KMAN PUBLISHING INSTITUTE

Article history:
Received 10 December 2025
Revised 20 February 2026
Accepted 16 March 2026
Published online 01 November 2026

Journal of Resource Management and Decision Engineering

Volume 5, Issue 6, pp 1-18



Identifying Government Economic Policies to Support Innovation in Creative Industries Using the Delphi Method

Amin. Mahdavi[1], Rouhollah. Shahnazi[2*], Ahmad. Sadraei Javaheri[3], Parviz. Rostamzadeh[4]

[1] PhD Student, Department of Economics, Faculty of Economics, Management and Social Sciences, Shiraz University, Shiraz, Iran
[2] Professor, Department of Economics, Faculty of Economics, Management and Social Sciences, Shiraz University, Shiraz, Iran
[3] Associate Professor, Department of Economics, Faculty of Economics, Management and Social Sciences, Shiraz University, Shiraz, Iran
[4] Assistant Professor, Department of Economics, Faculty of Economics, Management and Social Sciences, Shiraz University, Shiraz, Iran

*** Corresponding author email address**: rshahnazi@shirazu.ac.ir

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Mahdavi, A., Shahnazi, R., Sadraei Javaheri, A., & Rostamzadeh, P. (2026). Identifying Government Economic Policies to Support Innovation in Creative Industries Using the Delphi Method. *Journal of Resource Management and Decision Engineering*, *5*(6), 1-18.
https://doi.org/10.61838/kman.jrmde.271

© 2026 the authors. Published by KMAN Publication Inc. (KMANPUB). This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

A B S T R A C T

Creative industries are recognized as a driving force of the knowledge-based economy and a significant source of employment and value added in the contemporary world. However, fully realizing the innovative potential of these industries requires a coordinated and supportive government policy framework. In Iran, despite the emphasis placed by high-level policy documents on the development of the creative economy, the absence of an operational and systematic roadmap for supportive economic policies—particularly those focusing on financial instruments, market development, intellectual property rights, and ecosystem development—constitutes a significant research and implementation gap. This deficiency has resulted in fragmented activities, inadequate returns on investment, and the incomplete realization of the innovation potential of this sector. Accordingly, the present study aims to identify, categorize, and prioritize effective government economic policies through the Delphi method and expert participation, thereby proposing a systematic framework that can serve as a basis for developing operational strategies and effective policymaking, facilitating interactions between government institutions and creative-industry actors, and ultimately accelerating innovation- and creativity-driven economic development in the country. Accordingly, this study employs the Delphi method to identify and validate effective government economic policies for supporting innovation in creative industries. With the participation of 10 experts and through several rounds of evaluation, 55 initial components were refined into 29 final policy instruments classified into six overarching domains. The prioritized policy domains were financial and investment policies (e.g., tax incentives and venture capital), market development and competitiveness (e.g., support for start-ups), networking and ecosystem development (e.g., innovation centers), legal and institutional frameworks for intellectual property, creative human capital development, and science and technology policies. The reliability of the results was confirmed using statistical indicators of agreement among the expert panel. The findings emphasize the multidimensional nature of innovation support and the necessity of integrated and coherent government policy intervention to strengthen innovation in the creative sector.

Keywords: *innovation policies, creative industries, government support, Delphi method, ecosystem development.*

1. Introduction

Creative industries have become a strategic component of contemporary knowledge-based economies because they transform creativity, cultural content, symbolic value, design capabilities, and intellectual assets into economically and socially valuable products and services. Their importance extends beyond cultural production to employment creation, entrepreneurship, exports, urban development, digital markets, and the emergence of new business models. The growing convergence between the knowledge-based economy and the creative economy has consequently placed creativity and innovation at the center of economic development strategies (Ashtari & Mahdinejad, 2016). Creative industries are distinctive because substantial innovation within these sectors takes place outside conventional formal research and development (R&D) structures, meaning that traditional industrial measures of R&D may not adequately capture their innovative activities (Cunningham et al., 2004). This characteristic complicates the design of appropriate public interventions, although innovation within creative industries can contribute significantly to competitiveness and economic performance (Bae & Yoo, 2015; Hausman & Johnston, 2014). At the macroeconomic level, innovation is closely associated with productivity and economic growth, while international innovation assessments increasingly regard institutions, knowledge creation, market sophistication, and creative outputs as interconnected components of national innovation capacity (Dutta et al., 2019; Maradana et al., 2019).

Innovation policy has accordingly evolved from a narrow focus on correcting underinvestment in R&D toward broader attention to innovation systems, institutional coordination, market formation, and transformative change. Contemporary definitions of innovation encompass new or significantly improved products and business processes and emphasize the systematic measurement of innovation activities across different organizational settings (Oecd & Eurostat, 2018). Governments intervene in innovation processes because knowledge spillovers, financing constraints, uncertainty, coordination failures, capability deficits, and other market and system failures may cause private investment in innovation to remain below socially desirable levels (Jaumotte & Pain, 2005; Mani, 2004). Innovation-policy scholarship has therefore distinguished among R&D-oriented approaches, innovation-system approaches, and transformative frameworks aimed at redirecting innovation toward broader economic and societal challenges (Fartash et al., 2021; Schot & Steinmueller, 2018). Innovation policy is consequently better understood as a portfolio of complementary instruments operating through finance, demand, institutions, skills, networks, regulation, and markets rather than as an isolated subsidy or technology program (Edler & Fagerberg, 2017; Goolsbee & Jones, 2020). Policy toolkits likewise demonstrate the potential roles of tax incentives, direct research support, competition policy, and human-capital interventions in promoting innovation (Bloom et al., 2019).

This multidimensional perspective is particularly relevant to creative industries. Creative enterprises frequently depend on intangible assets, specialized talent, intellectual property, project-based production, networks, reputation, and rapidly changing consumer preferences. The development of global creative industries has therefore involved increasingly complex interactions among culture, technology, markets, regulation, and intellectual property (Flew, 2013). Digital transformation has further changed value creation and value capture through platform-based distribution, data-intensive customer relationships, scalable digital products, and new configurations of creative business models (Landoni et al., 2020; Li, 2020). Emerging technologies such as blockchain may create additional opportunities for authentication, ownership, transactions, and rights management in creative markets (Malik et al., 2023). At the same time, the COVID-19 pandemic revealed the vulnerability of creative industries to disruptions in physical venues, consumer demand, financing, and employment while accelerating the shift toward digital modes of production and distribution (Khlystova et al., 2022). This experience reinforced the importance of policies designed to create a more resilient creative sector (Unesco, 2020). Furthermore, innovation increasingly intersects with sustainability and circular-economy transitions (Suchek et al., 2021), while differences between incremental and radical innovation indicate that firms operating under different institutional conditions may require different forms of support (Sufyan et al., 2024).

Government intervention can affect innovation from initial knowledge creation and capability development to commercialization, diffusion, and market expansion. Evidence indicates that governments can become embedded in innovation processes through financing, coordination, regulation, infrastructure development, procurement, and the orchestration of relationships among public and private actors (Meng et al., 2023). Such interventions may also generate positive externalities extending beyond directly supported organizations by improving the wider innovation

environment (He et al., 2023). Direct government funding can reduce resource constraints and facilitate research and innovation activities, particularly where projects involve high levels of uncertainty (Fu, 2022). Nevertheless, policy effectiveness depends on instrument design, implementation capacity, institutional context, and the correspondence between policy instruments and the barriers encountered by innovative organizations (Patanakul & Pinto, 2014; Zuniga, 2023). Public policies must also take account of firm size, resource limitations, and changing economic conditions (Silva et al., 2019). In Iran, previous research has similarly demonstrated the relevance of government entrepreneurship policies, public institutions, and policy interventions to innovative performance, innovation-based growth, and the internationalization of innovative enterprises (Ghazi Nouri et al., 2020; Hosseinpour & Moradi, 2021; Karamipour et al., 2015; Keykha-ye Farzaneh & Tash, 2023; Omidi et al., 2019).

Financial and investment policies constitute one of the principal pillars of public innovation support because innovation involves uncertainty, delayed returns, and intangible assets that may be difficult to finance through conventional mechanisms. Innovation-policy frameworks therefore incorporate instruments such as grants, subsidized credit, guarantees, tax incentives, venture capital, and support for developing firm capabilities (Cirera et al., 2020). Comparative evidence also shows considerable variation in the configuration of innovation and technology policies according to countries' institutional conditions and stages of development (Li et al., 2017; Wamae, 2006). Regional policy experience further suggests that financial instruments need to be coordinated within broader innovation systems rather than implemented independently (Ma et al., 2016). Innovation outcomes also respond to the wider economic environment: imports can alter firms' incentives and opportunities to innovate, exchange-rate conditions can affect R&D activity, and foreign direct investment may interact with regional and environmental conditions in shaping innovation (Chen, 2017; Chen et al., 2017; Feng et al., 2019). Government financial support should therefore form part of a coherent policy mix encompassing investment, trade, competition, and technological development.

