Research Paper
Impact Factor: 7.358
Peer Reviewed & Indexed Journal
www.ijmsrr.com

IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

COMPARITIVE STUDY OF GLOBAL START UP GRANT PROGRAMMES

Dr. M. Sangeetha* Dr. E. Jothi**
**Assistant Professor, Department of Commerce CA, Sona College of Arts and Science, Salem-5*
***Assistant Professor, Department of Commerce CA, Sona college of Arts and Science, Salem.*

Abstract
This paper compares design features, delivery models, and outcomes of government-backed start-up grant programmes across advanced and emerging economies. Using a structured comparative framework and secondary data from policy portals, evaluation reports, and ecosystem studies, the analysis examines eligibility criteria, thematic focus (deep tech vs. general innovation), funding size and tranches, co-funding requirements, non-dilutive vs. quasi-equity elements, speed of disbursement, and complementary support (mentoring, incubation, internationalization). The study finds wide divergence in programme objectives and instruments: developed-economy schemes typically emphasise R&D commercialization, milestone-based tranches, and rigorous peer review, while emerging-economy programmers prioritise firm formation, inclusivity, and regional development with simpler selection and broader sector coverage. Evidence suggests that grants paired with post-award services (technical mentorship, public procurement access, and follow-on financing pathways) yield higher survival and scaling rates than cash-only schemes. Conversely, fragmented governance, slow disbursement, and weak monitoring dilute impact, particularly for early-stage firms facing short runways. The paper proposes a synthesis model featuring tiered grants linked to measurable milestones, blended finance options to crowd-in private capital, outcome-oriented KPIs (jobs created, IP generated, export readiness), and digital grant management to reduce administrative friction. By mapping common success factors and pitfalls, the study offers actionable guidance for policymakers and ecosystem leaders seeking to optimize grant design for innovation, inclusivity, and fiscal efficiency.

Keywords: Start-Up Grants, Innovation Policy, Non-Dilutive Finance, Comparative Analysis, Entrepreneurship, Public Funding, Ecosystem Development.

Introduction

Start-ups have emerged as powerful engines of innovation, employment creation, and economic transformation in the 21st century. Governments across the world increasingly recognize their role in driving competitiveness, fostering technological breakthroughs, and addressing societal challenges. However, the earliest stage of start-up development is often marked by limited access to finance, high risk perception among private investors, and uncertain business models. In this context, grant programmes—non-dilutive financial support provided by governments and international agencies—play a critical role in bridging the funding gap and catalyzing entrepreneurial ecosystems. Global experiences demonstrate that start-up grants are not uniform; they vary significantly in terms of design, eligibility criteria, sectoral priorities, funding structures, and monitoring mechanisms. For instance, advanced economies such as the United States and the European Union emphasize research-intensive start-ups and technology commercialization through competitive grant models like the SBIR/STTR programme and the Horizon Europe framework. On the other hand, emerging economies such as India, Brazil, and South Africa focus more on inclusive entrepreneurship, regional development, and sectoral diversification to stimulate broad-based growth.

While the intent of these programmes is common—to reduce financial constraints and stimulate entrepreneurial activity—their effectiveness depends on contextual alignment with national innovation systems, governance efficiency, and the extent of complementary support such as incubation, mentorship, and market access. Comparative analysis of these programmes can therefore reveal not only best practices but also gaps and challenges that need to be addressed to enhance impact. This study aims to undertake a comparative examination of global start-up grant programmes, analysing their structures, objectives, and outcomes across diverse economies. By mapping similarities and differences, the paper seeks to provide insights for policymakers, start-up founders, and ecosystem stakeholders on how to design and implement grant mechanisms that are both inclusive and growth-oriented.

Statement of the Problem

Despite the widespread adoption of grant programmes to support start-ups, there is no single global model that guarantees success. Countries adopt diverse approaches shaped by their economic priorities, institutional capacity, and innovation ecosystems. Some programmes are highly competitive and research-driven, while others prioritise inclusivity and regional entrepreneurship. However, the effectiveness of these grants is uneven—many face challenges such as delayed disbursement, lack of monitoring, limited scalability of funded ventures, and weak integration with private capital markets. This creates a critical gap in understanding which design features make grant programmes most impactful, and how lessons from one context can inform improvements in another. A systematic comparative study is therefore essential to identify best practices, highlight common pitfalls, and provide policy guidance for building sustainable and outcome-oriented grant mechanisms.

