China's consumption rate over the past 15 years rose from a low of around 35% in 2010 through a trend of gradual increase with fluctuations, reaching 39.1% in 2024. In terms of international comparison, when China's trade surplus ratio was relatively high in 2010, the gap between China's consumption rate and the average of other G20 members reached as much as 25 percentage points. As China's consumption rate increased and its surplus ratio declined, this gap narrowed significantly over the past decade and more; however, in 2024 China's consumption rate still remained about 18 percentage points lower than the G20 average.

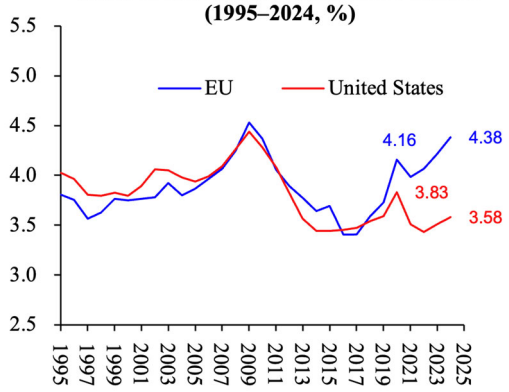
As the world's largest emerging economy, China's economic structure has long attracted extensive attention and debate among scholars both domestically and internationally. Drawing on the estimates in this paper regarding the scale and allocation structure of China's public resources, this section offers an empirical explanation for these structural features. To a large extent, they can be understood through the way public-sector resources are allocated and may be viewed broadly as the outcome of a catch-up–oriented approach of public resources allocation.

First, consider the relationship between the structure of public resource allocation and China's relatively high investment rate. The estimates in this paper suggest that the portion of public-sector resources devoted to investment, production, and other activities that primarily enhance supply-side capacity amounts to nearly 26% of GDP. After excluding resources used to maintain existing production capacity, to address historical legacy issues of state-owned enterprises, and industrial funds that should not be counted as capital formation, the remaining resource expenditures broadly consistent with the concept of capital formation (including depreciation used for replacement investment) are estimated to exceed 20% of GDP. An international comparison would require data on the relative scale of public-sector investment across major economies. In the absence of systematic cross-country data, this paper provides a rough comparison based on observable patterns of government and state-owned

enterprise investment in the United States and Europe.

Figure 6 reports recent government investment rates in the United States and Europe. In recent years, the U.S. government investment rate has been relatively low, at under 4%. Given the very small size of the state-owned enterprise sector in the United States—where SOE investment is limited mainly to areas such as real estate finance and postal services—the contribution of SOEs to public-sector investment is likely modest, bringing total public-sector investment to around 4% of GDP. Government investment rates in the European Union are slightly above 4%. Some EU member states, such as France and Spain, have relatively large state-owned enterprise sectors among advanced Western economies; taking SOE investment into account, the overall public-sector investment rate in the EU is estimated to be slightly above 5%. Based on these considerations, the average public-sector investment rate in the United States and Europe in recent years is estimated to be around 5%. China's public-sector investment rate thus exceeds that of the United States and Europe by roughly 15 percentage points, which can explain the vast majority of the observed difference in investment rates between China and major advanced economies.

Figure 6. Government Investment as a Share of GDP in the United States and EU (1995–2024, %)



Data Source: CEIC

Turning next to the fact that China's household consumption rate is about 18 percentage points lower than the average of other G20 members, this gap can be explained mainly through two channels—direct and indirect effects stemming from public resource allocation.

The direct effect lies in the relatively low share of public resources devoted to supporting consumption in China. In the United States and Europe, public-sector resources under government control likely amount to around 40% of GDP. After subtracting roughly 5 percentage points used for various forms of public investment, and further considering that monetary expenditures such as pensions are not fully converted into consumption due to less than 1 of the marginal propensity to consume for pension recipients, the portion of public resources that actually translates into consumption in the livelihood domain is estimated to exceed 30% of GDP. By contrast, this paper estimates that in China the share of public resources used to support livelihood consumption is close to 22% of GDP; accounting for the fact that pension expenditures are not fully converted into consumption, the effective consumption-supporting share of public resources in China is estimated at around

20% of GDP. This direct channel alone can thus explain roughly a 10% gap between China's consumption-to-GDP ratio and that of the United States and Europe.

The indirect channel operates through the impact of an incomplete social security system on high household saving rates and low consumption. As the economy has developed, the scale of social security expenditure in China has expanded markedly, and its achievements are evident. Nevertheless, the social security system still requires further improvement, particularly because support for lower-income groups of "urban and rural residents" remains relatively insufficient due to specific transitional constraints. This situation has contributed to relatively high precautionary savings among households. Figures 7 and 8 report household saving rates for China and other G20 members. In 2022, China's household saving rate stood at 21.28%, nearly 20 percentage points higher than the recent average for other G20 members. Country-level data show that in 2023 the household saving rates in South Korea and Japan were only 0.48% and 2.25%, respectively, suggesting that explanations focusing on the so-called East Asian cultural factors have limited. Taking into account that household monetary income in China amounts to roughly 40% of GDP, the relatively high household saving rate can explain about an 8% shortfall in China's consumption rate. Taken together, the combined effects of these direct and indirect channels largely account for the observed difference between China's consumption rate and the average consumption rate of other G20 members.

