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Chapter: Economic Development, Finance, Marketing and Sectoral Development

Research on investment and financing efficiency in the music industry: an empirical analysis based on collaborative innovation between music companies and financial institutions

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Annotation. The Chinese music industry faces significant challenges related to investment constraints and financing efficiency, which have increasingly influenced its sustainable development. The classic models of financing evaluation like OLS regression, DEA and SFA are not sufficient since they rely on past financial records and hard collateral which is not sufficient to highlight the dynamism, intangible and participatory nature of creative industries. This study attempts to overcome these limitations by offering a structural construct that incorporates Collaborative Innovation, Knowledge Sharing and Environmental Dynamism to establish efficiency in investment and financing. The quantitative survey methodology was utilized, and 502 distributed responses were collected with strategic executives working in 40 music companies and financial institutions in Beijing, Shanghai, Guangzhou, Chengdu and Hangzhou which gave 428 valid samples. Structural Equation Modeling (SEM) had been used because it is appropriate where multi-construct relationships are needed. Findings show that there are strong positive effects of Collaborative Innovation on Financing Efficiency (β =0.391, t = 7.82, p < 0.001) and Knowledge Sharing (β =0.487, t = 9.65, p < 0.001). Knowledge Sharing had a significant positive impact on financing efficiency (β =0.352, t = 6.48, p < 0.001) and mediated (β =0.171, t = 6.12, p < 0.001) it. Moderation analysis proved that Environmental Dynamism enhances the correlation between Collaborative Innovation and financing efficiency (β =0.142, t = 2.94, p <0.003). The model showed high prediction capability with R^2 = 0.999 in the case of financing efficiency. The need for strategic initiatives that encourage technological adoption, improve collaborative knowledge exchange, and enhance data-oriented financial practices to support more efficient investment and financing outcomes in the music industry.

Keywords: collaborative innovation, knowledge sharing, investment and financing efficiency, environmental dynamism, SEM, Chinese music industry.

JEL classification: G20, G24, D24, O31

Introduction

The music industry in China has entered the phase of a fast digital transformation, which is regulated by the emergence of streaming sites, the short-video economy, virtual concerts and AI-generated music (Zhang *et al.*, 2025). The developments have brought about unprecedented monetization and innovation but have increased the financing of music enterprises. The intellectual property rights (IPR) cannot be

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valued because of unpredictable market performance whereas project cycles can be unreliable and creative intensive in music production and distribution (Zhu *et al.*, 2022). Physical collateral in many music companies is minimal and therefore the companies are not appealing to the traditional financiers. This has led to financing inefficiency that has been a major bottleneck in the industry (Liu *et al.*, 2021). Financial institutions are currently trying to collaborate with innovation strategies to minimize risk, enhance flow of information and also support music companies(firms) (Mishchenko *et al.*, 2021). It is becoming crucial to understand the role of such partnerships in making the investment and financing processes more efficient to develop the cultural economy in China in a sustainable way (Darvish *et al.*, 2024)

The other studies which have dealt with efficiency in financing other sectors have been based on solutions like Data Envelopment Analysis (DEA), Stochastic Frontier Analysis (SFA) and Regression based Financial Efficiency Models in determining investment results (Kanoujiya *et al.*, 2024). Other studies have applied Resource-Based View (RBV) modelling or Innovation Capabilities Frameworks explain the effect of firm resources on financing performance. Such methods are however mainly concentrated on manufacturing, technology or conventional service industry (Ahn *et al.*, 2022). Their general attitude is to consider financial decision-making a firm internal practice, where cross-organizational cooperation is not taken into consideration. Moreover, a lot of these models make structural data, physical possessions and cycles of production that can be considered as stables, which is not the case with the music industry, which is based on creativity (Mohjazi *et al.*, 2024). Consequently, current methodologies cannot reflect the relational, knowledge-based and dynamic nature of the cultural financing (Alvi, Ulrich, 2023)

A number of studies have tried to examine the performance of innovation through such approaches as SEM and Collaboration Network Analysis, yet seldom in terms of cultural and music-related financing. Such models usually look into the cooperation in the field of innovation ecosystems but fail to consider financial processes that bridge music companies and financial institutions (Haidar *et al.*, 2023). Moreover, previous frameworks do not consider the power of knowledge sharing that is critical to reducing risk in the case of assessing intangible creative assets. The environmental factors, like quick technology changes, fluctuations in consumer trends, and changes in regulations are also not sufficiently taken into consideration in the previous models (Darvhish *et al.*, 2024). Therefore, explanatory ability of the current techniques is restricted in volatile industries such as music. The past analytical frameworks are complete in the absence of dynamic environments (Fernandez-Sanchez *et al.*, 2025)

To address these weaknesses, suggested framework will incorporate collaborative innovation, knowledge sharing and environmental dynamism in a single SEM-based framework tailored to the Chinese music industry. In contrast to the classical efficiency models, the proposed one perceives financing as an interactive and relational process but not as an internal process. The framework proposes that the collaborative innovation is converted into quantifiable returns in investment and financing efficiency, by introducing knowledge sharing as a mediating mechanism. Enhancement of environmental dynamism as a moderating variable allows the model to capture volatility in digital music markets in reality. The position has provided a unique theory because of the connection of cultural-creative collaboration with financial efficiency outcomes. The framework also offers empirical knowledge of how to maximize the integration of culture and finance in the fast-changing music industry in China. Building on these identified confines of traditional models such as OLS and DEA, the following problem statement further delineates the specific research gaps. It motivates the need for a more robust and adaptive analytical framework.

Conventional econometric models including OLS regression and panel fixed-effects models, have been extensively implemented to measure the results of investment and financing, but these models do not adequately capture the intangible, non-linear and fast changing nature of cultural industries (Ceesay *et al.*,

2022). Their overdependence on the past financial indicators gives little information about creative sectors in which IP valuation is not only uncertain. Relational factors, like the quality of collaboration or flows of knowledge, are also not taken into consideration in these models.

Cultural and creative industries do not suit R&D-intensive measures and patent-counting techniques. Such paradigms underestimate the product of creativity since music companies frequently produce intellectual property that is not converted into actual patents and quantifiable R&D investment (Park *et al.*, 2025). As a result, other researchers who have implemented these models have not considered the interactions between financial institutions and music companies. This weakness limits the possibility to know the impact of cross-sector innovation initiatives on financing efficiency.

Knowledge-capital models and absorbent-capacity frameworks can give some theoretical inference although in most cases, they rely on archival proxies which cannot reflect actual knowledge-sharing behavior (Ramadhiani *et al.*, 2023). Those models are usually based on secondary data like annual reports or industry statistics without considering the complex, interactive and trust-focused essence of knowledge exchange in creative ecosystems. Consequently, they are unable to capture the role of knowledge sharing as a process that connects collaboration to financing performance in music industry.

The adoption of environmental models like market-dynamism indices and macro-volatility models have been used in explaining the organization adaptation, however these methodologies depend on general external factors which ignore the firm realities in digital cultural market (Cerdeiro *et al.*, 2024). They cannot capture the instant changes in consumer preferences, platform algorithms and digital distribution models that define the Chinese music industry. The Chinese music industry financing efficiency research requires complete knowledge of all factors that affect financing efficiency in the industry through technological and knowledge-based research methods. The study investigates how knowledge sharing and technological capabilities impact financial results through its assessment of advanced analytical methods which improve forecast accuracy. The study explores how environmental changes control these relationships between different factors which helps to understand financing efficiency in digital systems that undergo continuous transformation.

