

A Comparative Study of College Student Entrepreneurship Policies in Northeast China and the Yangtze River Delta Region: A Content Analysis Based on Policy Texts

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Abstract: This study aims to compare the structural differences in college student entrepreneurship policies between Northeast China and the Yangtze River Delta (YRD) region. By constructing a two-dimensional analytical framework of "policy instruments - policy content," a content analysis was conducted on 39 policy documents from six provinces and one municipality within the two regions. The findings reveal that both regions rely heavily on supply-side policy instruments, while underutilizing environmental and demand-side instruments. Regarding policy content, the YRD region demonstrates significant advantages over Northeast China in constructing a systematic ecosystem, particularly in specialized programs and tailored incentives, whereas Northeast China focuses more on foundational support. This indicates that the policies in Northeast China exhibit characteristics of a "foundational support model," while the YRD region shows the embryonic form of a "systemic ecosystem model." The study recommends that Northeast China should transition from factor supply to ecosystem building and design distinctive incentive programs. The YRD region needs to promote policy refinement and regional coordination. At the national level, classified guidance should be implemented to optimize regional entrepreneurship policy systems.

Keywords: College Student Entrepreneurship Policies, Policy Instruments, Content Analysis, Regional Comparison, Northeast China, Yangtze River Delta Region

1. Instruction

University students are a group in society endowed with significant entrepreneurial potential and innovative spirit. Against the backdrop of economic transformation and an expanding graduate population, promoting entrepreneurship to drive employment has become an important strategy for alleviating employment pressure, stimulating social innovation, and cultivating new economic dynamism. Since the release of the Action Plan for Reinvigorating Education Toward the 21st Century, the state has successively introduced multiple policies, gradually constructing a support system for university student entrepreneurship covering education, financing, taxation, services, and other areas. The policy environment has now become a key factor influencing the effectiveness of their entrepreneurial endeavors. However, regional development in China is uneven, and areas with different resource conditions and development stages may exhibit systematic differences in the focus and underlying logic of their policies. Northeast China (Liaoning, Jilin, Heilongjiang), a traditional industrial base facing transformation challenges, and the Yangtze River Delta region (Shanghai, Jiangsu, Zhejiang, Anhui), a dynamic and innovation-intensive advanced area, constitute a typical comparative sample. A systematic comparison of the structural characteristics of university student entrepreneurship policies in these two major regions can not only promote mutual learning and optimization of policies between them, but also provide an empirical basis for understanding China's regionally differentiated governance logic and promoting the precise implementation of national entrepreneurship policies. To this end, based on a two-dimensional analytical framework of "policy instruments-policy content," this paper conducts a content analysis of core provincial-level policy texts from the aforementioned six provinces and one municipality. It aims to reveal the similarities and differences in the application of policy instruments and the focus of policy content between the two regions, and to analyze the

differences in regional governance concepts reflected therein. The study seeks to provide references for optimizing regional entrepreneurship policies and promoting coordinated development.

2. Literature Review and Analytical Framework Construction

2.1 Literature Review

In the study of policy evolution, scholars often employ content analysis or co-word analysis to systematically review policies at the national level over the years. Wang Haoyue and Xia Shiwu (2024) constructed a three-dimensional framework of "elements-instruments-time" for analysis, revealing a shift in policy themes from employment placement to innovation cultivation, and pointed out issues such as biases in the use of instruments^[1]. Feng Ying and Zhang Zhuo (2021), based on temporal and spatial dimensions, analyzed the evolutionary characteristics of policies from exploration to focused implementation, and preliminarily revealed differences in the allocation of policy attention across regions^[2]. In the field of policy effect measurement, research is more micro-specific, often testing the actual impact of policy instruments through questionnaire surveys and statistical models. Tan Yu (2019), based on survey data, empirically analyzed the incentivizing effects and pathways of policies such as entrepreneurship training and financing support on entrepreneurial intentions^[3]. Other studies have focused on fiscal and tax policies, evaluating their effects in reducing entrepreneurial costs and improving enterprise survival rates, bringing policy discussion to the level of outcome verification.