Figure 7. Household Saving Rates of G20 Members: China and the Average of Non-China G20 Members (2010–2024, %)

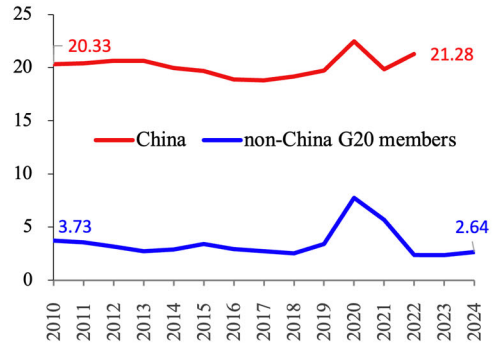
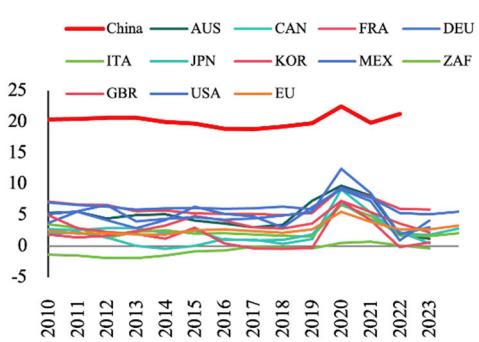


Figure 8. Household Sector Saving Rates of G20 Members (2010–2024, %)



Data Source: OECD

5-4. The Relationship with the "Strong Supply vs. Weak Demand" Pattern

A catch-up–oriented allocation of public resources reflects society's decision, under specific development goals and institutional arrangements, to intervene in and partially override market-driven resource allocation. As a result, the pattern of economic growth necessarily differs from that of a typical market economy. The macroeconomic structural characteristics observed in China and the features of its public resource allocation are therefore coupled, providing empirical support for this basic line of reasoning.

However, when we return to the core focus of this paper—the relationship between catch-up–oriented public resource allocation and the "strong supply vs. weak demand" contradiction observed in recent years, the relationship is neither direct nor mechanical. On the contrary, both logically and empirically, mobilizing massive

public resources and channeling them on a large scale toward the supply side does not automatically produce the kind of "strong supply" pattern discussed in current policy debates, nor does it necessarily lead to a situation in which "weak demand," centered on consumption shortfalls. In other words, catch-up–oriented public resource allocation is a necessary condition for the recent strong-supply vs. weak-demand configuration, but it is not a sufficient condition.

For example, during the planned economy period, China relied on strong governmental and public-sector control over resources, and accumulation or investment rates were also quite high. Yet technological and industrial supply-side capabilities, as well as external competitiveness, were far from strong. At that time, household consumption levels were universally low due to the overall level of economic development, but there was no sense in which consumption was "weak" relative to supply or capacity; rather, the main constraint lay on the supply side, and the economy exhibited the classic features of a shortage economy characterized by chronic demand exceeding supply. Similarly, in the early years of reform and opening-up, allocation of public resources continued to present a supply-side–oriented pattern, but under adjustment policies that prioritized light industry and consumer goods, the supply structure became more responsive to market demand and economic vitality increased. Nevertheless, the supply structure at that period was dominated by relatively low-end, labor-intensive industries, bearing little resemblance to today's notion of "strong supply." At the same time, consumption levels rose significantly, and owing to lagging institutional reforms, short-term and localized phenomena of "excessive" or even "disorderly" consumption emerged—again fundamentally different from today's "weak demand" situation.

Given a catch-up–oriented public resource allocation framework, at least two additional conditions are required for the recent strong-supply–weak-demand pattern to fully materialize.

First, structural conditions related to the market system and the growth of private enterprises are essential. In an open and competitive market environment, the combination of catch-up–oriented public resource allocation with a dynamic private sector can release powerful forces that accelerate productivity growth and strengthen supply capacity. At the same time, when strategically allocated public resources and competitively allocated market resources both exert force on the supply side, this configuration can systematically give rise to weak final consumption and the normalization of the so called "involutionary" competition, making it especially difficult to maintain a roughly balanced supply–demand relationship and to achieve high-quality development. By contrast, under a planned economy, even massive public investment in supply—at times including extreme episodes such as the centralized mobilization of virtually all social surplus, even at the expense of necessary consumption, during campaigns like nationwide steel production drives—failed to overcome low supply-side efficiency and persistent shortages. The fundamental reason lay in the absence of market-based resource allocation mechanisms and a vibrant private sector, broadly defined to include foreign-invested enterprises.

Second, developmental stage and cumulative time dynamics matter. The effects of catch-up–oriented public resource allocation on supply and demand depend critically on the stage of development and the process of long-term accumulation.

Technological, industrial, and productivity advances on the supply side are governed by objective laws and typically follow a non-linear, step-like progression rather than occurring all at once or evolving in linear manner. Viewed over the reform and opening-up period, China's manufacturing-centered industrial upgrading can be broadly divided into three stages. The first stage, from the 1980s to the early 1990s, saw institutional transition reshape the state-enterprise-dominated industrial system, with light industry, consumer goods, and processing manufacturing expanding rapidly in an open market environment. The second stage, from the mid-1990s to around 2010, was marked by accelerated industrialization and urbanization, large-scale development of heavy industry, expansion along industrial value chains, and significant increases in capital and technology intensity, allowing China to reach global scale leadership in many sectors. The third stage, following structural adjustment, supply-side structural reform, and sustained industrial and manufacturing promotion policies, saw China's mainstream and advanced industrial technologies and capacities leap to the global mid- to high-end, with some sectors reaching the frontier and a few achieving global leadership[59], thus beginning to display a "strong supply" pattern. Clearly, such supply-side upgrading is constrained by objective laws and cannot be achieved overnight.

