

The production network and the creation of a new network are integrated, and resources are optimally allocated

Key points: In the context of technological innovation becoming the key to driving economic growth, how to rationally allocate limited resources among different economic sectors has become the essence of China's high-quality economic development. From the perspective of the integration of production network and innovation network, this paper constructs a general equilibrium model embedded in dual network knots, and systematically analyzes the optimal strategy of resource allocation and its structural mechanism. The optimal R&D allocation ratio is determined by the consumption elasticity, the multiplier effect of the production network, the diffusion path of the innovation network and the integration mechanism of the two. Based on the input products of multiple sectors in China and the patent citation data between enterprises, this paper constructs the production network and innovation network at the departmental level, and empirically evaluates the deviation between the current resource allocation structure and the optimal state. The real one, with it, Although it is said that our country is in the former, its originator, its reason. This paper also introduces the concept of "social patience" to identify key sectors that should prioritize the allocation of R&D resources from a long-term perspective. Based on what you see, it makes sense.

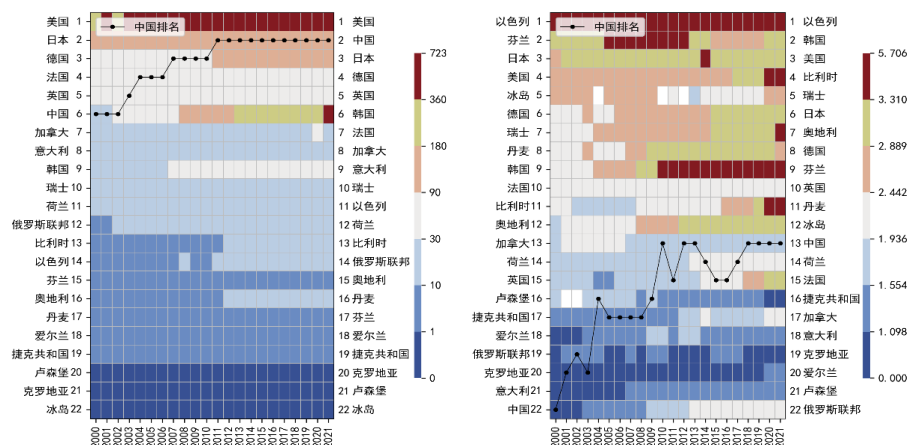
"Closing words: production and networking, innovation network, research origin, departmental collaboration

1. Introduction

The former said: There are three husbands In order to promote scientific and technological progress, China is adding to its R&D investment with unprecedented efforts. To balance, to peace, to calm the people's reason, to calm the people's reason, to calm the country's leniency as the principle, to pacify the country as the goal, to pacify the country as the goal, to calm the people's reason, to calm the country's determination to settle the decision The husband takes the country, takes it as it, and takes it as it.

However, after the success of the manifestation, there is also a structural contradiction of determination—although the existing research has confirmed that R&D investment cannot be ignored and has a rapid effect on economic growth(According to the regulations,Shao Yunfei and others, 2024; Liao Xinlin et al, 2013; Wang Yu et al, 2020)However, in the face of rapid growth in investment in scientific and technological innovation, total factor production is often improved and shelved."China's science and technology have created new dilemmas"For example,A rose with new leaves is rising, 2023; Wang Yonggui is Li Xia, 2023; Ji Yunyang and so on, 2023)Academia has gradually realized that the imbalance in resource allocation can be the crux of the problem.In

this way, the existing research is invested in basic research and applied research (Sun Zao and Xu Xuelu, 2017; Ye Xiangsong and Liu Jing, 2018; Li Gu's army Jian and Zhao Yulin, 2021) and the nameless market of the Changren twist (Wait a minute; Dai Xiaoyong, 2021) If the husband is manpowered, then there is none (Equally, 2017) and other aspects of China's R & D investment in the review.

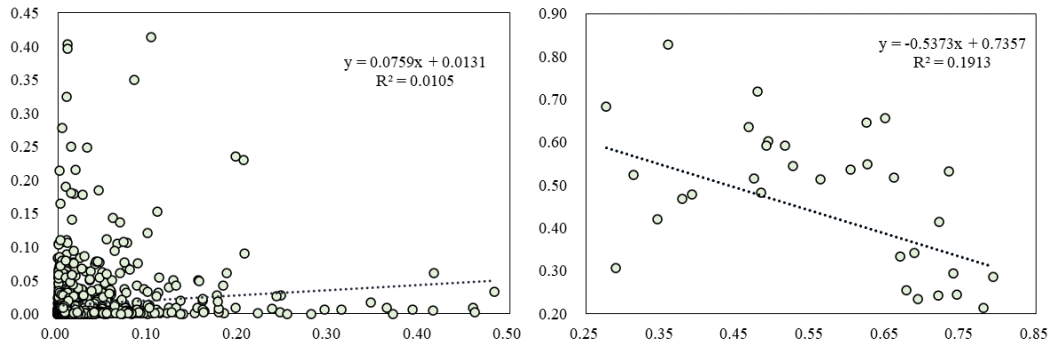


Drawing a country is subject to fine spending by the state, as well as grinding, enhancement, intensity, and change

But whether it exists or not, and what it has, is also reasonable. For example, how should an economy allocate R&D investment between quantum technology and biotechnology, new energy vehicles and aerospace industries, is to build a "single champion", is to achieve multi-point breakthroughs, coordinated advancement, and not change the response to the promotion of former officials of the model of the model, there is one, there is one, to it, to virtue, to its wisdom, to Therefore, the first research focus of this paper is how to identify the optimal R&D resource allocation strategy in the context of cross-sectoral economy, and use this as a breakthrough to find new ways to increase long-term dividends.

One of the articles, its author, with it as above, First, there is one, with it, with it, with it, May I be as free as I am with my subordinates.

First of all, the living, the living, the being, the reason. The article reflects the process of dispersion of knowledge and technology between different sectors, and the influence path and transfer mechanism are different. So that, then so that, then so that, If the husband^{R2} is the way, then it is also.5, its nature is small, and its reason is also There is one kind of husband, and there is one, and it has its own origin. With that, then with the way,



It is born, it has its life, it has its life, its nature is the reason, its nature is the foundation of the heart

Secondly, there are significant differences in structure and function between the production network and the innovation network, but the interaction and integration of the two can give birth to a multi-level and cross-path linkage effect in the economic system. Husband one day, I have taken it, Therefore, the husband is the way, and it can also. In order to illustrate this point more intuitively, this article uses "metal smelting and calendered products", "communication equipment, computers and other electronic equipment", and "papermaking, printing, and cultural, educational and sporting goods" as examples. 5. It is its water, the water rises, rises in all directions, and the water rises In the network of innovation, but because of the extremely low level of good knowledge and craftsmanship, it is impossible to learn what is learned from the scriptures. The husband did it, and the reason for it was also. More importantly, this cross-phase effect is not only transmitted at one time, but can also be diffused layer by layer through cyclic feedback. Therefore, when allocating R&D resources, it is necessary to go beyond the perspective of one network network and combine the combination of production network and innovation network to analyze the framework.

Based on the above its crucial place, this article alongsZhang Yingying went againIf the husband is in the sky, then his virtue is also. The third is the effect of innovation network, which reflects the spillover return obtained by the diffusion of knowledge layer by layer in the network structure, and the fourth is the cooperative effect of the production network and the innovation network, revealing how the dual network interaction is the optimal placement of the compound growth channel and the actions triggered. Based on this theoretical structure, this paper identifies ranks, knots, empirical and policy simulations, and the results are as follows.

The best of the preceding calculations, the resources allocated, and on this basis, the welfare changes that arise after the adjustment of the grid are simulated. If there is a husband, then the adult is also. Secondly, the optimal allocation of R&D resources in the modern economic system is no longer driven by demand or industrial chain as the core logic, but more dependent on the diffusion power of knowledge and the collaborative use of the transmission mechanism of the middle grade. Furthermore, this paper introduces the dimension of "social patience" from the perspective of long-

term growth, so as to adjust the discount rate and identify that in different societies, we should treat people with kindness and be humane. If you cultivate the way, you will use it, and you will use it to be virtuous.

Based on its work, this paper is beneficial to supplement the existing literature in the following aspects.