In recent years, regional comparative studies have gradually emerged. Some focus on within developed urban agglomerations, such as Deng Gao (2021), who conducted a multidimensional comparison of university student entrepreneurship financing policies in the Yangtze River Delta region^[4]. Others concentrate on intra-provincial differences, such as Yao Yitian et al. (2021), who compared policies across different regions within Jiangsu Province, uncovering disparities in coverage and targeting^[5].

In summary, existing research has laid a solid foundation, yet there remains room for improvement in the systematicity and depth of comparisons. On one hand, most comparative studies lack an integrated analytical framework capable of simultaneously capturing both the "methods" and "areas" of government intervention. On the other hand, there is still a scarcity of research specifically conducting structured comparisons between the two highly typical regions of Northeast China and the Yangtze River Delta. Therefore, this study aims to construct a structured analytical framework to systematically analyze and compare the policies of these two regions, in order to reveal the underlying differences in their support logic and focal points.

2.2 Analytical Framework Construction

To systematically compare the university student entrepreneurship policies in Northeast China and the Yangtze River Delta region, this study draws upon Rothwell and Zegveld's policy instrument classification theory to construct a two-dimensional analytical framework of "policy instruments-policy content." This framework deconstructs and quantitatively analyzes policy texts from two fundamental aspects: the methods of government intervention and the areas of entrepreneurship support.

In the dimension of policy instruments, they are categorized into three types: supply-side, environment-type, and demand-side. Supply-side instruments manifest as the government acting as a direct provider of resources, promoting entrepreneurship through measures such as funding subsidies, loan guarantees, free workspaces, and skills training. Environment-type instruments focus on the government providing indirect support by optimizing rules and conditions, including tax and fee reductions, simplification of approval processes, and fostering an innovation-friendly atmosphere. Demand-side instruments, on the other hand, involve the government stimulating entrepreneurship by acting as a market creator, for instance, through preferential public procurement, service outsourcing, and the establishment of demonstration projects. These three types of instruments constitute the basic toolkit of government support for entrepreneurship and serve as a key perspective for analyzing the methods of policy intervention.

The policy content dimension is subdivided into five specific support areas based on the key stages and core needs of university student entrepreneurship activities. Entrepreneurship Financing Support (EFS) primarily addresses funding issues during startup and operation, including various subsidies, loans, and fund support. Entrepreneurship Training and Education (ETE) focuses on enhancing

entrepreneurs' knowledge, skills, and overall competence, encompassing curriculum instruction, competition-based training, and mentorship. Entrepreneurship Services and Platforms (ESP) aim to provide physical spaces and supporting services such as incubation, government affairs facilitation, and intermediary services. Social Security and Rights(SSR) involves removing barriers for entrepreneurs regarding student status management, social security continuity, household registration, and housing. Special Programs and Tailored Incentives (SPTI) refer specifically to comprehensive support measures with distinct regional characteristics, targeted industrial orientations, or aimed at specific groups; they represent the concentration of regional policy differentiation and innovation.

By integrating the policy instrument dimension with the policy content dimension, a two-dimensional matrix for systematically analyzing policy texts is formed. By classifying the specific policy clauses collected, based on their core instrument type and primary content area, into corresponding positions within this matrix and conducting frequency statistics, a quantitative description of the internal structure and resource allocation strategies of the policies in the two regions can be achieved. This analytical framework transforms textual policy provisions into structured, comparable data, thereby clearly and objectively revealing the similarities and differences between Northeast China and the Yangtze River Delta region in terms of their preferences for instrument selection and focal points in content, laying a methodological foundation for subsequent in-depth comparison and discussion.