Research Objectives

The present study is undertaken with the following objectives:

1. To examine the structure and design of start-up grant programmes in selected developed and emerging economies.
2. To compare eligibility criteria, funding mechanisms, and sectoral focus across global programmes.
3. To evaluate the outcomes and challenges associated with different models of grant implementation.
4. To identify best practices and success factors that enhances start-up survival, innovation, and scalability.
5. To propose policy recommendations for designing efficient and inclusive start-up grant programmes adaptable to diverse contexts.

Review of Literature

Grants and public funding mechanisms have been widely researched as critical instruments for stimulating entrepreneurial ecosystems. Scholars and policymakers highlight their importance, but also point out variations and limitations.

1. **Lerner (2010)** argues that government intervention through grants and subsidies is often justified by market failures in early-stage financing. His work emphasises that well-targeted grants can foster innovation but may fail if bureaucratic inefficiencies dominate.
2. **European Commission (2018)**, in its evaluation of *Horizon 2020*, notes that non-dilutive funding for research-intensive start-ups contributes significantly to technology commercialisation and cross-border collaboration, but administrative complexity remains a barrier for SMEs.

3. **Audretsch & Link (2019)** examined the U.S. *Small Business Innovation Research (SBIR)* and *Small Business Technology Transfer (STTR)* programmes, showing how milestone-based grants improve survival rates of technology ventures while stimulating private sector co-investment.
4. **NASSCOM (2021)** highlights India's grant-based schemes under the *Startup India* initiative, where early-stage funding combined with incubation support improves inclusivity and regional entrepreneurship but requires stronger monitoring and scalability mechanisms.
5. **OECD (2021)** reports that countries such as Israel, Singapore, and Finland adopt integrated grant systems linking financial aid with mentoring, incubation, and global market access—creating higher innovation intensity compared to fragmented schemes.
6. **Global Entrepreneurship Monitor (GEM) Report (2022)** shows that start-up grants in emerging economies often focus on employment generation and inclusivity rather than purely technology-driven innovation, reflecting different national development priorities.
7. **World Bank (2022)**, in its study on *Innovation and Entrepreneurship Policy*, suggests that blended models—combining grants with venture capital and private equity—are more effective in ensuring sustainability of funded start-ups.
8. **Sharma & Singh (2023)** conducted a comparative study of grant programmes in India and South Korea, concluding that while India focuses on accessibility, South Korea emphasises competitiveness and R&D outcomes, showing a trade-off between inclusivity and innovation intensity.
9. **PwC & Startup Genome (2023)** report that global start-up hubs with strong grant ecosystems (such as Silicon Valley, Tel Aviv, and Berlin) show higher start-up scaling potential, largely due to grant-linked mentoring and ecosystem support services.
10. **UNCTAD (2023)** stresses that global disparities exist: while advanced economies provide structured, outcome-based grants, developing nations face challenges of limited budgets, monitoring inefficiencies, and political constraints in sustaining grant programmes.

Research Methodology

Research Design: This study adopts a comparative and descriptive research design, focusing on analysing the structure, functioning, and outcomes of global start-up grant programmes. The comparative approach helps to highlight similarities, differences, and unique features between developed and emerging economies.

Scope of the Study

The study includes selected countries representing both developed economies (e.g., United States, European Union, Israel, Singapore) and emerging economies (e.g., India, Brazil, South Africa). These countries were chosen because they represent diverse policy frameworks, innovation ecosystems, and developmental priorities.

Data Collection

Secondary Data Sources

1. Government policy documents and official portals of grant programmes (e.g., SBIR/STTR in the U.S., Horizon Europe, Startup India Fund of Funds).
2. International reports from OECD, World Bank, UNCTAD, and Global Entrepreneurship Monitor.
3. Academic journals, published case studies, and books on innovation and entrepreneurship policy.
4. Industry reports (PwC, NASSCOM, Startup Genome) providing ecosystem-level insights.

