Research on the Influence of Scientific and Technological Innovation on High-Quality Economic Development

——The Intermediary Effect based on Industrial Structure Upgrading

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Abstract. Based on 30 provinces in China as research samples, this paper selects the panel data from 2013 to 2023, and effectively analyzes the relationship between scientific and technological innovation and industrial structure upgrading and high-quality economic development through the construction of benchmark model and intermediary effect model. The main way to promote high-quality economic development through scientific and technological innovation in China is to promote the upgrading of industrial structure. However, due to regional differences, there are also differences in its promoting role. Therefore, from the aspects of increasing investment in scientific and technological innovation, accelerating the upgrading of industrial structure, and paying attention to the coordinated development of scientific and technological innovation and industrial structure upgrading, we put forward corresponding policies and suggestions for promoting the high-quality development of national economy.

Keywords: High-quality economic development; Scientific and technological innovation; Upgrading of industrial structure.

1 Introduction

China's economy has entered a period of high-quality development from a period of rapid development. There is a fundamental difference between rapid economic growth and high-quality economic development, and high-quality economic development puts quality at the core position. Science and technology is the first productive force and the main driving force to achieve high-quality economic development [1]. Adhering to the path of innovation-driven economic development is the key to bringing China's middle-income group to a new level. Scientific and technological innovation is a new engine of economic development, providing a new driving force [2], rebuilding the driving mechanism of economic growth, and promoting the development of efficient and sustainable economic development. Promote the development of science and technology, promote diversified investment in science and technology, and create an open innovation environment with international competitiveness [3].

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The ability of scientific and technological innovation plays a vital role in high-quality economic development. It is also an important starting point to solve the deep-seated contradictions in current economic development, accelerate the transformation of economic mode and improve the quality and efficiency of industrial structure. In the face of the new trend of high-quality economic development, China's previous scientific and technological innovation theory has not adapted to the new economic development requirements of connotative growth characterized by the improvement of total factor productivity, which seriously restricts the output effect and innovation efficiency of scientific and technological innovation input, and hinders the process of high-quality economic development [4]. In order to effectively improve the accuracy of scientific and technological innovation policy supply, this paper analyzes the mechanism of scientific and technological innovation to promote high-quality economic development, and elaborated how to further play the role of scientific and technological innovation in promoting high-quality economic development.

2 Theoretical Analysis and Research Hypothesis

2.1 The Impact of Scientific and Technological Innovation on High-Quality Economic Development

The research process of high-quality scientific and technological innovation on economic development in China is long and starts late. In light of China's national conditions, relevant scholars have continuously learned from advanced development experience and gradually established a research system for scientific and technological innovation and high-quality economic development. Under the background of market-oriented economic development, the research on the interrelationship between high-quality economic development and scientific and technological innovation is gradually improved. Romer established a new economic growth theory, emphasizing that scientific and technological innovation is the driving force of economic growth and development and explaining the important impact of technological progress [5]. Fagerberg It is believed that the difference of the level of scientific and technological innovation affects the national economic development. In recent years, many scholars study scientific and technological innovation and high-quality economic development from different perspectives[6] . Liu Hedong et al. believe that the essence of high-quality economic development is to adjust the relations of production and improve productivity, while the connotation of high-quality development lies in high-quality input-output and income distribution. One of the driving forces of China's high-quality development is innovation, strengthening independent research and development and innovation to improve the efficiency of economic growth. This paper studies the relationship between the comprehensive score of high quality development and the construction of the index system to measure high quality development[7]. Yu Dengke and Li Jiao explored the influence of innovation on the regional high-quality development level, used the regression model to establish the comprehensive index of scientific and technological innovation index and high-quality economic development, and concluded the relationship between scientific and technological innovation and high-quality development

[8]. In addition, some scholars have used empirical analysis to explore the relationship between the two. Based on the relationship between scientific and technological innovation and high-quality economic development, the following assumptions are put forward:

H1: The improvement of scientific and technological innovation ability promotes high-quality economic development, that is, scientific and technological innovation is positively correlated with high-quality economic development.

