出國報告(出國類別:參加國際學術研討會)



論文題目: The Performance Evaluation of Government Sponsored Research Projects:

2008-2011

- 服務機關:國立暨南國際大學
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- 報告日期:104年12月10日

摘要

亞洲公共管理學會(Asian Association for Public Administration, AAPA)2015 年於中國西安交通大學召開。來自韓國、日本、泰國、哈薩克、瑞士、南非等十五個國 家及地區的100餘名代表,圍繞"改革、創新與可持續發展:亞洲國家的研究、理論與 實踐"這一主題,通過十二個分論壇展開了交流研討,本次會議是 AAPA 的第六次年會。

隨著經濟全球化以及科學技術的迅猛發展,世界各國都面臨著行政管理物件日趨多 樣、行政事務日益複雜、行政風險與責任與日俱增的問題。加強行政管理領域的交流, 促進行政改革步伐,共同討論行政管理的發展是亞洲各國的政府使命。

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一、目的

亞洲公共管理學會(AAPA)之前身是一群希望從亞洲觀點來思考亞洲各國公共行 政改革議題的學者之間的定期討論會,稱之為「亞洲論壇」(Asian Forum)。一直到 2009 年,在國立暨南國際大學(台灣埔里)舉辦第八屆亞洲論壇的時候,與會學者均感有擴 大參與的必要,因此隔年(2010)就在日本明治大學召開了 AAPA 的成立大會,本人自 2006年開始就參加亞洲論壇的討論會,也因此成為 AAPA 的創始會員之一。AAPA 成立 之後,在過去的五次的年會當中,除了菲律賓的年會之外,個人參加了四次,並均於會 中發表論文。

本次 AAPA 年度學術研討會議是以「亞洲研究、理論、應用的革新、創新與永續 發展」(Reform, Innovation and Sustainable Development in terms of Asian Research, Theory, and Applications)為主題,結合中國科學學與科技政策研究會,於 2015 年 1 月 8 日至 12 日, 假西安交通大學(中國陝西省西安市)舉行。此次的論文,是由本人與計畫協同主持人 (史美強教授,陳文學助理教授)共同撰寫的"The Performance Evaluation of Government Sponsored Research Projects: 2008-2011",針對我國中央政府經費輔助之研究計畫的績效進 行評估。

参加此次會議的目的有三,第一,藉由提交研討會論文,完成本人對於政府補助之 研究計畫績效評估的研究。第二,參與研討會得以與許多亞洲學者,針對研討會主題和 本人發表的論文討論並交換意見。第三,透過參與研討會,增加本人在英文論文撰寫和 口語表達方面的能力(本人論文是以英文發表)。除了參與研討會豐富的學術討論之外, 也與參與大會的學者一同參訪西安市附近的文化古蹟,也算是一項額外的收穫。 二、過程

本人主要是收到 AAPA 會長 Prof. Pan Suk Kim 的 email 邀請,才得知此次會議將在 西安市舉行,並由西安交通大學承辦。由於本人與該校公共政策與管理學院吳建南教授 亦屬舊識,因此同意參與會議。

整體會議期間為兩天,但是研討會的議程只安排了12月9日一天。本人是在12月 8日抵達西安,並於當日下午住進會議舉行地點(校內賓館),完成註冊手續。研討會 正式議程於12月9日開始,在上午舉行隆重的開幕儀式之後,大會安排了一系列的演 講和與會人員合照(附錄一),而真正的研討會則是在當天下午正式展開。本人主要工 作有兩項,一是在12月9日下午擔任與談人(Panel 6),由於原本的主持人 Prof. Osamu Koike (Yokohama National University, Japan)臨時有事情,無法主持,我意外地代替主 持了此小組的討論,整體研討會會議議程詳見附錄二)。我另外一項工作是以與協同主 持人共同撰寫的「The Performance Evaluation of Government Sponsored Research Projects: 2008-2011(附錄三)」為題發表論文(Panel 9),本文是針對我國政府補助的實務性研究 計畫的績效,進行評估,獲得與會學者積極的迴響。研討會在傍晚豐盛的晚宴之後,劃 上完美的據點。

此次會議總共約200人參與,發表了超過60篇學術論文,成果豐碩。除了學術饗 宴之外,我也利用這個機會分別與多位跟亞洲公共行政學者(舊雨新知)私下交換意見, 討論共同有興趣的議題。此外,大會安排多項參觀活動,包括了秦始皇兵馬踊,古城樓, 文化表演和當地特色小吃,大開眼界收穫豐富。

三、心得與建議

個人是 AAPA 的創始會員之一,曾經積極參與 AAPA 前身的「亞洲論壇」,透過小 規模、高度參與的研討會,深入地和與會學者交換意見。自從 AAPA 成立之後,這是 第四次參與擴大規模的年度研討會。從擴大參與的角度, AAPA 年度研討會的規模日益 茁壯,但是卻是以主辦國的學者為主,也開始流失當初深入交換意見的精髓。

即使如此,無論從提交的研究學術論文,或是承辦單位的用心,此次研討會的素質 非常高,個人也從中學習了許多成功的管理個案,或是比較新穎理論的引用。當然,個 人仍然是我國參與此項年會的唯一代表,我國公共行政學者參加的程度並不熱烈,眼看 大陸學者參與的規模和強度不斷提升心中感觸甚多。希望藉由此次參與的經驗,與國內 相關領域之老師交流,期盼能有更多從事公共行政領域之學者專家,在未來一同出席年 會。

附錄一



附錄二

SERIES OF CELEBRATING ACTIVITY FOR XJTU'S 120TH ANNIVERSARY

"REFORM, INNOVATION AND SUSTAINABLE DEVELOPMENT: ASIAN RESEARCH, THEORY, AND APPLICATIONS"



亚洲公共管理学会 2015 国际会议 2015 International Conference

The Asian Association for Public Administration

(AAPA)



Jointly Organized by:

Asian Association for Public Administration Chinese Association for Science of Science and S&T Policy School of Public Policy and Administration, Xi'an Jiaotong university Center for Chinese Local Government Innovation, Xi'an Jiaotong University

January 8-10, 2015 Xi'an, China

AAPA President's Welcome Message

Welcome to the 6th annual conference of the Asian Association for Public Administration (AAPA) in Xi'an, China on January 9-10, 2015. The 1st inaugural conference of AAPA was held in Tokyo in 2010, followed by the 2nd in Jakarta in 2011, the 3rd in Hong Kong in 2012, the 4th in Seoul in 2013, and the 5th in Cebu in 2014.

The main conference theme of the 2015 AAPA meeting is "Reform, Innovation and Sustainable Development in terms of Asian Research, Theory, and Application." Its sub-themes include: (1) how to push administrative reform and realize its aims; (2) innovations in the private and public sector; and (3) sustainable development from organizations, regions to countries. This year's conference brings together an international community of public administration professionals, scholars, and graduate students to learn about major theoretical and practical issues in public administration around the world and specifically in Asia.

The Asian Association for Public Administration (AAPA) was established in 2010 with the aim to expand and improve public administration and public policy by fostering excellence in research, education, and practice in the Asian region. Prior to it, a number of Asian scholars formed the Asian Management Forum and had annual meetings since 2001, which paved the way for the establishment of AAPA. Asian public administration has now become more prominently featured on the world stage so that a need to demonstrate a world-class quality of public administration in Asia to all levels of actors and stakeholders has become apparent.

Therefore, I strongly believe that AAPA can provide great opportunities for networking with scholars and practitioners, as well as scholarly activities that will encourage the development of new professional relationships in the field of public administration in Asia and the rest of the world. Once again, I thank you for your participation and contributions to AAPA. Your continuous support and dedication have ensured AAPA's influential role in public administration for many years to come. Let us promote excellence and professionalism in public administration and policy in Asia together!