The emergence of "weak demand" has likewise been a long-term process. From the shortage economy of the planned period, to partial product surpluses around 1990, to the first large-scale episodes of excess capacity and insufficient demand at the end of the 20th century, the role of final consumption in shaping overall supply–demand conditions has evolved continuously. After entering the new century, consumption growth remained relatively subdued, but macroeconomic authorities used a combination of policies—expanding investment, boosting exports, and reducing excess capacity—to dynamically compensate for consumption shortfalls and maintain a roughly balanced growth path. At the same time, investment and international competition drove sustained upgrading of industrial and technological structures, providing ongoing momentum to supply-side development. Only in recent years, as investment returns declined and both domestic and external conditions shifted, has the strong-supply–weak-demand contradiction become pronounced, with the room of maneuver for the traditional adjustment mechanisms becoming substantially narrowed and the consumption shortfall itself requiring direct policy consideration.

In sum, the formation of the strong-supply and weak-demand pattern depends not only on catch-up–oriented public resource allocation, but also on the growth of private enterprises in an open market environment and on the long-term evolution of the industrial and economic structure. Given the rich institutional, structural, and evolutionary dimensions of this phenomenon, the characterization by the Central Economic Work Conference at the end of 2025 as a "problem arising in the course of development and transformation" is both accurate and appropriate. Attempts to explain strong supply vs. weak demand purely through abstract theory or logic risk missing its deeper complexity, while judging it simply in terms of the right or wrong mix of specific policies is even more likely to remain superficial.

5-5. The Policy Logic of Raising the Consumption Rate and Advancing Rebalancing

At present, China's overall supply capacity and international competitiveness are improving rapidly and forcefully. The national economy is undergoing a new round of

technological and industrial progress and a leap in productivity, and the historic achievements of economic development are evident. Yet insufficient domestic demand—especially the shortfall in consumption—continues to constrain growth. Together with several years of negative GDP growth gaps and a subdued macroeconomic climate, this has produced a complex set of overlapping contradictions amid an increasingly complicated internal and external environment.

This has given rise to a rare situation: the more frequently technological and industrial successes are reported on the supply side, and the faster productivity catch-up accelerates to narrow the gap with global frontiers, the more pronounced the demand shortfall and the greater the pressure felt by micro-level market entities. Social contradictions thus appear to grow more complex. As a result, assessments of the economy have become polarized—"very good" and "very difficult" coexist; optimism and concern run in parallel; and a sharp contrast emerges between macro indicators and micro-level perceptions.

Yet major economic contradictions often arise simultaneously with the objective conditions needed to resolve them. From the perspective of the catch-up–oriented public resource allocation framework developed in this paper, it is not difficult to see that the recent strengthening of supply has endogenously generated tensions with relative weak consumption and demand, while at the same time creating favorable conditions—unavailable at earlier stages—for substantively strengthening consumption and resolving the strong-supply vs weak-demand contradiction. The key point is that this pattern indicates a degree of phase-specific redundancy in technological progress and supply-side capacity, particularly a powerful endogenous momentum in innovation and productivity catch-up. If, at this juncture, should part of public resources be reallocated in a timely and appropriate manner from the supply side toward supporting consumption, this would not only avoid undermining continued advances in high-end manufacturing and technological productivity, but could also—while promoting common prosperity and expanding the domestic market—better support investment and productivity growth. Put differently, under the special conditions of strong supply and weak demand, the tight trade-off that previously constrained public resource allocation between investment/supply and people's livelihoods/consumption has been significantly relaxed. This opens the possibility of ensuring sufficient resources for high-end manufacturing and technology while, through adjustments in public resource allocation and complementary reforms, raising the consumption rate to advance rebalancing and move the economy from strong supply vs. weak demand toward the new pattern of supply and strong both strong.

The current non-equilibrium thus presents a policy "arbitrage" opportunity. Specifically, during the Fifteenth Five-Year Plan period, China's economic development faces new opportunities on both the supply side and the demand side. Supply-side upgrading requires implementing the Plan's policy orientation by focusing on persistent bottlenecks in science and technology, aligning with a new wave of technological revolution centered on artificial intelligence and intersecting with quantum science and life sciences, and strengthening innovation to accelerate high-level technological self-reliance. Success on this main battlefield of great-power competition would further narrow the gap with advanced economies and lay the foundation for achieving the goal of becoming a moderately developed economy by

2035.

Demand-side transformation, in turn, requires substantively addressing weak domestic demand—especially the consumption shortfall emphasized in this paper. Given the multi-layered and systemic causes of insufficient consumption, policy must be comprehensive, integrating proactive macroeconomic management, real estate sector stabilization, income distribution improvement, reforms on social security and the household registration system. In particular, optimizing the traditional catch-up–oriented allocation of public resources should serve as a key lever to resolve the structural problem of relatively weak consumption growth that has persisted since the late 1990s. By vigorously boosting consumption to gradually improve capacity utilization and corporate returns, market expectations and investment are likely to respond positively, thereby improving domestic demand conditions and creating the necessary foundations for reaching the 2035 development objective.

On this basis, it is necessary during the Fifteenth Five-Year Plan period to make raising the consumption rate the central demand-side policy objective—the critical lever for advancing economic rebalancing. In response to reasonable questions about "where the money will come from" to boost consumption, the answer is not to rely solely on expanded fiscal borrowing, but to orderly adjust the existing structure of public resource allocation. Based on the paper's preliminary estimates, if the allocation of public resources between supply and consumption—currently roughly 25.5% versus 22.5% of GDP—can be reversed to 22.5% versus 25.5%, people's livelihood–related consumption spending could increase by about 3% of GDP. Given the persistent demand constraints on growth in recent years, such an adjustment would further amplify the growth effects of higher consumption. A review of China's economic history shows that policy adjustments have repeatedly achieved substantial increases in the overall consumption rate within relatively short periods—suggesting that the Fifteenth Five-Year Plan era presents a renewed opportunity to raise consumption, a topic warranting dedicated follow-up study.