2.2 The Relationship between Scientific and Technological Innovation and the Upgrading of Industrial Structure

Scholars study and analyze the interrelationship between scientific and technological innovation and the upgrading of industrial structure from different perspectives. Lu Zichen and gao han through the perspective of scientific and technological innovation cooperation, analysis of scientific and technological innovation along the "Belt and Road" city industrial structure, found the coordinated development of industrial structure technology innovation plays an important role, scientific and technological innovation is divided into two aspects of scientific research and technology development, research the influence of regional industrial structure, research shows that scientific and technological innovation can significantly promote the upgrading of the regional industrial structure, research than technology development can more effectively promote the upgrading of regional industrial structure [9]. Song Deyong and Bi Daojun selected the central city of the Yangtze River as a research sample, and found that in the process of promoting the progress of industrial structure, the influence of technological innovation was not a direct linear relationship, but gradually changed from inhibition to promotion[10].Based on the uncertainty of the impact of scientific and technological innovation on industrial structure upgrading, the following assumptions are proposed:

H2: The investment of scientific and technological innovation promotes the upgrading of industrial structure, that is, scientific and technological innovation is positively correlated with the upgrading of industrial structure.

2.3 The Impact of Scientific and Technological Innovation and Industrial Structure Upgrading on High-Quality Economic Development

From the domestic and foreign literature, the role of scientific and technological innovation and industrial structure upgrading in high-quality economic development has different levels. Gan Chunhui, Zheng Ruogu, Yu Model believe that the advanced industrial structure and the rationalization of industrial structure have a positive impact on economic growth[11].Ren Xiaoyan, Yang hydraulic in 2012-2017 China 30 provinces panel data as a sample, respectively to upgrade industrial structure, technology innovation, independence and high quality development of regional economy, the results show that the eastern Midwest industrial structure upgrade impact on the development of high quality differences, the eastern industrial structure upgrade has a positive effect on high quality development, and the central region of industrial struc-

ture upgrading has a negative impact on high quality development[12].Shi Dan, Li Peng and Xu Ming empirically analyzed the impact of industrial structure changes on economic quality development, and the results showed that industrial structure upgrading promoted high-quality development in China, but the impact on regional high-quality economic development was different[13].

H3: Scientific and technological innovation has an impact on the high-quality economic development through the intermediary variable of industrial structure upgrading.

3 Research Design

3.1 Model Building

This paper analyzes the interaction between scientific and technological innovation, industrial structure upgrading and high-quality economic development(see Fig. 1). First of all, it studies the role of science and technology innovation in the high-quality development of China's economy, and points out the role of the progress of science and technology in the high-quality economic development. Secondly, the connection between scientific and technological innovation and industrial structure upgrading, the detailed analysis of scientific and technological innovation and industrial structure upgrading, the combination of scientific and technological innovation and industrial structure upgrading, and draw the conclusion that scientific and technological innovation can promote the upgrading of industrial structure. Finally, the influence of industrial structure upgrading on economic development is analyzed in high quality.

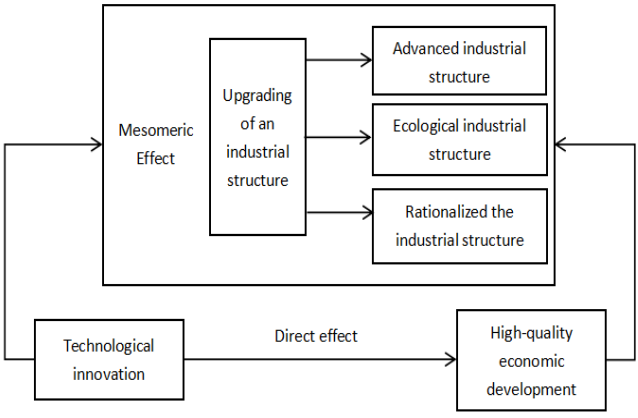

Fig. 1. The Relationship between scientific and technological innovation, industrial structure upgrading and high-quality economic development

