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## MODERN CHINA: CHANGING ECONOMIC PARADIGM

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**Abstract.** The article presents the key directions of China's socio-economic policy since the 18<sup>th</sup> CPC National Congress (2012), which introduced the fifth generation of Chinese leaders led by Xi Jinping. The emphasis is placed on the consideration of the main components of China's transition to a new model of economic development. Assessing institutional changes with regard to this task, the author argues that alongside with strengthening market principles in the economy, they provide for enhancing the supervisory and regulatory functions of the government based on a number of newly adopted laws and regulations. The authorities' efforts to improve people's wellbeing and expand domestic demand extended to the creation of a comprehensive social security system, state support for the poor, tax relief, ensuring good conditions for small businesses, developing education and medical services. As a result in early 2020s the PRC declared overcoming absolute poverty and building a moderately prosperous society. Favorable framework was provided for the science and technology development, e.g. growing R&D spending, tax benefits, the creation of numerous innovation centers, as well as expanding international cooperation in science and technology. This allowed the PRC to become one of the world leaders in a number of aspects of innovative development. China's green and carbon transition policy meets the terms of the Paris Agreement on climate and provides for establishing stringent eco-environmental protection systems as well as changing energy mix through closure of carbon-intensive industries, stimulating eco-friendly technologies, creation of a national carbon market, etc. All this gives hope for a gradual improvement of the country's eco-environment. Currently, China's economy bears visible traces of its transition to a new development model. Despite all its problems and global challenges, the macro- and microeconomic results of the policy, pursued by the Chinese leadership, cause reasonable optimism about the country's further development.

**Keywords:** economic model, domestic demand, poverty alleviation, disposable income, taxation, innovation, technology, R&D, eco-environment, pollution, investment, energy consumption, carbon intensity, decarbonization.

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## СОВРЕМЕННЫЙ КИТАЙ: СМЕНА ЭКОНОМИЧЕСКОЙ ПАРАДИГМЫ

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**Аннотация.** В статье представлены ключевые направления социально-экономической политики Китая в период после XVIII съезда КПК (2012 г.), приведшего в политику пятое поколение китайских лидеров во главе с Си Цзиньпином. Рассматриваются важнейшие составляющие перехода КНР к новой модели экономического развития, включая преодоление бедности и формирование среднего класса, создание национальной инновационной системы, борьбу с загрязнением и деградацией окружающей среды. Проанализированы макро- и микроэкономические результаты осуществляемой социально-экономической политики и ее возможные перспективы.

**Ключевые слова:** экономическая модель, внутренний спрос, преодоление бедности, располагаемые доходы, налогообложение, инновации, технологии, НИОКР, окружающая среда, загрязнение, инвестиции, энергопотребление, углеродоемкость, декарбонизация.

The first decade of this century was marked by a very dynamic development of China's economy, with an average annual GDP growth rate of more than 10%. This was reflected in the rapid development of infrastructure, the fast expansion of industrial capacity, and the improvement in people's living standards. China, only recently a member of the group of less-developed countries, rose to become one of the global leaders, ranking second after the USA. It is now the second-largest economy in the world after the United States, accounting for more than 30 per cent of global economic growth. However, discarding the first, external layer of social prosperity, a whole set of socio-economic problems, closely related to the phenomenal growth of the Chinese economy, or even directly caused by it, are revealed.

### TRANSITION TO A NEW MODEL OF ECONOMIC GROWTH

The period under review brings into sharp focus the extensive, extremely costly nature of the country's development based upon the mobilisation of huge investment resources, cheap labour, and outstripping export growth. The share of private consumption in China's GDP was extremely low, even by the standards of developing countries. In 2010, it was 33.8% compared to 53.7 in Thailand, 61.9 in India, and 52.5% in the Republic of Korea [1, p. 66]. The income of the population significantly lagged behind the GDP dynamics and was distributed very unevenly. China's Gini index, which shows the income inequality ratio in society, was 0.47, one of the highest in the world. Limiting the growth of the living standards of the population and the development of the social sphere fueled the potential for social tension.

