

Strategies for Optimizing Entrepreneurial Financing Channels for College Students

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Abstract. Under the dual contexts of the continuous expansion of the college graduate workforce and the accelerated transformation and upgrading of the industrial structure, college students' independent entrepreneurship has become a critical pathway to stabilize employment rates and promote innovation, but they generally face the financing bottleneck characterized by "high willingness and low success". This study aims to systematically explore optimization strategies for addressing the financing challenges faced by college student entrepreneurs. Employing literature analysis and case study methodologies, this study identifies the existing structural imbalance of "excessive reliance on endogenous sources and insufficient external source supply" of the current financing channels and its underlying causes. The study found that to address the financing predicament, it is imperative to establish a collaborative linkage mechanism involving the government, colleges and universities, society and entrepreneurs to link: the government should strengthen the top-level design and improve the risk-saring policy; colleges and universities need to construct an integrated ecology of education incubation; social capital should engage in early-stage intervention and provide diversified support; and entrepreneurs themselves need to improve their ability and credit.

Keywords: College Student Entrepreneurship, Financing Channels, Industrial Transformation and Upgrading, Policy Support, Internet Plus Entrepreneurship

1. Introduction

Against the dual backdrop of the sustained growth in the total number of college graduates and the domestic industrial structure's accelerated transformation and upgrading towards a knowledge-intensive and technology-driven model, college students' independent entrepreneurship has been elevated to a national strategic height and is recognized as a critical pathway for alleviating social employment and stimulating the vitality of market innovation. Nevertheless, practical observations indicate that Chinese college students generally confront the predicament of "high entrepreneurial willingness and low actual success rate", among which financing constraints are identified as the core bottleneck hindering their entrepreneurial initiation and development. Existing studies have approached this topic from diverse perspectives [1]. Zheng Liu adopted a multi-case comparative approach to evaluate the policy effectiveness of government entrepreneurial funds. It was revealed that it had limited coverage, a lengthy examination and approval process and other drawbacks,

making it challenging to cater to the diversified and agile financing demands of entrepreneurial projects [2]. While existing studies have comprehensively uncovered the manifestations and part of the causes of financing difficulties, most of them focus on macro-policy evaluation or single financing channel analysis, and lack in-depth and dynamic research on how college students can systematically integrate and innovate financing channels against the backdrop of the new business formats driven by "industrial transformation and upgrading" and "Internet +". This research primarily employs literature analysis and case study methods. By systematically collating relevant literature such as domestic and foreign entrepreneurial financing and college students' entrepreneurship support policies, a theoretical analytical framework is constructed. At the same time, several typical cases of college students who have successfully obtained financing in the field of the "Internet +" domain are selected for in-depth analysis, and the selection, combination and innovation process of their financing channels are examined. This study is intended to directly assist college student entrepreneurs in overcoming capital constraints and enhancing the survival rate and growth potential of their entrepreneurial ventures.

2. Analysis of the current situation of college students' start-up financing

2.1. The general situation of college students' entrepreneurship financing

The most salient feature of the overall landscape of college students' entrepreneurship financing lies in the structural imbalance of "excessive dependence on endogenous dependence and insufficient external supply" [1]. Empirical research conducted at Jiaxing University serves as a typical illustration. Through the analysis of 157 valid questionnaires, it reveals a grim reality: among the sources of start-up capital, family financing accounts for as high as 68%, emerging as the absolute dominant source, while bank loans, representing formal finance, account for only 7%, and venture capital, a proxy for market capital, is as low as 2.8%. This data explicitly demonstrates that the "first barrel of money" for college students to start a business depends heavily on the network of personal social relationships rather than an institutionalized financial support framework.

