THE GLOBAL INNOVATION INDEX 2020:

Who Will Finance Innovation?

The theme for the GII 2020 is *Who Will Finance Innovation?*

To boost entrepreneurship and economic growth, how best to finance innovation is a top business and policy concern in the 21st century – and these innovation finance ambitions are only more pressing amidst the personal and economic toll of the COVID-19 pandemic.



For investors, funding R&D, novel technologies, start-ups, scale-ups, or the development of brands or business models is risky. Major resources are required upfront, while product outcomes and financial returns are uncertain. For innovators, efforts to raise funds are marked by uncertainty. This is particularly true when they have only ideas or intangible assets as collateral—or when it comes to larger rounds of financing, i.e., "late stage" investments. For financiers, making capital available only to start-ups at the expense of scale-ups can lead to market failures.

The lack of financing sources—due to imperfections in the capital market, or other causes—can lead to a worrying under-investment in innovation. With few exceptions, a dearth of finance and risk capital is a concern in developed and developing economies alike. At the same time, there is renewed interest in financing innovation, including by a range of new actors such as not-for-profit organizations, sovereign wealth funds, wealthy individuals, and celebrities. Funds and new markets to finance innovations are emerging, in particular, in middle-income economies. Until recently, global capital markets were more liquid than ever.

This was the state of play in early 2020. Now the state of play for funding innovation is changing rapidly. As the world deals with an economic calamity from the coronavirus pandemic, and the global public anxiously awaits innovative new treatments and vaccines, the need to assess the financing of innovation has become more pressing than ever.

The **GII 2020** will shed light on the state of innovation finance by investigating the evolution of existing financing mechanisms and by pointing to progress and remaining challenges.

- Traditional innovation financing mechanisms covered are public support schemes, firm-specific innovation investments, and market-based mechanisms targeting innovation specifically, such as loans, private equity, and venture capital.
- New mechanisms explored are corporate venturing, sovereign wealth funds, intellectual property marketplaces, microfinance, crowdfunding, and technology solutions.

Key questions are:

- What is the relative state of innovation finance today and in the future, especially in light of the current health and economic crisis?
- How are traditional sources of risk capital, such as venture capital, evolving?
- What do new actors and mechanisms add to the mix, and are they effectively helping to overcome possible market failures?
- What are the differences between countries, and does the innovation finance gap contribute to deepening the global innovation divide across countries?
- How do we ensure that financing mechanisms support the development of inclusive innovation ecosystems?

GII 2020: Outside Chapter Authors

Chapter 2: Sources of Funding Innovation and Entrepreneurship **Peter Cornelius**, AlpInvest Partners

Chapter 3: Sovereign Wealth Funds and Innovation Investing in an Era of Mounting Uncertainty **Jerome Engel**, University of California, Berkeley; **Victoria Barbary**, International Forum of Sovereign Wealth Funds; **Hamid Hamirani**, Ministry of Finance Oman; **Kathryn Saklatvala**, bfinance

Chapter 4: Government Incentives for Entrepreneurship **Josh Lerner**, Harvard Business School

Chapter 5: Financing "Tough Tech" Innovation **Ramana Nanda**, Harvard Business School

Chapter 6: Shaping the Unknown with Virtual Universes – the New Fuel for Innovation Pascal Daloz, Patrick Johnson, and Sébastien Massart, Dassault Systèmes; Pascal Le Masson and Benoît Weil, Mines ParisTech, PSL Research University

Chapter 7: From Financial Growth to Generative Growth: A Renewal of Private Equity **Laure-Anne Parpaleix**, **Kevin Levillain**, and **Blanche Segrestin**, Mines ParisTech, PSL Research University

Chapter 8: Filipinnovation: Financing Science for the People **Fortunato de la Peña**, Department of Science and Technology, Philippines

Chapter 9: Financing Research, Development, and Innovation: the Case of the Czech Republic **Karel Havlíček, Silvana Jirotková, Tomáš Holinka**, and **Martin Hronza**, Ministry of Industry and Trade, Czech Republic

Chapter 10: Financing Innovation in Brazil **Robson Braga de Andrade**, National Confederation of Industry–Brazil (CNI)

Chapter 11: Financing Innovation in India: Challenges and Opportunities **Deepanwita Chattopadhyay**, IKP Knowledge Park

Chapter 12: Israel's Challenging Transformation from Start-Up Nation to Scale-Up Nation **Yaron Daniely**, aMoon Venture Fund

Chapter 13: Equity Bank—Financing Innovation in Kenya James Mwangi, Equity Group Holding Plc

Chapter 14: Abu Dhabi: Innovation at the Heart of a Modern, Diversified, and Sustainable Economy **Tariq Bin Hendi**, Abu Dhabi Investment Office

Chapter 15: Intellectual Property as an Asset for Financing Innovation **Pippa Hall**, United Kingdom Intellectual Property Office

Chapter 16: Opportunities to Reap Financing Through IP for Innovation **Alfred Radauer**, IMC University of Applied Sciences Krems