Maintaining high growth rates required increasingly more investment – its share in GDP increased rapidly (from 33.2% in 2000 to 72.1% in 2012), while economic efficiency declined. Whereas, at the onset of the century, 1 yuan of GDP growth required 3.5 yuan of investment, in 2012, this required 7.9 yuan. The problem of resource supply also became more acute. The cost of raw materials and energy used to produce a unit of GDP was 4–6 times higher than in developed countries, causing excess production capacity, environmental pollution, and a threat of depletion of the national economic potential [2, p. 150].

The emphasis was placed on export-oriented industrial production. Between 2000 and 2010, China's export quota increased from 20.5% to 26%, demonstrating an obvious increase in the country's dependence on external markets [source 1, Tables 3-1, 11-2].

The negative aspects of this phenomenon became apparent during the global financial crisis of 2008–2009, which caused a sharp drop in demand for Chinese exports.

Being a major supplier of industrial goods, China failed to become a fully-fledged modern industrial power with efficient high-tech manufacturing. The country had no technological advancement in key sectors, relying mainly on imports of foreign capital, technology, and key components of technologically sophisticated products. Having no national industrial brands with a well-established reputation, China, for the most part, supplied goods with quality and reliability lagging behind advanced standards.

The need for a paradigm shift in economic development was declared at the 18<sup>th</sup> CPC National Congress (November 2012), which brought the fifth generation of Chinese leaders, headed by Xi Jinping, into politics. The country was tasked with building a more harmonious society based on modern industrial capacity and scientific and technological achievements securing a fundamental improvement in the quality of life as well as the creation of a favourable ecological environment. In an unstable global economy, special emphasis was placed on the development of the domestic market and internal consumer demand.

The new strategic priorities called for respective changes in the institutional environment intended to create the conditions for major structural shifts and the formation of new macroeconomic proportions. Above all, it was a financial policy that allowed a moderate increase in the budget deficit (up to 3–3.5% of GDP), with a corresponding increase in credit leverage. The aim was to reduce the fiscal burden on the economy and develop a competitive business environment. Tax reform, which redistributes the tax burden between different types and subjects of economic activity, aims to support high-tech, environmentally friendly industries, energy-saving technologies and to increase incomes and social protection of the population [3].

Shifting the centre of gravity to internal growth factors substantiates the importance of further reform of the public sector. Over the years, the extensive development model resulted in the accumulation of excess production capacity not required by the market. This led to the mass-scale shutdown of such enterprises, especially those that are energy-intensive, technologically backward, and ecologically destructive. At the same time, the corporatisation of major state-owned enterprises is expanding, and mixed

forms of ownership and public-private partnerships are developing.

The support of non-state business activity also implies allowing private companies to restructure the public sector enterprises through mergers and acquisitions, subsidising independent innovation activities, facilitating access to finance for private companies, encouraging exports of private capital, etc.

Along with the development of national innovations, strengthening the innovation bloc also requires the absorption of advanced foreign technologies, and consequently, further enhancement of external openness. In 2020, a new Foreign Investment Law of the PRC, which strengthened the protection of rights of foreign investors, extended their access to the Chinese economy, and granted them national status at all stages of the investment process. It is no coincidence that over the past 10 years China has risen by 60 positions (from the 91<sup>st</sup> to the 31<sup>st</sup>) in the World Bank's ranking of favourable business environments [source 2].

At the same time, the government is seeking not only to retain but even to increase its control over the country's strategic sectors. In recent years, the PRC has enacted a number of laws – on e-commerce, cybersecurity, personal data protection, export control, and others. The regulators seek to keep a watchful eye on the companies operating in the Internet and technology-related sectors. Particular attention is paid to such issues as overseas listings, data security, customer privacy, anti-competitive and offshore practices, mergers, etc. As a result, in the course of China's transition to the new economic model, the proliferation of market relations and the market environment is accompanied by increased state supervision and regulation measures.