Pan S. Kim

Pan Suk Kim President, Asian Association for Public Administration (AAPA) Visiting Scholar in Residence, School of Public Affairs, American University, U.S.A. Professor, College of Government and Business, Yonsei University, South Korea. Immediate Past President, International Institute of Administrative Sciences (IIAS)

Program Overview

| Thursday, 8 January | | | | |
|---------------------|--------------------------------|--|--|--|
| 15:00-21:00 | Registration | Lobby, Nan Yang Hotel 1 st Floor | | |
| Friday, 9 Janua | ry | | | |
| 8:00-10:00 | Registration | Lobby, Nan Yang Hotel 1 st Floor | | |
| 8:30-9:30 | Opening Ceremony | Tuto motion 1 | | |
| 9:30-10:00 | Photo-Taking Break | Conference Hall 2 nd Floor | | |
| 10:00-12:00 | Keynote Speech | | | |
| 12:00-14:00 | Lunch (AAPA Board meeting) | Chinese Restaurant 1 st Floor | | |
| 14:00-16:00 | Concurrent Sessions | Conference Room | | |
| 16:00-16:20 | Break | 1,5,4,5, 0, 60, | | |
| 16:20-18:20 | Concurrent Sessions | 2 nd Floor | | |
| 18:30-20:30 | Welcome Banquet | Chinese Restaurant 1 st Floor | | |
| | Saturday, 10 Jan | uary | | |
| 8:30-10:40 | Keynote Speech | International Conference Hall, | | |
| 10:40-11:00 | Break | 2 nd Floor | | |
| 11:00-11:50 | Closing Ceremony | | | |
| 12:00-14:00 | Lunch | Chinese Restaurant 1st Floor | | |
| 14:00-18:00 | Social Program | City Tour | | |

Friday, 9 January

8:30-9:30 Opening Ceremony International Conference Hall

Moderator: **Prof. Zhengwei Zhu**, Executive Dean of School of Public Policy and Administration, Xi'an Jiaotong university, China

Congratulatory Message

| Prof. TiejunWang | Vice President, Xi'an Jiaotong University, China |
|-------------------|---|
| Dr. Xiaoping Gao | Executive Vice President, Chinese Administration Society, China |
| Prof. Jiang Wu | Vice President, International Institute of Administrative Sciences |
| Prof. Lan Xue | Immediate Past Vice President, Chinese Association for Science of |
| | Science and S&T Policy, China |
| Prof. Pan Suk Kim | President, Asian Association for Public Administration, South Korea |

9:30-10:00 Photo-Taking

10:00-12:00 Keynote Speech International Conference Hall

Moderator: Prof. Eko Prasojo, AAPA Board Director, University of Indonesia, Indonesia

- 10:00-10:20 Prof. Lan Xue, Dean of School of Public Administration, Tsinghua University, China "Global governance: Challenges/Opportunities to Public Administration research and education"
- 10:20-10:40 **Prof. Andrew Massey**, University of Exeter, UK; Editor in Chief of the International Review of Administrative Sciences

"Reform and Innovation - Can Different Traditions Deliver Public Administration as Good Governance"

10:40-11:00 Prof. Masahiro Horie, Director, Executive Development Center for Global Leadership, National Graduate Institute for Policy Studies

"Changes of Public Administration in Japan in the 21st Century"

11:00-11:20 **Prof. Shuzhuo Li**, School of Public Policy and Administration, Xi'an Jiaotong university, China "An Innountion of Conder Imbalance Communes Economics and Superiords

"An Innovation of Gender Imbalance Governance Framework and Sustainable Social Development: Health, Rights and Public Policy"

11:20-12:00 Discussion

18:30 Welcome Banquet

Prof. Zhengwei Zhu, Executive Dean of School of Public Policy and Administration, Xi'an Jiaotong university, China

Saturday, January 10

8:30-10:40 Keynote Speech International Conference Hall

 Moderator: Prof. Andrew Massey, University of Exeter, UK; Editor in Chief of the International Review of Administrative Sciences
 8:30-9:50 Prof. Richard Walker, Associate Dean, Department of Public Policy, City University of Hong Kong

"Understanding Public Service Innovation: Typology and Validation"

8:50-9:10 Vizhou Wu, National Transport & Logistics Public Information Platform (LOGINK), China

"LOGINK—Innovation of Government's Logistics Public Information Service in the Internet Era"

9:10-9:30 Prof. Supachai Yavaprabhas, AAPA Board Director, Chulalongkom University, Thailand

"Reform, Innovation and Sustainability: Agenda for Thailand"

- 9:30-9:50 **Prof. Eko Prasojo,** AAPA Board Director, University of Indonesia, Indonesia "Building a trusted Governance through Integration of Policy Development and Innovation"
- 9:50-10:10 Prof. Jiannan Wu, AAPA Board Director, School of Public Policy and Administration, Xi'an Jiaotong university, China

"Are We happy in the World? Variations and Governance"

10:10-10:40 Discussion

10:40-11:00 Tea Break

11:00-11:50 Closing Ceremony International Conference Hall

- Moderator: Dr. Li Liang, Director of International Cooperation and Exchange Department, Xi'an Jiaotong University, China
- 11:00-11:20 Prof. Pan Suk Kim, President of Asian Association for Public Administration, South Korea

Message and General Assembly

11:20-11:30 Best Paper Award Ceremony

11:30-11:40 Prof. Supachai Yavaprabhas, Chulalongkorn University, Thailand Message of Next Conference Host

11:40-11:50 Prof. Jiannan Wu, Associate Dean of School of Public Policy and Administration, Xi'an Jiaotong university, China

Message of Thanks

Session Schedules

Friday, January 9

14:00-16:00 pm

| Panel | Theme | Venue |
|-------|---|--------------------|
| 1 | Theories of Reform and Innovation | Conference Room 8c |
| 2 | Innovation and Assessment in Public Finance | Conference Room 1 |
| 3 | Innovation in Public Service | Conference Room 3 |
| 4 | Innovation in Education | Conference Room 4 |
| 5 | Innovation Diffusion, Assimilation and Consequences | Conference Room 5 |
| 6 | Collaboration across Public, Private and Nonprofit Organizations | Conference Room 6 |

16:20-18:20 pm

| Panel | Theme | Conference Room |
|-------|--|--------------------|
| 7 | Governance | Conference Room 8c |
| 8 | Result-based Management Innovation | Conference Room 1 |
| 9 | International Practice of Innovation-driven Development | Conference Room 3 |
| 10 | Policy Design in Sustainable Development | Conference Room 4 |
| 11 | Culture and Entrepreneurship in Public Sectors | Conference Room 5 |
| 12 | Social Networks in Public Sectors | Conference Room 6 |

Friday, January 9

14:00-16:00pm

Moderator:

Panel 1 Theories of Reform and Innovation

Conference Room 8C

Prof. Eko Prasojo, University of Indonesia, Indonesia

Groundwater Preservation Policies for Sustainable Development of Regions

Prof. Shinya Ueno, Kumamoto University, Japan

A Study on the Policy Evaluation Dilemma and Its Countermeasures from the Perspective of State Governance

Prof. Zaijian Qian, Research Center on State Governance and Government Innovation, Nanjing Normal University

Administrative Reform and the Practices of Traditional Public Administration in Indonesia Prof. Deddy T. Tikson, M.Sc, Hasanuddin University, Indonesia

The One of Asia's Economy Development Miracle or the Period Institutional Degeneration? Looking again at the Corruption and Governance (or Lack of) Reform in the Indonesia's New Order Era