3. Research Design and Sample Selection

3.1 Sample Selection and Data Sources

This study selects Liaoning Province, Jilin Province, Heilongjiang Province, and Shanghai Municipality, Jiangsu Province, Zhejiang Province, and Anhui Province as research samples. Northeast China and the Yangtze River Delta region are typical within China's regional development landscape. Northeast China represents an old industrial base facing the challenges of transformation and upgrading, while the Yangtze River Delta region is a leading area in China in terms of economic vitality and innovation capacity. Comparing these two regions, which exhibit significant differences in developmental stage, resource endowment, and transformation objectives, allows for an in-depth exploration of the underlying logic behind local government policy design under distinct developmental contexts. This, in turn, provides practical references for understanding the diversity of regional governance and for promoting policy optimization and coordination.

Regarding data sources, this study ensures the authoritativeness and transparency of the policy texts. The primary sources for the policy documents are the official websites of the Human Resources and Social Security Departments of the respective provinces and cities, as well as national-level information dissemination platforms such as the National College Student Employment Service Platform. To ensure the timeliness and comparability of the policy samples, the collection scope is limited to specialized policies or relevant comprehensive policy chapters directly targeting college students or university graduates' entrepreneurship. These policies must have been formally issued and remain effective between 2024 and early 2026 by the provincial governments or their functional departments. The collection and screening of texts were conducted intensively in March 2026.

3.2 Research Methods and Procedures

This study adopts the policy text content analysis method. This method involves objective, systematic, and quantitative description of textual content, making it suitable for the structural deconstruction and comparison of policy documents. The research process follows standardized content analysis steps. First, specific policy clauses with independent meaning are determined as the unit of analysis, for example, "provide a personal entrepreneurship guaranteed loan of up to 300,000 yuan with interest subsidies" or "grant a one-time entrepreneurship subsidy of 5,000 yuan." The coding scheme strictly adheres to the "policy instruments - policy content" two-dimensional analytical framework constructed earlier. Each analysis unit is assigned two codes, identifying its policy instrument type and policy content dimension, respectively. The coding rules were clarified during the preliminary research phase through trial coding. Second, following unified coding guidelines, all analysis units within the policy texts are coded independently. Discrepancies arising during coding are resolved through discussions between the researcher and supervisor, with decisions made based on established rules to ensure coding reliability. After all coding is completed, the results are entered into a database to form a

structured data set. Finally, frequency statistics and cross-analysis are conducted based on the coded database. The entire analysis process features clear steps and transparent rules, ensuring the verifiability of the path from text to conclusions. This provides an objective basis for subsequent in-depth comparison and discussion.

4. Two-Dimensional Quantitative Comparison of Entrepreneurship Policies in the Two Regions

4.1 Overall Characteristics and Regional Comparison of Policy Instrument Usage

Through coding statistics on 39 selected core policy texts from Northeast China and the Yangtze River Delta, the application of policy instruments in both regions exhibits a highly isomorphic structure characterized by the absolute dominance of supply-side instruments, a severe shortage of environment-type instruments, and the complete absence of demand-side instruments. Based on the statistics, supply-side instruments appear 36 times in total across the two regions, accounting for a high proportion of 92.3%; environment-type instruments appear only 3 times, while demand-side instruments are absent. This distribution indicates that, whether in the transforming old industrial base of Northeast China or the economically vibrant Yangtze River Delta urban agglomeration, local governments prioritize the intervention model of directly providing resources when supporting university student entrepreneurship. In contrast, approaches that indirectly guide through optimizing the institutional environment (environment-type) or stimulate demand through public procurement (demand-side) are extremely underutilized. This reflects a prevalent reliance on strong, direct intervention pathways in entrepreneurship governance among local governments in China.