#### OVERCOMING POVERTY AND CREATING

#### A “MODERATELY PROSPEROUS SOCIETY”

Increasing domestic effective demand and expanding the domestic market, at the heart of the new economic model, imply a significant rise in the living standards of the Chinese people, especially in rural areas, which traditionally lag behind in terms of income and consumption. An important step in this direction was the governmental “Outline of Development-driven Poverty Alleviation in Rural Areas” (2011–2020), which was aimed at the drastic improvement in the living standards of 99 million people living in the poorest districts of the country. The programme was based on five criteria (food, clothing,

secondary education, healthcare and housing) and the established “poverty threshold” – 2,300 yuan per person yearly in 2010 prices or 4,000 yuan in current prices [4, p. 5, 8].

The realisation of the programme is based on the targeted poverty reduction strategy proposed by Xi Jinping. It not only identifies specific targets for assistance but also reveals the reasons for the plight, develops targeted support measures, sets the scope of required payments, and assigns officials responsible for programme implementation. By drastically curtailing the misuse of state support funds (from 36.3% in 2013 to 1.5% in 2020), this policy launched in 2015 allowed the CPC Central Committee to set the goal of eradicating extreme poverty by 2020 [source 3].

Various financial sources are being mobilized to tackle poverty. The year-on-year allocation from all levels of budgets between 2013 and 2020 exceeded 1.6 trillion yuan in total, including 660 billion yuan from the central budget. A comparable amount comes from the funds of line ministries and state-owned corporations. In fact, they represent public investments and are used to realise publicly significant industrial and social infrastructure projects [source 4].

A special source of funds is sponsorship, which the authorities and enterprises from the more developed Eastern provinces send to the underdeveloped regions of Central and Western China. In 2013–2020, it exceeded 1 trillion yuan. Most of the resources channelled to the poorer areas, however, embody the idea of poverty alleviation through development. These are mainly concessional bank loans intended for the development of rural households and the establishment of small and micro-enterprises for rural commerce. Over the eight-year period between 2013–2020, they amounted to more than 10 trillion yuan [source 3].

Overall, about 15 trillion yuan, which is about 2.5% of the GDP, was allocated for poverty alleviation between 2013 and 2020. The results are impressive. They include an extension of health insurance, an increase in pensions and subsidies aimed to maintain the subsistence level, improved social protection for the elderly, and mass resettlement from unpromising areas of stagnant poverty. By 2020, all 832 poverty-stricken counties had introduced nine years of compulsory education and achieved almost universal health coverage, and housing renovation. The distribution of the centralised water supply rose from 70 to 83 per cent and water hygiene was guaranteed. The construction of roads, railways, and electricity networks provided these regions with regular

connections to other areas, reliable postal services, and Internet access, and respectively – with distance learning, e-commerce, telemedicine, and other elements of a modern market environment [5].

Between 2013 and 2020, annual per capita disposable income for the rural impoverished in China increased from 6,079 to 12,588 yuan, with an average annual growth rate of 11.6% versus 9.3% for the country as a whole. Whereas in 2010 the ratio of average per capita income in urban and rural areas was 3:1, in 2020 it was 2.56:1 [source 2].

At the same time, along with the growth of incomes of the population's, the development of the market also requires the creation of conditions for their use for consumption needs. All the more so because the Chinese tradition is to save a lot of money for medical care, children's education, old-age provision, contingencies, etc. To encourage more active use of savings, it is necessary to strengthen people's confidence in the security of life.

In this context, the PRC has set a course to cover all segments of society with a social security system that would guarantee people's basic needs. In 2021, old-age insurance covered 1 billion people, unemployment insurance – 222 million people, occupational injury insurance – 274 million people, and basic health insurance – over 1.3 billion people [source 2]. It is the world's largest social security system. In 2021, life expectancy in China reached 77.9 years, showing a 2.5 years increase over the last 10 years.