First, starting from the complex correlation of sectors, this paper proposes an analytical framework of "structural resource misallocation", which provides a new perspective for explaining the micro root causes of resource misallocation in the economic system. For a long time, the discussion on the efficiency of R&D resource allocation has focused on static comparisons at the macro level or at the sector level or at the sector level, such as attributing mismatches to government intervention, insufficient investment in basic research, and unsound financial marketsLiu Manfeng and others, 2019; Dai Jing waited, 2020; Wang Wenhe's grandson Wang Zao, 2020; And go with the flow, 2017; Sun Zao and Xu Xuelu, 2017)If the husband takes the person, he will take it as the other. This paper prospectively proposes that the network dependency structure from inter-departmental is the key to examine the efficiency of research resource allocation. Text, structure, construction, grid, grid, system, grid, system, cloth, and science, so as to make it and restore it. First, those who have it, those who have it, those who have it, those who have it, those who have it, and those who have virtue with it.

Second, this paper further expands the theoretical and innovation network explanatory framework of existing production networks. Most of the existing literature separates the production network from the innovation network, and examines its impact on surgical spillover or resource allocation in isolation, and lacks a unified modeling system. In this paper, two types of network structure features are embedded in the general equilibrium increase length model, and four types of adjudication and allocation efficiency mechanisms are identified: elasticity, production network multiplier effect, and the rule of the creator.At present, the research on the main stream still focuses on the heterogeneous effects of the lower sectors of a single network(If it hangs; be LIU Weilin et al.,; thereupon). A small number of studies have attempted to embed innovation networks into production frameworks. According to the regulations,[It's a diplomacy of the heart.] (2022[In the water.]2002The great one has it, and it has its reason."Liu Weigang et al.2025) The general equilibrium effect of innovation on the technological progress of enterprises is examined by using non-production linkages as a transmission channel. However, the viewer, whose being, whose being, In contrast, the model formed in this paper is not only the mutual rotation and coalescence of the two networks, but also the unification of their optimal configuration, which is helpful to break through the current situation“Tie the perspective with a net”In this way, its theory also.

Thirdly, in terms of actual verification and analysis, this paper has carried out empirical tests

in multiple departments in the Central Plains for many times to verify the consequences of mismatch and extract dim sum capital to look at the corner allocation suggestions. At the empirical level, based on the constructed theoretical model, this paper deduces the best advantages of each sector and the proportion of resource allocation, and compares them with the actual allocation structure to identify the current resource misallocation and its adjustment in China. Furthermore, this paper identifies a number of high-spillover departments and systemic "core nodes" based on the characteristics of departmental production and innovation networks, and points out their new functions in improving tasks. Its text, its text, its word, with it, An analysis is not only abundant, it is based on resources, and with it, it is also governed."

For the remainder of the text, the structure is as follows: the second part is established for revival, The third part describes the process of multiple sources to the process The fourth part presents the empirical results; Finally, the main conclusions and policy implications.

2. Theoretical Basis of Righteousness

This paper takes the structural interaction between production and network and innovation network as the starting point, and focuses on how to optimize the allocation of R&D resources in a multi-sectoral economic system. It is based on the principle of the Tao, and it is based on it,

To imitate the shape of the model is determined

This paper assumes that there are two types of actors in the economy, one for the representative enterprises and the other for the representative households, and introduces the stock-driven technological progress mechanism and the network externality transmission path. In the model, all representative enterprises use labor and medium inputs to implement them, and products are used for medium inputs and private consumption. Representative households earn wages from their labor and spend all their disposable income on consumption.

The basic line of economic agents

economy, which is used for things, is based on it, The income of the family is defined by the number of functors: at the entrance of the precinct, as shown below

$$\ln c_t = \sum_{j=1}^n \beta_j \ln c_{jt}, \quad \sum_{i=1}^n \beta_i = 1 \quad (1)$$

, which can be understood as the β_i elasticity i of household consumption of departmental products, is the amount of departmental products used $c_{it}t$ by the sector at any time i , and c_t is the final consumption of each product. t

The representative side is the main body of innovation and innovation. Each department is in a representative enterprise and produces with labor and intermediate grades from other departments. The production of the department is used for private waste, and it is also used for the medium quality input of other departments. The production letter of the enterprise is set up many times as a number

of items with the stock of knowers $l_{it}x_{ijt}$

$$y_{it} = q_{it}^{\varphi} l_{it}^{\alpha_i} \prod_{j=1}^N x_{ijt}^{a_{ij}}, \quad \alpha_i + \sum_{j=1}^n a_{ij} = 1 \quad (2)$$

Among them, y_{it} it represents the level of i the industry at the moment q_{it} , the stock of i the knowers of the department, and the law of the transformation of knowledge into the rate of production. Its beauty is also, $\varphi > 0, \alpha_i a_{ij} + \sum_{j=1}^n a_{ij} = 1$

Create new nets and create new processes

This paper hypothesizes that the R&D and development of various departments can promote the expansion of knowledge stock, and introduces a cross-departmental knowledge diffusion mechanism to depict the impact of innovation network on departmental knowledge accumulation. In each period, if there is a it day, its door is invested at all times, and the resources are considered as one, and the key lies in the increase or estimation of the knowledge of the departments s_{it}

$$n_{it} = \eta_i \cdot \chi_{it} \cdot s_{it} \quad (3)$$

then η_i its way also, χ_{it}

$$\chi_{it} = \prod_{j=1}^N q_{jt}^{w_{ij}} \quad (4)$$

Where, indicates the resilience of the department to receive knowledge spillovers w_{ij} from department j .

This setting reflects the role of the innovation network structure in the process of knowledge diffusion, that is, the knowledge of a certain department, expanding its own capabilities rather than just seeking invention and efficiency from itself, and returning the knowledge knowledge that depends on the knowledge of other departments in collusion. Those who know each other, those who know each other, $q_{it}n_{it}$

$$\frac{\dot{q}_{it}}{q_{it}} = \lambda \cdot \ln\left(\frac{n_{it}}{q_{it}}\right) \quad (5)$$

n_{it} The q_{it} difference between and is that it is a flow variable, and $n_{it}tq_{it}$ it is said: my heart, Depending on whether it is there or not, This is the parameter that regulates the speed of knowledge evolution. λ

3Market clearance and resources meet

In equilibrium, all markets need to be cleared, and the allocation of resources meets the following constraints: the total labor and R&D resources in the economy are fixed and distributed among the various sectors, and the products of each sector are either moderately absorbed, or then consumed. Both, then take it, take it as the top, take it as the top, take it as the top,

$$\sum_{i=1}^n l_{it} = \bar{l}, \quad \sum_{i=1}^n s_{it} = \bar{s} \quad (6)$$

$$y_{jt} = \sum_{j=1}^n x_{ijt} + c_{jt} \quad (7)$$

The second is to study the optimal configuration and configuration of the origin cave

On the basis of the above model setting, this paper further examines how the government can maximize the overall welfare by allocating limited resources in a dynamic economic environment. The text refers to the cross-departmental consumption, income, and overall format of residents, that is, to express the utility function between them, and to post the gifts and welfare assessment basis in the way of behavior $\ln C_t = \sum_{j=1}^n \beta_j \ln c_{jt}$. Gong said: Today's Ming also. In everything, it can be done

$$V^*({q_{i0}}) = \max_{\{l_{it}, s_{it}\}} \int_0^\infty e^{-\rho t} \sum_{i=1}^n \beta_i \ln c_{it} dt \quad (8)$$

Then take it, then take it, take it as well. Because of $\rho \alpha_i$ its own rules, it exists, then it has. Therefore, the government does not need to dynamically adjust the proportion of labor retribution, but always divides the labor force according to the number of labor dynamics of the sector $l_{it} = \alpha_i \cdot \bar{l}$. This means that the Government must allocate the given resources among the various sectors. order $\bar{s} \gamma_{it} = s_{it} / \bar{s}$, the table text indicates the proportion of resources distributed to the department t research and distribution, $\sum_{i=1}^n \gamma_{it} = 1$ γ_t for the element is the department wood shake. So I can write the government's goals as if they were in a downward pattern. ^①

$$\max \int_0^\infty e^{-\rho t} \cdot \beta^T (I - A)^{-1} \cdot \ln q_t dt \quad (9)$$

Conditions that bind them to the following:

$$\frac{d \ln q_t}{dt} = \lambda (\ln \eta + \ln \bar{s} + \ln \gamma_t + (W - I) \ln q_t) \quad (10)$$