While the financing channels appear diversified in form, the actual accessibility varies substantially, giving rise to an ecological contradiction of 'rich channels but unbalanced structure'. The government's capital cost is low but the approval cycle is long (6-12 months on average); venture capital, while capable of providing substantial funding (typically more than one million yuan per transaction), mandates that projects possess technical barriers or that core teams have industry expertise; crowdfunding platforms offer flexibility but exhibit unstable success rates (the average is less than 15%). This pattern of "rich channels but unbalanced structure" directly results in a sluggish financing success rate: less than 10% of entrepreneurs can successfully secure bank loans or venture capital [1]. Ultimately, this imbalance directly led to the low success rate of financing [1]. The imbalanced pattern of the aforementioned financing channels is reflected in the differentiated characteristics of the following six primary channels.

2.2. Main financing channels and characteristics

Government support funds: Encompassing forms such as non-repayable grants, tax exemptions, and interest-subsidized loans. The advantage is that the financing cost is the lowest, but typically the application process is cumbersome, the approval cycle is long, the quota is limited, and the competition is fierce.

Bank loans: As a conventional debt financing method, bank loans offer a stable capital supply. However, the bank risk control system relies heavily on collateral and stable cash flow, which is a serious mismatch with the characteristics of "light assets and no credit history" of college entrepreneurs, thus creating an extremely high threshold.

Venture capital: A form of equity financing capable of disbursing substantial capital injections and providing valuable industry resources. However, its pursuit of high returns and preference for projects with disruptive technologies and enormous market potential are very low in reach for most college student projects in the seed or start-up period.

Crowdfunding platform: Mobilize small-scale capital from the general public via online platforms, integrating dual functions of project promotion and market validation. However, its success rate fluctuates greatly, the requirements for the packaging and marketing capabilities of the project are high, and the financing amount remains relatively limited.

Family and personal savings: It is the main channel at present, with the characteristics of no transaction cost and fast acquisition, but it is constrained by family economic conditions and may impose great psychological and familial pressure on entrepreneurs. The limitations of these channels collectively point to the core challenges confronting college students in start-up financing.

2.3. Challenges faced by college students in start-up financing

Firstly, the coexistence of singular financing channels and exorbitant financing costs is evident. Yu Mei pointed out that more than 70% of college students who returned to their hometowns to start a business in the central and western regions could only launch their ventures through loans from relatives and friends, and "looking forward to the ocean" of banks, venture capital and other formal channels, which leads to the extremely fragile financing structure and poor risk resistance [3]. Secondly, the absence of a targeted credit evaluation system has become a "roadblock" to accessing formal financial services. Traditional financial institutions rely on fixed asset mortgages or stable cash flow for risk control, while college students' entrepreneurial projects are mostly new models or technologies characterized by light assets and high uncertainty, making them challenging to quantify using standardized risk assessment models [4]. Thirdly, the issue of policy support for the "last kilometer" is notable [2]. According to the study of Hangzhou, although the local government has issued over 200 policy documents supporting entrepreneurship, the policy implementation effect remains suboptimal—only 28% of college students reported having "a basic understanding" of relevant policies. The fragmentation of policies, inefficient publicity methods and vague implementation standards have weakened the dividends that the policy ought to deliver. Finally, the challenge of market risk prediction exacerbates financing difficulties. College students' entrepreneurial projects are mostly concentrated in highly volatile fields such as the Internet and cultural creation, but entrepreneurs themselves often lack the capacity for systematic analysis and judgment of market cycles, user behaviors, and competitive landscapes.

3. Strategies for optimizing the financing channels for college students to start a business

3.1. Government level: strengthen top-level design and institutional supply

As the architect of the macro environment and the provider of policies, the government should assume a leading position.

Refine the support policies for entrepreneurship and advance the "legalization of policies". In response to the existing issues of policy fragmentation and inadequate stability, reference should be

made to the "policy legalization" approach proposed in [2]. A multitude of temporary policies in the form of "notifications" and "opinions" should be integrated and upgraded into the Regulations on the Promotion of Entrepreneurship, which possesses binding force and stability .

Establish a dedicated fund covering the entire entrepreneurial life cycle and implement phased capital and resource matching. It can systematically draw on the successful experience of the German "EXIST" program and set up a regional college student entrepreneurship seed fund [5]. The fund should formulate a phased support scheme, covering the whole stage from "creative verification" to "prototype development" to "product trial", providing varying amounts of capital and resource support based on the characteristics of each stage, thereby addressing the earliest "death valley" problem of the project.

