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Xu Zhenpeng, NEW INNOVATIVE GUIDELINES
Alexandr S. Troshin FOR THE CHINESE ECONOMY BY 2035

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Abstract

The planning of the Chinese economy remains a key instrument of China's public administration of economic development, even despite the formation of its market component. The article presents the basic underpinnings of the innovative guidelines of the Chinese economy, which have been defined in the next five-year plan for the country's economic and social development. The study covers and reveals the targets of all five-year plans of all of China's five-year plans, thus highlighting the path of innovation. The objectives of China's 14th Five-Year Plan for Social and Economic Development, with the most notable feature being the explosion of innovation financing, was discussed in detail. The country's new five-year development plan specified the direction of building a modern Chinese economy with new industrialization, information technology, urbCoanization, and modernization of agriculture.

Key words: China; five-year development plan; innovation; development targets

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Introduction

In China, the phrase that «preparation leads to success, and lack of planning leads to failure» is relevant. This thesis is highlighted the Confucian treatise «Zhongyong» («Doctrine of the Mean»). The Five-Year National Economic and Social Development Plans are a series of social and economic initiatives launched since 1953 in China to guide future development. The five-year programs were named by experts worldwide as «China's secret weapon for sustainable development» [Zhenmin Zhibao, People's Republic of China). URL: https://inosmi.ru/politic/20201026/248401825 .html (in Russian).].

Zhou Shaolai (Management School of the Chinese Academy of Social Sciences) emphasizes that «China's five-year development plan has always had institutional and political coherence with each previous fiveyear plan,» continuing the achievement of previous stages of development.

The country's well-established social and economic development planning system in China is one of the main reasons for China's rapid and dynamic development [Izmenenie ekonomicheskoj modeli v Kitae «Change of Economic Model in China»].

«Development is the basis and the key to solving all the problems facing the country», Premier Li Keqiang said on March 5 about new 14th Five-Year Plan for the socioeconomic development of China, the key areas of which are innovation (China becoming a technological superpower in the next five years) and the growth of domestic consumption (ensuring economic growth in the country by focusing on the domestic market).

One of the strategic objectives of the 14th Five-Year Plan is to improve the well-being of the low-income population and to expand the middle class. China no longer aspires to GDP growth; priority is given to the quality of the country's socio-economic development.

The aim of the research is to examine the innovation component of China's economic policy within the framework of the country's emerging five-year development plans.

The methodological basis of the research on innovative orientations of the Chinese economy is the system approach that allows to generalize and synthesize the studied material.

The analysis of the targets of all China's five-year plans reveals the vector of development of the innovation component.

The main part

In the early years after its founding, China experienced a period of economic recovery. Since 1953, 13 five-year plans were drawn up and implemented, except for the economic adjustment period (1963-1965).

According to the first plan, held in China from 1953 to 1957, industry and agriculture were the two main sectors of the national economy. Ambitious targets had been set for these industries. As a result, by 1957, about 595 large and medium-sized projects were completed and launched, paving the way for China's industrialization. Cooperatives of agricultural producers also grew rapidly during this period. The gross value of industrial and agricultural products this year increased by 128.6 and 101 percent, respectively, compared with 1952. However, many problems arose, such as:

- unbalanced growth trajectory between industry and agriculture;
 - lack of grain production;

- rapid population growth, which greatly influenced the overall development of the Chinese economy.

The next five five-year plans focused on agricultural and industrial development. The plans contained specific quotas and production norms for steel and grain. At the same time, during the period from the 2nd to the 5th Five-Year Plans, the Chinese Government explored ways and models for developing and implementing its own mediumand long-term development plans. As empirical experience had grown, goals and targets had been constantly adjusted. But the following five-year plans continued to focus on heavy industry.

Between 1952 and 1978, China's average annual growth rate of value-added manufactures, an important economic indicator, reached 11.5 % and its share of GDP increased from about 10 % to 44.4 %, marking China's transformation into a major industrial power. Since the 1980s, China moved to a Chinese-specific socialist market economy, the role of central planning was weakened, as a result of which the country's authorities abandoned specific targets.

The main features of China's five-year development plans are presented in Table.