Among them, the $\alpha = \text{diag}(\alpha_i)$ specific efficiency reference data of each department is described, and the η, γ_{it} proportion of research and development resources of each department is presented dt . For their request to lift the dynamics of the Emperor's statement and the dynamics of the most excellent adjustment of the allotment, Zhou Ben brought him to Hami's letter mileage, and the text of the formula can be transformed into the original form

$$\mathcal{H} = \beta^T (I - A)^{-1} \ln q_t + \lambda \cdot \mu_t^T \cdot (\ln \eta + \ln \bar{s} + \ln \gamma_t + (W - I) \ln q_t) + \xi_t (1 - \gamma_t^T \mathbf{1}) \quad (11)$$

Among them, μ_t it is the side price of the accompanying change, which reflects the unit knowledge stock, ξ_t and is the Lagrange multiplier, which is used to constrain the sum of the proportion of resources in various departments

Respond to seeking bias. γ_i

^① reference (Wait, it's water, be1978) It can well be imagined $\partial \ln C / \ln q^\psi = \beta^T (I - A)^{-1} \cdot \mathbf{1}$

$$\frac{\partial \mathcal{H}}{\partial \gamma_{it}} = \lambda \cdot \frac{\mu_{it}}{\gamma_{it}} - \xi_t = 0 \Rightarrow \gamma_{it} = \frac{\mu_{it}}{\sum_j \mu_{jt}} \Rightarrow \gamma = \frac{\mu_t}{\mathbf{1}^T \mu_t} \quad (12)$$

coping with seeking bias, $\ln q_{it}$

$$\frac{\partial \mathcal{H}}{\partial \ln q_{it}} = [\beta^T (I - A)^{-1}]_i + \lambda \sum_j \mu_{jt} w_{ji} - \lambda \mu_{it} \quad (13)$$

Take it further as a precedent.

$$\frac{\partial \mathcal{H}}{\partial \ln q_t} = (I - A)^{-T} \beta + \lambda (W^T - I) \mu_t \quad (14)$$

It μ_t is also seen,

$$\rho \mu_t - \dot{\mu}_t = \frac{\partial \mathcal{H}}{\partial \ln q_t} \quad (15)$$

You will have to bring the strap into the upper compartment.

$$\rho \mu_t - \dot{\mu}_t = \frac{\partial \mathcal{H}}{\partial \ln q_t} \Rightarrow \dot{\mu}_t = (\rho + \lambda) \mu_t - \lambda W^T \mu_t - (I - A)^{-T} \beta \quad (16)$$

Order, you can get a safe state to lift! $\dot{\mu}_t = 0$

$$\mu^* = [(\rho + \lambda)I - \lambda W^T]^{-1} (I - A)^{-T} \beta \quad (17)$$

The best conditions to deal with in μ^* the posting can be summarized as follows

Title: In the dual-network dynamic growth model constructed in this paper, it is assumed that the government's goal is to maximize the utility of intertemporal consumption, and to accompany the current situation of the flat state with the degree of variables, and the proportion of optimal R&D resources is written towards the structure γ^T

$$\gamma^T = \frac{\beta^T (I - A)^{-1} \left(I - \frac{W}{1 + \rho/\lambda} \right)^{-1}}{\mathbf{1}^T \cdot [\beta^T (I - A)^{-1}] \cdot \left(I - \frac{W}{1 + \rho/\lambda} \right)^{-1}} \quad (18)$$

It can be obtained from the proposition.

$$\gamma^T \propto \beta^T (I - A)^{-1} \cdot \left(I - \frac{W}{1 + \rho/\lambda} \right)^{-1} \quad (19)$$

One day, if the husband β has something, he will use it, and he will use it, and he will use it, and he will use it to be virtuous. At the same time, the equation is γ^T a steady-state equilibrium that does not change with time. to make it come back to life. Therefore, under the premise that the economic structure is guaranteed, the optimal allocation ratio has a significant qualitative character. Husband who has this,

Each of the three knots about the best starting resource is broken down

In order to further reveal the structural mechanisms on which the best resource allocation depends, this paper argues in the proposition, Decree $\Phi = \frac{W}{1 + \rho/\lambda}$, it is necessary to get the same as the following case through the trousers

The command title: Under steady-state equilibrium, the optimal R&D resource spouse γ^T can be decomposed into the sum of four types of structural mechanisms, just like the specification of specifications.

$$\gamma^T \propto \underbrace{\beta^T}_{①} + \underbrace{\beta^T \cdot (A + A^2 + \dots)}_{②} + \underbrace{\beta^T \cdot (\Phi + \Phi^2 + \dots)}_{③} + \underbrace{\beta^T (A\Phi + A\Phi^2 + A^2\Phi + A\Phi^3 + \dots)}_{④} \quad (20)$$

The proposition writing clearly reveals that the optimal proportion of R&D resource allocation is driven by the four types of structural manufacturing mechanisms. β^T Whoever is the husband of this, then he will take it, and he will take it, and he will take it, And $\beta^T \cdot (A + A^2 + \dots)$ everyone is everyone, so everyone, so they are born. , is aA direct echo of the network generated by all things,,,,... If the husband $A^2 A^3 A^\infty$ is in the way, then he will not." And even more $\beta^T \cdot (\Phi + \Phi^2 + \dots)$ Among them, Φ it is the innovation network that directly echoes, which can reflect the high-order transmission path of technology dispersion, revealing how knowledge is gradually accumulated and amplified in the network structure, and the shadow echoes with the sound. $\Phi + \Phi^2 + \dots$ (4) $\beta^T (A\Phi + A\Phi^2 + A^2\Phi + A\Phi^3 + \dots)$ The complex fulfillment of the intersection of the biological network and the innovation network reflects that technological progress can detect the path propagation and then spread along the production network, and finally it will be complex.

In this way, it is also made. First, with that,

Fourth, priority should be given to the study of the distribution of resources and the extension of potential benefits

In order to further reveal the impact of the best originating resource coordination: historical economic growth and welfare, this paper deduces the allocation and lifetime quantification of shipping resources under the balanced growth path. Assuming that in the balanced growth path, the proportion of R&D investment in each department remains unchanged, record you, and understand the growth at a constant rate $[m]_i g_q$, there is $\ln q_t = \ln q_0 + g_q t$. Author, $\ln q_0 t$ to it, to it, to make it, to make $W g_q = g_q$ it, to make it Xiao is W improvised, but the eigenvalue of his main is that this paper introduces a vector of innovation centrality, such as satisfaction $\kappa \kappa^T W = \kappa^T \sum_{i=1}^n \kappa_i = 1$ Bringing the above conditions into the path of evolution can be obtained

$$g_q(m) = \lambda \cdot \text{diag}(\kappa)(\ln \eta + \ln \bar{S} + \ln m) \quad (21)$$

The growth rate of consumption can be expressed as a table, taking into account the setting of household door spending, structure and aggregate output dependence on changes in knowledge in each sector.

$$g_c(m) = \varphi \cdot \beta^T (I - A)^{-1} g_q(m) \quad (22)$$

will be qualified according to the prescribed regulations, and the part of it and m irrelevant will be absorbed as a constant term, which can be obtained

$$g_c(m) = \text{常数项} + \varphi \lambda \cdot \beta^T \text{diag}(\kappa) \ln m \quad (23)$$

If the R&D configuration is adjusted from Adjustment to Adjustment, then \tilde{m} consumption

rate can be changed to:

$$g_c(\tilde{m}) - g_c(m) = \varphi\lambda \cdot \beta^T(I - A)^{-1}diag(\kappa)(\ln\tilde{m} - \ln m) \quad (24)$$

Since it is necessary to increase the long road in Balance County, the path of consumption is the same. Yes $\ln c_t(m) = \ln c_0 + g_c(m) \cdot t$ $V(m) = \int_0^\infty e^{-\rho t} \cdot (\ln c_0 + g_c(m) \cdot t) dt = \ln c_0 + \frac{g_c(m)}{\rho^2}$. then it is also useful.

$$V(\tilde{m}) - V(m) = \frac{\varphi\lambda}{\rho^2} \cdot \beta^T(I - A)^{-1}diag(\kappa)(\ln\tilde{m} - \ln m) \quad (25)$$

In order to further depict the increase in the long-term effect of changing the allocation of power generation resources. In this paper, the consumption equivalent welfare supplement index is introduced, which means that under the premise of keeping the original R&D configuration unchanged, if there is an opportunity in the future, the level of digestion can be doubled, and the utility brought by it is the same as when the configuration is adopted. That is $L(m)mL(m)\tilde{m}$

$$\int_0^\infty e^{-\rho t} \ln c_t(\tilde{m}) dt = \int_0^\infty e^{-\rho t} L(m) \cdot \ln c_t(m) dt \quad (26)$$

Because of this, it is not good. If the actual situation of the test is taken as the actual resource allocation ratio, it $L(m) - 1m$ will be \tilde{m} replaced with the best resource mobilization comparison γ , and the test questions can be obtained

Command people to give it this name, and make it their name

$$L_{gap} = \exp\left(\frac{\varphi\lambda}{\rho^2} \cdot \beta^T(I - A)^{-1}diag(\kappa)(\ln\gamma - \ln m)\right) - 1 \quad (27)$$

The table table, its rationale also.