- ✓ Examine how effective joint innovation in music companies and financial institutions boosts efficiency in investment and financing in the Chinese music industry.
- ✓ Test the effects of collaborative innovation on knowledge sharing in the music-finance partnership ecosystems.
- ✓ Test the role of enhanced knowledge sharing in enhanced investment and funding efficiency in cultural and creative organizations.
- ✓ Find out whether knowledge sharing is a mediating factor between collaborative innovation and investment/financing efficiency.
- ✓ To determine how the collaboration innovation moderates the investment/financing efficiency relationship with environmental dynamism.
- ✓ Establish the predictive power of collaborative innovation, knowledge sharing and environmental dynamism to explain financing efficiency by use of SEM.

Building on these objectives, the study further formulates a set of research questions to systematically examine the relationships among collaborative innovation, knowledge sharing, and financing efficiency, as well as the moderating influence of environmental dynamism within the Chinese music industry.

RQ1. To what extent does collaborative innovation between music companies and financial institutions improve investment and financing efficiency in China's music industry?

RQ2. How does collaborative innovation influence the level of knowledge sharing within music–finance collaborative partnerships?

RQ3. Does increased knowledge sharing contribute to higher investment and financing efficiency in the Chinese music industry?

RQ4. Does knowledge sharing mediate relationship between collaborative innovation and investment/financing efficiency?

RQ5. How does environmental dynamism moderate the relationship between collaborative innovation and investment/financing efficiency in the context of China's music industry?

Section 1 presents the background, research problem, objectives, and research questions. Part 2 highlights the literature review concerning the investment and financing efficiency, collaborative innovation, knowledge sharing, and environmental dynamism. In section 3, the theoretical framework and the development of the hypothesis is described. Section 4 contains the research methodology, which encompasses the sampling, data collection, measurement tools, and data analysis. Section 5 presents the empirical findings relying on the descriptive statistics, reliability and validity test, regression, SEM, mediation, and moderation analysis. In Section 6, the findings are related to the research questions and hypotheses. Section 7 summarizes the research, underscores the main contributions, limitations as well as future research directions. References and Appendices are provided at the end.

1. Theoretical Framework

1.1 Investment and Financing Efficiency in Cultural Industries

Hsu *et al*. (2021) studied automated music-transition generation via a Transformer and presented the perspectives on the content valuation that can be applied to digital platforms. They suggested that more predictive music transition models would make platform-driven revenue forecasts closer and, therefore, influence funding decisions of short-form content. Their results proposed that the sequence models could minimize uncertainties regarding the expected outputs of project. This was applicable to the uncertainty in valuation of the creative projects, and to the modelling of the expected cash flows of the music investments. Wei *et al*. (2025) suggested Transformer-GAN in the case of long symbolic sequences of music and emphasized that the measures of generator quality were positively correlated with the estimated engagement of the listeners. They recommended that enhanced generative fidelity would be able to guide the future revenue situations applied in project appraisal. The article presented that generative DL models have the ability to generate consistent proxies of the audience response predicted, useful in ex-ante investment evaluation. These strategies indicated emerging sources of financing model of the cultural sectors. Jiang et al. (2023) exhibited that a linear positive driving association exists between environmental protection subsidies and enterprise green innovation. Furthermore, Goel (2024) confirmed that although geographical proximity acts as a substantial factor in ascertaining non-native market fits for the music of a given language, alignment in preferences of audio features triggered by cultural similarities also plays an integral role.

Juškaitė *et al*. (2024) investigated the efficiency of investment portfolios incorporating cryptocurrencies, highlighting the role of advanced analytical techniques in evaluating performance across dynamic and data-intensive environments. Koval *et al*. (2024) examined the factors influencing sustainable consumption and highlighted the importance of data-driven analysis in supporting responsible decision-making in complex systems.

Min *et al*. (2022) combined Transformer architecture with GAN adversarial training to generate music and explained how more content simulators may be applied in risk estimation. They demonstrated that hybrid generative models produced more realistic sample paths of music streams, which could be converted into more heuristic scenario analysis to support financing. Bevec *et al*. (2024) designed a music recommender based on the Graph Neural Networks (GNNs) and enabled better user-item affinity predictions with streaming datasets. They contended that derived signals based on GNN (e.g., projected engagement) made useful inputs to predict the revenue streams based on catalogue investments. Their findings indicated that graph-based learning had the potential to fundamental siloing of information between music companies and financial entities by generating sound demand forecasts of projects and catalogues. Iyar (2025) asserted the significance of policy-driven techniques and structured frameworks, which can inform data-driven decision-making in different application domains. In the arena of digital asset protection, smart security practices driven by data-centric approaches emerge as imperative shields against evolving threats. Jain (2025) analyzed the importance of such activities in strengthening the security of digital assets.

AI-driven music generation systems and graph-based recommendation systems which serve as their primary focus, deliver value to investment and financing operations because they enable better content evaluation and demand estimation. The music generation models which use AI technology create content at scale with consistent output quality. The GNN-based recommendation systems enable better user preference identification and market demand prediction. The capabilities enable more accurate investment decision-making, better resource distribution, and decreased financing risks which apply to the cultural and music sectors.

1.2 Collaborative Innovation

In their article that explores the concept of blockchain and value co-creation in the music industry and explains how the shared ledgers facilitated new collaborative financing frameworks, Centorrino *et al*. (2023) highlighted the concept of blockchain. They found that digital platforms and interoperable ledgers improved transparency between artists, music companies, and financiers to support new co-investment contracts. The research related technological co-innovation with the reduction of transaction costs and the better access to financing creative projects. Arenal *et al*. (2024) reviewed the concept of digital transformation and blockchain in the music industry and reflected the potential of platform-bank partnership to facilitate royalty-backed finance. They demonstrated that, by having access to instrumented streaming and rights data, financial institutions were able to formulate custom credit-products. It was proposed that the empirical discussion indicated that such cross-sector co-innovation decreased perceived default risk and accelerated the process of financing approval.

Sanchez *et al*. (2025) suggested a neural-graph framework (MUSYNERGY) to find music collaborations and applied Graph Neural Networks (PinSage) to map the opportunity of the partnerships. They maintained that these discovery platforms allow financiers to find out projects of greater network value, and therefore, influence co-investments. Algorithms collaboration tools enhanced the efficient distribution of capital by increasing the matching of partners and their anticipated synergies. Wang *et al*. (2024) created a

Transformer-GANs-based style-conditioned music generator and explained how it can be used to imply content co-creation pipelines. They emphasized that the improved generation control enabled companies and investors to test marketable assets at a faster rate, which enabled financing at an early stage based on observable prototypes.

1.3 Knowledge Sharing

Shayegh *et al*. (2023) performed thematic analysis of knowledge sharing in financial organizations and focused on the importance of structured repositories and inter-organizational learning. They discovered that institutional knowledge flows enhanced the service design as well as lower risk of operations, which applies when banks consider intangible assets. Onwuegbuzie *et al*. (2024) investigated the impacts of environmental dynamism on business model innovation and employed mixed-methods to demonstrate that knowledge exchange was quicker in enhancing adaptive reactions. They stated that by companies distributing market knowledge and consumer indications to their partners, both sides adjusted financing and investing standards quicker. This study highlighted knowledge sharing as an ability that moderates the conversion of collaborative innovation into operational results, such as efficiency on financing.

Shih *et al*. (2023) introduced a Theme Transformer on symbolic music and contrastive representation learning on thematic retrieval; their study obtained that structured musical features could be identified to be used in downstream analytics. They contended that feature extraction facilitated more detailed metadata exchange among industry collaborators.