Market development and demand-side policies are equally important because innovations cannot generate sustained economic value unless firms can reach consumers, validate new products, scale demand, and access suitable markets. Demand-side innovation policies include public procurement, standards, regulations, and other instruments through which governments influence the adoption and diffusion of innovative products (Oecd, 2011). Innovation-oriented public procurement is particularly relevant because government purchasing can create initial markets for innovative products and reduce commercialization uncertainty (Narimani et al., 2019). The importance of demand conditions is also evident in adjacent cultural and tourism markets, where consumption patterns respond to economic, destination-specific, and behavioral factors (Aslan et al., 2008; Bel et al., 2015; Brida et al., 2013; Chasapopoulos et al., 2014; Doswell, 2009). Research examining determinants of demand likewise underscores the importance of understanding the conditions governing market uptake (Han & Lee, 2017). For creative industries, innovation policy should therefore address not only the production of creative goods and services but also marketing, exports, market access, competition, procurement, and mechanisms that stimulate demand.

Networking and ecosystem development constitute another central policy domain because creative innovation is rarely produced by firms operating in isolation. Instead, it frequently depends on relationships among enterprises, universities, research institutions, government organizations, investors, intermediaries, professional associations, and users. Open-innovation approaches emphasize purposive knowledge flows across organizational boundaries and the importance of policy arrangements that facilitate such collaboration (De Jong et al., 2008). Iranian studies have similarly highlighted the organizational foundations of open innovation and the policies required to encourage interorganizational knowledge exchange (Hashemi, 2020; Siadati & Afshari Mofrad, 2019). Open government data can also contribute to an innovation-oriented environment when appropriate institutional and organizational capacities exist (Saraei et al., 2022). Consequently, innovation centers, accelerators, science and technology parks, clusters, collaborative networks, and international partnerships should be regarded not merely as infrastructure but as mechanisms for reducing coordination costs, circulating knowledge, and connecting creative enterprises with complementary resources.

The quality of innovation ecosystems is also closely connected to human capital, organizational culture, and the spatial environment. An organizational culture supportive of innovation can facilitate the conversion of ideas and knowledge into competitive advantage (Aghileh & Fadaei, 2019), while creative-city perspectives emphasize the role of

place, cultural resources, networks, and urban environments in attracting and mobilizing creative activity (Meshkini et al., 2014). Demographic and structural conditions can likewise influence innovation performance (Khani & Nasrollahi, 2014). Sectoral evidence from Iran indicates that technological capabilities, government policies, and market structures may co-evolve, implying that effective innovation policies must adapt to changes in firms and markets rather than remain static (Safdari Ranjbar et al., 2018). Futures studies can contribute to science, technology, and innovation policymaking by enabling decision makers to anticipate emerging challenges and alternative trajectories (Kowsari & Sadat Rahmati, 2019), while scenario-based approaches provide a structured means of evaluating development alternatives under uncertainty (Mollazadeh Yamchi et al., 2022). Such capabilities are particularly important in creative industries because technological change and shifting patterns of cultural consumption can rapidly transform skill requirements and business opportunities.

Legal and institutional arrangements provide another foundation for creative-industry innovation. Because creative output relies heavily on intangible assets, predictable intellectual property rules and appropriate protection mechanisms can affect incentives to create, invest, distribute, and collaborate. At the same time, economic analysis of government legal intervention emphasizes that intervention should be grounded in an understanding of market efficiency and market failure (Tusi & Kashani, 2019). Intellectual property protection, copyright arrangements, digital security, regulatory frameworks, and mechanisms for protecting creative works must therefore be balanced against competition, knowledge diffusion, and technological development. Comparative evidence concerning government policy and the dynamic development of creative industries also shows that policy effects change alongside industry structures and technological trajectories (Liu, 2021). This highlights the importance of adaptive legal and institutional frameworks rather than fragmented or static regulatory measures.

These policy domains are strongly interdependent. Financial assistance may have limited impact where firms lack skilled human resources; highly qualified creative talent may migrate when financing and market opportunities are inadequate; strong intellectual property protection alone cannot generate innovation without knowledge creation and commercialization capabilities; and research infrastructure may remain underutilized when connections among universities, firms, markets, and government institutions are weak. The core policy challenge is therefore one of coordination and policy-mix design. Government support for creative-industry innovation should simultaneously address resource constraints, market creation, institutional quality, ecosystem connectivity, knowledge and technology infrastructure, and talent development. This systemic interpretation is consistent with the movement of innovation policy away from isolated interventions toward combinations of mutually reinforcing instruments (Edler & Fagerberg, 2017; Schot & Steinmueller, 2018).

For Iran, developing such an integrated framework is particularly important. Although previous studies have examined government intervention, innovation systems, entrepreneurship, knowledge-based enterprises, open innovation, technological capabilities, and related policy instruments, the available evidence remains dispersed across policy domains and industrial contexts. The challenge is therefore not merely to establish whether government support is necessary, but to determine which specific economic-policy dimensions should constitute an integrated framework for creative industries and how these dimensions should be prioritized. Policy design in this area also requires consideration of institutional and managerial decision-making processes, particularly because multiple criteria and stakeholder judgments must often be reconciled when resources are limited (Bashiri et al., 2015).

Under such conditions, structured expert-consensus methods provide a suitable approach for consolidating fragmented evidence and contextual knowledge. The Delphi method enables expert judgments to be elicited, reviewed, and progressively refined through successive rounds and is particularly useful when the subject is multidimensional and a definitive empirical framework has not yet been established. Delphi-based approaches have been employed to identify complex factors in knowledge-based innovation and other management and policy settings (Aboufazaeli et al., 2022; Farshbaf Maherian & Lalianpour, 2016; Vali Bahraini & Khayat Moghadam, 2015). More broadly, systematic research procedures, appropriate sampling, structured data collection, and validity assessment strengthen the methodological rigor of applied management research (Sarmad et al., 2018). Combining documentary evidence with expert judgment can therefore transform a broad inventory of potential interventions into a context-sensitive framework in which overlapping policy instruments are consolidated and the most relevant dimensions are validated and prioritized.

Accordingly, the aim of the present study is to identify, categorize, validate, and prioritize government economic policies for supporting innovation in creative industries using the Delphi method.

2. Methods and Materials

In terms of purpose, the present study is applied research because its findings can be directly used to identify and make practical government decisions aimed at supporting innovation in creative industries. In terms of implementation method, the study is descriptive and employs both qualitative and quantitative approaches. Its principal objective is to identify government economic policies for supporting innovation in creative industries.

2.1. Data Collection Instruments

In the library-based phase, documentary research and a systematic review of the literature were used to extract the theoretical foundations. In the fieldwork phase, the primary data collection instruments consisted of semi-structured interviews in the first round and a researcher-developed questionnaire in subsequent Delphi rounds. The questionnaires were designed using a five-point Likert scale ranging from *completely unimportant* to *completely important* (Sarmad et al., 2019; Vali Bahraini & Khayat Moghaddam, 2015).

2.2. Study Population and Sampling

The study population consisted of scholars, experts, and specialists in creative industries and innovation, as well as government policymakers. Sampling was conducted purposively using a combination of judgmental and snowball sampling methods. Initially, judgmental sampling was used to select the first members of the expert panel; subsequently, chain-referral sampling was employed, whereby these participants introduced other relevant specialists.

The sample size was set at 10 participants for the qualitative phase (interviews) and 12 participants for the quantitative phase (Delphi questionnaire); 10 experts ultimately participated in completing the questionnaires during the Delphi rounds. The criteria for selecting members of the expert panel included university faculty membership in relevant fields, managerial experience in innovation and creative industries, scientific publications related to the research topic, and practical experience in relevant policymaking.

2.3. Screening and Selection of Indicators

In this study, the Delphi method was employed to identify and screen the most important indicators and dimensions of economic policies. The Delphi method is a structured process for collecting data from experts and achieving consensus among their judgments. The use of the Delphi method is appropriate when integrated knowledge concerning a particular subject is lacking and the objective is to improve understanding of the problem, opportunities, and potential solutions. For the selection and confirmation of indicators and dimensions, a mean score greater than 3.5 was considered acceptable. In addition, a difference of less than 0.5 between the mean scores of two successive rounds and an increasing trend in Kendall's coefficient of concordance across successive rounds were considered criteria for consensus.

2.4. Validity and Reliability

To enhance the validity of the study, participants were selected who possessed sufficient expertise, willingness, and motivation in the relevant field. In addition, conducting multiple Delphi rounds facilitated convergence among expert opinions. The Content Validity Ratio (CVR) was used to assess content validity, while Kendall's coefficient of concordance was employed to assess reliability and the degree of consensus among experts. This coefficient ranges from zero to one, with a value of one indicating complete agreement. The stopping criterion for the Delphi rounds was the achievement of stability in Kendall's coefficient of concordance across two successive rounds.

To assess the content validity of the questionnaire, the Content Validity Ratio (CVR) was used. Ten experts were asked to evaluate each item using a three-point scale consisting of *essential*, *useful but not essential*, and *not essential*. Based on Lawshe's (1975) table, the minimum acceptable CVR for 10 experts was set at 0.62. Of the 35 initial items, 30 had significant CVR values, indicating satisfactory content validity of the questionnaire.