Comparative Framework

To ensure systematic analysis, grant programmes are compared based on:

1. **Eligibility Criteria** (sector focus, stage of start-up, inclusivity parameters).
2. **Funding Mechanism** (amount, disbursement mode, milestone-based vs. lump sum).
3. **Support Services** (mentoring, incubation, market access, internationalisation).
4. **Governance and Monitoring** (application process, transparency, evaluation mechanisms).
5. **Outcomes** (survival rate, innovation outputs, scaling potential, job creation).

Method of Analysis

1. A qualitative content analysis is used to interpret policy documents and reports.
2. A comparative matrix is developed to evaluate each programme across the above parameters.
3. Patterns, success factors, and limitations are identified to draw conclusions and policy implications.

Limitations of the Study

1. The study is based on secondary data, which may not always reflect the most recent updates in grant policies.
2. Differences in socio-economic and institutional contexts make direct comparisons complex.
3. Quantitative data on start-up performance is limited in some countries, necessitating reliance on qualitative assessments.

Findings and Discussion

1. Programme Objectives

1. **Developed Economies**: Focus is on innovation intensity and R&D commercialization. Programmes such as the U.S. SBIR/STTR and EU's Horizon Europe priorities deep technology, IP creation, and global competitiveness.
2. **Emerging Economies:** Objectives extend beyond innovation to inclusivity, employment generation, and regional development. For example, India's Startup India Seed Fund Scheme and Brazil's innovation grants emphasise accessibility to a wide pool of entrepreneurs, including non-tech ventures.

Discussion: This reveals a divergence—developed economies use grants as strategic tools for maintaining global technological leadership, while emerging economies employ them as developmental instruments.

2. Funding Mechanisms

1. **Developed Economies**: Funding is milestone-based, competitive, and often disbursed in multiple tranches (e.g., SBIR Phase I & II). These mechanisms encourage accountability and reduce misuse of funds.
2. **Emerging Economies**: Grants are often lump-sum or single-phase, with simpler application processes. While this increases accessibility, it sometimes results in inefficient utilisation and weak accountability.

Discussion: Milestone-based structures are more effective in aligning incentives, but may exclude less experienced entrepreneurs. Simpler models improve inclusivity but may reduce innovation depth.

3. Complementary Support Services

1. **Developed Economies**: Grants are embedded in a larger support ecosystem that includes mentoring, incubation, procurement linkages, and access to venture capital. For instance, Israel's Innovation Authority combines grants with internationalisation support.
2. **Emerging Economies**: Complementary support is growing but often fragmented. India's incubation centres and South Africa's entrepreneurship hubs exist, but coverage and quality vary significantly across regions.

Discussion: Evidence suggests that grants without mentoring and ecosystem support yield limited scaling impact. Developed countries' integrated models outperform in long-term start-up survival.

4. Governance and Monitoring

1. **Developed Economies**: Strong evaluation frameworks are in place. Peer review, independent assessment, and progress monitoring ensure accountability.
2. **Emerging Economies**: Governance is improving but faces challenges like bureaucratic delays, political influence, and weak tracking of post-grant performance.

Discussion: Transparent and merit-based evaluation is a critical determinant of success. Weak monitoring mechanisms in emerging economies dilute the intended outcomes of grant programmes.

5. Outcomes and Impact

1. **Developed Economies**: Higher survival rates, global competitiveness, and significant innovation outputs (patents, IP, scalable ventures). For example, many U.S. unicorns (e.g., Qualcomm, Symantec) trace their roots to SBIR support.
2. **Emerging Economies**: Positive impact on job creation, regional entrepreneurship, and first-generation entrepreneurs. However, scalability and innovation intensity remain lower compared to developed economies.

Discussion: The impact of grants reflects national priorities—while developed economies showcase technology leadership, emerging economies contribute more toward inclusive growth.

Comparative Insights

1. **Best Practices Identified**: Milestone-based disbursement, ecosystem integration, transparent governance, and international market linkages.
2. **Key Gaps in Emerging Economies**: Weak monitoring, limited scale of funding, bureaucratic inefficiencies, and fragmented support services.
3. **Transferable Lessons**: Emerging economies can adapt competitive and milestone-based structures, while developed economies can learn from inclusivity-driven models to promote diverse entrepreneurship.