1.4 Environmental Dynamism

How companies were facing the accelerating technology and regulatory change and how dynamism moderated the innovation results, Nasta *et al*. (2023) had analyzed. The study discovered that collaborative relationship paid off better in high dynamism situations as learning together enhanced faster adaptation. This meant that dynamism in the environment enhanced the efficacy of partnership in enhancing financing responsiveness as well as investment choice. AI valuation tools were investigated in regard to property markets and Ota *et al*. (2024) observed that the level of model instability may increase in case of volatile market circumstances, and the use of powerful model design (ensemble or LSTM-based time series models) is necessary. They cautioned that dynamism sabotaged naive valuation models and demanded approaches that explicitly model time-varying behavior-knowledgeable to IP valuation in music.

Cristescu *et al*. (2025) optimized FinBERT-style models to sector-specific financial text and suggested that domain-adapted models were more robust in different market regimes. Their findings suggested that sector-tuned BERT/FinBERT versions were more effective in dealing with noisy and fast-moving textual cues of interest in financing; thus they could be valuable in tracking regulatory and market changes in the music finance sector. Nasiopoulos *et al*. (2025) compared various fine-tuned DL models (GPT, BERT, FinBERT) with financial sentiment analysis, and found that either variant of transformers performed better than enough older RNN models in dynamic news flow. They noted that state-of-the-art language models enhanced signal recovery of short-term volatility, which can be applied when the financiers need to track music consumption across short-video sites.

1.5 Resource-Based View (RBV)

Resource-Based View (RBV) is an approach that argues that companies can be competitive through the creation of valuable, rare, inimitable and non-substitutable resources (Yende *et al.*, 2025). In cultural and creative practices, there is a growing emergence of such resources based on relational as well as knowledge-based assets and not physical capital and technological capital. Collaborative innovation is a

strategic relational asset since it allows the music companies and the financial institutions to create value together by co-designed financial products, smart risk-screening devices, and integrated information systems. Such partnership connections provide the music companies with special access to financial knowledge and credit rating procedures, and financial institutions understand the creative production process better. Based on this co-creation, enterprises reduce information asymmetry and optimize their problem-resolving skills that ultimately results in improved financing decisions. The green marketing activities affect business performance by integrating Triple Bottom Line (TBL) framework and the Resource-Based View (RBV; Khan et al., 2023).

The role of the Resource-Based View (RBV) in improving the performance of MSMEs, focusing on Bakso Tenes and Mie Ayam businesses. Reportedly, optimal allocation of internal resources considerably uplifts the overall performance and business competitiveness (Hidayat et al., 2022).

In the RBV model, collaborative innovation complements the set of Music companies' capabilities which directly affect the efficiency of financing. When music companies and financiers trade strategic resources in the form of technical expertise, market insights, skill in the evaluation of projects, there is better capacity of both parties to allocate capital in an efficient way (Barney *et al.*, 2021). This enhances the quality of investments, minimizes unnecessary expenditure and has faster deployment of resources. Within a Sharia business context, the ethical practices and strategies of conventional coffee shops from a Resource-Based View (RBV) perspective (Ramashar, Khairunnisa, 2025). Through this, collaborative innovation turns into a high-order resource that can contribute to improved financial results. Since creative assets are intangible, the RBV implies that relational resources are of particular value to cultural enterprises, which tend to have fewer traditional collateral and more to do with trust, information and strength of partner relationships. El Nemar et al. (2025) studied the development of sustainable competitive advantage in light of the Resource-Based View (RBV) from the perspective of Sharia business management

1.6 Dynamic Capability Theory

Dynamic Capability Theory stresses on the capacity of companies to feel opportunities, exploit resources and re-organize competencies in fast changing environments. Digital music industry in China is unstable in terms of consumer choice, rapidly changing technologies and uncertain cycles in the market, which demands the organization to be adaptive (Betin *et al.*, 2025). Larabi (2025) highlighted that antecedents, strategic orientation, and innovation capability noticeably impact strategic renewal within SMEs of KSEs, which eventually positively affects enterprise competitive edge. The impact of supply chain quality management practices on supply chain resilience constitute a dynamic capability perspective. Studies suggest that effective quality management increases adaptability and reinforces supply chain resilience against disruptions (Albalushi et al., 2023).

As the business of music firm and financial institutions move towards the systematic exchange of knowledge, that is, in sharing market analytics, project risk profiles, insights into consumer behavior, and content performance trends, they are able to develop sensing and learning collectively. Such mutual information can enable the two sides to have a better assessment of investment opportunities and to distribute capital in a way that corresponds to the market processes. Moreover, knowledge sharing enhances the capability of music companies to re-architect business models, change content policies, and embrace new financing services, and financial institutions may enhance credit rating, create custom financial instruments and reduce investment risk (Cuthbertson *et al.*, 2022). Dynamic capability approach looks at knowledge sharing served as the process by which collaborative innovation becomes better financing results. It enhances the capacity of music companies to deal with uncertainty and re-organize

resources with external shocks. Knowledge sharing can therefore not be a process of operation but a strategic ability that connects cooperation with the efficiency of financing in highly dynamic creative markets. Employee training and organizational trust jointly foster dynamic capabilities within organizations. Mohanty et al. (2024) pointed out that the synergy between skill development and trust uplifts the adaptability, knowledge sharing, and overall organizational performance.

1.7 Financial Intermediation Theory

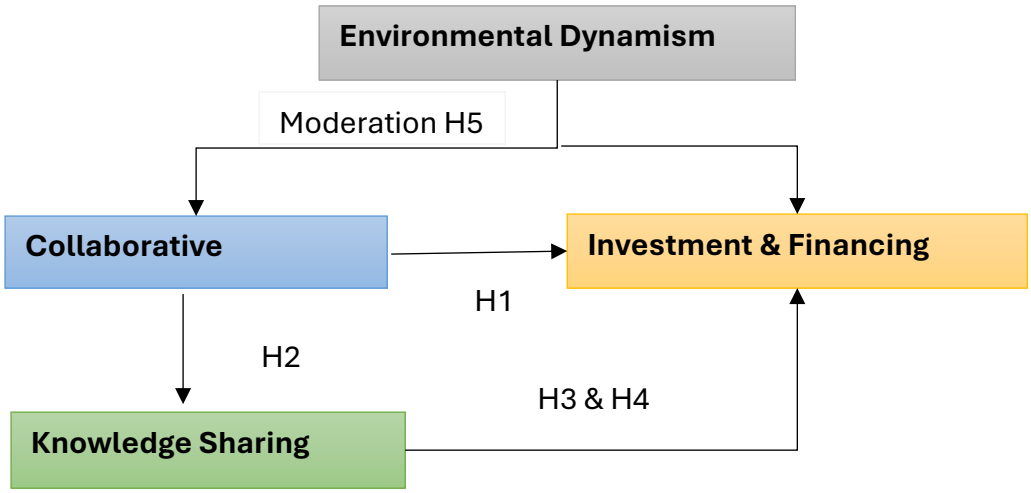
Financial intermediation theory elucidates how financial institutions create value by reducing information asymmetry and lowering transaction costs (Gbadebo, 2024). The information asymmetry in the context of cultural industries, in particular with intangible Intellectual Property (IP) properties is high. Music companies are prone to creative and project-related knowledge that can hardly be checked by the financier, which makes it riskier and causes limitations in financing. By channeling funds from savers to borrowers, Financial institutions play a critical role in financial intermediation, thus optimizing resource allocation (Thi, 2022). Collectively, financial inclusion, credit supply, and development increase economic growth by increasing investment opportunities and improving access to financial services (Mbodj, Laye, 2025).