6. Concluding Remarks

Unlike the multiple episodes of short-term aggregate demand insufficiency experienced during the early stages of reform and opening-up, the recent pattern of economic growth characterized by strong supply capacity alongside weak consumption reflects a structural mismatch formed under a new historical context. This mismatch has emerged as China's technological upgrading and productivity catch-up have reached a higher level, while robust supply-side momentum has increasingly diverged from relatively weak consumption and insufficient demand. The persistence of this demand-constrained growth pattern in recent years can be attributed to multiple factors, including delayed effects of the pandemic, the deep adjustment of the real estate sector, disparities in income distribution and social security resources allocation, as well as institutional constraints such as the household registration system. At a deeper level, it is also closely related to the long-standing catch-up–oriented allocation of public sector resources, which has been persistently concentrated on the supply side.

To explore these issues in greater depth, this paper takes 2023 as the reference year and provides a preliminary quantitative estimation of the total scale of public sector resources and their allocation between investment-oriented supply-side uses and

livelihood-oriented consumption support. On this basis, it further examines the structural implications and policy relevance of public resource allocation. Before concluding, several key points are summarized below.

First, a comprehensive understanding of China's contemporary growth dynamics and structural contradictions requires attention to a broader concept of public sector resource allocation than that captured by conventional government fiscal accounts. Modern economic analysis emphasizes the relationship between markets and government, and the combination of an effective market with proactive government has become a widely accepted analytical framework. In practice, however, government influence on the economy does not operate solely through administrative departments and budgetary expenditures, but also through other components covered by the broadly defined public sector. While in the era of planned economic construction or the early reform period the general government budget largely determined the scale and structure of public sector economic activity, institutional evolution and economic development have led to the gradual expansion of other public resource channels. As a result, the scale of resources controlled by the public sector now significantly exceeds both the general fiscal budget and even the scope of the "four-budget" framework of broad fiscal accounts. Under comprehensive government leadership and coordination, the long-term concentration of large-scale public resources on investment and supply-side catch-up constitutes an essential background for understanding China's long-run growth mechanism and structural evolution.

Second, it is important to recognize both the long-term contribution of catch-up–oriented public resource allocation to productivity advancement and its constraints in the context of current structural imbalances. Public resource allocation oriented toward technological and industrial upgrading, when combined with market competition mechanisms and private sector innovation, has formed a powerful engine driving China's long-term growth with technology and industrial convergence. In particular, public resources have played a distinctive and critical role in building modern infrastructure systems, fostering foundational industries, and supporting frontier technological exploration, reflecting key features of China's development path and institutional choices. At the same time, as market mechanisms deepen and private sector supply capacity expands, reinforcing a catch-up–oriented public allocation strategy may increasingly generate endogenous pressures of weak consumption in relative sense. These pressures interact with evolving domestic and external conditions, contributing to the intensification of the strong-supply vs weak-demand pattern. Despite years of countercyclical macroeconomic policies that have supported growth, demand weakness has proven difficult to reverse fundamentally, in part because public resource allocation continues to reinforce underlying structural imbalances in supply and demand.

Third, understanding China's long-term growth achievements and current structural tensions from the perspective of public resource allocation requires a clear recognition of the dual nature of investment. Investment typically unfolds through construction projects and thus exhibits demand-side characteristics during the phase of project implementation, when increased investment can temporarily alleviate consumption weakness and support aggregate demand through countercyclical effects. Public investment has also played a key role in addressing structural

bottlenecks and promoting industrial upgrading. However, the capacity of investment to resolve demand insufficiency is inherently limited. Investment possesses a transitional character between demand and supply, as completed projects ultimately become productive capacity. Under conditions where catch-up–oriented public resource allocation persists alongside weak consumption, capacity expansion driving by additional investment can amplify supply-demand imbalances, requiring ever-larger investment to sustain approximate equilibrium. This dynamic gives rise to a recurring pattern of "weak consumption - strong investment - capacity expansion - weak consumption...". From this perspective, while investment can provide short-term stabilization through compensating the relative lack of consumption, it cannot fundamentally resolve the endogenous consumption constraints embedded in the existing allocation framework.

Fourth, the cyclical process of maintaining supply-demand balance through large-scale investment is not a simple repetition, but rather a spiral evolution accompanied by substantial structural upgrading. Over time, this process generates the conditions for its own transformation. As China’s manufacturing sector advances toward mid- to high-end levels, with some industries reaching global frontiers, and as the returns to capital decline alongside the maturation of industrialization and urbanization, the scope for large-scale investment based on reasonable expected returns has narrowed. In recent years, sustained weak consumption combined with earlier capacity expansion and intensified competition has led to declining industrial investment returns and falling long-term risk-free financial yields. While the public sector can expand investment beyond market profitability constraints, reliance on public investment alone becomes increasingly unsustainable in the face of structurally weak demand. Policy emphasis on boosting consumption, enhancing effective investment, and expanding domestic demand reflects the shrinking policy space for maintaining balance primarily through investment, and underscores the need to address the deeper roots of consumption weakness through adjustments in public resource allocation.