Vishnu Juwono, Lecturer in Public Administration, University of Indonesia

Direct political participation in the legislative process

Pattama Subkhampang, Senior Academics , King Prajadhipok's Institute, Thailand

Discussants:

Suparjana, Ministry of Home Affairs Republic of Indonesia

Associate Prof. Bo Yan, School of Public Policy and Administration, Xi'an Jiaotong University

| Panel 2 Innovation and Assessment in Public Finance | Conference Room 1 |
|---|-------------------|
| Moderator | |

Prof. Jie Li, School of Public Policy and Administration, Xi'an Jiaotonguniversity

Assessment on the New Delivery Model of Public Goods in Chinese Rural Area: Based on the "Yishi-Yiyi" Financial Incentive and Subsidy Projects in Six Counties in Gansu Province

Prof. Wensheng He, Yating Jiang, School of administration, University of Lanzhou

Assessment on the Budgeting Process in the City Government of Tagum, Davao Del Norte, Philippines

Nor-Aima Serajan Saro-Dilna, MPA, Mindanao State University, Philippines

Enhancing performance audit as leverage for administrative reform in Indonesia

Windhu Wibisono, Supreme Audit Board of the Republic of Indonesia, doctoral student at Administration Science University of Indonesia

Expenditures Quality Improvement in the Acceleration of Regional Development and Public Service Provision in Indonesia (Case Study in Underdeveloped Regions)

I Gede Eko Putra Sri Sentanu, Wang Bing, College of Public Administration, Huazhong University of Science and Technology

Types of Poverty and Their Impact Factors among Migrant Rural Households in the Eco-sensitive areas: A Case of Ankang,Shaanxi Province,China

Wei Liu, Prof. Jie Li, School of Public Policy and Administration, Xi'an Jiaotonguniversity

Discussants:

Moderator:

Dr. Aleth M. Mamauag, Isabela State University Prof. Prabir Kumar De, Dept. of Political Science, University of Kalyani, West Bengal, India

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Conference Room 3

Prof. Reto Steiner, Centre of Competence for Public Management, University of Berne

Training as a Point for Change: Learning & Executive Development in Reforming the Singapore Public Service, 1959 – 2001

James Low, School of Politics & International Relations, Australian National University

An Assessment of Government Provision to the Constituents of Marikina City towards Sustainable Social Development

Dr. Antonio S. Valdez, PamantasanngLungsodng Marikina, Philippines

Comparative study on Citizenship Education through International Experience: Sustainable Path for Promoting Citizen Sector Role in Representative Democratic Politics in Thailand

Dr. Lertporn Udompong, Research and Development Office, King Prajadhipok's Institute, Thailand

Policy Evaluation Study on Subsidy Policy, Qualitative Basis, for Poverty Alleviation In Parepare, South Sulawesi

Muhammad Rusdi, Hasanuddin University, Makassar, Indonesia

Assessing the Sustainability of China's Basic Old-Age Insurance System

Associate Prof. Lijian Wang, Xiaogang Ye, Daniel Beland, Xi'an Jiaotong University

Discussants:

Ella Wargadinata, Faculty of Public Management, IPDN

ABE Miwa, Assistant Professor, Center for Policy Studies, Kumamoto University

Panel 4 Innovation in Education

Conference Room 4

Moderator:

Prof. Sri Juni Woro Astuti, Social and Political Science Faculty, Wijaya Putra University

Analyzing the Effectiveness of the Korean School-based Anti-bullying Program: WEE Class Project

Minhyo Cho, Mikying Park, Department of Public Administration, School of Governance, Sungkyunkwan University

Teachers' Morale And Some Selected Factors As They Relate To Academic Achievement Among High School Students In Lanao Del Sur And Marawi City: Basis For An Intervention Program Kossay D. Mangca, Municipal Agrarian Reform Officer, Department of Agrarian Reform, Iligan

City, Philippines

Examining the Economic Independence of College Students: Effects on their Employment Outcomes

Ju-young Yoon, Rosa Minhyo Cho, University of Sungkyunkwan

Questioning the Role of Highly Position Women in Indonesian Community Based Early Childhood Education Service

Itje Sandra Suminar, Jatiluhur Foundation, Bandung, Indonesia; Associate Prof. Ida Widianingsih, Public Administration Department, Padjadjaran University, Indonesia The Relationships Between Work-Family Conflict, Work Passion, and Job Satisfaction: A Comparison of Chinese Female and Male Engineers

Associate Prof. Xinhong Wang, Prof. Yang xueyan, Xi'an Jiaotong Univeristy, Prof. John C. Weidman, University of Pittsburg

Discussants:

Prof. Marian Myrtle G Onod, College of Public Affairs, Mindanao State University Dr. Ansano M. Ampog, Department Of Public Administration, College Of Public Affairs Mindanao State University, Marawi City, Indonesia

Panel 5 Innovation Diffusion, Assimilation and Consequences Conference Room 5 Moderator:

Prof. David Mello, North-West University, South Africa

Why and How the Korea transformed to the global E-Government Leaders? Focus on the United Nations E-Government Survey

Prof. Choong-Sik Chung, Department of Public Administration, KyungSung University in Korea,

Public Adoption of E-Government Services based on Mobile Internet: An Empirical Study of "IN Label" in Shanghai Dapuqiao Community

Associate Prof. Lin Zhu, Xiaojing Liu, Department of Public Administration, School of science and public management, East China University of Science and Technology

E-Payment And Its Implications In Nigerian Public Service

Dr Sanusi Ahmad, Dr Bayero Bukkuyum Kasim, Department of Public Administration, Faculty of Management Sciences, Usmanu Danfodiyo University Sokoto-Nigeria

Sustainable Development of e-Government Reconsidered: The Cases of Ex-post Evaluation on Official Development Assistance (ODA) Projects

Prof. Sung Gul Hong, Prof. B. Joon Kim, School of Public Administration & Public Policy,

Kookanin University; Prof. Jaeshin Park, School of Corporate Management, Kookanin University

Development and Applications of a Performance Evaluation Methodology for the Ex-Post Evaluation on E-Government Projects in Context of the Official Development Assistance: Political, Legal and Institutional Preparedness

Prof. Sung Gul Hong, Prof. B. Joon Kim, Prof. Jaeshin Park, School of Public Administration & Public Policy Kookmin University

Discussants:

Prof. Chang Kil Lee, Sejong University, Korea Xiaojun Zhao, School of Management, Lanzhou University

Panel 6 Collaboration across Public, Private and Nonprofit Organizations

Conference Room 6

Moderator:

Prof. Osamu Koike, Yokohama National University, Japan

What is Novel in China's New R&D Institutes? From Mission-Management-Governance Perspective

Dongbo Shi, Phd candidate, School of Public Policy and Management, Tsinghua University

Open innovation beyond public and private, in pharmaceutical innovation

Ayako Matuura, Phd candidate, The University of Tokyo

Is there a clubbing effect underlying Chinese research citation increases?"