All this takes place against the backdrop of the exponential growth in per capita GDP and household incomes, stimulated by the state policy aimed at scaling up wages and social benefits, raising purchase prices in agriculture, differentiating and reducing the tax burden, etc. In 2011, the non-taxable minimum monthly income for individuals was raised from 2 thousand to 3.5 thousand yuan, and in 2019 – to 5 thousand yuan (USD725). Tax deductions were established for elderly parental care, mortgage, education, and medical expenses. At the same time, taxation of the well-off strata is increasing, helping to alleviate social inequality, in particular concerning income from securities, investment in intangible assets, etc.

Even during the most difficult time of combating the coronavirus pandemic, the government did not depart from its policy aimed to raise living standards. In 2020, the national per capita disposable income reached 32,189 yuan, 2.6 times higher than in 2010. Hence the increasing improvement in the quality of life: over the past decade, the Engel coefficient (average share of household expenditures on food pur-

chase) slumped from 31.9 to 29.2% in urban areas and from 37.9% to 32.7% in rural areas. In 2021, the CPC announced its victory over extreme poverty and claimed to have built a Moderately Prosperous Society (*xiaokang*).

## INNOVATIVE-TYPE COUNTRY

The transition from the status of a “workshop of the world” to the status of a “creative laboratory of the world” implies full development of research and development, resulting in the increase of the country's share in the global volume of high-tech and innovative products. This mission was entrusted to the State Council of the PRC and the Ministry of Science and Technology (MST).

Among the key policy documents of the government are the 2006 National Medium- and Long-Term Programme for Science and Technology Development (2006–2020), the “Made in China 2025” Programme (2015), the “Internet Plus” Plan (2015), the Global Competitiveness Plan for Higher Education (2015), and the State 13th Five-year Plan for Scientific and Technological Innovation, 2016–2020 (2016). These documents set the overall policy direction.

Thus, in the interests of China's endogenous innovation development, reducing its technological dependence and becoming a world leader in terms of patents and scientific publications, it is planned to increase R&D expenses to the level exceeding 2.5% of the GDP (1.7% in 2010). A number of major technological breakthrough areas have been set out, including information, biological, laser, energy, aerospace technologies, etc. [source 5, pp. 29-30]. The main methods and measures of state support for innovation development have been outlined for promoting the country towards global leadership in major high-tech industries. It is envisaged that China will become an advanced Internet power based on the implementation of mobile and cloud technologies in production processes, the development of the “Internet of things” and the processing of “big data”. As a result, China is geared to become one of the leaders of innovative development by 2030 and the world's leading innovative power with one of the best higher education systems by 2050.

To achieve the above-mentioned goals, numerous targeted science and technology programmes were initiated (over 100 by the mid-2010s). To improve their management and coordination the government undertook structural consolidation in the following budget funding areas in 2014–2016:

– The National Natural Science Fund: individual grants for fundamental and applied research;

– National Science and Technology Major Projects: investment in the development of advanced technologies and products of strategic economic importance;

– National Key Research and Development Programmes: funding R&D in agriculture, energy, health, environmental, and other socially relevant areas;

– Foundation for the Promotion of Technological Innovation: encourages technology transfer and commercialisation, supports corporate innovation programmes;

– “The Bases and Talents Programme”: optimising the allocation of scientific and technical resources, supporting key research centres, schools, and team units.

A new Inter-ministerial Joint Council, consisting of over 30 government agencies led by the MST, Ministry of Finance, and the State Committee for Reforms and Development, has been charged with setting budgets, coordinating departmental interests, and preventing duplication [exp. 6, p.6].

In recent years, science and technology funding has been growing at an advancing pace, reaching 2.44% of the GDP in 2021. Since 2009, China has been second only to the USA in terms of R&D expenditure, considering that the gap between them is narrowing at a swift rate: whereas in 2010 the USA/PRC spending ratio was 2:1, in 2018 it was 1.2:1. These funds, in terms of the nature of their sources, can be split into budgetary allocations (15–17%), expenditure provided by research institutes and universities (about 7%), and investment by enterprises (over 75%) [source 7].

The development of enterprises as the main object of innovation substantiates the targeted allocation of R&D expenditures. Over 80% of the funds are spent on experimental work (i.e. adapting technological solutions to market demands) with a focus on the production of electronics – computers, communication equipment, etc. Some 10% or more are allocated for applied research; the share of fundamental research fully supported by the state is only about 6%.