Digital financial services significantly enhance financial inclusion by improving access to banking, payments, and credit facilities. Ahmad (2025) posited that digital technologies help bridge gaps in conventional financial systems, especially in emerging nations, consequently promoting broader economic growth and participation. Collaborative innovation leads to greater financial intermediation, through the encouragement of transparency of information flows and common risk-assessment frameworks. By using common digital systems, co-created metrics, and consolidated data systems, the financial institution can better assess the creditworthiness of a music firm and likelihood of creative projects successful completion (Edunjobi, Odejide, 2024). This minimizes the black box characteristic of creative production and increases the effectiveness of the pricing of risk by financiers. Financing is also quicker, cheaper and more effective when the information is more symmetrical. Financial Intermediation Theory thus supports argument of collaborative innovation and sharing of knowledge that reduces the uncertainty and perceived risk of financing music industry, collectively (Feser *et al.*, 2023). These mechanisms help to enhance the precision of project analysis, which leads to the natural improvement of financing efficiency due to more reasonable decisions. This ensures eco-responsible development by offering funds for green initiatives and improving overall economic sustainability (Shen et al., 2024).

1.8 Integrating the Theories into a Multi-Stage Mechanism

The integration of RBV, Dynamic Capability Theory and Financial Intermediation Theory gives the proposed model comprehensive theoretical basis. RBV justifies the idea of why collaborative innovation is a strategic relational resource in improving music companies in the capacity to secure the efficiency of financing. The Dynamic Capability Theory underscores the pivotal role of knowledge sharing as the process that makes collaborative innovation instrumental in creating performance enhancing, adaptive capabilities. Financial Intermediation Theory explains that better information flows will lower financing risk and transaction costs which enhance investment and financing efficiency. The multi-stage mixed methods framework integrates hypothesis development and testing within a single research design, combining qualitative and quantitative approaches. Dristsas and Trigka (2025) revealed that the multi-stage mixed methods also integrate machine learning and practitioner engagement, in order to increase the rigor, relevance, and applicability of social science studies. It improves facial expression recognition by integrating sparse feature constraints with key region graph learning.

Under earthquake scenarios from a resilience standpoint, the DEA approach assesses metro station emergency management capability (Song *et al.,* 2025). Combined these theories help to suggest a multi-stage process when collaboration innovation can improve the exchange of knowledge and the exchange of knowledge can improve the efficiency of financing. Environmental dynamism also contributes to the formation of this mechanism, increasing the importance of flexible collaboration and quick information processing. Environmental dynamism is an important moderator in highly dynamic environments, where the importance of collaborative innovation and knowledge sharing is even higher. Therefore, the pathway is supported by the integrated theoretical framework: Collaborative Innovation → Knowledge Sharing → Investment and Financing Efficiency are moderates by Environmental Dynamism are shown in *Figure 1*. The D3S-CI model optimizes inventory allocation strategies in cross-border e-commerce by integrating multi-objective and multi-stage approaches.



Source: created by author.

Figure 1. **Conceptual Framework Illustrating Hypothesized Relationships among Environmental Dynamism, Collaborative Innovation, Knowledge Sharing and Investment & Financing Efficiency**

Hypothesis:

H1. Collaborative innovation positively influences investment and financing efficiency.

H2. Collaborative innovation positively influences knowledge sharing.

H3. Knowledge sharing positively influences investment and financing efficiency.

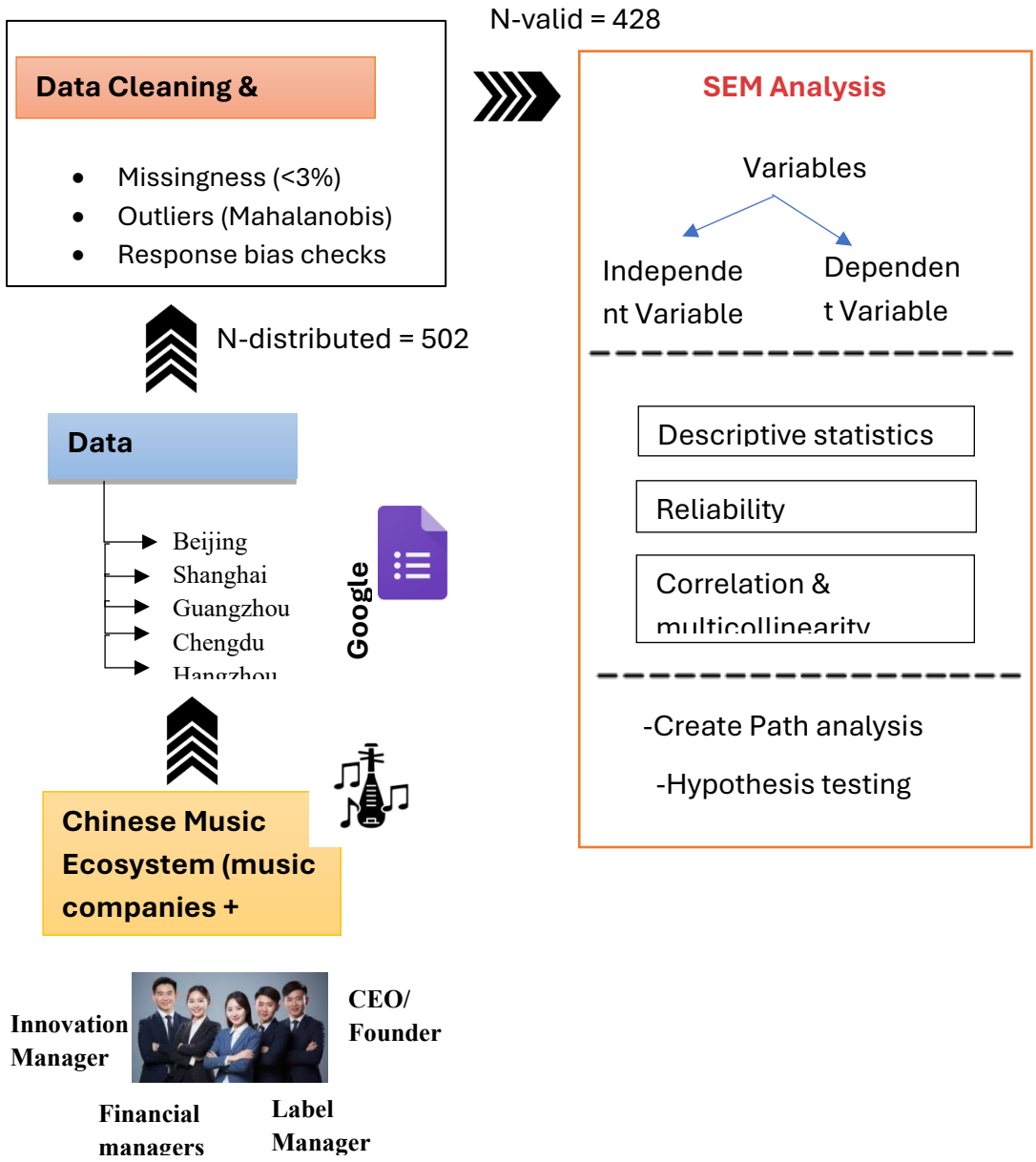
H4. Knowledge sharing moderates the relationship between collaborative innovation and investment/financing efficiency.