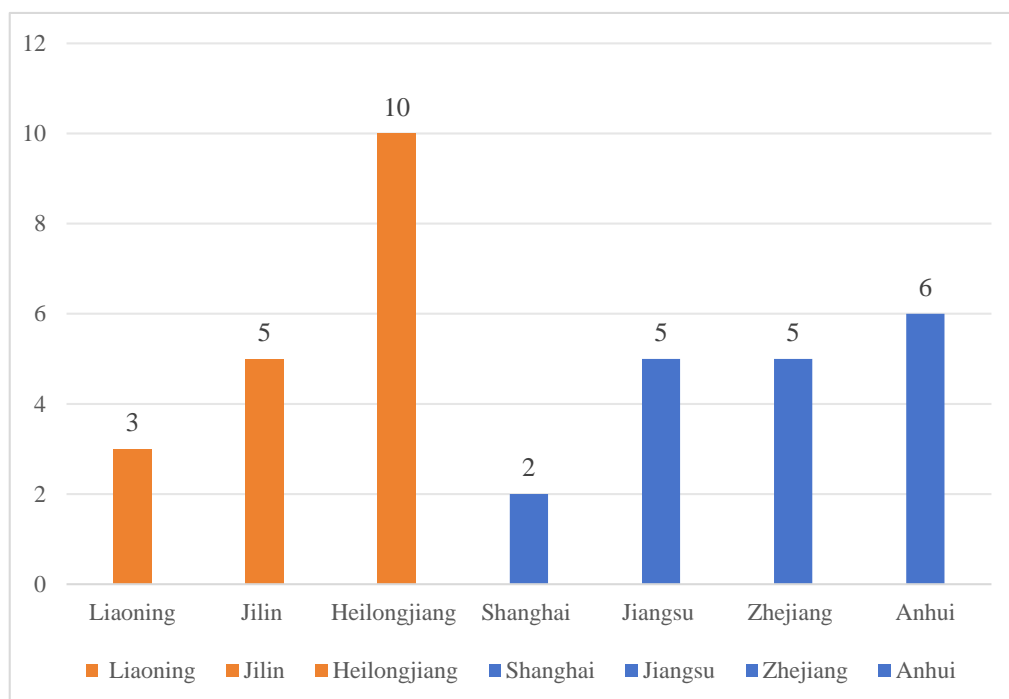


Figure 1 Comparison of the Frequency of Supply-side Policy Tool Usage Across Provinces and Cities.

Despite the overall structural homogeneity, there is a significant inter-provincial differentiation in the intensity of use of supply-side instruments among the six provinces and one municipality in the two regions. As shown in Figure 1, within the Northeast region, Heilongjiang Province exhibits the most intensive supply-side policies. Its "60 Policy Measures for Building a Happy Heilongjiang in the New Era" and supporting documents explicitly stipulate comprehensive, end-to-end direct support measures, such as personal entrepreneurship guaranteed loans of up to 300,000 RMB with interest subsidies, entrepreneurship subsidies, and "Magnolia" entrepreneurship training ^[6], with the number of such clauses reaching 10, far exceeding those of Jilin and Liaoning. In the Yangtze River Delta region, Anhui Province leads with 6 supply-side clauses, followed by Jiangsu and Zhejiang with 5 each, while Shanghai is relatively concise with only 2. This provincial-level variation is related to local fiscal capacity, density of higher education resources, and industrial foundation, but it does not fundamentally change the overarching pattern of supply-side dominance. It is noteworthy that the use of

environment-type instruments in both regions largely remains at the level of general statements such as "simplify procedures" and "strengthen promotion," lacking specific, operational implementation rules; while the collective absence of demand-side instruments exposes a significant weakness in policies utilizing market-driven methods like government procurement and demonstration applications to stimulate entrepreneurship.