2.5. Research Procedure

The research procedure began with an extensive review of library and documentary sources to extract the theoretical foundations and develop the initial policy framework.

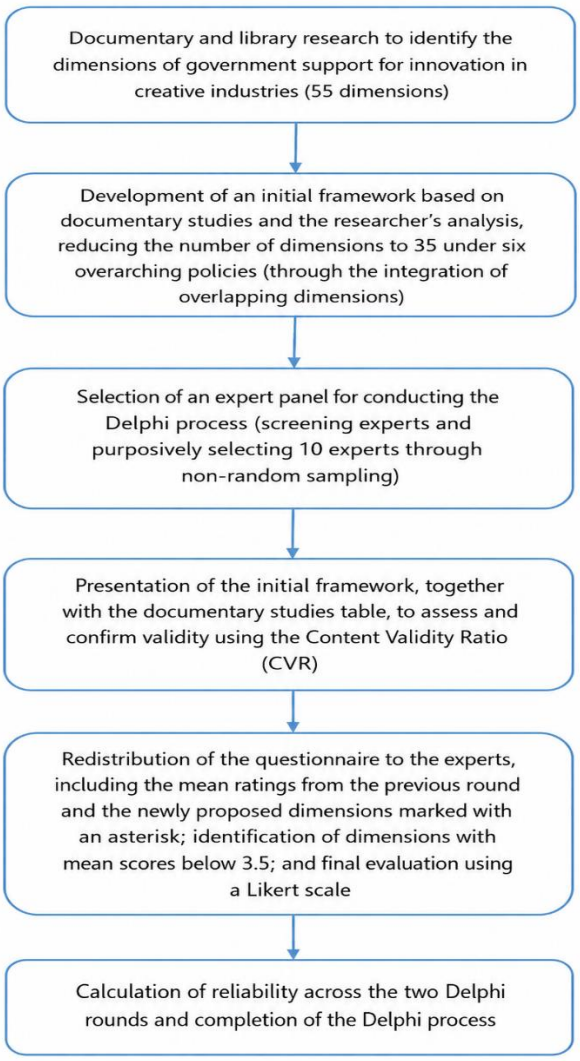
Following this process, 55 dimensions of government support for innovation were extracted. However, because some of the dimensions identified through the documentary studies overlapped, several dimensions were merged and subsequently categorized by the researcher into an initial framework consisting of 35 dimensions. Some of the modifications made to the titles of the dimensions were as follows:

- Changing the title **Innovation Awards** to **Organizing Events, Festivals, Competitions, and Innovation Awards**
- Changing the title **Employee Training** to **Training and Empowerment of Innovation Human Capital**
- Changing the title **Process Standardization** to **Standardization of Innovation Management**

At this stage, an expert panel was formed to evaluate the validity of the questionnaire. The proposed framework, together with the table of documentary studies, was presented to 10 experts, who were asked to rate each dimension using three response categories: *essential*, *not essential but useful*, and *not necessary*. In addition, three open-ended questions were posed to each expert: (1) If necessary, revise the titles of the general policies and dimensions as well as their placement within the framework; (2) if necessary, provide suggestions regarding the integration of dimensions; and (3) propose any dimensions or policies not included in the presented framework. Following this stage, the proposed general policies encompassing 30 dimensions were confirmed, while recommendations were made to merge 11 dimensions and add five new dimensions.

Figure 1

Research Implementation Process

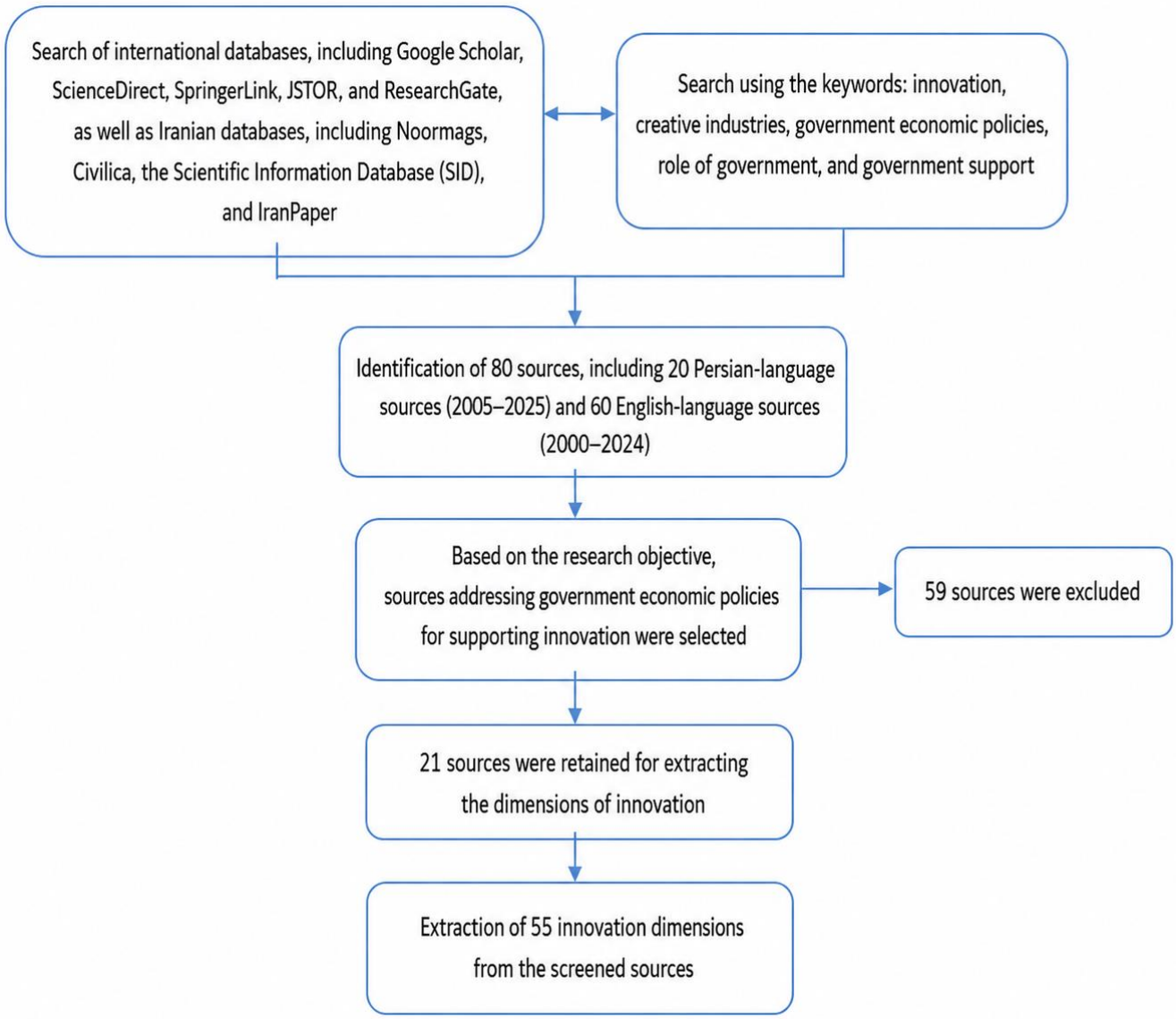


In the second stage, the initial evaluation of the indicators (the quantitative phase) was conducted. Accordingly, a structured questionnaire based on a five-point Likert scale, ranging from *completely unimportant* to *completely important*, was distributed among a larger group of 12 experts. Participants were asked to evaluate the importance of each policy identified in the previous round. Subsequently, the quantitative data were collected, and measures of central tendency and dispersion (mean and standard deviation) were calculated for each indicator. The proposed mergers and deletions from the previous round, which had been suggested by several experts, were also submitted for evaluation, and the proposed changes were implemented where consensus among the other experts was achieved.

Finally, the third stage consisted of review and progression toward consensus. The quantitative results of the previous round, including the means and standard deviations, together with the questionnaire and the experts' previous comments, were redistributed among 10 experts. At this stage, based on the results obtained, the reduction in standard deviation, and the slight increase in Kendall's coefficient of concordance, the Delphi process was terminated. Ultimately, 29 dimensions were identified under six principal policy categories.

Figure 2

Diagram of the Method Used to Extract Innovation Dimensions from Documentary Studies



The innovation dimensions extracted from the literature are presented in the following table.