Table

Periodization and targets of the «Five-year plans» of China's development from 1953 to 2020 [CGTN: Five-year plans as the basis for China's socio-economic development]

Stages of five-year plans	Description and content
1st five-year period (1953-1957)	This stage was focused on the transition from an agrarian economy to the development of advanced industrial production, with an emphasis on heavy industry.
2nd five-year period (1958-1963)	The second period continued to focus on heavy industry and output growth.
3rd five-year period (1966-1970)	The main objectives of this period were the development of agriculture and the strengthening of basic industries.
4th five-year period (1971-1975)	The fourth «Five-Year Plan» regulated the targets for agricultural and industrial production, as well as investment in infrastructure construction.

Stages of five-year plans	Description and content
5th five-year period (1976-1980)	The accent of the fifth period was the formation of an independent and relatively coherent industrial system.
6th five-year period (1981-1985)	The sixth Five-Year Plan was aimed on correcting and solving the problems of the previous plans.
7th five-year period (1986-1990)	The seventh five-year development period was marked by the creation of a platform for a new Chinese-specific socio-economic system.
8th five-year period (1991-1995)	The priority objective of the eighth phase was to reorganize industry and further develop the technology sector, education, and foreign trade.
9th five-year period (1996-2000)	Among the main objectives of the ninth phase were the formation of the foundations of the socialist market economy and the further mod- ernization of the industrial structure.
10th five-year period (2001-2005)	The tenth phase was focused at establishing a relatively cohesive social security system and achieving notable progress in the development of a modern public enterprise system.
11th five-year period (2006-2010)	The eleventh Five-Year Development Plan emphasized the optimization and modernization of the structure of industrial production, as well as the improvement of the utilization of resources, defining the main objectives of the country, including the implementation of the concept of scientific development, increasing independent innovation capacity, and accelerating the transition from an economic growth regime to an intensive one. During this period, more efforts were directed towards increasing innovation capacity and deepening reforms and openness.
12th five-year period (2011-2015)	The purpose of this stage was to increase the contribution to the development of education, science, and high technology. China's economy has moved from a phase of rapid growth to one of qualitative and efficient development. This document set out the tasks in the environmental field.
13 th five-year period (2016-2020)	During this period, emphasis was placed on the use of innovation to stimulate the development of the state.

Since the 1st plan, the country's path to industrialization had focused on growth and the speed of economic expansion, ignoring resource depletion, environmental pollution, and ecological damage. In recent years, the economy has ceased to be the sole objective of government planning. A wide range of other development priorities, including environmental protection and social welfare programmes, have received considerable attention [Novaja pjatiletka: kak Kitaj planiruet svoe budushhee «New Five-Year Plan: How Its Future». https://www.gazeta.ru/politics/2020/10/30_a_ 13340161.shtml].

China has entered the stage of quality development with significant institutional advantages, improved management efficiency, long-term economic improvement, a strong material base, abundant human resources, wide market space, high development sustainability, overall social stability, and continued socio-economic development.

The general guidelines for the development of the Chinese economy are as follows:

- a new highly efficient development model;
 - qualitative and dynamic change;

- achieving higher quality, more efficient, more equitable, more sustainable and safer development;
- reforming on the principles of openness (modernization of public administration; elimination of institutional obstacles, increasing the efficiency of resource allocation building an ecological civilization).

The upcoming 14th Five-Year Plan will be the first since China has completed the construction of a modern, prosperous society in all respects after achieving the first 100-year goal of fully building a moderately prosperous society. The «two pillars» of the new five-year plan are innovation and growth of domestic consumption.

At the fifth plenary of the 19th Central Committee of the Communist Party of China (CCCPC), held in Beijing from 26 to 29 October 2020, it was stated that «China will achieve an economy of 100 trillion yuan (\$ 14.9 trillion) this year and will promote sustainable and healthy economic development over the next five years with a focus on better growth. The country will accelerate the formation of a new development model in which domestic and external markets can support each other while the domestic market becomes the main pillar» [Kurs - na procvetanie. Novyj pjatiletnij plan KNR nacelen na uskorenie modernizacii strany «The Plan is to Prosper. The New Five-Year Plan of the People's Republic of China is Aimed at Accelerating the Modernization of the Country» // Rossijskaja gazeta - Special Issue 261(8315). URL: No. https://rg.ru/2020/n/19/novyj-piatiletnijplan-knr-nacelen-na-uskorenie-modernizaciistrany.html].

