

論文 / 著書情報
Article / Book Information

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Category(English)	Doctoral Thesis
種別(和文)	論文要旨
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論文要旨

THESIS SUMMARY

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要旨 (英文 800 語程度)

Thesis Summary (approx.800 English Words)

The doctorate thesis titled, “Analyses of University-Industry (UI) Collaborative Research: The Case of Thailand National Research Universities (NRUs)” consists of 9 chapters.

Chapter 1: Introduction The background and motivation of this study including previous studies on University-Industry Linkages (UILs), joint research and other UILs in developed and developing countries, and Thai UILs are provided. It indicates issues related to understanding these determinates should outline the antecedent of collaborative research and also explore the consequences of collaborative research on universities’ research activities and performance. Therefore, it brings up the objectives and research questions.

Chapter 2: Theoretical Backgrounds and Conceptual Framework This chapter provides the backgrounds of UILs regarding the university’s third mission, firms’ open science strategy and knowledge transfer activities for studying the causal relationships between universities characteristics and their patterns of UI collaborative research. The conceptual framework is illustrated based on these theoretical backgrounds.

Chapter 3: Thailand’s UILs and related Policies Thailand’s Science and Technology (S&T) related policies, the background related to Thai UILs for providing information of the UILs under the Thai context were introduced. This chapter also provides an analysis of the effects of Higher Education System Reform that affected some universities’ characteristics such as the change in external research funding structure and a variety of UI collaborative research areas.

Chapter 4: Thailand’s Competitive Industry Clusters and their Technological Capabilities The overview situation of the technological capabilities and the Thai competitive cluster characteristics were explored. This chapter identifies two competitive clusters: shrimp and Hard Disk Drive (HDD). The value chain governance, technological upgrading and the R&D activities of these two selected competitive clusters are further discussed.

Chapter 5: Academic Research Performance of the NRUs The research performance of NRUs were investigated. The analysis begins with the benchmarking of research performance using relative indicators at national, regional and the global level. Then, the publications of the institutions with high research performances were retrieved and analyzed using content-based co-citation analysis. The findings suggest that the NRU project had an influence on the universities’ research direction and focus. Each university has its own mission and research interests in line with its organizational path dependence and research infrastructures. The high-performing NRUs tended to specialize in research areas related to food and agriculture, chemical, and energy.

Chapter 6: Antecedents and Consequences of the NRUs’ Collaborative Research Co-publications and co-patents were used as proxies to represent collaborative research projects. The longitudinal study was carried out by dividing the time span into two periods: before and after the announcement of the NRU project. This chapter shows that the NRUs with autonomous status tended

to engage in collaborative research focusing relatively on scientific research in the second period. Most NRUs tended to keep improving their research performance aligned with their previous research specialization. However, only a few high-performing NRUs had their collaborative research in the first period highly associated with those of the second period.

Chapter 7: Academic Researchers' Perspectives towards Collaborative Research The academic researchers' perspectives toward UI collaborative research were investigated based on the semi-structured interviews and surveys. The relationship between academic researchers' attitudes and the researcher characteristics was explored. The findings indicate that most researchers, regardless of their characteristics, were highly concerned about the relatedness between their research agenda and collaborative research project and the novelty. The researchers who were in autonomous universities or who had collaboration experience tend to manage well issues related to confidentiality of research results. The researchers from civil service universities tend not to be familiar with the collaborative research and still lack this capability and professionals related to IP management.

Chapter 8: A Comparative study: Collaborative Research in Thai Shrimp and HDD Industries The comparative case study of the shrimp and HDD clusters were illustrated. The research-performance-driven model of Thai shrimp industry represents the case that the universities' research performances enhanced the collaboration with the industry through the support from government and industry's competitiveness. The technology transfer model of Thai HDD industry indicates the attempt of the private sector and government to spur the research activities and to build R&D capability related to HDD industry on the university side and locally-owned firms. Both cases indicate that openness of dominant firms associated with the more relational governance structure in the global value chain is one of the key antecedents leading to the establishment of UIL activities.

Chapter 9: Conclusions and Implications The summary of all findings and discussions provided the implications for designing policy interventions, academic management plan and firms' external R&D strategies. It explores the deep understanding of UIL and sheds light on the unique factors that affect the UI collaborative research in a developing country. While the previous studies posed limitations for inferring causal relationships between research performance and UI collaborative research, this study confirms that engagement in UI collaborative research is enhanced by research performance; however, it rarely occurs in the reverse direction.

備考：論文要旨は、和文 2000 字と英文 300 語を 1 部ずつ提出するか、もしくは英文 800 語を 1 部提出してください。

Note: Thesis Summary should be submitted in either a copy of 2000 Japanese Characters and 300 Words (English) or 1 copy of 800 Words (English).

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