
Preface

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Biographical notes: Jarunee Wonglimpiyarat is a Project Manager in Venture Capital (VC) financing at the National Innovation Agency, Ministry of Science and Technology, Thailand. She holds a PhD in Technology Management from Manchester Business School, UK, and postdoctoral fellowships at Boston University and Harvard University, USA. She has working experiences at PricewaterhouseCoopers, Standard Chartered Bank, Citibank N.A., Sussex Innovation Centre, Boston Technology Commercialisation Institute and United States Securities and Exchange Commission. She currently serves as an Editor for the *International Journal of Financial Services Management* and works as committee for the Global Technology Audit Guideline Programme.

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Investment and innovation policies play an increasing role in contributing to the development of high-technology start-ups. The formation of government policies generally aims to facilitate the translation of research results into economic benefits. However, improving the investment policies is a necessary but not a sufficient condition in fostering high-technology entrepreneurial activities and driving innovations. In this

special issue, we focus on policies to build an innovative climate to help develop early-stage companies, boost technology commercialisation (thereby increasing the nation's competitiveness) and support economic development.

This special issue brings together academics, practitioners, researchers, and aims to deliver a reference edition for all those interested in the innovation policies to foster conditions conducive to promote high-technology business development and commercialisation.

This special issue of the *International Journal of Foresight and Innovation Policy* examines 'Investment and Innovation Policies to Promote Technology Development and Commercialisation'. The refereed papers included have many interesting dimensions on the innovation policies towards technology commercialisation.

The first paper in this special issue is 'A dynamic panel data analysis for R&D cooperation and economic growth', by Tarek Sadraoui and Naceur Ben Zina. This work analyses the dynamic relationship between cooperation in R&D and economic growth. The authors have brought theoretical literature on the relations of technological cooperation as a base to discuss economic coordination. The study on R&D cooperation in innovation process is based on various estimation methods developed within dynamic panel framework of 23 countries during the period of 1992–2004. The Generalised Moments Method (GMM) is used in dynamic panel showing that impact R&D cooperation on growth varies according to indicator of internal expenditure of research and development of each country.

The second paper is 'Entrepreneurial financing for venture and innovation development', by Jarunee Wonglimpiyarat. This work analyses the management of Venture Capital (VC) industry for entrepreneurial financing in Thailand. In particular, the study discusses the role of the National Innovation Agency (NIA) in supporting technology commercialisation and development of the national innovation system. The paper offers the policies for the developing countries to promote the high-tech industry development. The financial support programmes of NIA would be a useful example for other developing economies to exploit the innovation potential and accelerate the process of innovation commercialisation.

The third paper is 'A roadmap of industrial cluster development: a case study of Thailand's HDD cluster', by Patravadee Ploykitikoon and Tugrul U. Daim. This work discusses the formation of Thailand Hard Disk Drive (HDD) cluster. The research develops a roadmap of industrial cluster development including main stakeholders of industry, university and government. The paper applies decision-making tools, Analytical Hierarchical Process (AHP) and Pairwise Comparison Methodology (PCM) to prioritise strategic actions and to develop a roadmap of HDD industrial cluster development in Thailand. The roadmap will be useful to policymakers and industrial cluster developers for creating industrial development strategic plans.

The fourth paper in this special issue is 'Power paradoxes in national innovation systems – an exploratory study among Singapore's technocrats and technopreneurs', by Pi-Shen Seet. The paper discusses the power relationship in Singapore's National Innovation System, specifically between two major groups of players, technology entrepreneurs (or technopreneurs) and bureaucrats and policy makers (or technocrats). The study uses Lukes' three-dimensional classification of power as a framework to study observable and unobservable exercises of power between these two groups. The findings reveal that there is an underlying imbalance between the two groups of actors with the power relationship largely tilted towards the technocrats and away from the technopreneurs.

The fifth paper in this special issue is 'Strategies for R&D and intellectual property learned from case studies', by Takeshi Hishinuma. The paper explores the key concepts derived from seven Japanese case study companies having achieved worldwide success on intellectual property management during the years 1970–1990. The research points out how the companies could manage risky technology development towards commercialisation. The paper provides insights of CEOs and engineers of major companies on the use of intellectual property strategies to strengthen their technological competitiveness.

The last paper in this special issue is 'A review of a literature on technology roadmapping: a case study of Power Line Communication (PLC)', by Karnchana Choomon, Nopporn Leeprechanon and Tritos Laosirihongthong. The paper provides a literature review of technology roadmapping and presents the case study of Power Line Communications (PLC) on technology communications development. The PLC trend shows two interesting aspects: technology solution development and the company's ability to support the connecting device and multifunctions. The paper would serve as a reference of technology roadmapping for researchers and practitioners.

This special issue covers a wide range of research studies that focus on investment and innovation policies to support entrepreneurial financing and technology commercialisation. We are grateful to Dr. M.A. Dorgham, Jim Corlett, Barbara Curran and to the Inderscience Publishers for giving us the opportunity to organise this special issue in the *International Journal of Foresight and Innovation Policy*. We would like to thank the authors and referees for their contributions to this special issue.