Table 1

Innovation Dimensions

Dimension	Extracted From
Provision of credit facilities	Cirera et al. (2020); OECD (2023); EBRD (2014)
Tax exemptions for innovative performance	Ma et al. (2016); Schot and Steinmueller (2018); Cirera et al. (2020); Goolsbee and Jones (2020); EBRD (2014)
Access to capital	Mani (2004); Jaumotte and Pain (2005); De Jong et al. (2008)
Innovation research funding	Ma et al. (2016); Schot and Steinmueller (2018); Goolsbee and Jones (2020); OECD (2023); EBRD (2014)
Linkages between government research organizations and firms	OECD (2011); EBRD (2014)
Establishment of technology parks and accelerators	Cirera et al. (2020)
Consulting and technical services	Cirera et al. (2020)
Establishment of innovation networks	Siadati and Afshari Mofrad (2019); Edler and Fagerberg (2017)
Policies stimulating innovative human capital	Bloom et al. (2019); Goolsbee and Jones (2020)
Financial support for networking activities	Siadati and Afshari Mofrad (2019)
Development of competitive markets	Bloom et al. (2019); Siadati and Afshari Mofrad (2019)
Provision of research grants	Cirera et al. (2020); OECD (2023); Bloom et al. (2019); Zuniga (2023); Mani (2004)
Reduction of investment risk	Zuniga (2023)
Attraction of foreign investment	Siadati and Afshari Mofrad (2019)
Support for technology transfer	Cirera et al. (2020)
Strengthening international cooperation	Siadati and Afshari Mofrad (2019)
Copyright protection	Bloom et al. (2019)
Employee training	Ma et al. (2016); Siadati and Afshari Mofrad (2019)
Facilitation of product marketing	Siadati and Afshari Mofrad (2019)
Management of knowledge dissemination	OECD (2011)
Tax credits for international collaboration	Siadati and Afshari Mofrad (2019)
Intellectual property regulations	Li et al. (2017); Ma et al. (2016); Flew (2013); Cirera et al. (2020); OECD (2023); Jaumotte and Pain (2005); Bloom et al. (2019); De Jong et al. (2008)
Grants	Cirera et al. (2020); OECD (2023); EBRD (2014)
Provision of subsidies	Li et al. (2017); Schot and Steinmueller (2018); De Jong et al. (2008); Zuniga (2023)
Innovation vouchers	Cirera et al. (2020); OECD (2023); EBRD (2014); Zuniga (2023)
Support for entrepreneurship	Goolsbee and Jones (2020); De Jong et al. (2008); Edler and Fagerberg (2017)
Support for talent	H et al. (2023)
Patent registration and protection	Cirera et al. (2020); Bloom et al. (2019)
Innovation feasibility grants	Siadati and Afshari Mofrad (2019)
Strengthening unions and associations	EBRD (2014)
Support for government research organizations	Jaumotte and Pain (2005)
Improving the commercialization of university research	OECD (2011)
Reducing innovation investment risk	Boghani and Jonash (1993); Goolsbee and Jones (2020)
Participation in innovation investment	Zuniga (2023)
Infrastructure development	Ma et al. (2016); Li et al. (2017); Cirera et al. (2020); OECD (2023)
Innovation procurement	Boghani and Jonash (1993); EBRD (2014)
Financial support for international cooperation	Siadati and Afshari Mofrad (2019)
Knowledge migration	De Jong et al. (2008)
Process standardization	OECD (2011); Li et al. (2017); Boghani and Jonash (1993); Cirera et al. (2020); Edler and Fagerberg (2017)
Support for entrepreneurship in creative industries	Li et al. (2017); Schot and Steinmueller (2018); De Jong et al. (2008)
Support for start-ups	Li et al. (2017); Schot and Steinmueller (2018)
Financial incentives for research and development	EBRD (2014); Edler and Fagerberg (2017)

Strengthening education in the field of innovation	Cirera et al. (2020); Siadati and Afshari Mofrad (2019)
Innovation awards	OECD (2011); Cirera et al. (2020); Edler and Fagerberg (2017)
Regulation and regulatory governance	Edler and Fagerberg (2017)
Research and development tax exemptions	Cirera et al. (2020); Jaumotte and Pain (2005); Bloom et al. (2019); De Jong et al. (2008); Mani (2004); Siadati and Afshari Mofrad (2019)
Venture capital investment	OECD (2023); EBRD (2014); Mani (2004)
Marketing support	Siadati and Afshari Mofrad (2019)
Establishment of overseas innovation offices	Siadati and Afshari Mofrad (2019)
Cluster-based support	EBRD (2014); De Jong et al. (2008); Edler and Fagerberg (2017)
Provision of skilled human resources	Goolsbee and Jones (2020); Jaumotte and Pain (2005); Bloom et al. (2019)
Employment of postgraduate students	OECD (2011); Siadati and Afshari Mofrad (2019)
Facilitation of private-sector demand for innovation	OECD (2011); Edler and Fagerberg (2017)
Strengthening the labor market	Jaumotte and Pain (2005)
Support for elite talent	OECD (2011); Jaumotte and Pain (2005)

3. Findings and Results

Based on the documentary and library-based studies and the researcher's analysis of the dimensions extracted from these studies, an initial framework comprising six general policy categories and 35 dimensions was developed, as presented in Table 2. The questionnaire was then validated in accordance with the procedure described above. Following the interviews and completion of the questionnaire by the experts, several modifications were made to the initial framework. Consequently, five dimensions were removed because their validity coefficients did not reach the required threshold. Furthermore, responses to the open-ended questions generated recommendations concerning the integration of several dimensions and the addition of new dimensions. Details are provided below:

Regarding the proposed general policy categories, the following changes were recommended:

- Changing **Human Capital Development Policy** to **Creative Human Capital Development Policy**
- Changing **Networking and Infrastructure Development Policy** to **Networking and Ecosystem Development Policy**

The proposed modifications to the innovation dimensions were as follows:

- Transfer of the **research grants and research funding** dimension from science and technology policies to financial and investment policies
- Removal of the **foreign investment attraction**, **innovation vouchers**, and **grants** dimensions because their scores did not reach the required threshold
- Integration of the **overseas innovation offices** dimension into the **strengthening international cooperation** dimension under networking and ecosystem development policies
- Integration of the **infrastructure development** dimension into the **development of science and technology parks, innovation centers, and accelerators** dimension
- Replacing the title **competitive regulation** with **combating monopolies and anti-competitive practices** under market development and competitiveness policies
- Removal of the **stimulating private-sector demand for innovation** dimension
- Integration of the two dimensions **supportive labor-market regulations** and **support for elite and creative talent** into **support schemes for retaining creative capital** under creative human capital development policy
- Changing the **employment of students during their studies** dimension to **skills-development mechanisms for postgraduate students** under creative human capital development policy
- Addition of **collaboration with global talent and creative diplomacy** as a new dimension under creative human capital development policy
- Replacing the two dimensions **technology transfer** and **knowledge migration** with **facilitation of knowledge and technology transfer mechanisms** under science and technology policies
- Addition of **science and technology infrastructure development** as a new dimension
- Integration of the two dimensions **support for patent registration** and **regulation and**

regulatory governance into **enactment and enforcement of supportive intellectual property laws** under legal and institutional intellectual property protection policy

- Addition of three new dimensions: **digital protection and cybersecurity**, **protection of the integrity of creative works and avoidance of discretionary censorship**, and **accession to international copyright protection conventions**

Based on the synthesis of expert opinions, five new dimensions were proposed and 11 dimensions were merged or removed, resulting in 29 dimensions under six policy categories for implementation of the Delphi process. Accordingly, in the first Delphi round, dimensions whose titles had been revised were marked with an asterisk, while the dimensions incorporated into the revised dimensions were presented as an appendix. The new dimensions were also added to the existing dimensions, and the experts were asked to rate them using a Likert scale and to indicate their agreement or disagreement with the proposed integrations. All proposed changes received expert approval, except that one expert expressed disagreement in two cases; consequently, the proposed changes were confirmed. Furthermore, all dimensions in this round received mean scores above 3.5 and were therefore retained for presentation in the subsequent round.

Table 2

Government Economic Policies for Supporting Innovation in Creative Industries: Initial Proposed Framework Based on Documentary Studies

Policy Category	Dimensions
Financial Policies	Credit facilities and guarantees
Financial Policies	Research and development tax incentives
Financial Policies	Subsidies
Financial Policies	Direct investment and venture capital
Financial Policies	Attraction of foreign investment
Financial Policies	Innovation vouchers
Financial Policies	Grants
Human Capital Development Policies	Training and empowerment of innovative human capital
Human Capital Development Policies	Employment of students during their studies
Human Capital Development Policies	Support for elite and creative talent
Human Capital Development Policies	Innovative human capital incentives
Human Capital Development Policies	Supportive labor-market regulations
Science and Technology Policies	Technology transfer
Science and Technology Policies	Research grants and research funding
Science and Technology Policies	Support for research organizations
Science and Technology Policies	Knowledge management and dissemination
Science and Technology Policies	Academic education in innovation and entrepreneurship
Science and Technology Policies	Knowledge migration
Networking and Infrastructure Development Policies	Development of infrastructure and science and technology parks, innovation centers, and accelerators
Networking and Infrastructure Development Policies	Organization of events, festivals, competitions, and innovation awards
Networking and Infrastructure Development Policies	Facilitation of linkages between government research centers and firms
Networking and Infrastructure Development Policies	Cluster-based support
Networking and Infrastructure Development Policies	Overseas innovation offices
Networking and Infrastructure Development Policies	Strengthening international cooperation
Networking and Infrastructure Development Policies	Infrastructure development
Legal, Institutional, and Intellectual Property Policies	Support for patent registration
Legal, Institutional, and Intellectual Property Policies	Standardization of innovation management