Fifth, the upcoming Fifteenth Five-Year Plan period presents a critical opportunity to raise the consumption rate and improve economic structure. Major challenges often emerge simultaneously with the conditions needed to resolve them. The coexistence of strong supply-side achievements and weak demand-side constraints signals a new window for adjustment. As supply-side capabilities strengthen and self-organizing dynamics improve, further expansion of investment and capacity increasingly faces diminishing returns due to consumption constraints. A gradual and appropriate reallocation of public resources from investment-driven supply support toward livelihood-oriented consumption will not hinder continued progress in advanced manufacturing and technological upgrading. On the contrary, by expanding the domestic market and advancing common prosperity, such rebalancing can enhance both investment efficiency and productivity growth, enabling supply-side advancement and consumption improvement to reinforce each other. The easing of trade-offs between investment and consumption creates a significant policy opportunity, with raising the consumption rate and promoting rebalancing emerging as central structural objectives.

Sixth, although raising the consumption rate is clearly necessary, concerns regarding fiscal constraints and debt sustainability raise legitimate questions

about "where the money comes from." The response advanced in this paper emphasizes optimizing the existing structure of public resource allocation rather than relying solely on expanded government borrowing. If the allocation shares of public resources between supply-side investment and consumption support were adjusted from the current estimated ratio of 25.5% to 22.5% of GDP toward a reversed configuration, an increase in livelihood-related spending equivalent to about 3% of GDP could be achieved. If long-term supply-side investment for the public sector resources were stabilized at around 15% of GDP, an even larger share of resources could be redirected toward improving livelihoods and stimulating consumption. Historical experience from earlier Five-Year Plans shows that decisive and pragmatic policy adjustments in response to structural imbalances have played an indispensable role in sustaining long-term growth. Looking ahead to the Fifteenth Five-Year Plan and beyond, continued problem-oriented and prudent decision-making, supported by policy innovation and gradual institutional adjustment, can lay the foundation for achieving the goal of becoming a moderately developed economy by 2035. At the same time, it must be recognized that the catch-up–oriented allocation of public resources is deeply embedded in existing institutions and interest structures, and the transition process will inevitably involve complexity and challenges that should not be underestimated.

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[1] The author is grateful to Professor Xu Xianchun, former Deputy Commissioner of the National Bureau of Statistics, for his comments and suggestions on the initial draft of this paper. The author also thanks Dr. Yang Yewei for multiple discussions during the research process and for his revision suggestions on the initial draft. Appreciation is further extended to Mr. Yang Jingxiang for his high-quality research assistance and translation of the first draft of the English version for this paper.

[2] Lu Feng: Strong Supply, Weak Demand, and Consumption Shortfalls—New Opportunities for Boosting Consumption and Adjusting Economic Structure during the 15th Five-Year Plan Period, NetEase Finance Think Tank, September 8, 2025.

[3] Lu Feng: Why Has Household Consumption Remained Persistently Weak? A Systematic Analysis of the Causes of China's Weak Consumption, NetEase Finance Think Tank, September 22, 2025.

[4] Government units are unique kinds of legal entities established by political processes that have legislative, judicial or executive authority over other institutional units within a given area. （UN etc., System of National Accounts 2008, p. 436.）

[5] UN etc., System of National Accounts 2008, p. 434..

[6] IMF Government Finance Statistics Manual (GFSM) 2014 (IMF government finance statistics manual 2014, 470 pages).

[7] In this context, "public corporations" is translated as "publicly owned enterprises" (or "state-owned enterprises"), rather than the literal translation "public companies." It specifically refers to enterprises that are established, controlled, or partially owned by the government, and whose primary purpose is to achieve public policy objectives—such as state-owned energy companies and public transportation enterprises. In this sense, the term largely corresponds to what is commonly understood in China as state-owned enterprises.

[8] Figure 2.2 on page 19 of the Manual uses bold black boxes to illustrate that the public sector comprises the general government, public non-financial corporations, and public financial corporations.

[9] Notice of the General Office of the Communist Party of China Central Committee and the General Office of the State Council on Further Strengthening and Improving the Management of Organizational Establishments and Strictly Controlling Staffing (March 15, 2007) states:
"Approval authority over administrative staffing is vested at the central level. The central authority for organizational establishment management reviews the administrative staffing of departments under the central and state organs, relevant mass organizations, and the total administrative staffing at all local levels. No locality or department may, without authorization, approve administrative staffing beyond the centrally approved totals or independently determine staffing allocations for Party and government organs."

[10] For example, in China, almost all major government departments, public institutions (shiye danwei), and state-owned enterprises have Party leadership bodies—such as Party groups or Party committees—established within them to ensure that the leadership of the Communist Party of China is embedded throughout organizational decision-making and operations.