4.2 Analysis of the Focus and Differences in the Policy Content Dimension

In terms of policy content, both regions prioritize entrepreneurship financing support and entrepreneurship training and education as their core focus, yet they show significant differences in the systematic design and specialization of policies. Figure 2 indicates that Northeast China has 9 policy clauses in the financing support dimension, and the Yangtze River Delta region also has 9, forming a "common ground" in the policies of both regions. For instance, Heilongjiang Province explicitly provides entrepreneurship-guaranteed loans of up to 300,000 RMB with fiscal interest subsidies; Jilin Province, in its 2024 Several Measures to Promote Employment and Entrepreneurship of College Graduates, raised the subsidy standard for eligible first-time entrepreneurs to a maximum of 50,000 RMB, accompanied by partnership entrepreneurship loans of up to 4 million RMB^[7].

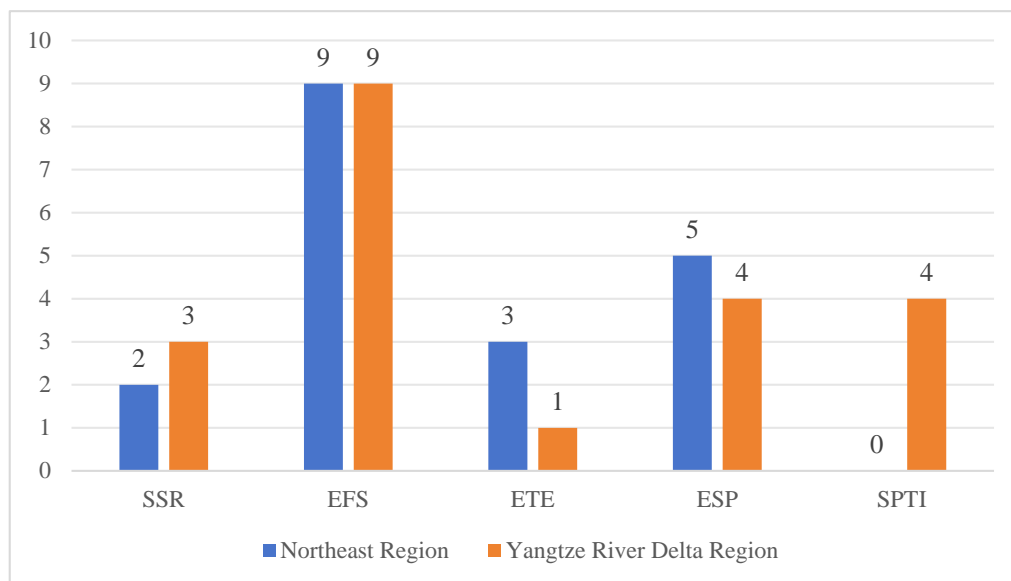


Figure 2 Comparison of the Distribution of Policy Content Dimensions in the Two Regions.

However, in the advanced dimension of Special Programs and Tailored Incentives, the Yangtze River Delta region demonstrates a clear leading advantage. This region has a total of 4 substantive clauses in this dimension, compared to 0 in Northeast China. The policies in the Yangtze River Delta region are not limited to universal support; they place greater emphasis on establishing policy highlands with distinct regional identity and industrial orientation. The "Pujiang Project" implemented in Shanghai specifically targets outstanding overseas returnees for innovation and entrepreneurship in Shanghai, providing fixed-amount funding for technology-based entrepreneurship projects, along with comprehensive support such as residency (hukou) and children's education, precisely attracting high-end international talent^[8]. The Global E-commerce Entrepreneurship and Innovation Competition, continuously developed by Zhejiang Province, deeply integrates the competition with the local e-commerce industry ecosystem, providing winning projects with a multi-dimensional resource package including funding, incubation, and traffic, forming a closed-loop mechanism that attracts talent and promotes industry through competition. Jiangsu Province's "Returning Swallow Plan" and the returning entrepreneurship support policies launched by various cities combine with the rural revitalization strategy to guide university students towards the county economy, developing specialty agriculture and rural e-commerce. In contrast, the policy content in Northeast China remains more at the "basic security" universal level, lacking such refined, branded incentive programs targeting specific sectors or groups. In the dimensions of Entrepreneurship Services and Platforms and Social Security and Rights, the policies in the Yangtze River Delta region are also more systematic. In terms of services, Jiangsu, Zhejiang, and other areas vigorously promote the construction of "doorstep" employment service stations and build integrated online-to-offline government service platforms that consolidate functions such as policy consultation and legal/financial intermediary connections. Regarding