About 2/3 of Chinese business R&D expenditure is financed by unitary and joint-stock state-run enterprises and 1/3 – by private companies. At the same time, almost 25% of all corporate R&D is subsidised by the state in the form of direct subsidies, tax and tariff concessions, accelerated depreciation, low-rate

or interest-free loans from state banks, gratuitous leases, etc. [6]. Coupled with budgetary allocations and university investments, this cash flow is entirely used to expand research and development, stimulate scientific activities, attract foreign experts, acquire foreign high-tech equipment, patents and licenses, as well as to organise mergers and acquisitions with high-tech foreign companies [7].

Over the past decade, this served as a basis for the emergence of a new generation of highly innovative private Chinese companies with a global reach, generating a growing flow of venture investments and patents in key digital technology areas. These include such market leaders as *Huawei* and *Xiaomi* (telecommunications), *Tencent* and *Baidu* (internet technologies); *Alibaba* (e-commerce), *DJI* (unmanned flying vehicles), *Geely* (automobile manufacturing), etc. Owing to such companies’ activities, China’s share in global venture capital investment increased from 6% to 19% between 2011 and 2016 alone [source 8].

Today, China has one of the largest science and technology complexes in the world. The country has 533 state key laboratories in operation and 191 national engineering research centres that engage in basic and advanced applied research. Over 1,600 state-level enterprise technology centres are engaged in the implementation and commercialisation of R&D results. There are over 130 technoparks and 1,287 state-level technology business incubators in the country [source 9]. International innovation centres are being set up in Beijing, Shanghai, and in Guangdong–Hong Kong–Macao Greater Bay Area for close all-round interaction with the world’s leading innovation zones.

These efforts have resulted in the country’s success in a number of important areas of science and technology. Among them are manned spaceflights, exploration of the Moon, Mars, and deep space, creation of the *Beidou* satellite navigation system, manned deep-sea vehicles, high-speed railways, 5G mobile communications, and supercomputers. China is at the forefront of cutting-edge technological segments, including e-commerce, financial technologies, robotics, 3D printing, autonomous transport vehicles, unmanned flying vehicles, virtual reality, artificial intelligence, etc.

China is already among the world leaders in many indicators of innovative development. They include the share in the global R&D output (20%), number of people employed in R&D, number of patent applications (1.35 million in 2020), number of publications in indexed scientific journals; share in global high-tech production (27%), in knowledge-inten-

sive services and high-tech exports; the share of the digital economy in the country's GDP (about 40%), etc. Beijing University and Tsinghua University are among the top 20 universities in the world. As a result, China moved from the 34<sup>th</sup> to the 12<sup>th</sup> position in the Global Innovation Index within the period from 2012 to 2021.

All of this, however, does not negate the need for further development of the national innovation system. Suffice it to say that, being the largest supplier of smartphones and personal computers, the country is still critically dependent (up to 90%) on the import of integrated circuits, chips, and microprocessors required for their production. Less than half of the patents registered in the country meet international standards and can be regarded as new inventions. Small and medium-sized businesses which provide for 65% of patents and 80% of innovative products concentrate their innovation activity on products that form the lower part of the value chain [source 10, p. 6, 13]. It is no coincidence that speaking at the 19<sup>th</sup> CPC National Congress (2017) Xi Jinping called for the strengthening of the fundamental component of national research and development.

#### CREATION OF "ECOLOGICAL CIVILISATION"

The accelerated growth of the economy based on the over-exploitation of resources led to serious disruption of the natural environment in China. In the early 2010s, it consumed about half of the world's coal production and produced over 20% of the global greenhouse gas emissions. Air pollution in 80% of Chinese cities was hazardous to humans. The high carbon intensity of industrial production caused soil pollution, shortage of clean water, and other environmental problems. According to the Ministry of Ecology and Environment of the People's Republic of China, the anthropogenic damage to nature in 2010 was estimated at 1.5 trillion yuan or 3.5% of the GDP [8].