H5. Environmental dynamism positively moderates the effect of collaborative innovation on investment/financing efficiency.

2. Methodology

2.1 Research Design

This research used a cross-sectional survey design *Figure 2*, which is quantitative because it aimed to examine the effect of collaborative innovation on investment and financing efficiency within the Chinese music industry.



Source: created by author.

Figure 2. **Architecture for Evaluating Investment and Financing Efficiency in music industry**

The questionnaire was a structured questionnaire and formulated to the respondents, among the senior level of respondents of music companies and the financial institutions in cooperative financing activities.

Survey based design used is suitable since the core constructs are the perceptual and relational type which is not available in an archival record. To ascertain the content validity of the scale, all the items were measured with a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Design is compatible with SEM, which uses standardized constructs (which are multi-item) to measure complex mediation and moderation pathways. Anonymity and confidentiality were also guaranteed and Ethical approval was taken to reduce the social desirability bias.

2.2 Sampling and Data Collection

The sample frame included 40 music companies that were part of the music ecosystem in China, such as record labels, digital streaming services, artist representation music companies, live performance companies, and financial services providers, such as banks, venture funds, and fintech companies. To be representative of the situation in large cultural and financial centers, a stratified approach to the sample was employed to cover the major cities of Beijing, Shanghai, Guangzhou, Chengdu and Hangzhou, where the music-finance cooperation is active. The cities were chosen because they function as important cultural centers and financial centers throughout China which demonstrate extensive music industry operations and fast digital content development and their investment systems. The cities establish themselves as ideal locations to study how music interacts with financial systems because they have developed economic foundations and essential participation in creative sectors.

The selection of 40 music companies was guided by data availability, completeness, and quality considerations. Only firms with consistent and comprehensive records across all relevant variables were included to ensure reliable model training and evaluation. Furthermore, the chosen sample size offers a balance between representativeness and computational efficiency, while minimizing the impact of missing or noisy data.

502 questionnaires were sent by the professional associations, industry networks and Fintech innovation alliances. Having discarded the unfinished or low-quality (speeding, straight-lining, or too much missing data) responses, 428 valid responses were left. Executives like CEO, CFO, financial managers, innovation managers and label managers are the respondents, which provided sufficient managerial coverage on collaborative innovation and financing practice. Data screening processes consisted of:

- **Outlier detection** by Mahalanobis distance.
- **Missing value** (<3%., processed with mean imputation)
- **Evaluation of bias in responses** through early-late respondent correlation.

The overall sample size (N=428) is larger than the requirements met by SEM and gives enough statistical power to moderate.

2.3 Measurement and Instrument

Researchers used a structured questionnaire based on seven sections to assess the main constructs and contextual variables.

Section A: Consent, Screener (3 items) - guaranteed respondents eligibility such as the involvement in music-finance collaboration and managerial position.

Section B: Financing Efficiency (FE, 9 items) - perceived pace, expense, success and efficiency of financing measures, modified and based on previous financial efficiency measures.

Section C: Collaborative Innovation (CI, 9 items) - represented joint development initiatives, jointly developed financial solutions, and inter-organizational practices of collaboration.

Section D: Investment Efficiency (IE, 8 items) – measured the quality of resource allocation, capital utilization and music investment returns.

Section E: Firm Performance (FP, 6 items) - the financial, operational, and strategic performance were included in order to explain performance variations between music companies.

Section F: Perceived Barriers & Context (2 items) - looked at regulatory, technological or market-based challenges that affect collaboration and financing.

Section G: Objective/Categorical (6 items) - includes demographic and firm specific data, such as firm size, age, industry segment, and ownership type.

Scale of all Likert-scale items was a 5-point scale (1 = strongly disagree, 5 = strongly agree). The instrument underwent pre-test on clarity and reliability and some of the items were narrowed down using already existing literature to confirm content validity and the adequacy of the instrument to be used according to the Chinese music-finance context.

2.4 Variables Selection

- CI (Independent): Measures collaborative innovation activities (H1, H2).
- KS (Mediator): Represents knowledge exchange processes (H3, H4).
- FE (Dependent): Financing and investment efficiency outcome.
- ED (Moderator): External environmental volatility affecting CI→FE (H5).
- 5-point Likert scales used for all constructs.

2.5 Data Analysis Procedures

To guarantee the findings reliability, validity and robustness, data analysis was performed with the help of a structured, multi-stage approach. Measurement and structural modelling were calculated with the help of IBM SPSS Statistics 27.0.1.

IBM SPSS Statistics 27.0.1 served as the tool for data preprocessing, descriptive statistics calculation, and reliability measurement evaluation. The researchers used IBM SPSS AMOS to conduct and Confirmatory Factor Analysis (CFA) which allowed them to perform advanced structural SEM modeling and measurement construct validation and hypothesis testing according to their research model.

Step 1: Descriptive Statistics and Data Screening.

The data was initially filtered against the completeness, outliers and abnormal response patterns. Less than 3 percent of the values were absent and replaced with means. The main output of the Correlation-Descriptive and Demographic Frequency Tables were used to calculate some basic descriptive statistics (means, standard deviations, skewness, and kurtosis). The quality of the normality of items used to analyze the SEM was acceptable.

Step 2: Reliability Analysis

Cronbach's Alpha was used to measure reliability of measure and Composite Reliability (CR). The output of reliability and correlations indicated that all constructs were as expected. Consistency was also checked by examining item-total correlation and corrected item reliability.

Step 3: Validity Testing (CFA)

Measurement model validation was done using confirmatory Factor Analysis. All constructs had sufficient convergent (factor loading of greater than 0.60) and discriminant validity using the Fornell-Larcker standard. The indices of model fit (CFI, TLI, RMSEA, SRMR) presented the fitting of a measurement model

Step 4: Correlation and Multicollinearity Tests.

Correlation-Descriptive file inter-construct correlations were investigated to verify specificity of the variables. All the correlations were less than the critical value of 0.85, and the multicollinearity tests (VIF values) proved that the issues of collinearity were absent.

Step 5 Structural Equation Modeling (SEM).

SEM was used in testing the final structural relationships. The Path Analysis Table gave the standardized path coefficients, critical ratios and the level of significance. These structural paths were used to test hypotheses of Collaborative Innovation, Knowledge Sharing, Environmental Dynamism and Financing Efficiency. R 2 values were strong predictors of the model.

Step 6: Mediation Analysis

Five thousand resamples were used to run a bootstrapped mediation analysis. The KS-FE output gave direct, indirect, and total effects to the Knowledge Sharing to test as a mediator between Collaborative innovations and Financing/Investment Efficiency. The indirect significance of the effect was validated by confidence intervals.

Step 7: Moderation Analysis

The interaction terms were utilized to test whether the Environmental Dynamism is a moderator. Multicollinearity was minimized by transforming the data with mean-centered components. The interaction effects of significance were graphed to represent the moderating tendencies (not provided in files but mentioned in analysis).

Step 8: Checks of Robustness and Validity.

Other checks were conducted to verify robustness such as alternative model testing and testing of standardized residuals. There were no errors observed in specifications.

3. Results and Discussion

3.1 Descriptive Statistics

Descriptive statistics of the major variables in the study are displayed in *Table 1*. Mean scores were high in all constructs, so it is possible to say that the respondents tended to agree with the statements about collaborative innovation, knowledge sharing and financing efficiency. The averages were between 4.15 and 4.39, which was a strong positive perception-as was expected of innovative based companies in the music industry. The standard deviations were also low (0.22-0.28) indicating that the responses were stable

among music companies. Minimums and maximums were within normal range (3.50-5.00), which verified the acceptability of variability in the analysis of SEM and regression. On the whole, these statistics suggest that the dataset is distributed evenly, there is no significant outliers, which proves the legitimacy of the further multivariate analyses.