Legal, Institutional, and Intellectual Property Policies	Enactment and enforcement of supportive intellectual property laws
Legal, Institutional, and Intellectual Property Policies	Regulation and regulatory governance
Market Development and Competitiveness Policies	Support for marketing and export of creative products
Market Development and Competitiveness Policies	Strengthening trade and professional associations
Market Development and Competitiveness Policies	Competition regulations
Market Development and Competitiveness Policies	Support for start-ups and entrepreneurship
Market Development and Competitiveness Policies	Innovation procurement
Market Development and Competitiveness Policies	Stimulation of private-sector demand for innovation

Based on the Delphi process and the collection of expert opinions over two rounds, the proposed dimensions and policies concerning government economic policies for supporting innovation in creative industries were classified into six main categories using a questionnaire based on a five-point Likert scale. In the first round, the questionnaire was distributed to 12 experts, of whom 10 completed it, while 10 experts participated in the second round. Five dimensions were identified under financial and investment policies, five under networking and ecosystem development policies, five under market development and competitiveness policies, four under legal and institutional intellectual property policies, five under science and technology policies, and five under creative human capital development policies. The increase in Kendall's coefficient of concordance from 0.26 to 0.31, a difference of less than 0.5 between the mean scores of all dimensions across the two rounds, and a reduction in the overall standard deviation from 0.31 to 0.21 led to termination of the Delphi process. The results of the Delphi questionnaires in the first and second rounds are presented in Table 3.

Financial and investment policies, which are concerned with financing, reducing costs, and creating financial incentives for innovative activities, comprised five key dimensions: provision of low-interest credit facilities and guarantees, with a mean score of 4.4; subsidies, with a mean score of 4.2; research and development tax incentives and exemptions, with a mean score of 4.7; research funding and grants, with a mean score of 4.6; and direct investment and venture capital, with a mean score of 4.1. These dimensions indicate expert consensus regarding the importance of diverse financial instruments for establishing an innovation ecosystem. In the domain of networking and ecosystem development, which emphasizes creating linkages and collaboration among actors, the five principal dimensions were the development of science and technology parks and innovation centers, with a mean score of 4.5; organization of national and international exhibitions, events, and festivals, with a mean score of 4.5; strengthening international cooperation, with a mean score of 4.5; facilitating linkages between government research organizations and private firms, with a mean score of 3.9; and support for cluster-based policies, with a mean score of 4.4. These policies provide the interactive and network-based infrastructure required for the flow of knowledge and innovation.

Market development and competitiveness policies, which focus on creating and expanding markets for creative products, included dimensions such as support for start-ups and the entry of new market actors, with a mean score of 4.5; combating monopolies and anti-competitive practices, with a mean score of 4.6; innovation procurement, with a mean score of 4.7; support for the marketing and export of creative products, with a mean score of 4.8; and strengthening trade and professional associations, with a mean score of 4.5. These values indicate the high priority assigned by experts to strengthening the demand side and promoting healthy competition. In the legal and institutional domain of intellectual property, which provides the security and incentives required for creative activity, the agreed-upon dimensions included the enactment and enforcement of supportive intellectual property laws, with a mean score of 4.3; accession to international copyright protection conventions, with a mean score of 4.4; protection of the integrity of creative works and avoidance of censorship, with a mean score of 4.6; support for the standardization of innovation management, with a mean score of 4.1; and digital protection and cybersecurity, with a mean score of 4.6.

Science and technology policies, which focus on strengthening the knowledge base and relevant infrastructure, comprised the development of academic education in innovation and entrepreneurship, with a mean score of 4.4; knowledge management and dissemination, with a mean score of 4.4; support for research organizations and institutions, with a mean score of 4.7; development of science and technology infrastructure, with a mean score of 4.4; and facilitation of technology transfer mechanisms, with a mean score of 4.1. These components constitute the

foundation for generating and supplying new ideas. Finally, creative human capital development policies, which focus on attracting, developing, and retaining talent, included support schemes for retaining creative capital, with a mean score of 4.6; collaboration with global talent and creative diplomacy, with a mean score of 4.3; training and empowerment of innovative human capital, with a mean score of 4.4; skills-development mechanisms for postgraduate students, with a mean score of 4.4; and talent attraction and management, with a mean score of 4.3. Taken together as an interconnected system, these policies provide a comprehensive framework for supporting innovation in creative industries.

Table 3

Mean and Standard Deviation of Innovation Dimensions

Policies	Dimensions	Round 1 Mean	Round 1 SD	Round 2 Mean	Round 2 SD
Financial and Investment	Low-interest credit facilities and guarantees	4.5	0.52	4.4	0.51
Financial and Investment	Research and development tax incentives and exemptions	4.6	0.51	4.7	0.48
Financial and Investment	Subsidies	4.0	0.66	4.2	0.78
Financial and Investment	Direct investment and venture capital	3.8	0.63	4.1	0.73
Financial and Investment	Research funding and grants	4.2	0.63	4.6	0.51
Networking and Ecosystem Development	Development of science and technology parks and creative-industry innovation centers	4.7	0.48	4.5	0.52
Networking and Ecosystem Development	Organization of exhibitions, events, festivals, competitions, and innovation awards	4.6	0.51	4.5	0.52
Networking and Ecosystem Development	Strengthening international cooperation	4.8	0.42	4.5	0.52
Networking and Ecosystem Development	Facilitation of linkages between government research organizations and firms	3.9	0.56	3.9	0.56
Networking and Ecosystem Development	Support for cluster-based policies	4.1	0.56	4.4	0.51
Market Development and Competitiveness	Support for start-ups and entrepreneurship	4.5	0.52	4.5	0.52
Market Development and Competitiveness	Combating monopolies and anti-competitive practices	4.7	0.48	4.6	0.51
Market Development and Competitiveness	Innovation procurement	4.8	0.42	4.7	0.48
Market Development and Competitiveness	Support for marketing and export of creative products	4.7	0.48	4.8	0.42
Market Development and Competitiveness	Strengthening trade and professional associations	4.3	0.67	4.5	0.52
Legal and Institutional Intellectual Property	Enactment and enforcement of supportive intellectual property laws	4.7	0.48	4.3	0.48
Legal and Institutional Intellectual Property	Accession to international copyright protection conventions	3.8	0.91	4.2	0.51
Legal and Institutional Intellectual Property	Protection of the integrity of creative works and avoidance of censorship	4.7	0.48	4.6	0.42
Legal and Institutional Intellectual Property	Support for the standardization of innovation management	4.0	0.66	4.1	0.31
Legal and Institutional Intellectual Property	Digital protection and cybersecurity	4.5	0.52	4.6	0.51
Science and Technology	Development of academic education in innovation and entrepreneurship	4.6	0.51	4.4	0.84
Science and Technology	Knowledge management and dissemination	4.2	0.42	4.4	0.51
Science and Technology	Support for research organizations and institutions	4.5	0.52	4.7	0.48
Science and Technology	Development of science and technology infrastructure	4.3	0.48	4.4	0.69
Science and Technology	Facilitation of technology transfer mechanisms	4.3	0.48	4.1	0.31
Creative Human Capital Development	Support schemes for retaining creative capital	4.7	0.48	4.6	0.69
Creative Human Capital Development	Collaboration with global talent and creative diplomacy	4.4	0.51	4.3	0.48
Creative Human Capital Development	Training and empowerment of innovative human capital	4.4	0.51	4.4	0.51
Creative Human Capital Development	Skills-development mechanisms for postgraduate students	4.2	0.78	4.4	0.51

4. Discussion and Conclusion

The present study sought to identify and validate government economic policies for supporting innovation in creative industries through a structured Delphi process. The findings showed that the initial pool of 55 policy dimensions extracted from documentary and library-based studies was first consolidated into 35 dimensions and, following content-validity assessment and successive Delphi rounds, was ultimately refined to 29 dimensions organized within six overarching policy domains: financial and investment policies, networking and ecosystem development policies, market development and competitiveness policies, legal and institutional intellectual property policies, science and technology policies, and creative human capital development policies. The convergence of expert judgments was reflected in the increase in Kendall's coefficient of concordance from 0.26 in the first round to 0.31 in the second round, the reduction in the overall standard deviation from 0.31 to 0.21, and differences of less than 0.50 between the mean scores of successive rounds. Although the magnitude of Kendall's coefficient indicates moderate rather than complete consensus, its upward trend alongside decreasing dispersion suggests increasing convergence among the experts. These findings support the view that innovation policy is intrinsically multidimensional and that effective government support cannot be reduced to a single financial, regulatory, or technological intervention (Edler & Fagerberg, 2017; Fartash et al., 2021; Schot & Steinmueller, 2018).