The ecological problem was voiced as acute at the 18<sup>th</sup> CPC National Congress which included in the Party charter a provision on the creation of "ecological civilisation" in China. Five years later, at the 19<sup>th</sup> CPC National Congress, this provision was further developed into a kind of environmental programme within the framework of Xi Jinping's proclaimed course towards the "Great Revival of the Chinese Nation" and building of "Beautiful China".

It is envisaged, in particular, to promote "green" economic development based on new technologies

and ecologically clean production. It is planned to intensify the measures against atmospheric pollution as well as soil decontamination and reclamation, recycling of solid wastes, etc. It is planned to enhance the responsibility for environmental pollution, limit the withdrawal of agricultural lands for urbanisation purposes, and restore the potential of forests, rivers, and lakes. Special attention is paid to the country's participation in global environmental management [source 11].

The latter is associated with China's accession to the Paris Climate Agreement in 2016, which defines the obligations of the world's countries to reduce greenhouse gas emissions and prevent dangerous climate shifts. China's commitments include halting the ramp-up of carbon dioxide emissions by 2030 and achieving carbon neutrality by 2060, for all emissions to be neutralised through cleaning technologies, transition to less toxic materials, and planting trees that absorb  $CO_2$  from the atmosphere. By 2030, the carbon intensity of GDP will be reduced by 65%; renewable energy generation will reach 25% of energy consumption, and forest areas will cover a quarter of the country's territory [9, p. 4]. For this, it is estimated that environmental investment would need to reach 90 to 100 trillion yuan or approximately 2% of the total GDP in 2020–2050 [10].

Over the years of reforms, China has set up full-bodied environmental legislation, including the basic Environmental Protection Law (1989), dozens of national laws, regulations and standards, and hundreds of local rules and regulations. However, in the conditions of priority given to high economic growth, this regulatory framework tends to be largely declaratory in nature. The creation of "ecological civilisation" requires not only the adoption of new, better laws, but also a drastic strengthening of law enforcement, monitoring and control.

In this regard, a system of environmental responsibility is being actively introduced in the work of governing bodies. When assessing the management of territorial and production units, certain criteria come to the fore, such as the achievement of energy-saving targets, the introduction of resource-saving technologies, compliance with maximum permissible load on natural objects, etc. Compliance with these benchmarks leads to personal career advancement and additional incentives.

Various administrative measures are used for environmental recovery, including reduction of maximum permitted emission reduction standards and increased penalties for violation of these norms. Im-

porting recyclables, plastic, and other solid waste is severely restricted and even banned. The production of plastic is being curtailed, and the authorities are planning to do away with plastic packaging altogether from 2026. Coal mines and industries with high carbon footprint are being shut down en masse. In November 2021, Xi Jinping announced the cessation of the construction of new coal-fired thermal power plants.

Economic incentives of green development are also underway. Over 90% of public procurement, in particular, focuses on energy-efficient and environmentally friendly products. The taxation of goods that cause damage to the environment through their production and use is increasing. Since 2018, a special environmental tax has been levied on companies generating air and water pollution, solid waste disposal, and noise pollution. This way ferrous and non-ferrous metallurgy enterprises, cement plants, coal mining and chemical companies are forced to undertake a technological upgrade and install cleaning facilities.

The money received from this tax and environmental fines is passed to environmental investment funds and used to finance “decarbonisation” projects. The Renewable Energy Development Fund, for instance, subsidises wind and solar energy projects. The consumers of solar power plants energy benefit from preferential tariffs, while the companies meeting energy-saving targets enjoy tax exemptions and subsidies from the government. Favourable conditions are also created for private companies engaged in energy saving and ecologisation of production. Almost 60% of public-private partnerships engage in green technologies and pollution avoidance. In addition, low-interest loans from China Development Bank, the government’s policy promoter, have accounted for about 25% of investments in hydropower and over 1/3 in wind power, solar energy, and bioenergy in recent years.