3.2 Sample Selection and Data Acquisition

Based on accuracy in data selection, the data were removed from the sample due to the inconsistency of statistical methods of Hong Kong, Macao and Taiwan data and the lack of relevant data in Tibet Autonomous Region. In this paper, 30 provinces in China

from 2013 to 2023 were selected as the research objects. The data used in this paper are mainly from the China Urban Statistical Yearbook, China Regional Economic Statistical Yearbook and the annual data of various provinces, and on this basis, the work of various provincial governments is analyzed. These data are based on the China Statistical Yearbook. Regarding the partially lost data, the mean or interpolation method is used to ensure the integrity of the data.

3.3 Model Setting and Variable Description

This paper studies the influence of scientific and technological innovation construction on high-quality economic development. From the perspective of the relationship between scientific and technological innovation and high-quality economic development, there are many factors affecting high-quality economic development under the actual situation in China. Therefore, high-quality economic development cannot be simply attributed to scientific and technological innovation. This paper verifies the influence of scientific and technological innovation construction on high-quality economic development through empirical research. The model is set up as follows:

$$hqed_{it} = \alpha_0 + \alpha_1 inn_{it} + \alpha_2 upg_{it} + \alpha_3 control_{it} + v_i + \mu_t + \varepsilon_{it} \quad (1)$$

In the model, $hqed_{it}$ is the explained variable, indicating high-quality economic development; inn_{it} is the explanatory variable, representing technological innovation; upg_{it} is the intermediary variable, indicating the upgrading of the industrial structure; v_i shows a regional fixed effect; μ_t shows the time-fixed effect; $control_{it}$ is a control variable, including government expenditure, human capital, environmental regulation, urbanization level, higher education level, financial industry development level and other factors; ε_{it} Denote the model random error term.

In order to study the role of industrial structure upgrading in the process of scientific and technological innovation, the transfer item of scientific and technological innovation and industrial structure upgrading is introduced on the basis of Equation (1):

$$hqed_{it} = \beta_0 + \beta_1 inn_{it} + \beta_2 upg_{it} + \beta_3 control_{it} + \beta_4 upg_{it} \times inn_{it} + v_i + \mu_t + \varepsilon_{it} \quad (2)$$

For the study of science and technology innovation for the development of high quality economic intermediary utility, based on the industrial structure upgrade as a intermediary effect test of the development of economic quality, and the upgrade the industrial structure (upg) from advanced industrial structure (ais), ecological industrial structure (eis) and industrial structure rationalization (ras) three aspects, model set as follows:

$$hqed_{it} = \sigma_0 + \sigma_1 inn_{it} + \sigma_2 control_{it} + v_i + \mu_t + \varepsilon_{it} \quad (3)$$

$$ais_{it}, eis_{it}, ras_{it} = \varphi_0 + \varphi_1 inn_{it} + \varphi_2 control_{it} + v_i + \mu_t + \varepsilon_{it} \quad (4)$$

$$hqed_{it} = \omega_0 + \omega_1 inn_{it} + \omega_2 ais_{it}, eis_{it}, ras_{it} + \omega_3 control_{it} + v_i + \mu_t + \varepsilon_{it} \quad (5)$$

Interpreted variable: high-quality economic development (hqed). The chosen explained variable is the composite index (hqed) of 30 provinces in China. Taking

into account the actual development of the 30 provinces in China, an index system of high-quality economic development has been established based on the six dimensions of economic quality and efficiency, innovative development, green development, coordinated development, opening up and sharing of people's livelihood (see Table 1). In order to calculate the high quality development index of 30 provinces in China, the comprehensive index method is used to measure the high quality development index.