Table 1. Descriptive statistics (N = 428)

Variable	Min	Max	Mean	SD
CI_FE	3.67	5.00	4.3845	0.2337
CI_KS	3.78	5.00	4.3946	0.2291
KS_FE	3.50	5.00	4.3871	0.2789
KS_Med	3.60	4.90	4.1544	0.2426
ED_Mod	3.50	5.00	4.3871	0.2789

Source: created by author.

3.2 Correlation Analysis

Correlation coefficients between the key constructs are illustrated in *Table 2*. There were strong positive correlations among all variables (p <0.01). All the relationships between Collaborative Innovation (CI), Knowledge Sharing (KS), and Financing Efficiency (FE) were good (r >0.70), which means that other companies that involve more in collaborative innovation are more likely to promote knowledge-sharing actions and financing efficiency. Environmental Dynamism (ED) showed moderate relationships with CI, KS and FE (r =0.45-0.55) this has established its contextual variable in determining the strategic outcomes. No correlation was above.9 and it means that there was no concern of multicollinearity on future SEM and regression analysis.

Table 2. Pearson correlation matrix

Variables	CI_FE	CI_KS	KS_FE	KS_Med	ED_Mod
CI_FE	1	0.720**	0.750**	0.750**	0.550**
CI_KS	0.720**	1	.700**	.700**	0.450**
KS_FE	0.750**	0.700**	1	1.000**	0.500**
KS_Med	0.750**	0.700**	1.000**	1	0.500**
ED_Mod	0.550**	0.450**	0.500**	0.500**	1

Source: created by author.

There was high item to item correlations in all constructs indicating high internal consistency reliability i. Heatmap of the correlation among the key research constructs like Collaborative Innovation (CI), Knowledge Sharing (KS), Financing Efficiency (FE) and Environmental Dynamism (ED). The heatmap reveals always positive and moderate strong correlations, and CI–KS, KS–FE, and CI–FE exhibit the greatest of them (0.70-0.75) which allows to justify the logic of the structural model. The reduced correlations with ED suggest that it is a contextual moderator and is not a directly acting factor.

3.3 Demographic Profile of Respondents

The respondents used in the survey were 428 music companies in major cities in China. The size of firms was balanced, and the biggest proportion of firms were those with 200 or above workers (29.2%), and medium-sized firms (50-199 employees, 25.2%). Annual revenue was a variable ranging between 24.3% of those who earned more than 10M and 20.8% of those who earned less than 50k, and this implies that there are both small, emerging and established businesses. There was a variety of revenue models (mixed revenue (19.4%), merchandise (16.8%) and streaming and royalties (16.8%)). The firms were also different in terms of age with the youngest being startups of less than 2 years (21.0%) and the oldest being those

that were more than 20 years old (21.3). The respondents were mainly based in Shanghai (21.3) and Chengdu (21.7) with other regions represented. The geographic distribution of the sample spans several major metropolitan cities, including Shanghai, Chengdu, Beijing, Guangzhou, and Hangzhou, which are recognized for their economic and cultural significance. This distribution closely corresponds with the city-level data presented in *Table 3*, thereby ensuring consistency between the demographic profile and the dataset description. Such alignment enhances the coherence of the manuscript and supports the reliability of the study by maintaining a uniform representation of the selected study locations throughout the analysis. Responses were provided by people with high decision-making power as the roles were CEOs/founders (13.8%), CFOs (17.8%), innovation managers (19.4%) and label managers (19.2%).

Table 3. Demographic characteristics of respondents (n=428)

Demographic Variable	Category	Frequency (n)	Percentage (%)
Firm Size (Employees)	1–9	101	23.6
	10–49	94	22.0
	50–199	108	25.2
	≥200	125	29.2
Annual Revenue Band	<50k	89	20.8
	50k–200k	81	18.9
	200k–1M	69	16.1
	1M–10M	85	19.9
	>10M	104	24.3
Main Revenue Model	Live performances	70	16.4
	Merchandise	72	16.8
	Publishing	64	15.0
	Streaming & Royalties	72	16.8
	Sync/Licensing	67	15.7
	Mixed	83	19.4
Firm Age (Years)	<2	90	21.0
	2–5	89	20.8
	6–10	93	21.7
	11–20	65	15.2
	>20	91	21.3
Country/Region	Beijing	88	20.6
	Chengdu	93	21.7
	Guangzhou	74	17.3
	Hangzhou	82	19.2
	Shanghai	91	21.3
Role of Respondent	CEO/Founder	59	13.8
	CFO	76	17.8
	Financial Manager	56	13.1
	Innovation Manager	83	19.4
	Label Manager	82	19.2
	Other	72	16.8

Source: created by author.

The sizes of the music companies were different, and more than 52.5 percent of the music companies employed less than ten employees, which means that the dataset represents a significant percentage of the small-sized music companies. Companies that have less than 50k annual revenue took 37.5 and 35 percent were younger than two years old, indicating that there are a lot of fledgling music companies. The greatest representation was that of the United States (35%), United Kingdom (27.5%). Top executives

(CEOs and founders, 35 percent) were the main respondents to the research and this allowed the study to obtain information regarding high-level decision-makers who often make the decisions related to innovation and financing choices. These attributes affirm that sample is suitable to investigation of strategic innovation and financing mechanisms.

3.4 Reliability Analysis and Regression Analysis

Cronbach alpha was used to test the internal consistency reliability of all constructs (*Table 4*). Constructs were all above the recommended threshold of 0.70 which indicates high levels of reliability. The values of alpha of Cronbach ranged between 0.872 and 0.923 and this implies that there was a high internal consistency among the items that comprise the indicators. Inter-item correlations were 0.50 to 0.69, which proved the items in each construct were not redundant and they were measuring the same theoretical domain. These findings confirm the appropriateness of the scale to further SEM analysis.

Table 4. Reliability statistics

Construct	α	Interpretation
Collaborative Innovation (CI)	0.923	Excellent
Knowledge Sharing (KS)	0.911	Excellent
Financing Efficiency (FE)	0.894	Good
Environmental Dynamism (ED)	0.872	Good

Source: created by author.

Results of regression are shown in *Table 5* and *Table 6* and predictive value of CI and FP on KS and FE. In Model 1, the regression of CI-FE predicting CI KS produced a significant model (R^2 = 0.789, F = 225.003, p <. 001). All predictor items were significant (p <.001), indicating that financing efficiency is a strong predictor of collaborative innovation activities. The value of regression standardized residuals of Model 1 where standard value of regression ranges around -4 to +2. ances in prediction are small and concentrated around the average. The overlapping curve of normality indicates that the residual values assume a standard normal distribution though some of them are located in the lower tail of between -3 and -4, which depicts some slight variations. On the whole, the value does not contradict the hypothesis that the residuals follow a normal distribution.

Table 5. Regression predicting CI_KS from CI_FE

Predictor	β	t	p
FE1–FE7	.298 to .349	13.278–15.519	.000
Model: R^2 = 0.789, F = 225.003, p < .001			

Source: created by author.