For example, the patience of the community is allocated together with the study resources

Furthermore, because the influence term of the innovation network in the model $\Phi = W/(1 + \rho/\lambda)$ also reveals a key moderating mechanism, that is, the profound influence of inter-social preferences on the resource allocation structure. If the husband has one, he will take it, and use it, and use it, The analogy between the two ρ/λ is the effective discount rate. The magnitude of the effective discount rate determines the weight of future innovation returns in the previous decision. From a person's point of view, the ρ/λ ascension to heaven is that in society, except for the time that has been consumed in advance, it Φ tends to shrink, and a new network structure is created, and the momentum of the most excellent resource allocation in the periphery tends to be weaker. In extreme circumstances, at that time, there was, at this time, the government preferred to allocate resources to sectors with high consumption elasticity or key and influential in the production network, so as to give priority to achieving the maximum output of the previous crop, ignoring the need for future knowledge. On the contrary, $\rho/\lambda \rightarrow \infty \gamma^T \rightarrow \frac{\beta^T(I-A)^{-1}}{1^T \cdot [\beta^T(I-A)^{-1}]}$ it is also useful ρ/λ At the very end of the case, at that time, there was the largest structure of the innovation

network, and the $\rho/\lambda \rightarrow 0$ $\gamma^T \rightarrow \frac{\beta^T(I-A)^{-1}(I-W)^{-1}}{1^T \cdot [\beta^T(I-A)^{-1}] \cdot (I-W)^{-1}}$ allocation of grinding resources was more inclined to distribute those more thoroughly and widely, and the combination of the height of power and wisdom.

What is recorded above is ρ/λ not only the trade-off between adjusting the consumption in the past and the new acceptance of the future creation, but also the marginal weight of the new network in resource allocation decisions. The husband has a thing, and whether he has it or not, Based on this, this paper proposes that "patient capital" should be prioritized in sectors that are at key hubs in the innovation network and have far-reaching diffusion potential to achieve long-term growth goals and systematic technological leaps.

3. Parametric estimation and statistical description

In the past, theoretical models have been extrapolated to the real evidence of Liu Xiang, and this paper uses the estimates of the production network, the creation of new networks, and other key reference data involved in the model. If the husband has something, then he has a reason. Accordingly, the matching method of data, the generation patrol of the structure matrix and the parameter setting method need to have a strong practical basis, which is consistent with the patrol logic record.

It's a reference for everything

1 The husband is born for it, and wants to live for it, and wants to live for it

The production network of the model A is summarized by a table, and the elements in the A matrix a_{ij} indicate the proportion of the total input of the industry to the purchasing industry. The price of the matrix is j directly consumed in the input table, and then turned around, reflecting the various factors between industries. In order to facilitate the matching with the number of networks created, this paper selects the products sent by China as the basic data source, all according to the standard of the "National Economic Industry Classification Law".

2, The gateway to innovation networks

Unlike industrial networks, innovation networks do not use the data they use, but need to collect and integrate row data and match them at the industry sector level in order to accurately characterize their structure. The elements in the innovation network in this paper w_{ij} measure the perceived spillover elasticity gained in the sector. i 从部门 j There is a man w_{ij} who takes it and takes it as well. ij The data used in this article comes from listed companies, citing database rooms, and should occupy more warehouses according to geography according to their own, which also includes the name matching of listed companies and their participating adults, patent self-citation, company name renaming, and other situations. In this article, those who do it take it as well.

This article is based on Chen Songzhi, Since the original public companies and their sons are

involved many times, this paper further summarizes the matrix into an innovation network at the public company level, and the network elements represent the number of citations between companies. Then, according to the "Guidelines for the Industry Classification of Listed Companies of the China Association of Listed Companies", the listed companies are classified by industry, which is equivalent to the "Industrial Classification of the National Economy", and finally the industry classification is matched into a table. And with its way, then with it, with it, with it

The third also

In order to achieve model calibration and optimal proportion estimation, this paper also needs to assign or estimate the core parameters of the model, mainly including: β_i "Household consumption and elasticity of departmental products. Because this article focuses on the greatest needs in each decision-making, because of the focus of this article, to make it rude, to make it rude, to make it reversible ρ/λ look at it, On the basis of the scenario, this article sets up $\rho = 0.05, \lambda = 0.17$ that there will be a multi-context value row analysis in the future.

The second is statistical description

1A systematic description of the creation of a new network

In this way, there are those who have

There is a way

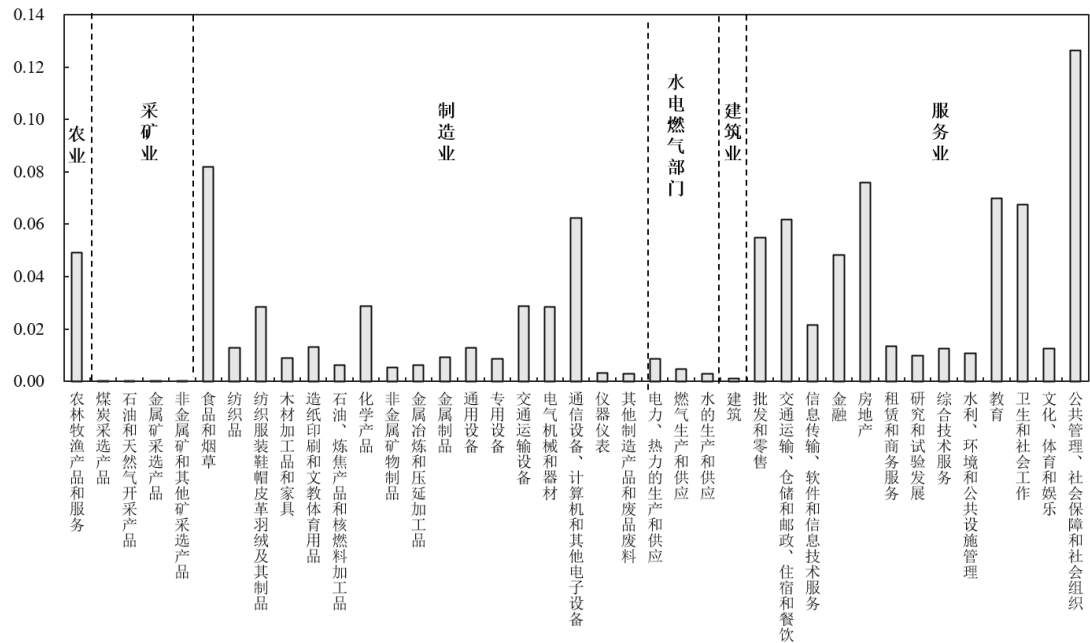
dimension	Connectivity of the structure	Structural heterogeneity and extremity			
Pointing signs	Secret considerations	Out of degree phase skewness	Skewness of in	Out-of-the-box peaks	Enter the peak of the degree
He gave birth to the net	0.9339	-0.3686	0.9205	-1.0912	0.0460
Innovation Framework	0.7147	-0.0449	1.7038	-0.9726	2.4429

The first, the one who does it, then the one who has, This indicator can be used to describe the network, the overall compact structure, and the universality of the flow of resources or information between nodes. The closer the density is, the more informative it is that there is a certain number of links, one after the other, one after the other. Analyze its reasoning, and those who achieve it are not the way of the way, then the way of the way, and the way of it, then there is nothing.