safeguards, some provinces and cities in the Yangtze River Delta have clarified methods for social security continuation after entrepreneurial failure and detailed rules for talent apartment support. In contrast, similar policies in Northeast China are more principle-based, often expressed as "encouraging the construction of incubation bases" and "implementing social security according to regulations," with relatively vague specific standards and implementation mechanisms at the operational level. The greater "flexibility" in these policies may affect the effectiveness of their actual implementation.

5. Research Findings and Analysis of Causes

5.1 Research Findings

Quantitative analysis clearly reveals the structural characteristics of policy instrument selection and content focus in the two regions. In the dimension of policy instruments, both Northeast China and the Yangtze River Delta region exhibit an absolute reliance on supply-side instruments, with a combined proportion as high as 92.3%. In contrast, environment-type instruments account for only 7.7%, and demand-side instruments are entirely absent. This highly homogenous instrument structure confirms the prevalent strong reliance on direct intervention pathways among local governments in China when supporting entrepreneurial activities. The preference is to lower entrepreneurial barriers through direct resource inputs rather than indirectly guiding them by optimizing the institutional environment or creating market demand. This convergence in instrument selection reflects that, under the macro-policy orientation of stabilizing employment and promoting entrepreneurship, directly allocating resources to entrepreneurs is viewed by local governments as the most direct and visible policy tool.

However, despite sharing similar instrument preferences, the supportive content of policies in the two regions shows significant regional differentiation. Policy clauses in Northeast China are highly concentrated in the two foundational areas of entrepreneurship financing support and entrepreneurship training and education, aiming to address funding bottlenecks and capability gaps at the startup stage. This demonstrates a distinct "foundational support model" characteristic. In contrast, the policy system in the Yangtze River Delta region is more multi-dimensional and diverse. While it similarly emphasizes foundational support, the number of clauses in the dimension of special programs and tailored incentives is double that of Northeast China. Furthermore, its stipulations regarding entrepreneurship services and platforms, as well as social security and rights, are more systematic and detailed. This difference indicates that policy design in the Yangtze River Delta has begun shifting from a mere supply of factors towards an attempt to construct the embryonic form of a more attractive and supportive entrepreneurship ecosystem.

5.2 Analysis of Causes

The causes of the differences in policy paradigms between the two regions are multidimensional and profound. The primary factor lies in the disparities in regional economic foundations and fiscal capacity. As the most economically dynamic region in China, the Yangtze River Delta possesses stronger fiscal strength and more abundant market resources. In 2023, the general public budget revenue in the eastern region showed steady growth, providing a solid foundation for local governments to invest resources in building entrepreneurship service platforms and establishing special guidance funds, beyond meeting basic needs^[9]. In contrast, Northeast China faces certain fiscal pressures during its transformation process. Policy resources tend to be allocated to areas that can deliver direct and quick results, such as one-time entrepreneurship subsidies and guaranteed loans, to ensure policy coverage and provide a basic safety net.

A secondary factor is that differences in industrial structure and regional development strategies have shaped distinct policy demands. The Yangtze River Delta region places a paramount emphasis on cultivating emerging and future industries. A strong example is Anhui Province explicitly proposing vigorous cultivation of strategic emerging industries such as advanced photovoltaics, new materials, and artificial intelligence. Although Northeast China has also proposed accelerating the development of industrial clusters in new materials, aerospace, and the low-altitude economy^[10], overall, it remains in a period of transitioning between old and new growth drivers. There is a stronger demand for inclusive policies supporting subsistence and opportunity-driven entrepreneurship, leading policies to focus more on universal foundational support. This difference in industrial foundations directly determines the precision and depth of policy content.