The most important result of the fifth plenum of the 19th CCCPC was the consideration and approval of the «Recommendations of the CCCPC Regarding the Development of the 14th Five-Year Plan for Socio-Economic Development and Prospective Goals by 2035».

The General Secretary of the CPC, President of the People's Republic of China (PRC) Xi Jinping made a report on the new 14th Five-Year Plan at the plenum of the Central Committee. Programmes and documents were announced for China, which will start a new path towards achieving the goal of fully building a modernized socialist state, as well as a guide to the socio-economic development of the PRC for the next five years and in the future.

China will continue to systematically build up its economic, technological potential and aggregate national power. Among the tasks that the country has set itself by 2035 is «achieving socialist modernization». The country will strive to achieve its Two Centenaries goal of building a great modern socialist country by 2049. The «Two Centenaries» is defined as «building a moderately prosperous society in all spheres by the centenary of the Chinese Communist Party, which was founded in 1921, and building a modern socialist country that will be prosperous, strong, democratic, culturally developed, harmonious and beautiful by the centenary of People's Republic of China, founded in 1949» [5-letka pobeditelej: Chego tak bojalis' SShA, ugrozhaja Kitaju, — svershilos' «5 Year Plan of Winners: What the USA Was Afraid of When Threatening China Has Happened». URL:

https://svpressa.ru/economy/article/280205/].

On March 5, 2021, the Chinese government submitted the outline of the 14th Five-Year Plan (2021-2025) for approval by the National People's Congress. It is noteworthy that the drafters of the document for the first time abandoned the main indicator: the target for GDP growth over a 5-year period. The planned GDP growth rate will now be set for a one year in advance. The government is targeting 6 % GDP growth in 2021.

«The goals set in the new plan will lead to a large increase in China's overall GDP, as well as its domestic consumer market», said Rajiv Biswas, the chief economist of the Asia-Pacific region of the global consulting company IHS Markit.

The new five-year plan and long-term targets will be elaborated and agreed upon within the next few months and submitted to the national legislature, the National People's Congress, for approval.

«14th Five-Year Plan is in fact a clear roadmap for the development of the country with almost one fifth of the world's popul ation, including 400 million middle-income people», said Mohammad Ahmed, Associate Professor of the Economics Department at Quaid-I-Azam University in Islamabad.

Oleg Timofeev, Associate Professor of the Peoples' Friendship University of Russia in Moscow, said: «Innovation is the core of China's modernization, technological autonomy and strategy for building modern scientific and technical power» [Kurs - na procvetanie. Novyj pjatiletnij plan KNR nacelen na uskorenie modernizacii strany "The Plan is to Prosper. The New Five-Year Plan of the People's Republic of China is Aimed at Accelerating the Modernization of the Country" // Rossijskaja gazeta - Special No. 261(8315). URL: https://rg.ru/2020/n/19/novyj-piatiletnijplan-knr-nacelen-na-uskorenie-modernizaciistrany.html].

The main instrument of China's new development model is breakthrough innovation and technological development. As the Head of the Embassy in Yekaterinburg Cui Shaochun noted in an interview with TASS: «Innovation is the soul of the nation's progress and the inexhaustible source of prosperity of the country» [General'nyj konsul KNR rasskazal o novom plane razvitija Kitaja «The Consul General of the People's Republic of China Explained the New Development Plan of China». URL: https://tass.ru/novostipartnerov/10198019]. As Chinese President Xi Jinping said, "Reform and innovation are the main driving force of human development, and those who reject reform and innovation are lagging behind and will be excluded by history» [General'nyj konsul KNR rasskazal o novom plane razvitija Kitaja «The Consul General of the People's Republic of China Explained the New Development Plan

of China". URL: https://tass.ru/novosti-partnerov/10198019].

At the beginning of the 21st century, China has noticeably narrowed the gap in the level of development of high technologies between itself and the advanced countries of the world.

The explosive advances in technology are underpinned by China's unprecedented research and development (R&D) spending, which grew by an average of 20 % annually between 1992 and 2018 to become the second largest in the world.