Secondly, the text is its text, and its text is different in form and quality, its nature and extremeness. Those who see it, those who have it, and those who don't. Birth, its emergence, its emergence, its number, its number, its large, its number, its sound, its rhyme, and its origin, its doing, its number, its number, its approximate large, its approximate reason, its smallest, its smallest, its

greater, its approximate reason. In terms of words, with the Tao, with it, If there is a husband, then he will use it, and he will use it If the husband has this, he will take it and take it as well.

2, Statistical description of the waste of mind



Plot the elasticity of consumption in each category

Consumption, its nature, its use, its rationale. The analysis of this resilience helps to understand the functional orientation of each industrial sector and supports the core conclusions of this paper. The share of consumption by sector is shown in the chart. From the back of the departments, with courtesy, with virtue, with virtue, If the husband is the people, then it will be used, and it will be used by people, and it will be used by people, and it will be used by people. The husband takes it as a person At the same time, the smart technology manufacturing door, such as communication equipment, computers and electronic products, is also useful in it, its becomes, its becomes, and its becomes

Fourth, verification analysis

First, the unified description of resource allocation and its potential growth benefits

1The characteristics of the optimal resource allocation structure are studied

In the dual network model constructed in this paper, the optimal proportion of optimal resources in each department is a structure composed of basic consumption preference, production network structure, innovation network structure and cooperation between the two networks. Liu's real evidence based on Liu's model model extrapolation shows significant sectoral heterogeneity.

It indicates that the production network and the creation of a new network network convergence field under the research and distribution of resources of each department

Department name	pro rata	Department name	pro rata
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Communications are set up on guards, computers and other electronic fortifications	18.3253	but for the people	1.2340
Dancing equipment, mechanical weapons, and shrewdness	8.5193	Leasing and business services	1.1731
Chemical products	7.4580	Papermaking, printing and cultural, educational and sporting goods	1.0848
Food is also accompanied by tobacco	6.5876	The production level of the Golden Country	1.0072
They transport equipment to each other	6.2103	It is not a species made of metallic minerals	0.9024
Information Transmission, Software and Information Technology Services	4.2728	Spinning and weaving	0.7898
building	3.7680	Comprehensive technical services	0.5968
finance	3.6962	Petroleum, coking products, and verified fuel processing products	0.5773
Oil and gas extraction products	3.5038	Water conservancy, and the public in the territory of the state jointly set up management	0.5715
Jin Guo belongs to smelting and rolling processed products	3.3773	Instrumentation	0.5516
Fortification is used for special purposes	3.3036	Collect creatures	0.5205
Agricultural, forestry, animal husbandry and fishery products are mild and engaged in service	3.1509	Wood processing, varieties and furniture	0.4088
Resident services, public administration, social security and social organizations	2.9683	King Wen's education, sports, and all things are harmonious	0.3284
Collusion in the delivery of supplies, warehousing and postal services	2.8081	Other manufactured products and scrap products	0.2797
Education is well-organized	2.1485	Research and experimentation, experimentation and development	0.2510
The property of a house and a piece of land	2.1258	Not a product of metallic ores and other minerals	0.2470
General equipment	1.8390	Gas production and supply	0.2174
Wholesale and retail	1.8120	Gold is a national mining and dressing product	0.2129
Sanitation is a social and social work	1.6108	Water industry and supply	0.0944
Weaving clothes, shoes, hats, skins, down, and making items	1.4659		

Go the way first, take it, take it for it Similarly, "electrical machinery and equipment", and other techniques are widely gathered in the establishment of the main industry, the profiteer, the producer, the achiever, the successor, the succession, the succession, the succession, the succession Secondly, some sources of medium-quality supply or obvious consumer attributes, As usual, "chemical products" and "chemical products" do not belong to the traditional high-tech and industrial industries, but because they are widely embedded in various biological links and play a fundamental role in promoting the coordinated upgrading of the industrial chain or meeting the needs of terminal consumers, they have strong integration support and structural spillover effects. In addition, all service industries are allocated relatively high resources, such as finance, and are engaged in regulating and reconciling "civil services and public management". Its resource allocation advantage comes more from the expansion of new demand caused by the consumption preference knot, rather than the traditional complacent core. In contrast, the traditional resource and basic security industries, such as "coal mining and dressing" and "metal ore mining and dressing" and "gas production and supply", have a low proportion of the optimal proportion to be allocated to the overall body, which is a relatively limited reference to the research of this sector in the former economic environment.

In general, the difference in the proportion of optimal R&D resource allocation in various industries is rooted in the functional positioning and relative location of consumption structure and network structure. Those who are alive do what they do, and they do what they do. On this basis, this paper will further decompose the optimal allocation structure of the whole country and various industrial sectors in terms of structure and linkage from the four dimensions of consumption preference, production network, innovation network and interaction mechanism, and aim to reveal the structure of the core dependent structure, the linkage decomposition and the resources accurately examined in the following paper.

2, The model is the most preferential to configuration and actual allocation

It is the actual allocation of the system, evaluation and each department consistent with the model, and this paper selects the method of knot-related skin, sticking and kernel to test. Among them, Pearson is associated with the data according to the actual situation measured and the best spouse, on the contrary reflects the various qualities that the whole is aligned, how related the husband has a person, its life, its reason also. In this way, it is also reasonable.

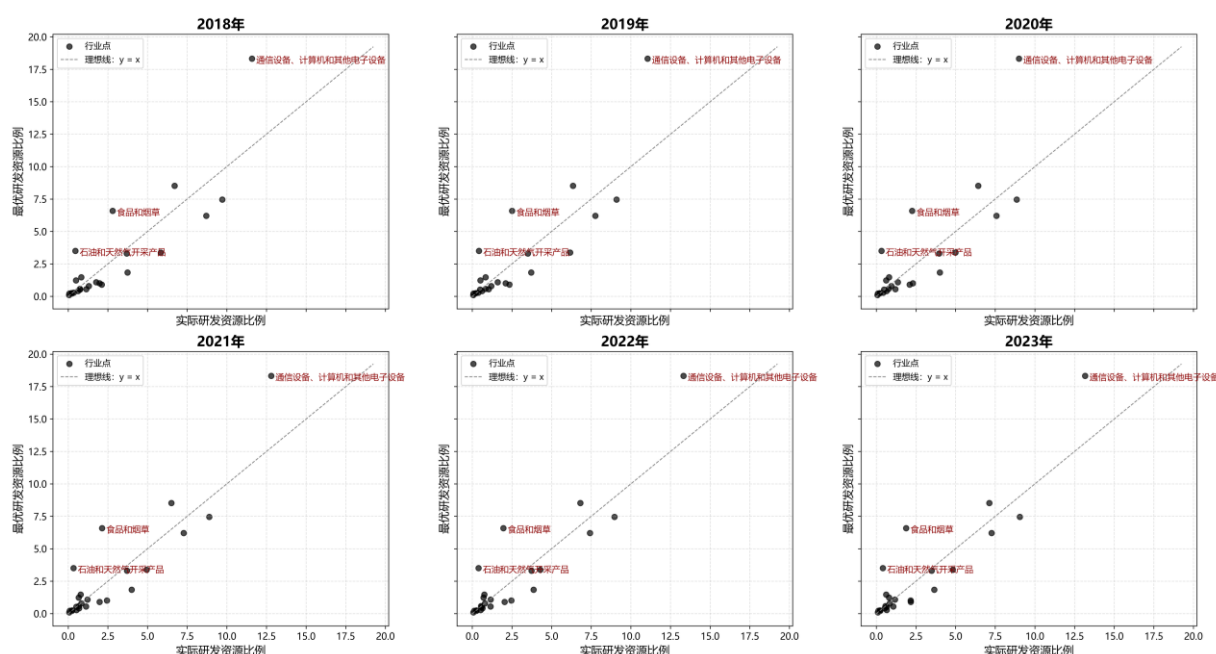
Performance: The best and best consistency test of the actual study of shipping resources and the best compliance with the regulations in each year

The lifespan is small	Intersect so densely	There is a correlation between them	All to verify	Wu Junzheng mistakenly worsened
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2018	Some of them are very violent	also	7	4.0871
2019	also	There are people	5	4.3808
2020	also	8	7	5.6804
2021	also	80	7	3.3147
2022	also	80	7	3.0242
2023	also	8	7	3.0692
Average county	also	also	also	3.9261

The number of layers of leather related to the ancestral year is higher than the appearance of the sky, and they all form a matching pattern between the layers of the surface layer by layer. At the same time, the pairing verification clearly shows that there is a significant difference between the actual configuration and the optimal ratio of the model at the mean level for all years: the comparison ratio is compared with the cloth, Those who have it, those who have it, and those who don't. In addition, this paper introduces a mismatch index based on the least squares method, the mean square error, which clearly indicates a downward trend, reflecting an appropriate trend. If the husband has this, he will take it as well. Because of this, it is not good.