By constructing a risk-sharing mechanism, the government can help reduce banks' risk assessment threshold for college students' entrepreneurial projects, thereby facilitating the flow of more credit resources to start-ups. Drawing on the mature government guidance model of the United States, establish a risk pool for college students' start-up loans featuring "government guarantee + bank discount + insurance sharing" [5].

Enhance policy promotion and implementation to achieve closed-loop management. After the policy is released, an online "policy implementation feedback platform" will be established to collect the pain points encountered by entrepreneurs in the process of applying for and using the policy, form a closed loop of "policy formulation-execution-feedback-iteration", realize dynamic optimization of policy content and implementation procedures, and ensure the precise delivery of policy dividends [2]. The institutional supply at the government level provides macro-level guarantees for college students to start a business, and colleges and universities, as the frontline of entrepreneurship incubation, need to further construct an integrated ecosystem encompassing education, incubation and support.

3.2. College level: building an integrated ecology of education, incubation and support

Colleges and universities serve as the frontline for cultivating entrepreneurial talents and incubating entrepreneurial projects, and their supporting role is indispensable.

Construct a hierarchical and progressive entrepreneurial education system. Drawing on the "three-tier curriculum" model of Stanford University, we will build a layered entrepreneurship education system of "general-advanced-elite" in domestic universities [6]. At the general level, offer entrepreneurship basic knowledge popularization to all students and identify high-potential students through the entrepreneurship knowledge test (such as the "Basics of Entrepreneurship" course examination); for students with initial entrepreneurial intentions, adopt case-driven in-depth instruction, with the quality of the business plan, market research report, etc. as the completion criteria. The layer adopts the "single-point focus" model to provide customized and practical guidance for students who have formed an entrepreneurial team.

Establish a one-stop startup incubation platform. Drawing on the model of the "8 major entrepreneurship support institutions" of the Technical University of Munich, universities should establish a physical "Entrepreneurial Service Center" within the campus through resource integration [5]. The center should integrate one-stop functions such as legal consultation, patent application, tax agency, investment docking, etc., so that student entrepreneurs can solve most of the administrative and professional service needs encountered in the process of entrepreneurship without leaving the campus—this will significantly lower the initial entry barrier and transaction costs of entrepreneurship. Establish an efficient and standardized campus start-up fund. Drawing on the successful model of the "Seed Fund" of the University of Geosciences of China, the "On-campus

Interest-free Revolving Fund" was established [7,8]. The evaluation mechanism of the fund should integrate academic rigor with market-oriented perspectives, and adopt a two-round roadshow evaluation system consisting of a "student jury + off-campus industry/investment judge". Funds are disbursed in phases and continuously injected according to the achievement of project milestones.

3.3. Social level: guiding the coordinated support of diversified capital and resources

Guide and drive financial institutions to pursue service innovation. The government should promote and replicate the proven practices of "risk pool loans" in Hangzhou, and encourage banks and universities to engage in in-depth collaboration and co-establish a "white list for college students to start a business" system [2]. For high-quality projects that are on the white list, banks should provide "mortgage-free credit loans" with a reasonable credit limit ranging from 50,000 to 500,000 yuan, and offer an interest rate discount of approximately 20% below the benchmark interest rate, thereby effectively addressing the first loan for light-asset entrepreneurs. Develop a dynamic risk pricing model and adopt a phased premium adjustment mechanism according to the project stage (seed period/growth period).

Encourage and guide capital institutions to make early-stage interventions. Drawing on the "Angel Investment Tax Credit" policy of the United States, venture capital institutions investing in early entrepreneurial projects of eligible college students shall be granted an income tax credit equal to a certain proportion (such as 20%) of their investment amount [5]. Building on the tax credit policy, introduce a follow-up investment incentive clause: for venture capital institutions that invest in early projects of college students, if there are institutional follow-up investments in the follow-up round, the government may provide additional incentives equivalent to 10% of the follow-up investment amount.