Associate Prof. Li Tang, School of Public Economics and Administration, Shanghai University of Finance and Economics; Philip Shapira, University of Manchester; Jan Youtie, Georgia Institute of Technology

Examining Coordination in Disaster Response Using Simulation Methods

Associate Prof. Xuesong Guo, School of Public Policy and Administration, Xi'an Jiaotong University; Prof. NaimKapucu, Florida State University

Discussants:

Dr. Dante M. Aquino, Isabela State University

Associate Prof. Milan Tung-Wen Sun, National Chi Nan University

16:20-18:00 pm

Panel 7 Governance

Conference Room 8C

Moderator:

Prof. Sung Gul Hong, School of Public Administration & Public Policy Kookmin University

Pelalawan'S Teknopolitan's Form In Bureaucracy Reform Concept

Faturokhman Eka Nugraha, Sucia Miranti, Ruri Hestiti Adviser : Muhadam Labolo, Averus Toana, Anindita Primastuti, Institute of Home Affair (IPDN)

Thailand's Reconciliation by Public deliberation

Thawilwadee Bureekul, Stithorn Thananithichot, Ratchawadee aengmahamad, King Prajadhipok's Institute, Thailand

Decentralisation Policy to Strengthen Local Government Capacity in Sumedang Regency, West Java Province, Indonesia

Suparjana, Ministry of Home Affairs Republic of Indonesia

Government Performance Evaluation Based on the Information of Government Portal Website: Research Path and Method

Prof. Bao Guoxian, Zhao Xiaojun, Jiang Lihua & Zhang Hong, School of Management, Lanzhou University

Women Empowerment in Politics; the Important Principle for Strengthening Good Governance in Thailand

Thawilwadee Bureekul, Pharkphoom Rukhamate, Ratchawadee Sangmahamad, Nittaya Ponok, Walaiporn Losussachan, King Prajadhipok's Institute, Thailand

Discussants:

Associate Prof. Lin Zhu, Xiaojing Liu, Department of Public Administration, School of science and public management, East China University of Science and Technology

Associate Prof. Ida Widianingsih, Public Administration Department, Padjadjaran University, Indonesia

Panel 8 Result-based Management Innovation

Conference Room 1

Moderator: Prof. Supachai Yavaprabhas, Chulalongkorn University, Thailand Performance Measurement For Local Public Organization: Does it make them more accountable? Ella Wargadinata, Faculty of Public Management, IPDN; Jl. Raya Jatinangor KM 20, Sumedang, Indonesia

Performance Management Revamp and The Effective Use Social Capital in South African Municipalities

Prof. David Mello, North-West University, South Africa

Expansion of public service's sustainability through Public-Private Collaboration platform: Focus on the Green-card platform in Korea

Prof. Kil-pyo Hong, Baekseok University; Prof. Yong-sung Park, Dankook University

Research on the Group Events from the Viewpoint of Game Theory in China

Chunlin Du, Xinwen Zhang, College of Public Administration, Nanjing Agricultural University

What Matter to Effectiveness of Government Performance Measurement: An Empirical Analysis Based on Goal Responsibility Assessment in China

Dr. Chunping Hu, Prof. Jiannan Wu, School of Public Policy and Administration, Xi'an Jiaotong University, China

Discussants:

Vishnu Juwono, Lecturer in Public Administration, University of Indonesia Dr. Antonio S. Valdez, PamantasanngLungsodng Marikina, Philippines

Panel 9 International Practice of Innovation-driven Development Conference Room 3 Moderator:

Prof. Zaijian Qian, Research Center on State Governance and Government Innovation, Nanjing Normal University, China

Emerging Social Entrepreneurship : Role of Self-Help Groups in West Bengal

Prof. Prabir Kumar De, Dept. of Political Science, University of Kalyani, West Bengal, India

Public Corporate Governance in Europe and Asia: Convergence or Divergence?-Shown Using the Example of Government-Linked Companies in Singapore and Switzerland

Prof. Reto Steiner, Centre of Competence for Public Management, University of Berne

Does Performance Accountability Improve S&T Innovation? Empirical Evidence from Chinese Provincial Governments (2003-2012)

Associate Prof. Bo Yan, Zhangli Liu, Jia Liu, Jiannan Wu, Xi'an Jiaotong University

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Associate Prof. Milan Tung-Wen Sun, National Chi Nan University; Mei-Chiang Shih, Tunghai University; Wen-Hsueh Chen, National Chi Nan University

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Discussants:

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Muhammad Rusdi, Hasanuddin University, Makassar, Indonesia

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| Associate Prof. Bankim Chandra Mandal, Ambedkar Studies Centre | at Rabindra Bharati |
| University, India | |
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| Prof. Marian Myrtle G. Onod, Department of Community Development Co | ollege of Public Affairs, |
| Mindanao State University | |
| Towards An Effective Local Development Planning in Indonesia | |
| Prof. Sri Juni Woro Astuti, M.Com., Dwi Wahyu Prasetyono, M.Si. Social | l and Political Science |
| Faculty, Wijaya Putra University | |
| How do the government balance conservation and development in the R | lestricted Development |
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| Prof. Jie Li, Linjing Ren, Xi'an Jiaotong University | |
| For Disaster Planning From the Point of the Height of Buildings: Case Stud | y in Osaka, Japan |
| ABE Miwa, Assistant Professor, Center for Policy Studies, Kumamoto Unive | ersity |
| Discussants: | |
| Prof. Deddy T. Tikson, M.Sc, Hasanuddin University, Indonesia | |
| | |

Kossay D. Mangca, Municipal Agrarian Reform Officer, Department of Agrarian Reform, Iligan City, Philippines

Panel 11 Culture and Entrepreneurship in Public Sectors **Conference Room 5** Moderator:

Prof. Wensheng He, School of administration, University of Lanzhou, China

Cultural Values and Job Performance of the Promotional Staff of the Department of Education Lanao DEL Sur and Marawi City: Basis for an Action Plan

Dr. Ansano M. Ampog, Department Of Public Administration, College Of Public Affairs Mindanao State University, Marawi City

Antecedents and Consequences of Creative Climate in the Public Sector

Kyoungryoul Min, Reginald G. Ugaddan, Associate Prof. Sung Min Park, Ph.D., Graduate School Of Governance, Sungkyunkwan University, Seoul, Korea

Human Resource Development (HRD) Practices and Effectiveness: Assessing the HRD Roles in Boosting Mission Congruence, Trust in Leaders, and Organizational Satisfaction

Associate Prof. Sung Min Park, Dr. Hi Jeong Yu, Min Young Kim, Governance & Policy Evaluation Research Institute , Sungkyunkwan University, Seoul, Korea

A Revisit to the Concept and Role of Entrepreneurial Leadership in the Public Sector: Exploring Ways to Boost Positive Attitudes and Behaviors of Chinese Public Employees

Min Young Kim, Miao Qing, Sung Min Park, Graduate School of Governance, Sungkyunkwan University, Seoul, Korea; Associate Professor, College of Public Administration, Zhejiang University, Hangzhou, China; Associate Professor, Graduate School of Governance, Sungkyunkwan University, Seoul, Korea

Examining Depressive Symptoms among Adolescents of Multicultural Families

Hyerim Lee, Minhyo Cho, Department of Public Administration/ School of Governance, Sungkyunkwan University

Discussants:

Dr. Lertporn Udompong, Research and Development Office, King Prajadhipok's Institute, Thailand

Windhu Wibisono, Supreme Audit Board of the Republic of Indonesia

| Panel 12 Social Network in Public Sectors | Conference Room |
|---|-----------------|
| Moderator: | |

Prof. Choong-Sik Chung, Department of Public Administration, KyungSung University in Korea Research on Organization Coordination Issue in Trans-boundary Governance: A Case of Xi'an

Jia Shi, Yue Zhang, Prof. Zhengwei Zhu, Associate Ptof. Xuesong Guo, School of Public Policy and Administration, Xi'an Jiaotong University

Public Administration Of An Excellent Education And Research Program: The Case Of Cvped In The Philippines

Dr. Edmundo C. Gumpal, Dr. Aleth M. Mamauag, Dr. Dante M. Aquino, Isabela State University

How Public Service Motivation Affect Individual Network Behavior In The Korean Public Sector?