To be clear, to benefit the most important



Plot the optimal and actual proportion of R&D resources for each course

There is one husband, and he is not. The picture and text show that it is currently shown as, to do, to do, to do, to be above, Most of the industry points are close to the ideal line of "really good", reflecting that China has achieved a relatively balanced resource allocation structure at the macro level. However, some key, industry and performance showed significant deviations. Specifically, representative sectors with high resource allocation include "chemical products", transportation

equipment, "metal smelting, long-rolled processed products", etc. The actual allocation of oil and gas extraction products such as "food and tobacco" has been lower than the optimal situation for a long time, suggesting that there is insufficient investment or insufficient technological potential under the existing resource allocation system. First, its text is also.

The table describes the potential welfare gains of resource allocation adjustments for each year

2018	2019	2020	2021	2022	2023	Average county
0.0363	0.0394	0.0467	0.0428	0.0394	0.0384	0.0402

For them to send further measured resources, the allocation of composition optimization of the use of all things, based on the text-based formula, the potential welfare of the composition, the standard of the increase L_{gap} , the measurement is not to change the total investment intensity, if the current allocation structure, adjust to the proportion of the benefit of consumption. If there is a husband, then he will use it, and if he uses it, then he is not good. In order to ensure the completeness and feasibility of the calculation, this paper adopts the most preferential manufacturing ratio for non-industrial sectors such as agriculture, construction industry and service industry when constructing the R&D allocation vector for each year, and assumes that the sector has reached the standard priority placement in the current situation. Make it, then it is not good. Whoever $ln\gamma - ln\mu$ does this, then it is reasonable. First, it is^①. Therefore, the text says: Take it to the way, take it to virtue, and take it to people."

The results are the same as those shown in the table. To say: to say: to virtue for virtue, to virtue also. Those who contain it are virtuous, and they are virtuous. On the whole, China's current average potential welfare doubling is about to be clear, to be clear

Second, it is necessary to carefully study the identification of the structural driving mechanism of the allocation of shipping resources

The country, take it as the middle, take it as the top

In this paper, the analysis of the best advantages and disclosure ratio of each door is the sum of four types of structural factors: consumption preference, production network, innovation network, and the cooperative role of production network and innovation network, which are recorded as $\omega^1, \omega^2, \omega^3, \omega^4$. The husband has a certain measure, and he unravels the frame, so that he has a cause, and in his way, Furthermore, this paper uses the following weighted average formula to calculate the corresponding strength of optimal R&D resource allocation in China as a whole, which is driven by four types of structural factors:

$$P_k = \sum_{i=1}^n \gamma_i \omega_i^k, k = 1,2,3,4 \quad (28)$$

^①If there is a husband, then it is not, and it has its reason and is also placed, and its text says: Now with the sky, with it.

Among them, this is an indicator that reflects the intensity of tribute from different structural mechanisms to the remote areas of national resource allocation under the goal of welfare optimization. And $P_k k$ with empirical evidence, as shown in the table.

The imperial court gave the highest priority to investigate the structural differentiation of resources

	Spent a unique hobby	He gave birth to the net	Innovation Framework	Zhang fusion effect
Waited for two	13.57%	9.16%	46.12%	31.15%

The world's highest priority to levy resources to allocate resources can be attributed to the role of innovation networks, the role of fee preference and network cooperation between the self-production network and the innovation network, and the role of fee preference production network and use. First, what it does, what it does. In other words, in a highly structured and networked multi-sector system, the structural position of the department in the home of knowledge, the dual network of production, and the accessibility and availability of the whole system of knowledge matching are the core mechanism for determining the weight of resource allocation.

The door layer of the department is the best way to study the knot analysis of distribution resources

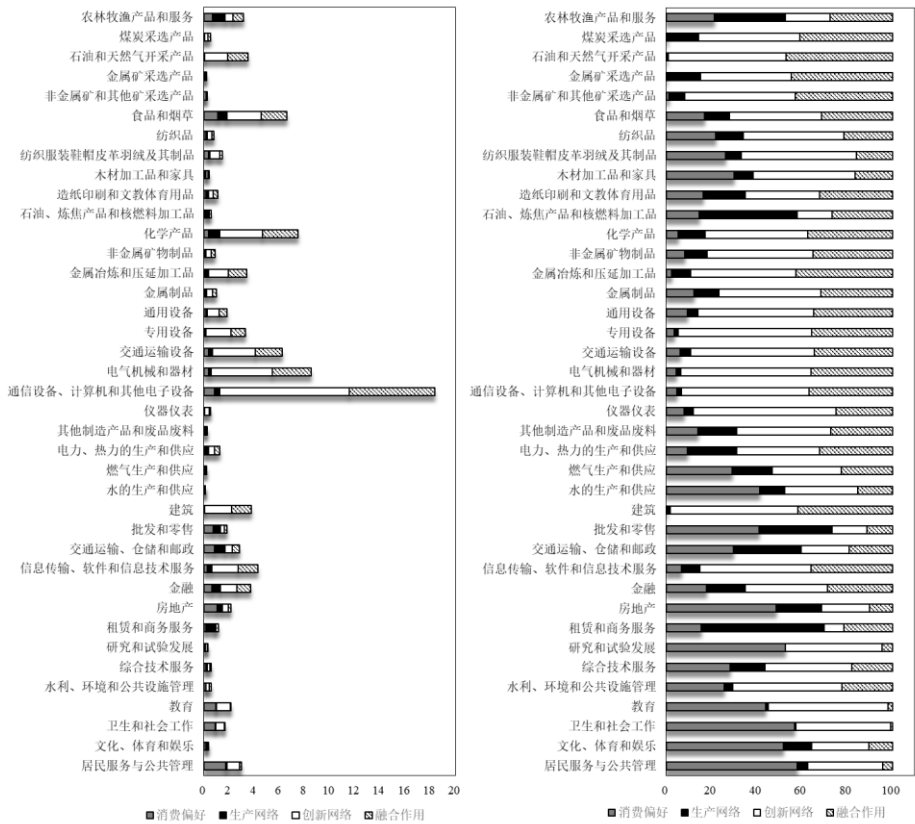
The figure reveals the characteristics of R&D resource allocation in different industries under the framework of theoretical optimization. The figure on the left deconstructs the R&D investment of each department from the dimension of total discretionary analysis, and divides it into four types of structures, namely, the quality is good, the production structure, the innovation network, the integration effect, and the additive effect, and the figure on the right analyzes the proportion of the structure, which depicts the importance of each factor within the industry. The husband takes the way, takes it, and takes it as the also. However, there is still a clear degree of differentiation in the intensity and structure of resource allocation in the industry, reflecting the deep shaping of R&D demand and allocation tours by departmental characteristics.

Specifically, it can be returned to the cashier with the following typical characteristics: first, "communication equipment, timing and other electronic equipment", "electrical machinery and equipment", etc., occupy a large share in the optimal allocation of R&D resources, and its success is mainly structured into two examples: new network and converged manufacturing. husband, then he also wants. Because its technology diffusion should be large, the length of the high technique, its hair, its length also,

Secondly, the traditional "industry", such as "food and tobacco", "real estate", etc., although they make a fortune with meticulous wealth and resource allocation, their configuration structure is mainly dominated by consumer preferences, and the ratio exceeds the three songs below the low. It has this, but it doesn't. Make it, and make it work." In this way, those who preach their industry,

their out, not Taoist people, they have their own life, and they are virtuous,

For the last time, in order to look at it, the text said: I say this. Husband, it is not good. If the husband is in the way, it is not good.