The national carbon market that took shape in 2021 is also intended to be a significant source of funding. While maintaining the overall  $CO_2$  emission limit set for the entire country, the market arranges for fee-based redistribution of emission rights from the companies with the emission volume below the cap set by the authorities to the companies exceeding that limit. Emissions reductions are achieved as the country’s emission allowances are reduced and as the price of corporate allowances rises.

The Chinese market is the largest in the world, covering more than 2,000 energy companies and generating 4.5 billion tonnes of carbon emissions (30%

of China’s total emissions). In the future, joining the market by oil and gas, chemicals, metals and construction companies is envisaged, as well as integration of the country into a cross-border carbon trading system.

These efforts are paying off. From 2005 to 2021, the share of coal in the PRC total energy consumption fell from 72.4% to 56%, with a parallel increase in renewable energy generation. Between 2015 and 2020, specific energy consumption decreased by 13.2%, while carbon dioxide emissions fell by 18.8% [source 2]. Man-made forest plantations are extending countrywide, and the total area of afforestation reached 23% of the country’s territory. This has led to a certain environmental sanitation. Compared to 2015, the amount of harmful aerosols in the air of Chinese cities has decreased by 28.8%.

#### TEN YEARS – A LONG OR SHORT TIME?

China’s current development demonstrates a visual imprint of transition to the new model of economic growth. Let us summarise some results of the last decade (see the table).

1. The average annual GDP growth rate reached 6.8%; if the impact of the pandemic year 2020 is neglected, the figure equals 7.3%. This is noticeably lower than in the previous 10 years, but still in line with the “new normal” (6.5–7.0% per year), as proclaimed by Xi Jinping. Supporting the country’s stable development, such a rate of growth allows for providing adequate employment as well as implementation of the necessary structural changes in the economy. At the same time, the quality of growth, which is presently secured by achievements in science and technology by more than 60%, is improving significantly.

2. Instead of the previously prevailing secondary sector of the economy (industry and construction), the tertiary sector (service industry, transport, healthcare, education, and science) is coming to the fore, oriented towards meeting not only material, but also general humanitarian, spiritual, and social needs. Whereas in 2011 the share of the secondary and the tertiary sectors in GDP production was 46.5% and 44.3%, respectively, in 2020, these indicators amounted to 37.8 and 54.5%. Advanced high-tech industries and services are developing at a faster rate, acting as the main driver of high-quality growth. They include the production of electric vehicles, solar panels, electronic equipment, and industrial robots,

**Table.** Basic macroeconomic indicators of the PRC, 2011–2020

	2011		2015		2019		2020	
		%		%		%		%
GDP, billion yuan	41 211.9	100.0	68 885.8	100.0	98 651.5	100.0	101 598.6	100.0
Including:								
Primary sector	3 791.5	9.2	5 786.4	8.4	7 004.3	7.1	7 823.1	7.7
Secondary sector	19 163.5	46.5	28 105.4	40.8	38 079.5	38.6	38 404.3	37.8
Tertiary sector	18 256.9	44.3	34 994.0	50.8	53 567.8	54.3	55 371.2	54.5
Investment, billion yuan	23 878.2	100.0	40 592.8	100.0	51 360.8	100.0	52 727.0	100.0
Including:								
non-state investment			23 264.4	58.8	28 640.0	56.8	28 926.4	55.7
GDP per capita, yuan	35 181		49 992		70 078		72 000	
National per capita disposable income, yuan	18 310.8		21 966.2		30 732.8		32 188.8	
Including:								
in urban areas	21 810.0		31 194.8		42 358.8		43 833.8	
in rural areas	6 977.0		11 421.7		16 020.7		17 131.5	
Retail sales of consumer goods, billion yuan	18 391.9				40 801.7		39 198.1	
Consumer price index (year-on-year)		5.4		1.4		2.9		2.5
Social security net, million people:								
pension insurance	283.9		858.3		967.5		998.0	
unemployment insurance	143.2		173.3		205.4		216.9	
health insurance	252.3		665.8		1354.0		1361.3	
Gini index	0.474 <sup>1</sup>		0.462		0.465		0.468	
Research and development								
Including:								
R&D expenditure, billion yuan	868.7		1417.0		2214.4		2439.3	
authorized patents, number			359 000		452 804		530 127	
Foreign trade value, billion USD	3641.9	100.0	3953.0	100.0	4577.9	100.0	4655.9	100.0
Including:								
export	1898.4	52.1	2273.5	57.5	2499.5	54.6	2590.0	55.6
import	1743.5	47.9	1679.6	42.5	2078.4	45.4	2066.0	44.4
Foreign direct investment, billion USD	116.0		126.3		138.1		144.4	
Outbound direct investment, billion USD	74.7		145.7		136.9		153.7	