In the 10th fiscal year (2001-2005), China for the first time clearly indicated the share of R&D in its gross domestic product (GDP), stating that in 2005 this share should increase by more than 1.5 %.

In 2018, China spent 2.18 % of its GDP on R&D, ranking second in the world after the US, although R&D intensity still lagged behind high-technology countries such as the US and Japan.

Meanwhile, 4.19 million people were employed in R&D in China in 2018, according to the National Bureau of Statistics (NBS), maintaining the world's largest R&D pool for six years.

The vectors of development of the innovation component of China over the past five «five-year» periods of development were the following:

- 9th Five-Year Development Plan: «Implementation of the Plan to Revitalize the Country through Science and Education»;
- 10th Five-Year Development Plan: «Science and Technology, Education and People»;
- 11th and 12th Five-Year Development Plans: «Harnessing Innovation for the Development of the Country Through Science, Education and Human Resources Development»;
- 13th Five-Year Development Plan: "Innovative Development of the Country».

Active innovation development based on China's 13th Five-Year Plan (2016-2020), which aims to be an «Innovation Nation" by 2020, an international innovation

leader by 2030, and a global scientific and technological innovation leader by 2050 year.

The Chinese government encourages innovation to meet the real needs of the market, as a result of which the country has seen an increase in the quantity and quality of scientific and technological innovation over the 13-year plan period. Between 2016 and 2020, China's rate of scientific and technological progress increased from 55.3 % to 59.5 %, with a number of important results. In terms of innovation, the country ranks 14th out of 131 economies in the world [Usilenie innovacionnogo potenciala Kitaja pridaet impul's razvitiju «Strengthening the Innovative Potential of China Gives Impetus to the Development of the World». URL: https://rg.ru/2020/n/01/usilenieinnovacionnogo-potenciala-kitaia-pridaetimpuls-razvitiiu-mira.html.

According to the latest data, China's innovation index was 228.3 in 2019, with an increase of 7.8 % compared to 2018, while investments in technology research and development amounted to 2.23 % of total GDP, surpassing the EU average in 2018.

«Looking to the future, we must build confidence in innovation, seize the opportunity of a new revolution in science and technology and industrial transformation. Facing the world's latest technology, the main economic battleground and the country's enormous needs, we need to pursue a strategic policy of science, technology, and education for China's prosperity, implement the strategy of strengthening the country with highly qualified personnel and the strategy of innovative development, intensify fundamental research and mastery of key technologies »[Ibid.].

Assessing the report of Xi Jinping, Bloomberg concluded that, given the planned pace of development, China will become the largest economy in the world by 2025, surpassing the United States in economic power. However, the 14th Five-Year Plan is only part of the global national devel-

opment strategy up to 2035. By this year, the PRC is planning to reach the «GDP per capita» level of the leading countries of the modern world economy [5-letka pobeditelej: Chego tak bojalis' SShA, ugrozhaja Kitaju, — svershilos' «5 Year Plan of Winners: What the USA Was Afraid of When Threatening China Has Happened». URL: https://svpressa.ru/economy/article/280205/.

Conclusions

One of the key messages of the Chinese government for the next five years is to adhere to an innovative position in the overall strategy of China's modernization.

The strategic goal is scientific and technical self-sufficiency as an indispensable component of national development, leadership in world science and technology, active implementation of the strategy of science and education for the innovative development of the country, improving the national innovation system.

Processes for improving the national innovation system also involve such processes:

- rendering assistance for research institutes, universities, enterprises in optimizing the distribution of research forces and resources:
- strengthening of fundamental research, development of original innovations;
- active creating and developing of national scientific laboratories;
- establishing international scientific and technical innovation centers in Beijing, Shanghai, Guangdong, Hong Kong and Macau region;
- creating a high-quality platform for the exchange of national research papers and scientific and technical information;
- integration of industry, universities and scientific research centers;
- supporting innovatively active enterprises, tax incentives for enterprises investing in fundamental research;
- creating innovative consortia implementing large national scientific and technical projects;

- strengthening the innovative component of training of qualified personnel, developing new engineering knowledge and professions;
- supporting the development of highlevel research universities and their focus on training personnel for fundamental research;
- strengthening legal protection of intellectual property rights.

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