The first major finding concerned financial and investment policies. Among the five dimensions in this domain, research and development tax incentives and exemptions received one of the highest second-round mean scores (M = 4.70), followed by research funding and grants (M = 4.60), low-interest credit facilities and guarantees (M = 4.40), subsidies (M = 4.20), and direct and venture-capital investment (M = 4.10). These results indicate that experts considered a diversified financing architecture essential for reducing the cost, uncertainty, and risk associated with innovative activity in creative industries. This finding is consistent with innovation-policy research showing that private firms may systematically underinvest in innovation because returns are uncertain, financing intangible assets is difficult, and knowledge spillovers prevent innovators from fully appropriating the social returns of their investments (Jaumotte & Pain, 2005; Mani, 2004). The importance assigned to tax incentives and research funding also aligns with evidence that innovation-support portfolios generally require a combination of direct and indirect instruments rather than reliance on a single mechanism (Bloom et al., 2019; Goolsbee & Jones, 2020). Similarly, practical innovation-policy frameworks emphasize grants, credit guarantees, tax incentives, and capability-oriented financial instruments as important mechanisms for encouraging innovation, particularly in developing and emerging economies (Cirera et al., 2020; Zuniga, 2023). The relatively lower score for direct and venture-capital investment may indicate that experts regard such instruments as important but more difficult to implement effectively in the institutional and financial environment surrounding creative industries.

The significance of financial support is also compatible with previous empirical evidence regarding government intervention. Government funding can increase research and innovative activity by relaxing resource constraints and enabling organizations to pursue higher-risk projects (Fu, 2022). Government-oriented innovation-support policies may further generate externalities that extend beyond directly supported firms and improve the wider innovation environment (He et al., 2023). In the Iranian context, previous studies have likewise found that governmental support and entrepreneurship policies can influence innovation performance, innovation-based growth, and firms' ability to develop technological capabilities (Ghazi Nouri et al., 2020; Karamipour et al., 2015; Keykha-ye Farzaneh & Tash, 2023). The present findings therefore reinforce the need to move from fragmented financial assistance toward a coordinated financing system combining fiscal incentives, risk-sharing arrangements, grants, guarantees, and investment mechanisms adapted to the distinctive characteristics of creative enterprises.

The second policy domain was networking and ecosystem development. The development of science and technology parks and creative-industry innovation centers, the organization of exhibitions and innovation events, and the strengthening of international cooperation each received a second-round mean of 4.50, while support for cluster-based policies received a mean of 4.40. Facilitation of linkages between government research organizations and firms received the lowest score within this domain (M = 3.90), although it remained above the study's acceptance threshold. These findings indicate that innovation in creative industries is perceived as an ecosystem-level phenomenon requiring interaction among firms, research institutions,

government bodies, professional organizations, investors, and international partners. This interpretation is closely aligned with open-innovation theory, according to which firms increasingly depend on external knowledge flows and interorganizational collaboration to develop and commercialize innovations (De Jong et al., 2008; Hashemi, 2020). Policies encouraging open innovation similarly emphasize the role of networks, collaborative infrastructures, and knowledge exchange across organizational boundaries (Siadati & Afshari Mofrad, 2019).

The findings also support the broader systems perspective in innovation policy, in which public intervention is expected to address coordination failures and strengthen connections among innovation actors rather than merely finance individual firms (Edler & Fagerberg, 2017; Meng et al., 2023). The emphasis on innovation centers, international cooperation, and clusters is particularly relevant to creative industries, where knowledge is often tacit, project-based, interdisciplinary, and dependent on social and professional networks. Creative-city approaches similarly identify spatial concentration, cultural infrastructure, networks, and the attraction of creative actors as important foundations for creative economic development (Meshkini et al., 2014). Furthermore, government institutions can facilitate the internationalization of innovative and high-technology enterprises by strengthening institutional connections and reducing barriers to entry into international markets (Hosseinpour & Moradi, 2021). The comparatively lower mean for government research organization–firm linkages may suggest that experts perceive existing institutional relationships as difficult to operationalize, thereby highlighting an area in which formal mechanisms for knowledge exchange and joint projects require further development.

The third major finding involved market development and competitiveness, which emerged as one of the most highly prioritized domains. Support for the marketing and export of creative products received the highest second-round mean among all dimensions (M = 4.80), followed by innovation procurement (M = 4.70), combating monopolies and anti-competitive practices (M = 4.60), support for start-ups and entrepreneurship (M = 4.50), and strengthening professional and trade associations (M = 4.50). These findings demonstrate that the experts did not view innovation solely as a supply-side process of generating new ideas; instead, they emphasized the importance of creating markets in which innovative creative products can be commercialized and scaled. This result is consistent with demand-side innovation-policy literature, which emphasizes public procurement, market formation, standards, and regulatory instruments as mechanisms through which governments can stimulate innovation (Oecd, 2011). The high ranking of innovation procurement is especially consistent with the argument that government purchasing can create lead markets, reduce commercialization uncertainty, and provide firms with early demand for new products and services (Narimani et al., 2019).

The priority assigned to marketing and exports also reflects the specific economic characteristics of creative industries. Creative products frequently depend on audience reach, symbolic differentiation, reputation, distribution channels, and access to domestic and international markets. Digital transformation has intensified these dynamics by reshaping business models and allowing creative firms to distribute products through digital and platform-based environments (Landoni et al., 2020; Li, 2020). Previous research has also emphasized that creative-industry innovation requires suitable economic models that connect innovation with commercialization and market development (Bae & Yoo, 2015). The importance placed on competition policy is likewise consistent with evidence that innovation outcomes are influenced by market structure and may co-evolve with government policy and technological capabilities (Safdari Ranjbar et al., 2018). In this sense, market-support policies should not protect existing firms from competition; rather, they should facilitate entry, limit anti-competitive conduct, strengthen entrepreneurship, and expand market opportunities for creative products.

The findings concerning legal and institutional intellectual property policies further indicate the importance of creating a secure institutional environment for creative activity. Protection of the integrity of creative works and avoidance of arbitrary censorship and digital protection and cybersecurity both received mean scores of 4.60, while enactment and enforcement of supportive intellectual property laws, accession to international copyright conventions, and innovation-management standardization also obtained favorable evaluations. These findings are highly relevant because the economic value of creative industries is disproportionately concentrated in intangible assets, copyrightable material, digital content, designs, brands, and other forms of intellectual property. The global development of creative industries has therefore been closely associated with intellectual property regimes and regulatory frameworks governing ownership, reproduction, and commercialization (Flew, 2013). Emerging technologies

such as blockchain have further increased the importance of digital rights management, authentication, and secure transactions in creative markets (Malik et al., 2023). At the same time, government legal interventions should be designed with attention to both market failure and market efficiency so that regulation protects creators without unnecessarily restricting competition and knowledge circulation (Tusi & Kashani, 2019). The findings thus suggest that intellectual property policy for creative industries should increasingly encompass digital security, rights enforcement, international compatibility, and institutional predictability.

Science and technology policies formed the fifth major domain. Support for research organizations received the highest second-round mean in this group (M = 4.70), followed by academic education in innovation and entrepreneurship, knowledge management and dissemination, and science and technology infrastructure development, each receiving high scores, while facilitation of technology-transfer mechanisms obtained a mean of 4.10. These results indicate that experts perceived knowledge generation, knowledge dissemination, infrastructure, and research institutions as fundamental supply-side foundations of creative-sector innovation. This finding corresponds with the broader innovation-system literature, which regards knowledge creation and diffusion as collective processes involving universities, research institutions, firms, and public agencies (Ma et al., 2016; Schot & Steinmueller, 2018). It also accords with evidence that imports, international knowledge flows, technological conditions, and external linkages can affect firm-level innovation (Chen, 2017; Chen et al., 2017). The relatively lower score for technology transfer may not indicate low importance, but may reflect the difficulty of translating formal technology-transfer models into creative sectors where innovation often involves combinations of technological, cultural, aesthetic, and organizational knowledge.

Finally, the creative human capital development domain emphasized the retention, development, and international connectivity of creative talent. Support schemes for retaining creative capital received a particularly high mean score of 4.60, while training and empowerment of innovative human capital and postgraduate skills-development mechanisms both received mean scores of 4.40, and collaboration with global talent and creative diplomacy received a mean of 4.30. These findings show that innovation policy must address human capabilities as well as financial and technological resources. Skilled and creative individuals constitute a central productive asset in creative industries because innovation frequently depends on specialized expertise, entrepreneurial capacity, aesthetic judgment, and the ability to integrate knowledge from multiple fields. Innovation-support frameworks have consistently identified human capital as a major determinant of innovative capability (Bloom et al., 2019; Cirera et al., 2020). An organizational culture conducive to innovation also helps convert individual creativity and knowledge into competitive advantage (Aghileh & Fadaei, 2019). The emphasis on retaining creative capital is especially important because inadequate career opportunities, weak innovation ecosystems, and limited market access can reduce the capacity of economies to retain highly skilled individuals.

Taken together, the findings demonstrate that government support for innovation in creative industries should be understood as an integrated policy system rather than a collection of independent programs. Financial incentives cannot produce sustainable innovation without markets, capable human resources, research infrastructure, networks, and institutional protection; similarly, intellectual property rights have limited economic value when creative firms lack financing or commercialization opportunities. This systemic interpretation is consistent with contemporary innovation-policy approaches emphasizing policy mixes, innovation systems, and transformative frameworks (Edler & Fagerberg, 2017; Schot & Steinmueller, 2018). The findings also correspond with studies emphasizing the need for resilient policy frameworks in the creative sector, particularly following the disruptions created by the COVID-19 pandemic (Khlystova et al., 2022; Unesco, 2020). Accordingly, the central contribution of the present study lies in integrating these complementary dimensions into a contextually validated framework of 29 policy instruments that can guide more coherent government intervention in support of innovation in creative industries.