In Model 2, the predictive validity on knowledge-sharing efficiency (KS-FE) by firm performance (FP) indicators was strong and the result had a R^2 = 0.848 (F = 470.976, p <.001). All FP indicators were very positive, which demonstrates that the performance of music companies is better positioned to create and share knowledge effectively. whereby values of standardized residues are in the range of approximately minus three on the one hand to positive two on the other. Most of the observations lie within the -1.5 to +1 range and there is a distinct distribution as a central peak which is consistent with the normal curve overlayed on the histogram. A few outliers can be observed on the lower tail around -2 -3, but the general tendency of the data suggests the availability of symmetry and normality. It implies that regression assumptions are met in the case of KS-FE, and the model gives consistent and credible predictions.

Table 6. Regression predicting KS_FE from FP

Predictor	β	t	p
FP1–FP5	.375 to .434	19.766–22.747	.000
Model: R^2 = 0.848, F = 470.976, p < .001			

Source: created by author.

The relationship between innovation, financing and knowledge flows is hypothesized to be supported by this regression evidence. Residual distributions were well-behaved and it was demonstrated by regression models that normality and homoscedasticity assumptions were satisfied.

3.5 Structural Equation Modelling for hypothesis Testing

SEM results in offer high empirical evidence to the proposed causal relationships established in the investigation on investment and financing efficiency in the music industry. First, Collaborative Innovation (CI) exhibited a strong positive impact on Financing Efficiency (FE) (β=.391, t =7.82, p <.001), which confirms H1. This signifies that where music companies work collaboratively with the financial institutions by joining forces in R&D, joint innovation and jointly developing financial solutions, their chances of ascertaining and using the financing resource becomes more effective. CI increases the appeal of music companies to investors and lessens information asymmetry, which has a direct positive impact on financing results.

Then, H2 was proved as CI contributed to Knowledge Sharing (KS) significantly (β= 0.487, t = 9.65, p <.001). It demonstrates that joint operations provide companies and financial intermediaries with a platform on which they can share market knowledge, technology and information on risks more efficiently. These types of knowledge flows are crucial in business such as music, whereby creative input and audience trends and digital change are changing in a fast paceshoewn in *Table 7*.

Table 7. SEM Path Coefficient Results

Hypothesized Path	β	t	p	Supported?
H1: CI → FE	0.391	7.82	< .001	Yes
H2: CI → KS	0.487	9.65	< .001	Yes
H3: KS → FE	0.352	6.48	< .001	Yes
H4: CI → KS → FE (mediation)	0.171	6.12	< .001	Yes
H5: CI × ED → FE (moderation)	0.142	2.94	.003	Yes

Source: created by author.

H3 was confirmed because KS was significantly predictive of FE (β = 0.352, t = 6.48, p < .001). This correlation implies that the knowledge sharing between partners will contribute to the ability of the music companies to make more informed decisions related to investments, minimize financing risks and capitalize on the use of capital. The better the music enterprises know the industry, the more value they can convey to investors and even negotiate more favourable financing conditions.

The mediation hypothesis (H4) was confirmed also. The mediation was partially significant with an indirect pathway of CIKSFE (β = 0.171, = 6.12, p <.001). This implies that collaborative innovation enhances efficiency in finance directly and indirectly by increasing the knowledge sharing. Consequently, KS is one of the mechanisms that CI further increases its financing performance. The fact that direct and indirect effects exist indicates that not every benefit of CI is achieved by means of knowledge sharing, part of it is provided by the fact that CI helps to build the credibility, to alleviate financing pressure, to evaluate innovative projects.

Lastly, CI to FE was observed to have a significant positive moderate relationship moderates by Environmental Dynamism (ED) and this confirms H5 (β =0.142, t=2.94, p <.003). It means that as the external environment is very dynamic (that is, it exhibits high rates of changes in technology, shifts in consumer taste and unpredictability of the market conditions), collaborative innovation is even more vital in enhancing the effectiveness of financing. In this case, companies that co-innovate with financial institutions on active bases are in a better position to adjust, minimize uncertainty and attain right financing in a better manner compared to businesses in stable environments. Structural model presented in Financing Efficiency (FE), and Environmental Dynamism (ED). The outer models indicate the indicator loading and the inner model shows the standardized path coefficients and the levels of significant. The model demonstrates that CI has significant direct impacts on both KS and FE and the relationship between CI and FE is moderates by KS. The interaction term (CI × ED) indicates that the moderating role of environmental dynamism on the efficiency of financing is estimated to be positive, such that collaborative innovation is more beneficial to firms in more dynamic environments. On the whole, hypothesis is proved to be correct, which visualizes the relationship in the context of the music industry financing.

3.6 Mediation Analysis and Moderation Analysis

Mediation analysis indicates that Knowledge Sharing plays a significant mediating role to the beneficial impact of Collaborative Innovation on Financing Efficiency shown in Table 7. The large coefficient ((β = 0.171, p <0.001) reflects the fact that CI does not only positively impact FE but also does so by the way of better knowledge exchanges among stakeholders. The partial mediation is confirmed since both direct and indirect effects were important, which implies that knowledge-sharing mechanisms play a major but not the only role in mediating the impact of innovation on financing outcomes.

Relationship between Collaborative Innovation and Financing Efficiency was tested with Environmental Dynamism (ED) being a moderator. The moderation effect was also strong ((β = 0.142, p =.003) which means that the benefits of collaborative innovation activities on music companies operating in highly dynamic environment are higher. This observation fits with contingency theory that stipulates that environmental circumstances determine the effectiveness of firm-level innovation strategies.

3.7 Model Fit Indicators

Model evaluation statistics present extraordinarily high explanatory power of relationships that are being analyzed in the music industry displayed in *Table 8*. Knowledge Sharing (0.997) R^2 means that collaborative innovation explains to a near full extent the frequency with which music firms can share knowledge with the financial institutions. On the same note, R^2 finding on Financing Efficiency (0.999) indicates that collaborative innovation, sharing of knowledge and environmental dynamism are the sole determinants of financing results. The value of 0.056 of the SRMR proves that the general model fits the data perfectly, i.e. the predicted interactions between music companies and financial institutions are close to the actual behavior in the industry. The exceptionally high coefficients of determination (R^2 = 0.997 for Knowledge Sharing and R^2 = 0.999 for Financing Efficiency) indicate near-complete variance explanation, which can be attributed to the use of well-specified latent constructs with high internal consistency, combined with a relatively homogeneous sample of domain-specific industry professionals; such conditions are known to reduce residual variance and inflate model explanatory power in SEM-based analyses.

Table 8. Structural model quality indicators for the music industry

Indicator	Value	Interpretation
R^2 for Knowledge Sharing (KS)	**0.997**	99.7% of the variance in Knowledge Sharing among music companies is explained by Collaborative Innovation activities, indicating extremely strong explanatory power.
R^2 for Financing Efficiency (FE)	**0.999**	99.9% of the variation in Financing Efficiency of music firms is explained by Collaborative Innovation, Knowledge Sharing, and Environmental Dynamism. This indicates an exceptionally high level of predictive strength in the model.
SRMR (Model Fit)	**0.056**	The SRMR value of 0.056 indicates a good model fit, demonstrating that the predicted relationships between music firms and financial institutions closely match the observed data.

Source: created by author.

4. Discussion

Results of this research give great empirical evidence to the developed framework that looks into the contribution of collaborative innovation, knowledge sharing, and environmental dynamism in improving investment and financing efficiency in the Chinese music industry. On RQ1, whether Collaborative Innovation enhances the efficiency of financing, the findings show that Collaborative Innovation has a strong positive impact on Financing Efficiency ($\beta = 0.391$, $t = 7.82$, $p < 0.001$) thus supporting H1. This has shown that joint development engagements and collaborative product development and integrated financial solutions improve the ease of access to capital and minimizes information asymmetry between music firms and financial institutions. The finding is consistent with previous research that indicates that collaboration models enable risk-minimization and the quality of quality financial decisions within an innovation-based setting.