[11] Unpublished Appendix 1: How to Understand the Relationship Between the Communist Party of China (CPC) and Public Sector Entities such as the Government?
[12] Lou Jiwei. Research on Counter-cyclical Fiscal Policy to Serve the New Round of Fiscal and Tax System Reform. Public Finance Research, 2025(1).
[13] Lou Jiwei. Research on Counter-cyclical Fiscal Policy to Serve the New Round of Fiscal and Tax System Reform. Public Finance Research, 2025(1).
[14] Unpublished Appendix 2. Why are debt proceeds not classified as fiscal revenue, yet revenues from special-purpose bonds and ultra-long special treasury bonds included in government fund budget revenues?
[15] Unpublished Appendix 3. How can the additional contribution of state-owned enterprise profits to public-sector resources be estimated?
[16] Unlike the remittance of profits by non-financial state-owned enterprises to the state capital operating budget, the remittance of profits by centrally administered state-owned financial enterprises is reflected in fiscal statistics under two categories. The first is state capital operating income recorded under non-tax revenue within the central general public budget. The second is the "dividends and interest" and "profits" items from financial enterprises recorded under the central state capital operating budget.
First, under the item "Central fiscal revenue: general public budget revenue: non-tax revenue: state capital operating income," the category of state capital operating income historically comprised three components: profits remitted by the People's Bank of China, profits remitted by centrally administered state-owned financial enterprises, and profits remitted by other centrally administered non-financial state-owned enterprises. Since 2022, however, the remittance of accumulated profits by the central bank has been reclassified into the government fund budget. As a result, revenues recorded under the above-mentioned "state capital operating income" item have since mainly consisted of profits remitted by centrally administered state-owned financial enterprises. Given that profit remittances from non-financial centrally administered SOEs are mostly recorded under the state capital operating budget, we estimate that profits remitted by centrally administered financial SOEs account for roughly 80 percent of total revenues under this item.
Second, profits remitted by financial enterprises under the state capital operating budget are recorded under the item "State capital operating income: central," which is further disaggregated into "Item II: State capital operating income: central: dividends and interest: financial enterprises" and "Item III: State capital operating income: central: profits: financial enterprises." These items have been separately accounted for since 2021, but their shares remain relatively small. In 2023, the total amount of profits remitted to the state by financial enterprises amounted to RMB 59.719 billion. Of this, RMB 66.449 billion was recorded as state capital operating income under non-tax revenue in the general public budget. Assuming that approximately 80 percent of this amount was contributed by centrally administered financial SOEs, profits remitted by these enterprises are estimated at about RMB 53.0 billion. In addition, the combined amount of "dividends and interest" and "profits" remitted by financial enterprises under the state capital operating budget totaled RMB 6.56 billion. (See Unpublished Appendix 4, The Special Institutional Process Governing Profit Remittances by Centrally Administered Financial Enterprises and the Scale of Profit Remittances in Recent Years.)
[17] At the beginning of 2024, the National Bureau of Statistics (NBS) released the preliminary estimate of China's gross domestic product (GDP) for 2023 at RMB 126,058.2 billion. On December 27, 2024, the NBS issued the Announcement on the Revision of 2023 Gross Domestic Product Data, stating that "in accordance with China's GDP accounting system and the results of the Fifth National Economic Census, and in conjunction with the implementation of a reform in the accounting method for owner-occupied housing services of urban residents, the National Bureau of Statistics revised the preliminary GDP estimate for 2023. After revision, GDP for 2023 amounted to RMB 129,427.2 billion."
This study adopts the preliminary GDP estimate for 2023 (RMB 126,058.2 billion) released by the National Bureau of Statistics, primarily to ensure consistency in statistical coverage and timing with the fiscal budgetary and final accounts data published for the same period.
[18] The Guiding Opinions require the "streamlining and standardization of existing public institutions (shiye danwei). Those that were not established in accordance with regulations, or whose originally assigned temporary or specific tasks have already been completed, shall be abolished. Public institutions (shiye danwei) with irrational functional layouts, excessive fragmentation, severely insufficient workloads, or overlapping or highly similar responsibilities shall be consolidated."
"On the basis of such streamlining and standardization, existing public institutions (shiye danwei) shall be classified according to their social functions into three categories: those performing administrative functions, those engaged in production and business activities, and those providing public-interest services. Public institutions (shiye danwei) that perform administrative functions shall gradually have such functions transferred to administrative organs or be transformed into administrative bodies; those engaged in production and business activities shall be gradually converted into enterprises; and those engaged in public-interest services shall continue to be retained within the public institutions (shiye danwei) system, with their public-interest orientation further strengthened. Going forward, no approval shall be granted for the establishment of public institutions (shiye danwei) that perform administrative functions or engage in production and business activities."
Subsequently, "based on differences in assigned responsibilities, service recipients, and resource allocation mechanisms, public institutions (shiye danwei) engaged in the provision of public-interest services are further subdivided into two categories. Those providing basic public-interest services—such as compulsory education, foundational scientific research, public culture, public health, and basic primary-level medical services—that

cannot or should not be allocated through market mechanisms are classified as Category I public-interest public institutions (shiye danwei). Those providing public-interest services such as higher education and non-profit medical services, which may partially rely on market-based resource allocation, are classified as Category II public-interest public institutions (shiye danwei)."

[19] Unpublished Appendix 5: The Reform and Institutional Transformation of China's Public Institutions (shiye danwei) System.

[20] Planning, Development and Informatization Department of the National Health Commission, Statistical Bulletin on the Development of China's Health Sector in 2023, released on August 29, 2024, source: official website of the National Health Commission.

[21] As of the end of 2023, the number of participants in the national basic medical insurance system reached 1.3billion persons. In 2023, total revenue of the national basic medical insurance fund (including maternity insurance) amounted to RMB 3,350.136 billion, while total expenditures reached RMB 2,820.838 billion. The current-year surplus of the pooled fund was RMB 503.959 billion, and the cumulative fund balance stood at RMB 3,397.975 billion (National Healthcare Security Administration, Statistical Bulletin on the Development of China's Healthcare Security System in 2023, released on July 25, 2024).

[22] Unpublished Appendix 6: The Share of Private Healthcare Institutions in Total National Health Expenditure.

[23] In addition, in real-world practice, a small number of healthcare workers within the public healthcare system have been reported to accept so-called "red envelopes" from patients, which objectively constitute illegal or irregular "grey income" received by healthcare service providers. "Red envelopes" generally refer to cash, gifts, or other benefits voluntarily or informally provided by patients or their family members to medical personnel—especially physicians, nurses, anesthesiologists, and lead surgeons—in exchange for perceived higher-quality medical services, faster treatment processes, or greater reassurance during care. While the vast majority of healthcare professionals adhere to professional integrity and ethical standards, such practices have persisted among a small minority and have proven difficult to eradicate over time. Given the irregular or illegal nature of such income, reliable aggregate statistical data on its overall magnitude are not available.