The present study has several limitations that should be considered when interpreting its findings. First, the Delphi panel was relatively small and consisted of experts selected through purposive and snowball sampling; although this approach is appropriate for expert-based studies, the resulting framework inevitably reflects the professional experiences and judgments of the participating experts. Second, the findings were developed within the institutional and economic context of Iran and therefore may not be directly generalizable to countries with different legal systems, levels of creative-industry development, financing structures, or innovation ecosystems. Third, the Delphi

process measures expert consensus rather than the actual causal effectiveness of policy instruments, and therefore a highly rated policy should not automatically be interpreted as having a greater empirical impact on firm-level innovation. In addition, some policy dimensions are conceptually interconnected, which may make their practical boundaries less distinct during implementation. Finally, rapid technological developments, particularly those associated with artificial intelligence, digital platforms, blockchain, and new forms of creative production, may alter the relative importance of some policy instruments over time.

Future studies should empirically test the proposed policy framework using larger and more diverse samples of creative-industry firms, entrepreneurs, policymakers, investors, academics, and other ecosystem actors. Quantitative methods such as exploratory and confirmatory factor analysis, structural equation modeling, analytic hierarchy process, network analysis, or multi-criteria decision-making techniques could be used to validate the relationships among the identified policy domains and determine their relative weights. Comparative research across different creative sectors, such as film, animation, gaming, publishing, design, music, advertising, and digital content, would also clarify whether particular policy instruments have sector-specific effects. Cross-national comparisons could examine how institutional settings influence the effectiveness of financial, regulatory, market, and human-capital policies. Longitudinal studies should further evaluate whether the implementation of particular instruments produces measurable changes in innovation outputs, employment, exports, firm survival, intellectual property creation, and productivity. Future research could also examine interactions among policy instruments to identify complementarities, substitution effects, and the most effective sequencing of interventions.

Policymakers should use the identified dimensions as an integrated portfolio rather than implementing isolated support programs. Priority should be given to establishing transparent financial mechanisms for R&D, grants, tax incentives, guarantees, and investment; developing export and marketing support for creative products; and strategically using public procurement to create demand for innovative creative outputs. Government agencies should strengthen innovation centers, industry clusters, research–industry linkages, and international collaboration while reducing administrative fragmentation among responsible institutions. Intellectual property enforcement should be modernized to address digital content, cybersecurity, copyright protection, and the integrity of creative works. At the same time, universities and training institutions should develop industry-oriented innovation and entrepreneurship programs and create practical skills-development pathways for postgraduate students. Finally, specific programs should be established to retain creative talent, attract global expertise, facilitate creative diplomacy, and regularly evaluate the effectiveness of each policy instrument through measurable indicators such as innovation output, commercialization, exports, employment creation, and private-sector investment.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethics Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were considered.

References

Aboufazaeli, M., Sharififar, F., Nikbakhsh, R., & Honari, H. (2022). Identifying Factors Affecting the Development of Peace through Sport Using the Fuzzy Delphi Method.

Research in Sport Physiology and Management, *14*(4), 37-52. https://www.sid.ir/paper/1094460/fa

Aghileh, M., & Fadaei, D. (2019). *Strategies for Developing an Innovation Culture as a Tool for Gaining Competitive Advantage* https://civilica.com/doc/897393

Ashtari, H., & Mahdinejad, H. (2016). *Explaining the Concept of Knowledge-Based Economy and Creative Economy in the Third Millennium* https://civilica.com/doc/616174

Aslan, A., Kaplan, M., & Kula, F. (2008). *International Tourism Demand for Turkey: A Dynamic Panel Data Approach*. https://ideas.repec.org/p/pra/mprapa/10601.html

Bae, S. H., & Yoo, K. (2015). Economic Modeling of Innovation in the Creative Industries and Its Implications. *Technological Forecasting and Social Change*, *96*, 101-110. https://doi.org/10.1016/j.techfore.2015.02.010

Bashiri, M., Hejazi, T. H., & Mohtajeb, H. (2015). *A Novel Approach to Multi-Criteria Decision Making*. Shahed University Press.

Bel, F., Lacroix, A., Lyser, S., Rambonilaza, T., & Turpin, N. (2015). Domestic Demand for Tourism in Rural Areas: Insights from Summer Stays in Three French Regions. *Tourism Management*, *46*, 562-570. https://doi.org/10.1016/j.tourman.2014.07.020

Bloom, N., Van Reenen, J., & Williams, H. (2019). A Toolkit of Policies to Promote Innovation. *Journal of Economic Perspectives*, *33*(3), 163-184. https://doi.org/10.1257/jep.33.3.163

Brida, J. G., Meleddu, M., & Pulina, M. (2013). Factors Influencing Length of Stay of Cultural Tourists. *Tourism Economics*, *19*(6), 1273-1292. https://doi.org/10.5367/te.2013.0248

Chasapopoulos, P., den Butter, F. A., & Mihaylov, E. (2014). Demand for Tourism in Greece: A Panel Data Analysis Using the Gravity Model. *International Journal of Tourism Policy*, *5*(3), 173-191. https://doi.org/10.1504/IJTP.2014.063105

Chen, S. S. (2017). Exchange Rate Undervaluation and R&D Activity. *Journal of International Money and Finance*, *72*, 148-160. https://doi.org/10.1016/j.jimonfin.2017.01.008

Chen, Z., Zhang, J., & Zheng, W. (2017). Import and Innovation: Evidence from Chinese Firms. *European Economic Review*, *94*, 205-220. https://doi.org/10.1016/j.euroecorev.2017.02.008

Cirera, X., Frías, J., Hill, J., & Li, Y. (2020). *A Practitioner's Guide to Innovation Policy: Instruments to Build Firm Capabilities and Accelerate Technological Catch-Up in Developing Countries*. https://doi.org/10.1596/33269

Cunningham, S., Cutler, T., Hearn, G., Ryan, M., & Keane, M. (2004). An Innovation Agenda for the Creative Industries: Where Is the R&D? *Media International Australia; Incorporating Culture & Policy*, *112*(112), 174-185. https://doi.org/10.1177/1329878X0411200114

De Jong, J. P. J., Vanhaverbeke, W., Kalvet, T., & Chesbrough, H. (2008). *Policies for Open Innovation: Theory, Framework and Cases*.

Doswell, R. (2009). *Tourism: How Effective Management Makes the Difference*. Routledge.

Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (2019). *The Global Innovation Index 2019: Winning with Global Innovation*.

Edler, J., & Fagerberg, J. (2017). Innovation Policy: What, Why, and How. *Oxford Review of Economic Policy*, *33*(1), 2-23. https://doi.org/10.1093/oxrep/grx001

Farshbaf Maherian, J., & Lalianpour, N. (2016). *Identifying Factors Affecting Fraud and Violations in the Iranian Insurance Industry Using the Fuzzy Delphi Method* https://sid.ir/paper/834154/fa

Fartash, K., Jahangirnia, M., & Saadabadi, A. A. (2021). Three Paradigms of Innovation Policy: Research and Development, Innovation Systems, and Transformative Change. *Science and Technology Policy Letters*, *11*(2), 152-178. https://stpl.ristip.sharif.ir/article_22080_38c05c1a7cacacb2e0d95b36afb9ee0b.pdf

Feng, Y., Wang, X., Du, W., Wu, H., & Wang, J. (2019). Effects of Environmental Regulation and FDI on Urban Innovation in China: A Spatial Durbin Econometric Analysis. *Journal of Cleaner Production*, *235*. https://doi.org/10.1016/j.jclepro.2019.06.184

Flew, T. (2013). *Global Creative Industries*. Polity Press.

Fu, Y. (2022). The Impact of Government Funding on Research Innovation: An Empirical Analysis of Chinese Universities. *Research article*, *44*(1), 285-296. https://doi.org/10.1002/mde.3680

Ghazi Nouri, S., Mohammad Hashemi, Z., & Sajjadifar, M. (2020). Examining the Effects of Government Interventions on Firms' Innovative Performance: A Case Study of Knowledge-Based Companies in Information and Communication Technology. *Executive Management Research Journal*, *12*(23), 95-124. https://doi.org/10.22080/jem.2020.18463.3167

Goolsbee, A., & Jones, B. F. (2020). *Innovation and Public Policy*. University of Chicago Press.

Han, E. J., & Lee, S. G. (2017). A Study on the Influencing Factors of Demand.

Hashemi, S. (2020). Introduction to Open Innovation and Examination of Factors Affecting Its Implementation and Development. *Biannual Journal of Industry and University*, *13*(49), 1-8.