Prof. Junki Kim, Jung-Su Park, Seoul National University

Featured Network Structures of Senior Civil Servants and Political Transition in Korea Prof. Chang Kil Lee, Sejong University, Korea

Discussants:

Prof. Jaeshin Park, School of Corporate Management, Kookmin University

James Low, School of Politics & International Relations, Australian National University

Transportation & Access

Start point: Xi'an Xianyang International Airport

1) Taxi to Nan Yang Hotel: around 150RMB

2) Airport Shuttle Bus to Nan Yang Hotel:

Airport shuttle bus to Jianguo Hotel, 26 RMB per person, then take a taxi to Nan Yang Hotel, around 7 RMB.

Start point: Xi'an Train Station

1) Taxi to Nan Yang Hotel: around 12RMB

2) Bus to Nan Yang Hotel:

No.5, No.9, No.25, No.30 bus to Wulukou station, then take No.33 bus to the South Gate of Xi'an Jiaotong University, and then walk to Nan Yang Hotel (8 min)

Start point: Xi'an High Speed Rail North Station

1) Taxi to Nan Yang Hotel: around 45RMB

2) Metro and Bus to Nan Yang Hotel:

Line 1:

Take Metro Line 2, get off at the bell tower (10 points), then walk to east of bell tower (about 100 meters). And take k45 bus, get off at the ShaPo (9 points), then walk to the Nan Yang Hotel (about 430 meters).

Line 2:

Take Metro Line 2, get off at NanShaoMen (12 points), then walk to the NanShaoMen bus station (approximately 160 meters). And take the 508 Bus, get off at the South Gate of Xi'an Jiaotong University (6 points) and then walk to Nan Yang Hotel (8 min).

Meals

Thursday, January 8

18:30-20:00pm Dinner (Buffet) Chinese Restaurant

Friday, January 9

| 7:00-8:00am | Breakfast (Buffet) | Western Restaurant |
|---------------|------------------------|----------------------------|
| 12:00-13:30pm | Lunch (Buffet) | Chinese Restaurant |
| 18:30-20:00pm | Welcome Banquet (Round | Table) Chinese Restaurant |

Saturday, January 10

| 7:00-8:00am | Breakfast (Buffet) | Western Restaurant |
|---------------|--------------------|--------------------|
| 12:00-13:30pm | Lunch (Buffet) | Chinese Restaurant |

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The Performance Evaluation of Government Sponsored Research

Projects: 2008-2011

Milan Tung-Wen Sun NationalChi NanUniversity

> Mei-Chiang Shih TunghaiUniversity

Wen-Hsueh Chen National Taipei University

Introduction

Essentially, the recent administrative reform emphasizes the notions of performance management which stresses the importance of shifting from controlling inputs to measuring outputs. It has been emphasized by many reform programs, such as Government Performance and Results Act in the USA, Financial Management Initiative in Britain, and the Programme Management and Budgeting in Australia. Performance management and measurement have also been receiving wide discussion and attention in Taiwan in the past two decades. Especially, the performance of government sponsored research projects has become a heatedly debated issue provoked by the mass media news. The media uncovered the story that there is a huge amount of taxpayer's dollar involved in the government sponsored research projects, but the ratio of research findings adopted by the corresponding government agency is quite low. This phenomenon drew severe critiques from the Legislative Yuan, the Control Yuan and the general public.

The objectives of performance management are to improve efficiency, budgetary decision, transparency and accountability (OECD, 2004). Research findings about what factors affect the performance of government sponsored research (e.g., the percentage of policy recommendations adopted by the sponsor agency) can presumably provide needed information as how to achieve the above mentioned objectives. Therefore, this paper collects data regarding research project sponsored by government agencies during the period between 2008 and 2011, and multi-variate statistical analysis is applied to examine the cause-effect of the performance of these research projects. Although there are many international and local literatures discuss the meaning, importance, and techniques of performance management, but very few empirical research projects. The significance of the paper is to bridge the gap between theory and practice, and to provide an inside look regarding the function of government-contracted research projects in Taiwan.

The balance of this paper is divided into four parts. The next section provided a short literature review on the topics of performance management and measurements and the evaluation of government sponsored research in Taiwan. It is followed by research design and data descriptions. The third section presents data analysis and discussion, and a brief conclusion is provided in the final section.

Literature Review

Performance Management

According to Bouckaert et.al. (1997), there are a number of levels at which performance

measurement can operate, and they can be integrated into an input-output model of policy and management cycle. The input-output model (see Figure 1) provides a systematic overview of the strategic objectives of an organization in which end outcomes are derived from the organization's mission statement. The operational objectives are constituted of five sequential phases of policy cycle. The first three phases of the policy cycle — input, activities and output, and the loop from output to input are the management cycle. The task of management should concern about what inputs yield the right amount and quality of outputs by organizing the activities in the best possible way.



The outputs should have some impacts on society. The crucial question is whether and what outcomes will result from the outputs. The latter are events, occurrences, or changes in conditions, behaviors or attitudes. In other word, outcomes are the consequences of what the program or organization did. Hatry (1999) argues that there is a pragmatic but important distinction between the ends ultimately desired and the interim accomplishments that are expected to lead to these end results. Of course, the impact of the societal environment should be assessed.

To certain extends, performance management can be broadly perceived as acting upon performance information. Therefore, generating performance information and to analyze it become critical. On the basis of Bouckaert's model, performance management should at least focus on valuable information concerning indicators in every phase of the cycle. Based on these information, criteria for assessing performance, such as economy (cost divided by input), productivity (output divided by one specific input), efficiency (output divided by cost), effectiveness (outcome divided by output), and cost-effectiveness (outcome divided by cost), can be applied (Neely *et al.*, 2006).

Generally speaking, performance measurement has at least three functions. First, it is

used to do retrospective assessments of realized, observed, and measured impacts. Second, performance measurement can be used to assess the best direction in which to head. Third, performance measurement can benchmark accomplishments against historical or international measures and advocate for particular actions (Olsen and Merrill, 2011:8). On this regard, to evaluate the performance of government sponsored research in Taiwan not only have to focus on similar information and criteria, the purpose of the assessment is to serve these functions.

The Measurement of Research Performance

The history of government sponsoring research is long. In the United States, in order to assure the energy supply and social economic stability, US government greatly increased its research funding after World War II hoping that social development could be proceeded smoothly by means of knowledge utilization. Until 1993, under the influence of Government Performance and Result Act(GPRA), the performance appraisal of research outcomes has gradually become the center of debate (Kostoff, 1996: 291).

To evaluate the performance of government sponsored research is to examine the quality of research outcomes, to generate useful information and to answer to the general public. Although it is legal and legitimate to evaluate the performance of government sponsored research, it is not easy to establish a system of performance measurement methods and indicators acceptable and agreeable by all stakeholders. First, government departments have different viewpoints toward performance measurement. Therefore, it is natural that there are difference among agencies regarding what kinds of information (e.g., indicators) are useful. For example, a member of Congress might ask whether appropriations for a particular laboratory will produce jobs in his or her district, and the director of the Office of Management and Budget (OBM) might ask about U.S. research expenditures relative to all other demands on the budget (Olsen and Merrill, 2011:8). Second, the fundamental difference between basic research and applied research is obvious. The useful outcomes of basic research cannot be measured directly on an annual basis, because the usefulness of new basic knowledge is inherently too unpredictable; on the contrary, applied research usually has pre-set goals and objectives, and performance appraisal can be conducted according to established goals and objectives (National Academy of Sciences, 1999:2). Third, different research fields cannot be compared based on same standards. Statistical standardization might produce bias problems.