<sup>1</sup> 2012 data.

Sources: [sources 12, 14, 15].

as well as information technologies and software, financial services, leasing, etc.

3. The importance of various development factors is changing. The growth based on cheap labour, heavy investment, and traditional industry exports is increasingly becoming a matter of the past. The share of investments in GDP has fallen from 57.9% to 51.9%, and China's export quota has dropped from 29.9% to 17.6%. At the same time, the significance of the internal market and domestic consumption is increasing. The share of final consumption, as a percentage of GDP, has increased from 50.6% to 54.3%, driven by such factors as people's income growth, job creation, improved labour skills, and extension of the social security net [source 12].

4. China's GDP growth rate so far significantly exceeds the global average (by 2 times or more). This is the reason for the progressive strengthening of China's position in the world. In 2012–2021, its share in the global GDP galloped from 11.4% to 18.0%; the share in the world export rose from 11.1% to 15.0%

[source 13]. While remaining one of the most attractive markets for foreign investment, the PRC also acts as a major international investor. Since the launch of the ambitious "One Belt, One Road" international spatial integration programme in 2013, China's external expansion policy has been gaining momentum; the volume of attracted and exported capital differs little.

5. Modern information technologies are being introduced nationwide; the integration of production and the Internet is expanding. By mid-2021, the country had 960,000 5G base stations with 365 million connected subscribers. With over 1 billion Internet users, the fixed-line broadband penetration has reached 96%, and mobile penetration – 108%. The big data processing and extensive online channels, facilitating risk management and reducing transaction costs, promote a competitive environment and efficient resource allocation.

6. The living standards have improved markedly. The traditional type of consumption based on main-

taining subsistence is giving way to a model oriented towards greater comfort and self-actualisation. Housing costs and services such as catering, public health, higher education, tourism, culture, transport, and telecommunications now account for almost two-thirds of Chinese citizens' consumer spending. Rapid urbanisation is an important factor in these changes. The share of the urban population reached 64.7% in 2021, compared with the figure of 52% in 2011.

About 2 billion square metres of housing are built in China annually, which is almost half of the global total [11, p. 47]. The number of automobiles per 100 households in 2020 was 37.1 compared to 13.1 in 2010. All this is evidence of the marked emergence of the middle class in the country amounting to about 470 million people [source 13]. As this social stratum is extending, it forms a capacious consumer market, the fastest-growing in the world.

\* \* \*

The experience of contemporary China is interesting and instructive. It shows how much can be achieved with political will, well-designed long-term

socio-economic programmes, necessary institutional and financial resources, and, most importantly, a clear understanding of the national strategic priorities. The development of China's economy is gaining an increasingly inclusive character; the results of economic growth are becoming accessible to a wide range of social groups. As a consequence, the country has dramatically changed its image for the better within a short period of time.

China still has a long way to go in dealing with a complex of problems connected with the imbalance of industrial and regional development and deep-seated social inequality, with the need to overcome technological dependence, reach ecological recovery, reduce the debt burden in the economy, etc. New and sometimes unexpected challenges such as the trade war with the USA or the COVID-19 pandemic should not be underestimated. Nevertheless, the gained momentum and the accumulated experience of overcoming difficulties suggest that China will continue its macroeconomic transit towards a modernised economy and a more harmonious, socially oriented, and environmentally friendly society.

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