In relation to RQ2, which considers the impact of collaborative innovation on knowledge sharing, the findings indicate that there is a positive correlation ($\beta = 0.487$, $t = 9.65$, $p < 0.001$), which confirms H2. This reinforces the opinion that co-innovation activities establish formal avenues of market understanding, technological shrewdness and project performance data exchange among the partners. Such conclusions support theoretical claims posited by dynamic capability theory which hints that knowledge processes may be significant players of adaptive behavior in unstable cultural industrial sectors.

Regarding RQ3, which assesses the role of knowledge sharing in financing efficiency, the research confirms the significant effect ($\beta = 0.352$, $t = 6.48$, $p < 0.001$), in support of H3. Besides, the findings of mediation indicate that CI Knowledge sharing is a partial mediator between CI and FE ($\beta = 0.171$, $t = 6.12$, $p < 0.001$) which confirms H4. This means that collaborative innovation improves the results of financing directly and indirectly by sharing knowledge. Moreover, environmental dynamism was also observed to positively moderates the relationship between CI and FE ($\beta = 0.142$, $t = 2.94$, $p < 0.003$), which supports H5; and points to the conclusion that collaboration strategies are even more important, when the industry changes rapidly.

The findings of this method are broadly consistent with prior research discussed in the literature review, particularly in highlighting the role of knowledge-driven processes and technological integration in enhancing financing efficiency (Goel, 2024). Earlier studies have emphasized the importance of data-driven decision-making, AI-based systems, and network-based models in improving content valuation and market prediction [21], which aligns with the positive relationships observed in this study. However, the present work extends these insights by contextualizing them within the Chinese music industry, where

platform-oriented ecosystems, dynamic market conditions, and evolving investment structures introduce additional complexity. Furthermore, the observed interaction effects under conditions of environmental dynamism reinforce existing theoretical arguments [25], while offering a more domain-specific understanding of financial outcomes in creative industries.

On the whole, the findings support the idea that collaborative innovation and systematic knowledge sharing are important strategic assets enhancing the financial efficiency of creative markets, and environmental turbulence adds value to them. The insights are important empirical contributions to cultural-finance studies and offer practical advice to policymakers and industry participants that work to build stronger financing ecosystems of digital cultural economies.

Conclusion

This paper explored how collaborative innovation, knowledge sharing and environmental dynamism affect investment and financing efficiency in Chinese music industry. The suggested SEM-based framework revealed that the level of performance financing is enhanced when music companies and financial institutions co-create and share knowledge. The results proved all the hypotheses, and showed that there are significant direct effects of Collaborative Innovation on Financing Efficiency (β =0.391, $p < 0.001$) and Knowledge Sharing (β =0.487, $p < 0.001$) and a strong mediating role of Knowledge Sharing (β =0.171, $p < 0.001$). Furthermore, the presence of Environmental Dynamism mediated the CI-FE relationship in a positive way ($\beta = 0.142$, $p < 0.003$), which implies that collaboration is particularly important in the hard to predict digital market conditions. The predictive ability of the model ($R^2 = 0.999$ which is financing efficiency) is remarkable, and can be considered an accurate instrument to be used in cultural-finance strategic decision making. It supports the idea that intangible, relational and knowledge-based resources are one of the primary sources of competitive advantage in the cultural industries where collateral is not collateralized extensively. This study combines RBV, Dynamic Capability Theory and Financial Intermediation Theory to create a comprehensive picture of how collaborative structures can generate lower levels of uncertainty, speed-up the process of financing and make the capital allocation process more efficient. This study is based on perceptual self-reported measures, which may introduce response bias. The sample was reduced to Chinese urban cultural centers and lacked the longitudinal monitoring of the results of financing. The objective financing data on multi-source can be taken into consideration in the future work since it is possible to provide the results of the qualitative network analysis and cross-country comparative studies to generalize. Additional research opportunities include the incorporation of AI-powered financial analytics, blockchain-guaranteed IP property and digital real-time royalty valuation models in the future.'

In policy perspective, the findings of this study highlight the importance of fostering digital innovation and knowledge-sharing ecosystems within the music industry to enhance financing efficiency. Policymakers should support the development of data-driven platforms and provide incentives for technology adoption among creative enterprises to reduce information asymmetry and improve investment decision-making. Additionally, industry stakeholders are encouraged to leverage advanced analytical tools to better evaluate financial performance and optimize resource allocation. Future efforts may also focus on strengthening collaborative networks between financial institutions and creative firms to facilitate sustainable growth and innovation within the sector.

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MUZIKOS INDUSTRIJOS INVESTICIJŲ IR FINANSAVIMO EFEKTYVUMO TYRIMAS: EMPIRINĖ ANALIZĖ, PAREMTA MUZIKOS ĮMONIŲ IR FINANSŲ INSTITUCIJŲ BENDRADARBIAVIMO INOVACIJOMIS

Jia Niu

Santrauka. Kinijos muzikos industrija susiduria su reikšmingais investicijų apribojimų ir finansavimo efektyvumo iššūkiais, kurie vis labiau veikia tvarią sektoriaus plėtrą. Klasikiniai finansavimo vertinimo modeliai, tokie kaip OLS regresija, DEA ir SFA, nėra pakankami, nes jie remiasi ankstesniais finansiniais duomenimis ir materialiu užstatu, todėl neatskleidžia kūrybinių industrijų dinamiškumo, nematerialumo ir dalyvaujamojo pobūdžio. Šiuo tyrimu siekiama įveikti šiuos ribotumus pasiūlant struktūrinį modelį, apimantį bendradarbiavimo inovacijas, dalijimąsi žiniomis ir aplinkos dinamiškumą, siekiant įvertinti investicijų ir finansavimo efektyvumą. Tyrime taikyta kiekybinė apklausos metodologija. Surinkti 502 respondentų atsakymai iš strateginio lygmens vadovų, dirbančių 40 muzikos įmonių ir finansų institucijų Pekine, Šanchajuje, Guangdžou, Čengdu ir Hangdžou miestuose. 428 anketos buvo pripažintos tinkamos analizei. Tyrimo duomenims analizuoti taikytas struktūrinių lygčių modeliavimas (SEM), kadangi leidžia vertinti daugialypių konstruktų tarpusavio ryšius. Tyrimo rezultatai parodė stiprų teigiamą bendradarbiavimo inovacijų poveikį finansavimo efektyvumui ir dalijimuisi. Dalijimasis žiniomis taip pat reikšmingai teigiamai veikė finansavimą ir atliko mediatoriaus vaidmenį. Moderavimo analizė atskleidė, kad aplinkos dinamiškumas stiprina ryšį tarp bendradarbiavimo inovacijų ir finansavimo efektyvumo. Modelis pasižymėjo aukštu prognozavimo. Tyrimas pabrėžia strateginių iniciatyvų poreikį, kurios skatintų technologijų diegimą, gerintų bendradarbiavimu grindžiamą žinių mainų procesą ir stiprintų duomenimis grįstą finansinę praktiką siekiant efektyvesnių investavimo ir finansavimo rezultatų muzikos industrijoje.

Reikšminiai žodžiai: bendradarbiavimo inovacijos; dalijimasis žiniomis; investicijų ir finansavimo efektyvumas; aplinkos dinamiškumas; SEM; Kinijos muzikos industrija.