Kostoff (1996: 285-288) points out that bibliometrics and econometrics are two research approaches which can be applied to research performance evaluation. The former provides indicators such as publications(publication of research results in refereed journals), peer reviewed books(research results published as commercial books reviewed by peers), keynote addresses, conference proceedings, citation impact, chapters in books, and competitive grants; the latter examines the cost-effectiveness of research outcomes. Basically, bibliometrics is still the major approach in the performance appraisal disciplinary.

In bibliometrics approach, citation analysis and book reviews are two most adopted performance indicators. Citation analysis includes citation ranking and citation counts. Citation analysis provides researchers with an effective indicator for assessing not only the research performance of individual authors, but also for assessing the relative quality of paper, journals, and programs (Garfield, 1983). However, there are some limitations when using the citation analysis. Citation counts provide not enough information as why a work is being cited (Meho and Sonnenwald, 2000: 125).

On the other hand, research related book reviews is another way to perform evaluation. Similar to the citation analysis, book review has also limits too. For example, because author of research project can be identified by reviewers, thus, positive comments are quite common. Furthermore, book review lacks a coherent standard to judge the quality of research performance.

Performance Measurement of research in the Developed Countries

In the United States, The Committee of Science, Engineering, and Public Policy of the National of Academy of Science presented six recommendations to performance appraisal (National of Academy of Science, 1999): (1) Both of the applied research and basic research programs supported by the federal government can be evaluated meaningfully on a regular basis. Research programs should be described in strategic and performance plans and evaluated in performance reports.(2) Differences in the character of the research will lead to differences in the appropriate timescale for measurement, in what is measurable and what is not, and in the expertise needed by those who contribute to the measurement process. (3) The most effective means of evaluating federally funded research programs is expert review. Expert review includes quality view, relevance review, and benchmarking, and should be used to assess both basic research and applied research programs.(4) Agency must pay increased attention to their human-resource requirements in terms of training and educating young scientist and engineers and in terms of providing an adequate supply of scientist and engineers to academe, industry, and federal laboratories.(5) mechanisms for coordinating research programs in multiple agencies whose fields or subject matters overlap are insufficient. A formal process should be established to identify and coordinate areas of research that are supported by multiple agencies. And (6)The development of effective methods for evaluating and reporting performance requires the participation of the scientific and engineering community, whose members will necessarily be involved in expert review.

In Holland, The Ministry of Education, Culture and Science and the Ministry of

Economic Affairs design the "Results of Clients' Satisfaction Surveys" to evaluate research performance (Deen and Vossensteyn, 2006: 5). In New Zealand, The Performance Based Research Funding's (PBRF) indicators are: (1) Published academic work, such as books, journal articles, conference proceedings, and masters or doctoral theses. (2) Work presented in non-print media (such as film, videos and recordings. (3) Other types of outputs, such as intellectual property, materials, products, performances and exhibitions. (Deen and Vossensteyn, 2006: 20-21).

In Britain, the Research Assessment Exercise (RAE) is used to assess the quality of research of British higher education institutions. It classifies academic disciplines into15 categories from panel A to panel O. Different discipline had different panel criteria and working methods. Taking political science and international relations sub-panel for example, both applied research and practice-based research will be assessed by the outputs of these researches. The sub-panel also will consider the quality of the research against the same indicators of excellence used by other performance appraisal, such as, originality, significance and rigor (RAE, 2008: 6).

The Performance of Government sponsored Research in Taiwan

There are basically two venues through which Taiwan government sponsors research: the National Science Council (NSC) and the Research Development and Evaluation Commission (RDEC), both of these agencies are under the Executive Yuan. The former emphasizes basic research, and the latter provides funding to applied research, especially to those research topics that are significantly important to government policy and/or administration (Table 1). Although the "administrative management and policy study" is critical to government operations and policy design, its share of government research funding is relatively small compared to that of the "Science and Technical Study." In terms of performance management, the criteria for assessing the quality of science and technical study are primarily academic ones (i.e., the merit of the research question and research design). However, the appraisal of the "administrative management and policy study" is more complicated, the essential concern is whether the research findings can help to solve emerging social and administrative problems.

| Category Year | Administrative Management and Policy Study (%) | Science and Technical Study (%) | Total Funding |
|------------------|---|------------------------------------|---------------|
| 2008 | 31,342,733 (8.0%) | 359,982,967 (92.0%) | 391,316,300 |
| 2009 | 15,733,367 (6.8%) | 215,324,400 (93.2%) | 231,091,100 |
| 2010 | 14,344,967 (5.6%) | 239,585,333 (94.4%) | 253,930,300 |

Table 1: Funding for Basic and Applied Research in Taiwan, 2008-2011

| 2011 28,095,000 (12.3%) 199,731,200 (87.7%) 227,826,200 |
|---|
|---|

Note: Table entries are in USD. For convenience, the exchange rate between USD and NTD is fixed at 1:30. Data Source: *The Annual Report of the Performance of Government Sponsored Research*, 2008~2011.

Beginning in 1973, RDEC, for the purpose of promoting government research capacity, initiated the first government contracted research (Liao and Wu, 2012: 10-11).¹ According to a regulation regarding the management of government contracted-out research, it specifies that a government agency can sponsor such research on the basis of organization need, and the research findings should be used to improve the administration of the agency and/or to provide reliable and feasible recommendations for future policy initiative. In practice, the "administrative management and policy study" stresses that (1) research topic should be problem-oriented, and it should reflect the trends of long term social development; (2) the opinions of major stakeholders and general citizens should be considered in the research process; and (3) research recommendations can serve as the references for policy planning and evaluation (Laio and Wu, 2011:111).

Specifically, funding provided by RDEC is divided into two categories. A part of the funding is to support research related to "administrative management and policy study" which are initiated by RDEC according to its own agenda priority and policy preference. Another part of the funding is to support research projects which are proposed by the other Central government agencies. Nevertheless, RDEC is in charge of performing the evaluation of all the contracted-out research. In addition of its own appraisal, RDEC will refer the final research reports to the proposed agencies respectively to see to what degree the research findings can be adapt and utilized.

In 1990s, influenced by knowledge utilization theory and unsatisfied adoption ratio, scholars in Taiwan started to investigate the cause-effect of performance management. Sun (1993) found that insufficient training of practitioner, insufficient financial resources, insufficient human resources, and inadequate authority for practitioners to carry out recommendations were the major factors that hindered knowledge utilization in Taiwan. By using of the "two communities theories", Zheng (1996) indicated that insufficient performance evaluation mechanism in government and culture difference between academics and practitioners were two factors leading to low adoption rate. After examining Environment Protection Agency's performance, Chao (1998) pointed out that the reasons why research findings were not adopted by agency were poor research quality, lack of feasibility, unclear government objectives, long term efforts required, department head's personal bias, and different cognition. However, these are research concerning the degree of

¹ "Problems of Contemporary Taiwan's Commodity Price and Corresponding Policy Solution" was the first government contracted research project conducted by Dr. Sun Zhen of Taiwan University.

utilization of research findings that are academic in nature. They are not design to appraise the performance of government contracted-out research. And for some uncertain reasons, this type of research drained off during the last decade.

It is suggested in this paper that academic and government researchers should take the performance appraisal of government contracted-out "administrative management and policy study" seriously. In 2007, the Control Yuan (2010: 54-55) criticized the performance of government-contracted-out research by revealing that, among the total 1,248 research projects sponsored by government agencies in 2006, only 602 of them whose policy recommendations were partially adopted (about 48.24%). Looking at the performance of government sponsored research for the past four years (Table 2), their adoption rates fluctuated from 24.9% in 2009 to 51.5% in 2010.

| | The Total Number | The Number of Research whose | The Adoption |
|------|------------------|------------------------------|--------------|
| | of Research | recommendations are adapt | Rate (%) |
| 2008 | 2042 | 563 | 27.5 |
| 2009 | 2489 | 621 | 24.9 |
| 2010 | 2453 | 1263 | 51.5 |
| 2011 | 1915 | 851 | 44.4 |

Table 2: The adoption rate of government sponsored research, 2008-2011.