Suggestions

Based on the comparative findings, the following suggestions are proposed to enhance the design and impact of start-up grant programmes globally:

Adopt a Tiered and Milestone-Based Funding Model

1. Grants should be released in phases linked to measurable milestones (prototype development, market validation, scaling).
2. This ensures accountability and prevents misuse while supporting sustained progress.

Integrate Grants with Ecosystem Support

1. Non-financial support such as mentoring, incubation, market access, and internationalisation opportunities should accompany financial aid.
2. Evidence shows that grants combined with support services yield higher survival and growth rates.

Leverage Digital Platforms for Efficiency

1. Digital portals for application, evaluation, and monitoring can reduce bureaucratic delays and improve transparency.
2. Data-driven dashboards can track performance and outcomes in real time.

Encourage Public–Private Partnerships (PPP)

1. Blending public grants with private investment can crowd-in capital, reduce fiscal burden, and increase scalability of funded ventures.
2. Co-investment models (e.g., Israel's Yozma Programme) can be replicated in emerging economies.

Balance Inclusivity and Competitiveness

1. While advanced economies may focus on R&D-driven start-ups, inclusivity models from emerging economies should not be overlooked.
2. A balanced approach can promote both high-tech innovation and broad-based entrepreneurial participation.

Strengthen Monitoring and Impact Assessment

1. Independent evaluation, regular progress reports, and impact metrics (jobs created, IP generated, export readiness) should be built into programme design.
2. This helps governments identify successful ventures and reallocate resources effectively.

Conclusion: Start-up grant programmes play a pivotal role in bridging early-stage financing gaps, encouraging innovation, and fostering inclusive entrepreneurship. The comparative analysis reveals that developed economies emphasise competitiveness, milestone-based disbursement, and strong ecosystem integration, resulting in higher innovation intensity and global competitiveness. In contrast, emerging economies prioritise accessibility, employment generation, and inclusivity, though challenges in governance and monitoring reduce long-term impact. The study underscores that there is no "one-size-fits-all" model; rather, programme design must align with national priorities and institutional capacity. However, common success factors—such as phased disbursement, transparent governance, ecosystem integration, and blended finance—are universally transferable. By learning from global best practices and addressing local gaps, policymakers can craft grant programmes that not only sustain early-stage start-ups but also contribute to long-term economic growth and innovation leadership.

References

1. Audretsch, D. B., & Link, A. N. (2019). Sources of knowledge and entrepreneurial innovation: The SBIR experience. Springer. https://doi.org/10.1007/978-3-030-13374-6.
2. European Commission. (2018). Horizon 2020 interim evaluation: Maximising the impact of EU research and innovation. Publications Office of the European Union.

3. Global Entrepreneurship Monitor (GEM). (2022). Global entrepreneurship monitor 2021/2022 global report. GEM Consortium. Retrieved from https://www.gemconsortium.org.
4. Lerner, J. (2010). The future of public efforts to boost entrepreneurship and venture capital. Small Business Economics, 35(3), 255–264. https://doi.org/10.1007/s11187-010-9298-z.
5. NASSCOM. (2021). Indian tech start-up ecosystem: Leading tech in the 20s. NASSCOM Research. Retrieved from https://nasscom.in.
6. OECD. (2021). OECD science, technology and innovation outlook 2021: Times of crisis and opportunity. OECD Publishing. https://doi.org/10.1787/75f79015-en.
7. PwC & Startup Genome. (2023). Global start-up ecosystem report 2023. Startup Genome. Retrieved from https://startupgenome.com.
8. Sharma, R., & Singh, A. (2023). Comparative analysis of start-up grant programmes in India and South Korea. Journal of Entrepreneurship and Public Policy, 12(2), 145–162. https://doi.org/10.1108/JEPP-05-2022-0048.
9. UNCTAD. (2023). Technology and innovation report 2023: Opening green windows. United Nations Conference on Trade and Development. Retrieved from https://unctad.org.
10. World Bank. (2022). Promoting innovation in developing countries: Policy tools and frameworks. World Bank Publications. Retrieved from https://www.worldbank.org.