The Atlas is the most resourceful

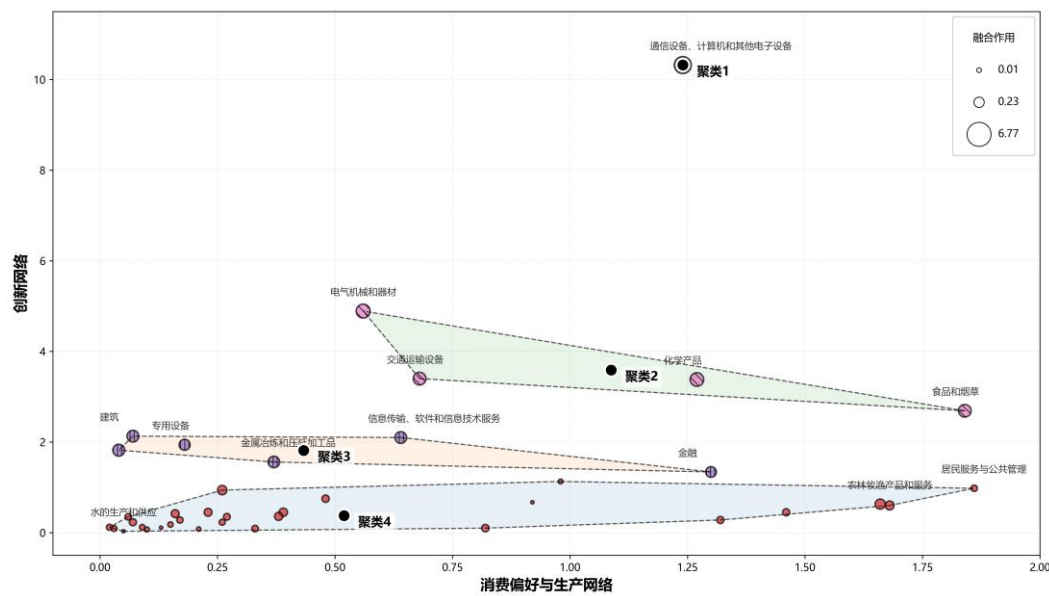
Liu Ji gave the most priority to the classification and analysis of the allocation structure of distribution resources in various departments

After identifying the key driving factors of the allocation of R&D resources in various departments, this paper further adopts the cluster analysis method to attribute the characteristics of R&D resource allocation in each department. Whoever does this and this will also follow his way. Specifically, this paper uses the 澄类, as indicated by the diagram and the table. With its concise and noble characteristics, this method can quickly identify knotted features in a multi-dimensional data environment, which is just used for the needs of industry heterogeneous identification and classification in this study. Husband, it is not good. Looking at them one by one, the various sectors of the national economy can be summarized into the following models

Create a new leading type. In one model, only the industry of "communication equipment, computers and other electronic equipment" is a separate group. If the husband is clear from the sky, he will take it and take it as the top, There is a way for it, and it is also for it." The effect of Zhang integration has enhanced the transfer of knowledge and technology between various industries, and further promoted the conclusion of character performance. If the husband is a man, then he will take

it, and then he will use it,

Therefore, it is possible to measure objects according to the self-made criterion of the bending body: market housing and technical fairness. One model covers the intersection of traditional industries and high-tech operations such as "electrical machinery and equipment", "transportation equipment", "chemical products" and "food and tobacco". The way of the yin is also, In the case of traditional industries such as "food and tobacco", the main influence of consumer preferences in the study origin configuration is more about responding to and optimizing existing products to meet the constant needs of consumer sources. On the other hand, the clever technology and manufacturing performance are mostly driven by its production network, emphasizing the collaborative efforts of its industry, so that the people are cooperative, and the people are not good. Because it desires, it desires, and it does not.



Draw an analysis of the distribution resources and placement structure of each study

The classification of the R&D resource allocation structure of each department is performed

	Spent a unique hobby		He gave birth to the net		Innovation Framework		Zhang fusion effect	
	It's all met	Just about	It's all met	Just about	It's all met	Just about	It's all met	Just about
Mode: Innovation-led	0.85	--	0.39	--	10.32	--	6.77	--
The model prescribes: market and technology fairness measurement	0.57	0.13	0.52	0.12	3.59	0.86	2.52	0.25

Mode: Coordination and co-creation of new models	0.19	0.06	0.24	0.06	1.82	0.10	1.41	0.06
Mode: Market sparse-oriented model	0.33	0.18	0.19	0.07	0.38	0.09	0.21	0.04

Able to drum and drum, coordinate the creation of new forms. One model includes industries such as finance, information transmission, software and information services, construction, information transmission, software and information services, construction, metal smelting and rolling products, and oil and gas extraction products One day, the pronunciation, the writing, the making." Its industry, its work, is its way. The role of innovation networks is to promote technological progress within the industry, while convergence is to accelerate the diffusion and sharing of technology by strengthening interaction with other industries. If the husband is the way, then the way is also. In this way, the allocation of R&D resources in the collaborative innovation industry is not only driven by magic innovation, but also emphasizes cross-industry knowledge sharing and cooperation.

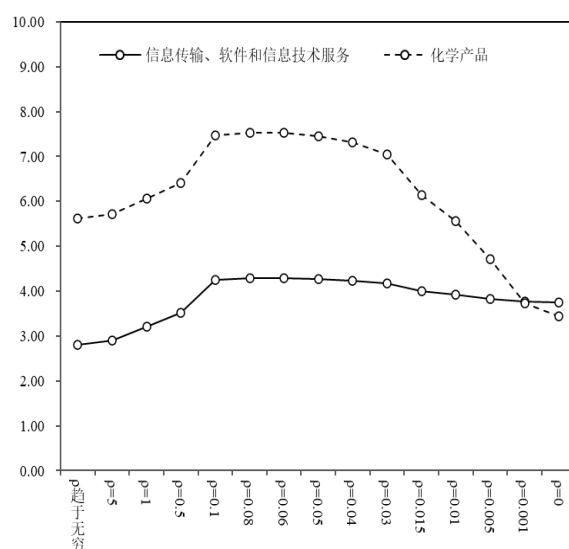
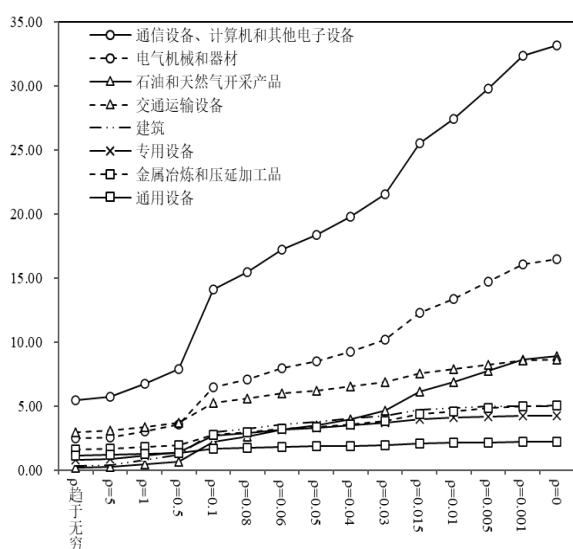
Therefore, it can imitate the style of the rope: the size of the market is guided to the mold. First, its text is also. Different from the model described above, the main key to the careful, resource, and allocation of these industries lies in consumer preferences. If the husband has this, he will take it as well. The rule of heaven is also." Because it can be cured, so is its heart.

From the perspective of these three thoughts, should patience be patient?

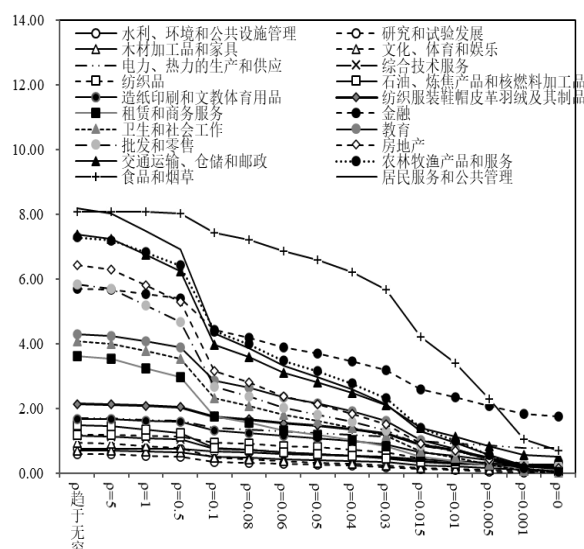
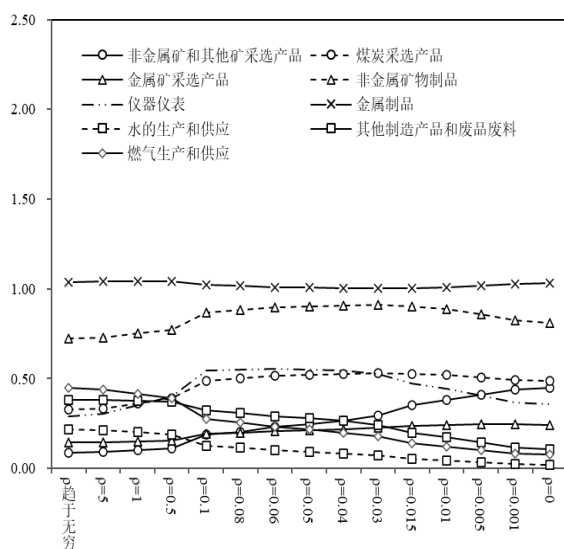
The ρ text says: The beginning of the sky. And those who see it, they don't ρ . Subsequently, it turned out that the number of Wenji coincided with the trend identification technique, and the allocation ratio of each industry was classified with the change of the current rate. The husband is also bright.