[24] Ministry of Education, National Bureau of Statistics, and Ministry of Finance (2024), Statistical Announcement on the Implementation of National Education Expenditure in 2023 , released on November 25, 2024.

[25] Ministry of Education: Enrollment in private general and vocational undergraduate and junior college institutions increased by 694,900 students year-on-year; Cover News, October 25, 2024.

[26] For example, within the system of science and technology public institutions (shiye danwei), market-based income constitutes one of the operating funding sources beyond fiscal appropriations. Research institutes classified as public institutions (shiye danwei) obtain service-based income through activities such as technology transfer to enterprises and society, inspection and testing services, standards testing, engineering evaluation, and technical consulting. Some institutes, relying on key laboratories and research platforms, conduct pilot-scale testing, technology maturation, and technology transfer, thereby generating contract revenues and commercialization proceeds. At the same time, many science and technology public institutions (shiye danwei) participate in horizontal research projects, under which enterprises commission R&D activities and provide corresponding funding. Based on authoritative statistics and category-based breakdowns reported in the Annual Report on the Transformation of Scientific and Technological Achievements in China, an interval estimate can be derived for the total contract value of the combined "five types of technical services plus three types of technology transfer" provided jointly by universities and research institutes. The total contract value amounted to RMB 177.66 billion in 2022, RMB 206.30 billion in 2023, and RMB 226.91 billion in 2024. Of this total, research institutes are estimated to account for approximately 40%–50% (see Unpublished Appendix 7: Estimated Sources and Scale of Market-Based Income of State-Owned Research Institutes within China's public institutions (shiye danwei) system).

[27] According to current statistical classifications, China's administrative and institutional state-owned assets are categorized into (1) current assets, (2) intangible assets, (3) fixed assets, (4) construction in progress, and (5) public infrastructure. It is evident that at least "fixed assets" and "public infrastructure" fall within the scope of fixed assets as generally defined for depreciation analysis.

[28] Based on data from the 2023 input–output tables, total fixed asset depreciation in China amounted to RMB 19.5 trillion in that year, accounting for approximately 15.07% of GDP.

[29] Comprehensive Report of the State Council on the Management of State-Owned Assets in 2023, report submitted by the State Council at the 12th Meeting of the Standing Committee of the 14th National People's Congress on November 5, 2024; released on November 6, 2024.

[30] The total assets of 1,435 listed state-owned enterprises (excluding financial enterprises) amounted to approximately RMB 70.63 trillion, of which fixed assets totaled about RMB 15.85 trillion, accounting for 22.44% of total assets.

[31] In particular, central state-owned enterprises such as China National Petroleum Corporation, State Grid Corporation of China, and China State Railway Group possess vast stocks of infrastructure and production equipment. Their core assets encompass strategic systems including oil and gas extraction, energy transmission and distribution, railway networks, and communication networks, the overwhelming majority of which—aside from a few exceptions—are not held by listed companies.

[32] Comprehensive Report of the State Council on the Management of State-Owned Assets in 2023, report submitted by the State Council at the 12th Meeting of the Standing Committee of the 14th National People's Congress on November 5, 2024; released on November 6, 2024.