Hausman, A., & Johnston, W. J. (2014). The Role of Innovation in Driving the Economy: Lessons from the Global Financial Crisis. *Journal of Business Research*, *67*(1), 2720-2726. https://doi.org/10.1016/j.jbusres.2013.03.021

He, S., Liu, J., & Ying, Q. (2023). Externalities of Government-Oriented Support for Innovation: Evidence from the National Innovative City Pilot Policy in China. *Economic Modelling*, *128*. https://doi.org/10.1016/j.econmod.2023.106503

Hosseinpour, A., & Moradi, M. A. (2021). The Role of Government Institutions in Developing Innovation in High-Tech Businesses for Entry into International Markets. *International Business Management*, *16*(4), 1-24. https://doi.org/10.22034/jiba.2021.47279.1762

Jaumotte, F., & Pain, N. (2005). *An Overview of Public Policies to Support Innovation*.

Karamipour, A., Khaleghi, M., Arasti, M. R., & Garousi Mokhtarzadeh, N. (2015). How Can Government Support Innovation-Based Growth in Large Firms? *Technology Development Management*, *3*(3), 9-26. https://doi.org/10.22104/jtdm.2016.365

Keykha-ye Farzaneh, M., & Tash, M. (2023). The Impact of Government Entrepreneurship Policies on Innovation in Iran. *Quarterly Journal of Innovation Economy Ecosystem Studies*, *3*(2), 103-112. https://doi.org/10.22111/innoeco.2022.43270.1034

Khani, R., & Nasrollahi, Z. (2014). The Impact of Population Growth on Innovation in Iran and Selected Developing Countries. *Strategic and Macro Policies*, *1*(4), 87-106. https://www.jmsp.ir/article_6261_98dbac851ab126d46899ab4ec143534b.pdf

Khlystova, O., Kalyuzhnova, Y., & Belitski, M. (2022). The Impact of the COVID-19 Pandemic on the Creative Industries: A Literature Review and Future Research Agenda. *Journal of Business Research*, *139*, 1192-1210. https://doi.org/10.1016/j.jbusres.2021.09.062

Kowsari, S., & Sadat Rahmati, F. (2019). Futures Studies and Their Role in Science, Technology and Innovation Policy-Making. *Science and Technology Policy*, *12*(2), 103-118.

https://jstp.nrisp.ac.ir/article_13689_07eabe90f54b42cc3a66f37ed6a0f63a.pdf

Landoni, P., Dell'era, C., Frattini, F., Petruzzelli, A. M., Verganti, R., & Manelli, L. (2020). Business Model Innovation in Cultural and Creative Industries: Insights from Three Leading Mobile Gaming Firms. *Technovation*, *92*, 102084. https://doi.org/10.1016/j.technovation.2019.102084

Li, F. (2020). The Digital Transformation of Business Models in the Creative Industries: A Holistic Framework and Emerging Trends. *Technovation*, *92*, 102012. https://doi.org/10.1016/j.technovation.2017.12.004

Li, F., Butel, L., & Wang, P. (2017). Innovation Policy Configuration—A Comparative Study of Russia and China. *Policy Studies*, *38*, 311-338. https://doi.org/10.1080/01442872.2017.1308477

Liu, Z. (2021). The Impact of Government Policy on Macro Dynamic Innovation of the Creative Industries: Studies of the UK's and China's Animation Sectors. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(3), 168. https://doi.org/10.3390/joitmc7030168

Ma, L., Jiang, M., Yu, K., & Gan, J. (2016). *A Study on Regional Innovation Policy under Innovation Paradigm 30: A Case of Jiangsu Province in China* https://doi.org/10.1109/PICMET.2016.7806596

Malik, N., Wei, Y. M., Appel, G., & Luo, L. (2023). Blockchain Technology for Creative Industries: Current State and Research Opportunities. *International Journal of Research in Marketing*, *40*(1), 38-48. https://doi.org/10.1016/j.ijresmar.2022.07.004

Mani, S. (2004). Government, Innovation and Technology Policy: An International Comparative Analysis. *International Journal of Technology and Globalisation*, *1*(1), 29-44. https://doi.org/10.1504/IJTG.2004.004549

Maradana, R. P., Pradhan, R. P., Dash, S., Zaki, D. B., Gaurav, K., Jayakumar, M., & Sarangi, A. K. (2019). Innovation and Economic Growth in European Economic Area Countries: The Granger Causality Approach. *IIMB Management Review*, *31*(3), 268-282. https://doi.org/10.1016/j.iimb.2019.03.002

Meng, J.-H., Wang, J., & Liu, Y. (2023). How Is Government Embedded in Innovation Process for Breakthroughs? A Meta-Synthesis of Qualitative Case Studies. *Technological Forecasting & Social Change*, *194*. https://doi.org/10.1016/j.techfore.2023.122735

Meshkini, A., Hataminejad, H., Mahdinejad, H., & Parhiz, F. (2014). *Creative City*. Arad Ketab Publications.

Mollazadeh Yamchi, M., Pourmohammadi, M. R., & Hosseinzadeh Dalir, K. (2022). Evaluation of Spatial Development Scenarios with a Futures Studies Approach: The Aras Free Zone. *Quarterly Journal of Future Cities Vision*, *3*(2), 79-94. http://jvfc.ir/article-1-163-fa.html

Narimani, M., Peyravi, M. H., & Shalbafi, M. (2019). The Role of the Tendering Law in Innovation-Supportive Government Procurement Policy. *Science and Technology Policy*, *12*(3), 77-90. https://doi.org/10.22034/jstp.2019.11.3.1018

Oecd. (2011). *Demand-Side Innovation Policies*. OECD Publishing.

Oecd, & Eurostat. (2018). *Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation*.

Omidi, V., Shahabadi, A., & Mehregan, N. (2019). The Effect of Government Policies on Innovation Growth in Developing Countries. *Modern Economy and Trade*, *14*(3), 19-40. https://jnet.ihcs.ac.ir/article_5006_a39eb84ccdce7cdbae9fa1d95100cd2a.pdf

Patanakul, P., & Pinto, J. K. (2014). Examining the Roles of Government Policy on Innovation. *Journal of High Technology Management Research*, *25*(2), 97-107. https://doi.org/10.1016/j.hitech.2014.07.003

Safdari Ranjbar, M., Rahman Seresht, H., Manteghi, M., & Ghazi Nouri, S. S. (2018). Evolution and Co-Evolution of Technological Capabilities, Government Policies, and Market Structure in a Sectoral Innovation System: The Gas Turbine Industry in Iran. *Management Improvement*, *12*(4), 1-23. https://www.behboodmodiriat.ir/article_86877_fd33e34642a6faaff9bb1f1d8c195045.pdf

Saraei, H., Mohammadian, A., & Khani, N. (2022). A Systematic Review of Intra-Organizational Factors Affecting Open Government Data with an Innovation-Oriented Approach. *Public Administration*, *14*(3), 479-501. https://doi.org/10.22059/jipa.2022.341714.3143

Sarmad, Z., Bazargan, A., & Hejazi, E. (2018). *Research Methods in Behavioral Sciences*. Agah Publications.

Schot, J., & Steinmueller, W. E. (2018). Three Frames for Innovation Policy: R&D, Systems of Innovation and Transformative Change. *Research Policy*, *47*(9), 1554-1567. https://doi.org/10.1016/j.respol.2018.08.011

Siadati, H., & Afshari Mofrad, M. (2019). Policies for Encouraging Open Innovation. *Comprehensive Special Issue on Science, Technology and Innovation Policy*, *11*(2).

Silva, G., Carlos Di Serio, L., & Danilo Bezerra, É. (2019). Public Policies on Innovation and Small Businesses in a Swinging Economy. *Brazilian Administration Review*, *16*(3). https://doi.org/10.1590/1807-7692bar2019180140

Suchek, N., Fernandes, C. I., Kraus, S., Filser, M., & Sjögrén, H. (2021). Innovation and the Circular Economy: A Systematic Literature Review. *Business Strategy and the Environment*, *30*(8), 3686-3702. https://doi.org/10.1002/bse.2834

Sufyan, A., Ibne Asad, A., & Novák, P. (2024). Radical and Incremental Innovations Performance in Eastern European SMEs: An Empirical Study of Developed and Emerging Economies. *Journal of Eastern European and Central Asian research*, *11*(3). https://doi.org/10.15549/jeecar.v11i3.1604

Tusi, A., & Kashani, J. (2019). Economic Analysis of Government Legal Interventions in Lease Relations Based on the Ideas of Market Efficiency and Market Failure. *Private Law Research*, *8*(29), 159-191. https://sid.ir/paper/252690/fa

Unesco. (2020). *Policy Guide for a Resilient Creative Sector*.

Vali Bahraini, H., & Khayat Moghadam, S. (2015). *Identifying Factors Affecting Knowledge-Based Innovation Using the Delphi Method* Tehran, Iran. https://civilica.com/doc/435243

Wamae, W. (2006). *A Survey of Innovation Policies in Developing Countries: Lessons and Case Studies*. http://hdl.handle.net/10625/28589

Zuniga, P. (2023). *Innovation Policy Effectiveness in Emerging Countries: Lessons from Impact Evaluation Studies*.