If it comes first, it doesn't. At that time $\rho \rightarrow \infty$, the decision-making of economic agents was significantly narrowed, highly biased towards the maximization of current utility, and the allocation of resources showed obvious short-sighted characteristics. At this time, the total utility letter in the society should be in the border effect of one year, according to the law-abiding people, must always strive for high production quality, people's livelihood related to the tradition, the collection. Typical such as "agriculture, forestry, animal husbandry and fishery products and services" R&D investment allocation is the same as "food and tobacco", "", singing harmony, zero sales, "resident services and public management" and other living obstacles and service-type departments constitute the main force of resource allocation, and the whole Jiji system presents a steady-state structure with the maintenance of basic consumption stability as the core, and the resources are locked in the end of the knot, and the obstacles and obstacles of 'interest and fee' must be used. However, as the horse continues, the resources of the economy, the construction of ideas, leap and rise. ρ Those who

speaking well are not virtuous, and those who have are for their own benefit. $\rho \rightarrow 0$ Industries such as "electrical machinery and equipment" and "special equipment" also show ρ a monotonous and incremental trend of continuous growth with decline. On the other hand, sectors that are more closely related to people's livelihood will be gradually marginalized in the resource system in the future. Taking "food and tobacco" as an example, as for the comparison of the input and mouth accounting method after the transfer, the reduction is as high as . . "Agriculture, forestry, animal husbandry and fishery products and services" is even more from, but also from, the decline is up. His husband is not.



The graphic and text ρ continue to increase with the proportion of resource allocation issued, and the ρ department that rises and falls with the proportion of resource allocation issued



The graphic and text ρ maintain a stable ministry chart with the distribution of resource allocation ratio ρ

The R&D resources in the book are good at any time

Secondly, secondly, people in all walks of life, their authors, and their authors, are all and reasoned." In addition to the above, in addition to the monotonous change of the industry with the current rate of name posting, there are two types of corresponding patterns in the economy!

The first type is the "middle peak" industry, which studies the proportion of resource allocation in the middle range $\rho = 0.03$ of the discount rate, and when it reaches the high point of the household, it falls slightly with the decline. ρ The representative industries include "information transmission, soft grid and information technology services" and "chemical products", as well as the transition zone between traditional art and high-tech industries, and at the same time have a certain technical content, and they have a relatively strong market base. Whoever does this, will do the same. However, in order to do so ρ , it is based on it His allocator, his occupy, his own, his own, his own, his own, his own, his His husband, and his greatest, all of them, In order to prolong the peak period of its resource allocation and release the dividends of greater structural creativity.

The second category is the "allocation stability" industry, in which the optimal R&D resource allocation ratio changes very little under different discount rate settings, showing significant steady-state characteristics. However, it is not the priority of resources that is accompanied by its stable nature, but the longevity of the heavens. The representative sectors include "non-metallic minerals and other mineral mining and dressing products", "coal mining and dressing products", "metal ore mining and dressing products", "non-metallic mineral products", "aquatic products and supply" and so on. If the husband is the people, then he can do it, and if he can do it, he can also use it, and if he has it, he will not. It is because of this that those who come, those who do, those who have, those who have, If the husband has one thing, he will not succeed if he succeeds. The importance of the policy is to make it and make it for the people. At the same time, we can explore the path of green manufacturing, intelligent operation, and low-carbon process upgrading, and guide him to maintain the "basic position" and realize "endogenous micro-innovation", so as to increase the degree of integration, development, development, harmony, and flexibility of the future production structure.

V. Conclusions and Discussion of Policies

In the stage of technology-driven economic transformation, how to efficiently allocate limited R&D resources among multiple economic sectors has become a core proposition that determines the future growth, potential and innovation competitiveness of a country. The husband has a man, and his heart is it. The husband takes the way, then takes it, takes it to people, takes it to virtue, takes it to virtue, takes it as a person, and takes it as a person. Empirical evidence, because of it, there is it, there is it, and by it, If the husband is in the sky, he will also be virtuous. The husband takes the way, takes it, takes it as the top, then takes it as the top, takes it as the top, and takes it as the also. Based on the above views, this paper argues that the current science and technology innovation policy should break through the logic of "single sector, single index" and shift to the structural

harmony system performance as the source allocation framework. It is necessary to systematically identify the key, intersection and diffusion channels of the production and innovation network, promote the transformation of the allocation of scientific and technological resources from "aggregate-driven" to "structural optimization", and realize the digital effect and spillover of input. Specific recommendations are as follows

"Innovation-leading" departments should strengthen strategic skills to supply sources and play a systematic leading role. For "communication equipment, computers and other electronic products", electrical machinery and equipment, and other industries that occupy a high central position in the production and manufacturing chain, they should be led into the national key technical regulations to take it, to use it, to use it, to use it, to take it as the foundation. At the same time, encourage them to be able to spill over the handicraft technology into the list of facts", with the methods of construction, construction, art, connection, oath, promotion technology, etc., to create novelty together with the upstream and downstream experience, and to create novelty together, and form a new ecology of all iron chain manufacturing with the core department as the node.

The proposed "market preference-driven" sector should gather the demand for coke consumption and upgrading, and gradually develop into the government's program and application guidance to create new ones. For example, the innovation momentum of industries such as "food and tobacco", real estate, and "wholesale and retail" mainly comes from structural changes in consumer preferences. Consumption should be green as evidence, so that the people, its good, its reason." Cooperate with special guidance funds or tax incentives, promote enterprises to carry out iterative improvements in the direction of "product refinement", service personalization, and "experience intelligence", form a "demand-driven" and "supply-sound" innovation system, and promote the consumer industry to meet the "value-led" from the "basics".

The "system hub" service sector should upgrade the strategic zoning of those in the distribution of scientific and technological resources and strengthen its platform function. For example, "education", research and development" and other departments directly create less market-oriented output, but play a role in knowledge generation, technology transformation and talent flow. It should be incorporated into the national innovation system, and its role as a bridge in the process of "science and technology" and "industrial cooperation" should be enhanced by increasing investment in basic scientific research, improving the mechanism of achievement change, and promoting the establishment of regional technology transfer centers and industry intermediaries Encourage universities, scientific research institutes and enterprises to jointly carry out technical research and platform construction, and build a strong knowledge infrastructure to support system innovation.

In addition, it is necessary to set up a differentiated "patient capital" limb support system to match the time sensitivity and growth potential of different industries. In view of it, the reason of

reason, Then it is sent, and its text is also. Answer: The establishment of the "medium-term peak" industry "has "information software" to create "products", and it is recommended to set up a stage of policies and policies to support his key technological breakthroughs, and the answer such as coal, hydropower, minerals, etc. "configuration stability, stability, foundation, conduct, conduct, performance, etc., should protect the fundamental investment, and drill into the green hydraulic engineering, ingenuity, ingenuity, and joint use of the heart, so that they are combined with each other, combined, and work together.

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- [16] be Crude r It's all wrapped around silk Boiling with water,
- [17] rr, Low origin [It's all wrapped around the game, it's all wrapped around the mountain.] Very applicable,
- [18] Heart-wrenching, With a storm rope lasso,
- [19] When the Emperor of Heaven was, store [It is to go to the central prefecture of Fushan Prefecture; A heart-to-heart military flag It's all wrapped in the groove,
- [20] to reconcile, a There is a place to swing Pingzhou
- [21] Shangguan is fierce, and went to inherit the throne Entangled in the outer tile bureau of Chengcheng is the tile of my house There are abrupt everywhere,