Table 1. Index system for high-quality economic development

Level 1 indicators	Secondary indicators	Indicator direction
Economic quality and efficiency	Economic growth(%)	+
	Per capita GDP(Yuan)	+
	The proportion of tertiary industry(%)	+
Innovative development	The proportion of college teachers in the employed personnel(%)	+
	R & D staff as a proportion of people employed(%)	+
	High-tech industry market turnover(100 million)	+
Green development	Land area covered with trees(%)	+
	The harmless treatment rate of household garbage(%)	+
	Waste water discharge(t)	-
	Industrial exhaust gas emissions(t)	-
	Industrial solid waste discharge volume(t)	-
Harmonious development	Urban-rural income gap(Yuan)	+
	Urban-rural consumption gap(Yuan)	+
	Urban and rural unemployment rate(%)	-
Open to the outside world	Amount of imports(ten thousand yuan)	+
	Amount of exports(ten thousand yuan)	+
	The proportion of total outbound investment in GDP(%)	+
People's livelihood sharing	Per capita education funds(Yuan)	+
	Per capita fiscal expenditure on medical care and health care(Yuan)	+
	Number of beds in medical and health institutions per capita(place)	+
	Per capita green space area(square meter)	+

Explanatory variable: technological innovation (inn), which is expressed by the amount of patent granted.

Control variables: By combining the existing research results, it is found that the high-quality economic development is affected by many factors. On the basis of relevant domestic and foreign research, the following control variables are selected: government expenditure, human capital, environmental regulation, urbanization level, higher education level and development level of financial industry. The names and descriptions of each variable are shown in Table 2.

Table 2. Main variables and their descriptions

Type of variable	Variable name	Representation of symbol	Variable declaration
Explained variable	High-quality economic development	hqed	High-quality economic development
Explanatory variable	Technological innovation	inn	Patent authorization
Control variables	Government expenditures	gov	The amount of government financial expenditure
	Human capital	hcap	Number of employed people
	Environmental regulation	enr	The proportion of the completed industrial pollution amount in GDP
	Urbanization level	url	The proportion of the urban population in the total population of the province
	Higher education level	hel	Number of undergraduate graduates
	Development level of the financial industry	fdl	Deposit balance of financial institutions
Metavariable	Advanced industrial structure	ais	The added value of high-tech industries accounts for the total industrial added value
	Ecological industrial structure	eis	Share of energy consumption in GDP
	Rationalized the industrial structure	ras	Industrial structure rationalization index

4 Empirical Inspection and Analysis

4.1 Descriptive Statistics of the Variables

In order to reduce the error, the above variables were analyzed in the empirical analysis. The descriptive statistics of the variables are shown in Table 3.

Table 3. Descriptive statistical results of the variables

Variable name	Observed value	Average value	Standard deviation	Least value	Maximal value
Human capital(hqed)	330	0.398	0.610	-1.798	3.712
Technological innovation(inn)	330	1.087	1.691	-3.073	5.432
Government expenditures (gov)	330	2.032	1.267	1.678	3.987
Human capital(hcap)	330	4.883	1.211	-2.679	7.025
Environmental regulation(enr)	330	0.875	1.142	-1.023	2.447
Urbanization level(url)	330	-1.358	1.327	-6.025	3.764
Higher education level(hel)	330	1.077	1.301	-0.235	1.674
Development level of the financial industry(fdl)	330	-1.014	1.021	-2.087	1.003
Advanced industrial structure(ais)	330	0.640	0.254	-1.047	2.612
Ecological industrial structure(eis)	330	0.744	0.467	-1.345	2.498
Rationalized the industrial structure(ras)	330	1.024	0.722	-1.036	3.113

4.2 Analysis of the Regression Results of the Benchmark Model

On this basis, scientific and technological innovation data information is used to match the high-quality economic development situation to ensure the robustness of the model. The data are counted using the regression formula of econometrics. Among them, in Table 4, column (1) is the regression result of scientific and technological innovation on high-quality economic development, and in column (2) is the introduction of relevant control variables, and the regression results of scientific and technological innovation on high-quality economic development are analyzed. In this paper, the two factors of region and time are fixed, thus ensuring the robustness of the regression results.