Data Source: *The Annual Report of the Performance of Government Sponsored Research*, 2008~2011.

Furthermore, taking the year of 2011 as an example, the total number of government research projects reaches 1915, and the whole expenditure is 6.8 billion (about 0.23 billion of USD, see Table 1). Among the 1915 research projects, although 851 of them have provided policy recommendations that have been adopted by the government, the adoption rate is only 44.44% (RDEC, 2012). Compared to the huge sum of funding, it is worthwhile to examine why there are more than 55% of research projects that have not delivered any impacts on government operation. Under such circumstance, not only both the Control Yuan and the Legislative Yuan, but also the media and the general public have all raised concerns about the effectiveness of government research projects. 2

It might be argued that it may be overly simplified, or even insufficient, to take policy adoption as the only criterion to evaluate the performance of government sponsored research. Zhen (2009) argues that many research have revealed extraordinary amount of information which are useful for policy evaluation, but they are not policy recommendations that can be adopted. In addition, the appraisal of whether the research findings have been adopted or not is usually conducted only half year after the research was completed. However, the

²FTV News, 2012/9/24.<u>http://newsftv.com.tw/NewsContent.aspx?sno=2012924p10M1&ntype=class</u>, retrieved date, 2012/10/9.

intermediate outcome or the impact of the research might be realized several years later (Zhu and Lin, 2011). Furthermore, some of the research findings have to wait for the "policy window" to be realized. For example, a research conducted in 1994 regarding the reveal system for government information could be considered as adopted only after 2005, when the Government Information Act was passed (Laio and Wu, 2011:115).

Some scholars have questioned about the feasibility of applying the concept and the practice of performance management on government sponsored research (Lin, 1998:28). Nevertheless, since the indicator has been utilized for a long time, and its meaning is easy to understand, policy adoption is used in this paper to evaluate the performance of government sponsored research. Factors which can explain the variation in policy adoption can provide valuable information for improving the performance of research in the future.

Research Design and Data

Analytical Framework

On the basis of Bouckaert's model (Figure 1), an analytical framework is proposed to evaluate the performance of government contracted-out research (Figure 2). Basically, the framework is consisted of three elements in performance management: input, output and intermediate outcome. It is argued in this paper that policy adoption is an intermediate outcome of government sponsored research, it is not an output measure. It is the completion of the research and the quantity and quality of the contents of the research which constitute the output aspect of the research. It is on the basis of these output variables that the policy recommendations proposed by government sponsored research can be adopted or not (i.e., a dichotomous variable of intermediate outcome).



Figure 2: Analytical Framework

The output measures include five variables: the number of policy recommendations proposed by a research, the proportion of short-term solution to the total policy recommendations, the number of government agencies recommended to solve the problem, law and regulation need to be revised, and the recommendation of complementary measure. It is hypothesized that (1) the more policy recommendation proposed, it is more likely that government agency can find feasible solution; (2) short term policy recommendations can generate immediate results which tend to be preferred by government agencies under the condition of uncertain budget allocation in the long run; (3) the more agencies have to be involved in problem solving indicate more efforts are needed in coordination and extra transaction costs, which usually diminish the willingness in policy adoption; (4) the specification of law and regulation need to be revised in policy recommendation tend to increase the likelihood of policy adoption; and (5) the inclusion of problem solution, it tends to enhance the probability of policy adoption.

The input indicators include the amount of research funding, the duration of research project, and the number of team member. Presumably, more financial or human resources and longer time for conducting research, the quality can be improved, and hence the higher possibility for its recommendations to be adopted. These input measures also represent the criteria of economy in performance management. The definitions and operationalization of these variables are presented in Table 3.

| Variables | Aspects in Performance Management | Measurement | |
|---|---|---|--|
| Dependent variable | | | |
| Policy Adoption | Intermediate Outcome | 0=No, 1=Yes | |
| Independent Variables | | | |
| Research Duration | Input | The number of months | |
| Research Funding | Input | NTD in thousands | |
| Research Team Member | Input | The number of team member (principle researcher, associate researcher(s), research assistant(s), ets.,) | |
| Total Number of Policy Recommendations | Output | | |
| Short Term Recommendations | Output | The number of short term recommendation/ the number of intermediate and long term recommendation | |
| Agencies Involved Output | | | |
| Specific Law and Regulation Involved? | Output | 0=No, 1=Yes | |

Table 3: Definitions and Operationalization of Variables

Data and Sample Descriptions

This study examines the performance of government sponsored research projects contracted out by RDEC in Taiwan from 2008 to 2011. The reasons for selecting the time period (from 2008 to 2011) for analysis are two folds. First, these research projects belong to the category of "administrative management and policy study" which are problem-oriented, closely linked to social development, and will have important influence on the well-being of the whole society. Second, since 2008, every research project contracted out by government agency has been integrated into Government Research Bulletin (GRB) system (The Control Yuan, 2012:102). GRB system contains the comprehensive information of the government sponsored research from which the data for this research can be collected systematically.

From 2008 to 2011, there are a total of 137 research projects were contracted out by RDEC. By examining *The Annual Report of the Performance of Government Sponsored Research* published on RDEC website, data regarding the title of research project, its research duration, its amount of research funding, and its condition of policy adoption are first collected. Then, all of the 137 research reports are downloaded from GRB system, and data on the number of team member, total number of policy recommendations, the number of short-term, medium and long term recommendations, number of agencies involved, laws or regulation recommended to be revised, and the recommended complementary measure are collected and coded accordingly ³.

Among the 137 government contracted-out administrative management and policy studies, only 35 of them are evaluated by the sponsored agencies as feasible, and part or all of the recommendations have been adopted. For the input side (Table 4), the research duration ranges from 3 to 18 months; research funding is between two hundred thousand NTD (about seventy thousand USD) and 5.8 million NTD (about one hundred and ninty thousand USD), and the average is about nine hundred and thirty thousand NTD (about thirty-one thousand USD); the number of research team member range from 2 to 18 people. As for the output indicators, some of the research reports contain no recommendation, but the maximum number of policy recommendation proposed by the project is 74, and the average is about 14; the ratio between short term and long term recommendations range from 0.21 to 5, the average is about 1.61; the average number of agencies recommended for solving problem together is about 6; there are 67 research projects specify one or more law and/or regulation need to be revised; 93 projects provide no complementary measure.

³ A standard coding procedure is involved in which two coders have coded the sample articles independently, the results are then compared, and any disagreement has been discussed and solved by mutual agreement (Neuendorf, 2002).

| Variables | Minimum | Maximum | Mean | SD | Mode | Cases |
|------------------------|---------|---------|--------|--------|------|-------|
| Research Duration | 3 | 18 | 8.06 | 2.91 | | 137 |
| Research Funding | 200 | 5790 | 936.12 | 689.17 | | 136 |
| Research Team Member | 2 | 18 | 6.00 | 2.87 | | 110 |
| Total Number of Policy | 0 | 74 | 13.75 | 10.95 | | 116 |
| Recommendations | | | | | | |
| Short Term | 0.21 | 5.00 | 1.61 | 1.05 | | 102 |
| Recommendations | | | | | | |
| Agencies Involved | 0 | 22 | 5.53 | 4.84 | | 116 |
| Specific Law and | 0 | 1 | | | 67 | 116 |
| Regulation Involved? | | | | | | |
| Complementary Measure? | 0 | 1 | | | 93 | 116 |

 Table 4: Sample Descriptions

In sum, the performance of Taiwan government sponsored research projects in the category of "administrative management and policy study" is relatively poor, they can be described as relatively short in research duration with limit but acceptable amount of funding; they are usually implemented by a medium size research team. On average, these research projects produce about 14 policy recommendations; most of them are short-term solutions, requiring coordination among many government agencies. About half of the research projects specifically pinpoint law and/or regulation which need to be revise, and vast majority of these projects mention no complementary measure for coping with the problem.