Finally, differences in local government governance philosophies and policy innovation capabilities

cannot be overlooked. The implementation of the national strategy for integrated development in the Yangtze River Delta has profoundly shaped the region's administrative culture, characterized by collaborative governance, benchmarking against international standards, and encouraging innovation. In the field of entrepreneurship policy, this manifests as a willingness to undertake institutional innovation. Conversely, Northeast China, more deeply influenced by its historical planned economy system, often tends to adopt more direct and controllable intervention methods in its socio-economic governance. This is reflected in the policy instruments as a path dependency on supply-side measures. Simultaneously, when facing complex transformation tasks, policymakers may prefer lower-risk "basic security" strategies over exploring more advanced, yet more uncertain, ecosystem-building models. This difference in governance philosophy ultimately manifests as disparities in the systematicity, refinement, and innovativeness of the policy texts between the two regions.

6. Conclusion and Policy Implications

6.1 Conclusion

This study constructs a "policy instruments - policy content" two-dimensional analytical framework to systematically analyze and compare the provincial-level university student entrepreneurship policies in Northeast China and the Yangtze River Delta region. The research finds that there are structural differences in the support logic of policies between the two regions. The policy system in Northeast China exhibits characteristics of a "foundational support model." Its core approach is to directly provide resources such as funding and training, focusing on addressing the basic survival issues faced by university students during the initial stages of entrepreneurship. The role of the policy functions akin to "providing timely assistance." In contrast, the policies in the Yangtze River Delta region show a clear tendency towards building a "systemic ecosystem model" of support. Beyond covering basic needs, they place greater emphasis on fostering an entrepreneurial ecosystem through integrated service platforms and targeted special programs, aiming to "add finishing touches" by selecting and nurturing high-growth potential projects. This difference profoundly reflects the divergent governance logics followed by the two regions, based on their distinct development stages and resource endowments.

6.2 Policy Implications

For the Northeast Region, future policy optimization should focus on promoting a transition from a factor supplier to an ecosystem builder. Specific pathways include closely integrating with local characteristic and advantageous industries such as high-end equipment manufacturing, modern agriculture, and the ice-and-snow economy to design and launch targeted industrial entrepreneurship support programs. This will enhance the alignment and guiding force of policies with the local economy. Simultaneously, there should be active exploration and enrichment in the application of environmental and demand-side policy instruments. For example, optimizing local approval and regulatory processes, and establishing government procurement catalogs targeted at university student startups can gradually reduce the over-reliance on single supply-side tools and stimulate market and social vitality.

For the Yangtze River Delta Region, the policy focus should shift from systematization to deeper precision and coordination. It is recommended to fully leverage its strengths in digital governance to promote intelligent matching and seamless fulfillment of entrepreneurship policies, thereby improving service efficiency and user experience. More critically, by relying on the Yangtze River Delta integration development mechanism, deeper coordination should be pursued in areas such as mutual recognition of entrepreneurial qualifications, interoperability of sci-tech financial services, and sharing of talent databases. The goal is to break down administrative boundaries and construct a truly integrated regional innovation ecosystem, thereby strengthening its role as a national model and its radiating influence.

At the National Level, this study suggests that macro-level policy guidance must fully consider and respect regional heterogeneity. It is recommended that when formulating nationwide entrepreneurship support policies, sufficient space for policy innovation should be reserved for regions with different development types, implementing classified guidance and encouraging localities to explore support models that align with their own realities. Furthermore, establishing a regular inter-regional platform for policy learning and experience exchange can promote mutual learning between regions characterized by a "foundational support model" and those with a "systemic ecosystem model."

Ultimately, this will help foster a multi-level, complementary, and coordinated national entrepreneurship policy system.

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