Table 4. Benchmark regression results

Variable name	(1) hqed	(2) hqed
inn	0.041***	0.091***
	(0.009)	(0.071)
gov		0.152***
		(0.057)
hcap		-0.006
		(0.030)
enr		0.111***
		(0.647)
url		-0.257***
		(0.048)
hel		0.239
		(0.110)
fdl		0.381
		(0.263)
Observed value	330	330
Area fixation effect	Y	Y
Time fixed effect	Y	Y
Adjust R^2	0.371	0.366

Note: robust standard error in parentheses; *,**,***are significant at 10%, 5% and 1% levels, respectively.(similarly hereinafter)

Table 4 shows that scientific and technological innovation plays a positive role in promoting high-quality economic development, and the verification hypothesis 1 is valid. In terms of control variables, the government expenditure coefficient is positive, indicating that the government can take corresponding policy measures and give certain financial support, so as to create a good environment for the development of regional economy. The coefficient of human capital is negative, but not significant, which shows that human capital has not had an obvious impact on the high-quality economic development of various regions, and the possible reason is that there are problems such as the distribution of unbalanced labor force in some regions. The environmental regulation coefficient is positive, indicating that different regions promote the high-quality economic development with environmental advantages. The coefficient of urbanization level is negative, indicating that the increase of urbanization level is unfavorable to promoting the high-quality economic development. In the process of urban development, blind expansion causes the waste of resources, aggravates the pressure of the environment, and then affects the economic development of the city. At the same time, the development of higher education also shows obvious positive characteristics, which shows that the development of higher education has played a positive role in promoting the high-quality development of regional economy. The coefficient of the development level of the financial industry is positive, which shows that to some extent, the development of the financial industry can promote the

high-quality development of the economy, but it may not be fully utilized, so it plays a limited role.

4.3 Intermediary Effect Test

Because scientific and technological innovation has many effects on the high-quality development of China's economy, it is of great significance to study the role of scientific and technological innovation in the high-quality development of China's economy. Scientific and technological innovation is an intermediate variable —— industrial structure upgrading to promote high-quality economic development. The intermediary variable of industrial structure upgrading is analyzed and verified from three aspects: advanced industrial structure (ais), ecological industrial structure (eis), and rationalization of industrial structure (ras).

Table 5. Estimation results of the intermediary effect of the influence mechanism of scientific and technological innovation on high-quality economic development

Variable name	Advanced industrial structure		Ecological industrial structure		Rationalized the industrial structure	
	model 1	model 2	model 3	model 4	model 5	model 6
	hqed	ais	hqed	eis	hqed	ras
inn	0.033*** (0.006)	0.047*** (0.025)	0.067*** (0.017)	0.051*** (0.031)	0.066*** (0.014)	0.042*** (0.045)
ais		0.130*** (0.072)				
eis				0.101*** (0.054)		
ras						0.147*** (0.067)
Controlled variable	Y	Y	Y	Y	Y	Y
Area fixation effect	Y	Y	Y	Y	Y	Y
Time fixed effect	Y	Y	Y	Y	Y	Y
Constant term	-0.221 (0.034)	0.417*** (0.144)	0.021** (0.138)	0.377*** (0.113)	-0.146 (0.028)	0.328*** (0.108)
Observed value	330	330	330	330	330	330
R^2	0.373	0.565	0.611	0.575	0.542	0.410

The test results of intermediary effect are shown in Table 5. According to the estimation of Model 1, Model 3 and Model 5, scientific and technological innovation can significantly promote the upgrading of industrial structure, the ecology of industrial structure and the rationalization of industrial structure, and then verify hypothesis 2, the

investment in scientific and technological innovation can promote the upgrading of industrial structure. In addition, in model 2, model 4 and model 6, the advanced variable industrial structure, ecological industrial structure, rationalization of industrial structure and high-quality economic development coefficient are all positive. The above research results show that the verification hypothesis 3 can improve the high-quality economic development by promoting the upgrading of industrial structure, ecological industrial structure and rationalization of industrial structure, that is, scientific and technological innovation has a positive impact on the high-quality economic development through the intermediary variable of industrial structure upgrading.