Research Findings and Discussion

T-test and Chi-square Test

For the purpose of examining whether there is any relationship between input variables, as well as output ones, and policy adoption, sample projects are divided into two groups: those with adopted recommendation and those without (Table 5). On average, government sponsored research projects which produce adoptive recommendations have more research funding (about one million NTD vs. eight hundred thousand NTD) and more team member (about 7 vs. about 6) than those without, and have relatively shorter period of research duration (7.8 months and 8.15 months) than those without any adopted recommendation. However, the differences are not significant.

| Input and | Policy | Mean | t voluo | |
|------------------|-----------|---------|---------|--|
| Output Variables | Adoption? | | t value | |
| Research | Yes | 7.80 | 0.53 | |
| Duration | No | 8.15 | 0.55 | |
| Decemb Funding | Yes | 1095.94 | 1.07 | |
| Research Funding | No | 882.84 | -1.07 | |
| Research Team | Yes | 6.63 | 1 10 | |
| Member | No | 5.75 | -1.10 | |
| Total Number of | Yes | 16.06 | -1.21 | |

Table 5: A Comparison of Input and Output variables by Policy Adoption

| Policy | No | 12.83 | |
|-----------------|-----|-------|---------|
| Recommendations | | | |
| Short Term | Yes | 1.92 | 1 02** |
| Recommendations | No | 1.48 | -1.93** |
| Agencies | Yes | 4.12 | 2 20 |
| Involved | No | 6.10 | 2.29*** |

Note: One tail t-test, * = p<.1; ** = p<.05; *** = p<.01.

On the other hand, research projects with better performance generally contain more recommendations (n=16), emphasize short-term solutions (1.92), and require less government agency coordination (n=4) than those projects without policy adoption (the comparative figures are 13, 1.48, and 6 respectively, see Table 5). Particularly, the differences between these two groups of projects in terms of "emphasizing short-term solution" and "the number of agency involved in recommendation" are statistically significant at 0.01 level. Potentially, the sponsoring agencies are looking for short-term and less complicated solutions for dealing with emerging social problems. Of course, the tendency may be related to the quality of recommendation, but the underlying attitude of "act now for avoiding blame" can be a significant factor contributing to policy adoption.

Ch-Square tests are also conducted to determine whether there is any relationship between policy adoption and whether there is any specific law and regulation recommended for revision and whether any complementary measure has been recommended. However, no significant relationship has been revealed (data not shown).

Logistic Regression

There are two models been analyzed in the logistic regression. Model I contains only the input variables, and Model II includes both the input and output variables (Table 6). The purposes of the regression analysis are to examine the relative importance of these variables, and their influences on the performance of government sponsored research project (i.e., the dependent variable is policy adoption).

| Variables | Model I | Model II |
|----------------------------|---------|----------|
| | Coeff. | Coeff. |
| | (S.E.) | (S.E.) |
| Constant | 918 | -2.721** |
| Constant | (1.248) | (1.248) |
| Pasaarah Duration | 173 | 152 |
| Research Duration | (.110) | (.163) |
| Pasaarah Funding | .001 | .001 |
| Research Funding | (.000) | (.001) |
| Pasaarah Taam Mambar | .098 | .071 |
| Research Team Member | (.688) | (.119) |
| Total Number of Policy | | .088*** |
| Recommendations | | (.034) |
| Short Term Recommendations | | .381# |

 Table 6: Logistic Regression

| | | (.256) |
|-----------------------------|---------|--------|
| Agencies Involved | | 245*** |
| Agencies involved | | (.082) |
| Specific Law and Regulation | | .543 |
| Involved? | | (.608) |
| Complementary Massure? | | .383 |
| Complementary Weasure? | | (.767) |
| Ν | 109 | 97 |
| -2Log Likelihood | 120.898 | 89.856 |
| Hosmer & Lemeshow test | p>0.05 | p>0.05 |

Note: 1. # indicates that the value is approaching significant at 0.1 level, * = p < .1; ** = p < 0.05; *** = p < 0.01.

Although the fitness of Model I is confirmed through the Hosmer & Lemeshow test, but there is no significant relationship between the dependent and independent variables. As also indicated in Model II, there is no significant influence of the input dimension (research resources and research duration) on the performance of government sponsored "administrative management and policy study" projects.

In Model II, the number of policy recommendations has a positive impact on policy adoption, and the coefficient is significant at 0.01 level (Table 6). On the other hand, an increase in the number of government agency to provide joint problem solution tends to decrease the possibility of policy adoption, the negative relationship is also significant at 0.01 level. However, although the proportion of short-term recommendation does not have significant relationship with policy adoption, which does not confirm the finding revealed in Table 5, the direction of relationship is as expected, and the coefficient is approaching significant at the 0.1 level. That is to say, when the research project emphasizes the short-term solutions, it is more likely that its recommendations will be adopted by the sponsoring agency.

Furthermore, although the relationships between "specific law and regulation need to be revised" and "the provision of complementary measure" and policy adoption are not significant, the directions of the respective relationships are as expected. The specification of law and regulation need to be revised in policy recommendation tend to increase the likelihood of policy adoption; and the inclusion of complementary measure in policy recommendation indicates the sophistication in the design of problem solution, it tends to enhance the probability of policy adoption. These considerations may be related to the quality of research.

As a summary, the number of policy recommendation, the number of agency recommended for providing problem solution, and, to a lesser extent, the emphasis on short-term recommendation ate three important variables affecting policy adoption. That is to say, these three factors significantly influence the performance of government sponsored research, especially for those projects in the "administrative management and policy study"

category which is in charged by RDEC. The findings echo the arguments made by Chao (1998). Of course, only about 26% (35/137) of our sample research projects are defined by the sponsoring agencies as providing feasible recommendations, and partial or all of them have been adopted accordingly. The situation requires specific efforts to improve the efficiency, budgetary decision, transparency and accountability of government sponsored research. However, any effort to manage and to improve the performance of government sponsored research has to consider these factors seriously.

Concusion

The retrospective evaluation on the performance of government sponsored research in Taiwan is not very impressive. There are ample rooms for improvement by taking the necessary measures by RDEC. The essential question is: how to improve the adoption rate of these researches? Of course, the argument that policy adoption rate should not be the only criterion to access the performance of research projects is still valid, the richness in information generated, the comprehensiveness of analytical framework proposed, the adequacy of research methods involved, etc., can also be included.

Although there is no significant relationship between inputs and outcomes of government sponsored research, RDEC should nevertheless monitor closely the process of contracting out research project. It is recognized that some actions have already been taken by RDEC to ensure the usefulness of research project (Laio and Wu, 2011), the following steps can also be considered: (1) The details in contract as to specify the concrete requirements of the research report, the qualification of research team, and to encourage cross-disciplinary and cross-university collaboration should be stressed; (2) The feedback loop of the management cycle should be established, the quality and the adaptability of research output should be carefully evaluated, and the results can be used to further ensure the quality of research team in competing for government research contract; and (3) The balance between short- and long-term recommendations should be emphasized, RDEC has to reduce the risk for the research team to maximize policy adoption rate at the expense of lacking long term perspective in solving critical social problems.

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