Promote the standardized development of crowdfunding platforms. Drawing on the British "Seeds" equity crowdfunding model, establish a "College Student Entrepreneurship Crowdfunding Zone" on a major crowdfunding platform [7]. The platform shall assume the preliminary screening responsibility and conduct pre-due diligence on the projects. To protect the interests of investors and reduce their decision-making barriers, flexible exit mechanisms can be designed, such as granting investors "equity repurchase rights" and allowing them to withdraw at the original investment price within 3 years after investment, thereby boosting the confidence of social capital participation.

Deepen enterprise-university cooperation and demand matching. Establish a German-style "public-private innovation partnership alliance" mechanism [5]. Led by the government or industry associations, construct a "college students' entrepreneurship-enterprise demand docking platform". Enterprises are encouraged to release real technical problems or business innovation needs on this platform, and college entrepreneurial teams participate in the challenge in the way of "revealing the list". Enterprises shall provide "prototype development funds" and "market channel support" for this initiative, thereby enabling college students' entrepreneurial projects to be closely aligned with market demand from the outset, improving their success probability and facilitating access to capital and resource injection from the industry.

3.4. College student entrepreneurs themselves: consolidate the internal foundation and capacity building

The coordinated support of social capital and resources has laid the external foundation for college students to start a business, and the enhancement of entrepreneurs' own capabilities is fundamental to solving the financing problem. College students and entrepreneurs should proactively pursue

practical entrepreneurial training, actively participate in Stanford's "entrepreneurship training camp"-style extreme challenges, and hone their market insight, teamwork capabilities, and rapid trial-and-error competencies in a high-pressure environment [6]. This is the foundation for impressing investors. Meanwhile, they should refine the business plan meticulously and clearly explain market pain points, solution pathways, profit models, competitive barriers, team backgrounds, and financing needs. They should also proactively construct a personal credit profile. Entrepreneurs should cherish their credit assets and take the initiative to participate in pilot projects such as Hangzhou's "College Student Entrepreneurship Credit Score" [5]. Entrepreneurs should also accumulate personal credit points by sustaining good academic performance, advancing the project progress on time, cherishing the tutor's evaluation, and maintaining a good repayment record. List the four potential risks of technology, market, team and policy separately in the business plan, and design targeted response plans for each risk type [8].

4. Conclusion

College students' entrepreneurship financing has initially formed a multi-channel framework encompassing policy funds (government start-up funds, discounted loans), traditional market capital (angel investment, venture capital), and emerging social financing (product crowdfunding, equity crowdfunding). Nevertheless, there exist notable "disconnections" between these channels: although policy funds are stable, they are inadequate in coverage and flexibility; market capital pursues high returns, which is misaligned with the immaturity and high-risk characteristics of most college students' start-up projects; and social financing has extremely high requirements for the market appeal and display ability of the project. Against this backdrop, the core to addressing the financing bottleneck is to actively build an "ecological, phased, and precision-oriented" financing channel coordination mechanism. The specific optimization directions include the following: first, strengthen the guiding and bridging role of policy channels, design more flexible "seed funds," and establish a linkage screening and follow-up mechanism with market investment institutions to mitigate early-stage project risks. Secondly, encourage the forward deployment and professionalization of market channels, develop "campus venture capital" and angel investor networks focusing on early scientific and technology innovation projects, and provide composite resources of "funds + mentors." In terms of research methods, this article mainly relies on literature analysis and typical case studies. While in-depth analyses can be conducted, the representativeness and generalizability of the cases may be limited, and there is a scarcity of large-sample quantitative data to verify the effectiveness weight of various channels. In view of the limitations, future research can be carried out in the following directions: First, carry out large-scale questionnaire surveys and empirical analyses to quantitatively evaluate the specific impact of different financing channels on the entrepreneurial performance (survival rate, growth rate) of college students. The second is to conduct cross-national comparative studies, systematically sort out the differences in the financial ecosystems that support young people's entrepreneurship in different systems and cultural backgrounds, and distill actionable experiences therefrom.

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