4.4 Robustness Test

In order to ensure the validity and reliability of the above research conclusions, this paper conducts the robustness test. First, replace the explanatory variables and use the proportion of R & D expenditure in GDP to measure scientific and technological innovation. The regression results are shown in column (1) in Table 6. The second is to replace the explained variables, taking per capita GDP as the measurement index to measure the high-quality economic development of China, and the data of Table 6 columns (2) are obtained. From the results of the robustness test, there is no fundamental change in the coefficient and significance level of the main explanatory variables, and the main conclusions accord with the previous conclusions.

Table 6. The robustness test

Variable name	(1) hqed	(2) hqed
inn	0.061*** (0.009)	0.087*** (0.067)
gov	0.148*** (0.040)	0.178*** (0.067)
hcap	-0.011 (0.035)	0.001 (0.026)
enr	0.094*** (0.320)	0.132*** (0.417)
url	-0.117*** (0.024)	-0.142*** (0.032)
hel	0.276 (0.125)	0.398 (0.141)
fdl	0.221 (0.107)	0.468 (0.280)
Observed value	330	330
Area fixation effect	Y	Y
Time fixed effect	Y	Y
Adjust R^2	0.366	0.398

4.5 Heterogeneity Test

Different regions in China have different degrees of scientific and technological innovation and economic development, so the functional mechanism and intermediary role of scientific and technological innovation and industrial structure upgrading for the high-quality development of regional economy will also be different. Regression results based on the whole sample may ignore differences in the degree of influence of different variables on high-quality economic development in different environments and economic conditions. Based on this, the article divides China into three regions: eastern, central and western. The locations and levels of economic development of these three regions differ greatly. Due to the large regional differences in China, further consideration is needed on how to promote the high-quality development of the urban economy. Regional studies: Is there heterogeneity in the role of scientific and technological innovation and industrial structure upgrading in promoting quality economic development? The regression results are shown in Table 7.

In this paper, we divided the state into three regions: Eastern, Central, and Western. At the same time, this paper also studies the functional mechanism of China's science and technology innovation to promote high-quality development. Empirical analysis shows that there is a significant positive correlation between technological progress and high-quality economic development in eastern China, with a regression coefficient of 0.037, indicating that there is a close relationship between technological progress and high-quality economic development. Similarly, there is a significant positive relationship between scientific and technological innovation and high-quality economic development in central China, with a correlation coefficient of 0.042. In the western region, the regression coefficient of the effect of science and technology innovation on high-quality economic development is 0.029, which is significantly positive. This shows that regional division still plays an active role in promoting China's science and technology innovation for high-quality economic development. Among the three regions in the east, the regression coefficient of the central region is larger than that of the east, and the east is larger than the west. This shows that the effect of science and technology innovation is more obvious in the central region. The development of western China is limited, the economic development is relatively slow, the innovation ability is not high, and the driving force of urban development is insufficient. The economic development of the central region is at a medium level, the potential for optimal allocation of technology and resources is great, and the positive impact on urban development is very obvious. Unlike the central and western regions, the eastern region has strong economic development capabilities, infrastructure construction has been completed, and plays an active role in improving the high-quality development of the economy. However, it cannot be ignored that the eastern region has a high population density, which puts certain pressure on the level of urban development and hinders the high-quality development of the economy. Therefore, the policy effect of science and technology innovation in central China on high-quality development.

Table 7. Heterogeneity results of the impact of scientific and technological innovation on high-quality economic development

Variable name	model 1	model 2	model 3
	east part	middle part	west part
inn	0.037***	0.042***	0.029***
	(0.007)	(0.014)	(0.004)
Controlled variable	Y	Y	Y
Area fixation effect	Y	Y	Y
Time fixed effect	Y	Y	Y
Constant term	0.911***	1.027**	0.544***
	(0.128)	(0.505)	(0.107)
R^2	0.424	0.536	0.467

5 Conclusion

This paper takes the data of 30 provinces in China from 2013 to 2023 as research samples, constructs the relationship between science and technology innovation and high-quality economic development of each province in China through empirical analysis, and analyzes the mediating effect of science and technology innovation. Innovation for quality economic development. On this basis, through the study of the above problems, the following conclusions are obtained:

First, continue scientific and technological innovation and high-quality economic development. Both scientific and technological innovation and the upgrading of industrial structure can promote the high-quality development of the economy. However, it is not clear that the current scientific and technological innovation and the upgrading of industrial structure have directly promoted the high-quality development of economic development, mainly because the current technological innovation ability is relatively poor and the industrial structure is not reasonable.