[33] Fixed assets of government administrative departments are mainly used to support functions such as government operations, public administration, law enforcement, public security, and diplomacy. Unlike enterprises or hospitals, administrative departments do not possess large-scale infrastructure or specialized equipment. Nevertheless, their fixed assets constitute an essential material foundation of the national governance system, including office buildings, official vehicles, and information technology equipment used by party and government organs at various levels, public security authorities, judicial bodies, and people's organizations.
[34] Fixed assets of public institutions are primarily concentrated in sectors such as education (schools), healthcare (hospitals), scientific research (research institutes), culture (museums and libraries), and social services. Although public institutions do not engage in profit-oriented market activities, they are the main providers of public services. The fixed assets they hold therefore represent indispensable material conditions for delivering basic services in education, healthcare, scientific research, and related fields.
[35] In 2023, the government fund account and the social insurance fund account accounted for 9.21% and 8.98% of GDP respectively.
[36] Unpublished Appendix 8: Characteristics and Reform Trajectory of Government Revenue and Expenditure Classification under China's Planned Economic System.
[37] Unpublished Appendix 9: Internationally Standard Government Finance Statistics (GFS) Frameworks for Fiscal Revenue and Expenditure Accounting.
[38] See China Statistical Yearbook (2003), pp. 284–285.
[39] Ministry of Finance, Notice on Issuing the Reform Plan for Government Revenue and Expenditure Classification, February 10, 2006, Document No. Caiyu [2006]13.
[40] For example, according to the Notice of the Ministry of Finance on Issuing the Government Revenue and Expenditure Classification Items for 2023, functional expenditure classification includes approximately 30 categories, while economic expenditure classification continues to comprise 12 categories.
[41] In 1994, the Budget Law of the People's Republic of China was adopted by the National People's Congress. During its first revision in 2014, the tenth amendment introduced an additional article as Article 9, which stipulates that: "The government fund budget refers to the revenue and expenditure budget for funds that are collected, levied, or otherwise raised from specific entities within a prescribed period in accordance with laws and administrative regulations, and that are earmarked exclusively for the development of specific public undertakings. Government fund budgets shall be compiled by fund project in accordance with the revenue conditions of each fund and actual expenditure needs, and shall adhere to the principle of spending based on revenue." (Full text and interpretation of the revised Budget Law of the People's Republic of China, February 13, 2015). No further amendments were made to this provision in the second revision of the Budget Law in 2018.
[42] According to the official statistical definition, government consumption expenditure refers to consumption expenditures incurred by government departments in providing public services to society as a whole, as well as net expenditures on goods and services provided free of charge or at prices that are not economically significant to residents. Because public services provided by the government, as well as goods and services supplied to individuals free of charge or at non-economically significant prices, generally lack observable market prices, government consumption expenditure is typically calculated indirectly using the cost approach. The primary data sources for this calculation are fiscal revenue and expenditure statistics compiled by fiscal authorities. (Based on the definition of statistical indicators published by the National Bureau of Statistics.) Under this statistical framework, it can be inferred that the approximately 10% of government fund revenues allocated to livelihood-related consumption has already been recorded under government consumption expenditure.
[43] Expenditures classified as supporting the supply side include those used to support state-owned enterprises in expanding reproduction, technological upgrading, transformation and upgrading, and new project investment. Typical examples include capital injections into state-owned enterprises to support key development projects; support for state-owned enterprise investment in strategic emerging industries, technological innovation, and green development; and expenditures on infrastructure construction and equipment procurement by state-owned enterprises. The overarching objective of such expenditures is to enhance the core competitiveness of state-owned enterprises and to promote optimization of the layout and structural adjustment of the state-owned economy.
[44] They also include expenditures related to mergers and restructuring of state-owned enterprises, capacity reduction, and the disposal of so-called "zombie enterprises," as well as expenditures to compensate laid-off and reassigned workers, pay resettlement costs, and address legacy issues arising from state-owned enterprise reform (such as collectively run enterprises affiliated with factories and the socialization of retired personnel management). The purpose of these expenditures is to safeguard the deepening of state-owned enterprise reform and to optimize the structure of state-owned capital.
[45] The state has required an increase in the proportion of state capital returns remitted to the government, with part of these proceeds transferred to the public budget and used to support livelihood-related areas such as social security, education, and healthcare.
[46] China Statistical Yearbook 2023, p. 224.
[47] At its initial stage, the fund began with RMB 500 million in fiscal capital. Through follow-on investments and minority equity participation in venture capital firms, it focused on supporting high-tech enterprises in the Zhongguancun Science Park, thereby laying the foundation for the subsequent development of industrial funds.
[48] Bohai Industrial Investment Fund Management Co., Ltd. was established in December 2006 at the initiative of the Tianjin Municipal People's Government and with approval from the State Council. Its purpose was to promote the development and opening-up of the Tianjin Binhai New Area and regional economic development. It is one of

China's earliest domestically funded industrial investment funds and represents a financial innovation instrument that combines policy guidance with market-oriented operations. The company is jointly held by multiple state-owned shareholders, including BOC International Holdings Co., Ltd. (48%) and Tianjin TEDA Investment Holding Co., Ltd. (22%). As of 2025, the fund had assets under management of RMB 20 billion, with an initial closed-end duration of 15 years.
(The initial closed-end duration refers to the first period after a fund's establishment during which it operates under a closed structure, typically specified in the fund contract or prospectus. Closed-end funds usually have durations ranging from 3 to 15 years, during which subscriptions and redemptions are not permitted; upon expiration, the fund may be extended or liquidated.)
The fund focuses its investments on sectors such as financial services, equipment manufacturing, and energy and mineral resources.

[49] Unpublished Appendix 10、Government actual final consumption refers to the value of public services provided by the general government sector to society as a whole.

[50] National Bureau of Statistics of China, System of National Accounts of China (2016), p. 22.

[51] Because public goods and public services provided by government departments do not have observable market prices, their contribution to GDP cannot be measured using the standard national accounting approach centered on value added. Instead, the associated cost expenditures are directly treated as the government's service contribution to GDP.

[52] National Bureau of Statistics of China, System of National Accounts of China (2016), p. 22.

[53] Unpublished Appendix 11: New Rural Cooperative Medical Scheme (NRCMS), the current basic medical insurance system for rural residents

[54] Such as free nursing home services, meals provided by community senior canteens, in-home medical and nursing care services, access to public elderly-care facilities, free or discounted public transportation for older persons, health check-ups, and other public services.

[55] According to Chapter 20 of the United Nations System of National Accounts (SNA 2008): "Social transfers in kind consist of goods and services provided to households by government units or non-profit institutions serving households (NPISHs) … The most typical examples are government-funded health and education services." It further explicitly states: "When the government pays for medical services through social insurance schemes (such as health insurance), these payments should be recorded as social transfers in kind to households, even if the funds are routed through insurance funds."

[56] Unpublished Appendix 12: Fiscal subsidies provided by the government to medical insurance funds constitute part of social transfers in kind.

[57] Lu Feng, Strong Supply and Weak Demand and the Consumption Shortfall: New Opportunities for Boosting Consumption and Adjusting Economic Structure in the 15th Five-Year Plan, NetEase Finance Think Tank, September 8, 2025.

[58] Investment rate, also known as the capital formation rate, refers to the ratio of gross capital formation to GDP measured by the expenditure approach.

[59] For example, China has achieved varying degrees of stage-by-stage progress in areas such as advanced shipbuilding, rail transit equipment, basic petrochemical materials, large aircraft and wide-body passenger jets, aerospace equipment, medical devices, chip R&D and fabrication processes, and industrial robots. The so-called "new three" industries, owing to their distinctive importance in the era of the green transition, have become prominent representatives of the latest round of industrial and technological upgrading (Lu Feng and Shi Xianjin, The Need to Pay Attention to China's New Round of External Imbalances, 2024-08-12).