Second, in the process of promoting high-quality development through scientific and technological innovation, the improvement of industrial structure may exert a partial adjustment effect. That is, the upgrading of industrial structure may play a partial role in the role of science and technology innovation in the high-quality development of the economy.

Third, science and technology innovation plays a different role in promoting high-quality economic development in different regions. From the perspective of the eastern region, the technological level in the eastern region is relatively mature, and the number of patent applications and patent grants is ahead. The impact on quality economic development is modest. From the perspective of the central region, the total capital and human investment in science, technology and innovation is less than that of the eastern region, but it maintains a long-term growth trend. It has a great impact on high-quality economic development. From the perspective of the western region, the development is limited, the economic development is relatively slow, the innovation ability is not high, the driving force of urban development is lacking, and the transformation of scientific and technological achievements has not been better realized.

On the basis of the above research results, the paper gives the following suggestions:

First, we will promote the optimal allocation of regional resources. For a long time, the unbalanced economic development among various regions, the large gap between the eastern region and the central and western regions, and the uncoordinated regional development, which have affected the overall level of scientific and technological innovation in China. Therefore, we should promote the flow of resources between the eastern, central and western regions, and optimize the allocation of resources in each region. Allocate resources according to the characteristics of each region itself. The eastern region should step up efforts to deliver scientific and technological achievements to the central and western regions and accelerate their growth rate. The central region should improve the efficiency of industrial enterprises, promote industrial upgrading, and improve the productivity of enterprises. The western region should fully absorb the innovative achievements of the eastern and central regions to promote economic development. We should continuously improve the degree of regional cooperation between large, medium and small cities, improve the effect of industry and talent gathering, establish regional cooperative innovation, and make efforts to promote the healthy development of China's economy.

Second, we will improve the talent mechanism. We will strengthen the introduction of talents, introduce scientific and technological talents of relevant majors according to the development direction, so that scientific and technological talents can fully match research projects, and improve the efficiency of scientific and technological innovation. Core technology innovation should pay attention to the accumulation of human capital. Keeping up with the country's major strategic development needs, with universities and research institutions as the main body of talent training, focus on strengthening the construction of scientific and technological innovation talent training system in the fields of ecological green, new materials, new energy, energy conservation and environmental protection, constantly solve problems in social and economic development, and promote high-quality economic development.

Third, to realize the industry-university-research cooperation model. Combining mode of enterprises, universities and research institutions, colleges and universities to provide talents, research institutions provide technology, enterprises provide target solutions, production can improve the efficiency of research, speed up the practical application of research results, and provide more jobs for talent, improve the efficiency of science and technology innovation, promote economic growth. We will improve policies on scientific and technological innovation for industry-university-research cooperation, build a community of industry-university-research cooperation, raise the level of industry-university-research collaborative innovation, deepen cooperation, and innovate the model of industry-university-research cooperation.

Fourth, we will strengthen the development of the western region. To promote the economic growth of the western region, we should strengthen the platform construction of the western region and put scientific and technological innovation into product competitiveness into the market, so as to improve the economic development level of the western region. First of all, product differentiation should be ensured. By increasing processing procedures to change the homogenization of products, increase product differences to improve economic competitiveness. Secondly, with the full help of the

network platform to publicize products, the government can play the role of publicity and guidance, and change the ideas of traditional enterprises. At the same time, we will provide tax incentives and financial subsidies for enterprises engaged in scientific and technological innovation, so that enterprises can have enough confidence to invest in the research and development of new technologies and realize industrial transformation and upgrading. Promote the high-quality economic development in the remote western areas.

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