

Greetings to the Asia Pacific Conference 2012

Since its inception 17 years ago, the Ritsumeikan Center for Asia Pacific Studies (RCAPS) at the Ritsumeikan family of educational institutions has done its best to promote the constantly evolving region of the Asia Pacific and research related to this dynamic region.

The RCAPS has a history of organizing various academic meetings to promote the study of the region. Its early efforts were directed to establishing the Ritsumeikan Asia Pacific University (APU) in Beppu City under the visionary leadership of Professor Sakamoto Kazuichi and his dedicated team of academics and administrators. With the establishment of APU, the RCAPS has become a research center to promote the research and dissemination of Asia Pacific Studies encompassing the entire disciplinary fields in social science research.

The Ritsumeikan APU's Asia Pacific Conference has become an annual activity organized by the RCAPS since 2003 to gather all the researchers at the APU campus. The annual activity has attracted hundreds of researchers from within Japan and all over the world to come to APU to share the research and findings. I am delighted that as in previous conferences, this conference too has brought innovative areas for comment and analysis.

On this happy occasion, I congratulate its current Director, Nader Ghotbi, the members of the RCAPS Steering Committee and the staff of the Research Office for putting together a range of topics and speakers for this conference.

Professor A. Mani

Vice President, International Cooperation & Research

Ritsumeikan Asia Pacific University (APU)
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Oita, Japan

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Notes from the Editor

The annual Asia Pacific Conference at Ritsumeikan Asia Pacific University (APU) is being held in December 2012 while the socioeconomic and psychological impact of the March 11th, 2011 triple disasters of Earthquake-Tsunami-Radioactive contamination in the Tohoku area of Japan can still be felt. As such, besides the “Regular Panel” presentations that target the wide range of issues in the Asia Pacific Region, we added a “Workshop Panel” focusing on “Disaster Management and Japan” to invite graduate students for active hands-on research and drafting of a research paper on the APU campus. Professor Yoichiro Sato will provide information regarding the “Workshop Panel” and I will explain the policies we undertook for the “Regular Panel” presentations this year.

All applicants to the “Regular Panel” AP Conference 2012 were asked to submit an “abstract” of the research they would like to present at the conference for the purpose of screening. The abstracts of the papers were screened by selected members from the RCAPS Steering Committee, as well as other faculty members from Ritsumeikan Asia Pacific University (APU) who mostly also kindly accepted the responsibility to chair the Regular Panel Sessions. Here I would like to mention their names and thank them for their pure and sincere support of this great annual academic endeavor at Ritsumeikan Asia Pacific University (APU). The following list mentions the names of some of the said faculty members, arranged alphabetically by their given names:

- A. Mani, Professor, College of Asia Pacific Studies (APS)
- Ali Haidar, Professor, College of International Management (APM)
- Behrooz Asgari, Associate Professor, College of International Management (APM)
- Haruo Nakayama, Professor, College of International Management (APM)
- John A. Rose, Professor, College of Asia Pacific Studies (APS)
- Kozo Otsuka, Assistant Professor, College of International Management (APM)
- Sangho Kim, Professor, College of International Management (APM)
- Serik Meirmanov, Associate Professor, College of Asia Pacific Studies (APS)
- Steven B. Rothman, Associate Professor, College of Asia Pacific Studies (APS)
- Yan Li, Professor, College of Asia Pacific Studies (APS)
- Yiu-Chung Ko, Professor, College of Asia Pacific Studies (APS)
- Yufu Iguchi, Associate Professor, College of Asia Pacific Studies (APS)
- Yuka Ishii, Professor, College of Asia Pacific Studies (APS)

At the next stage, the applicants whose abstracts had been accepted for presentation were asked to submit a “Summary Paper” to be edited, formatted and published in the “Proceedings to the Asia Pacific Conference 2012”. It was decided that only the summary papers, with about 1,000 words or more, would be included at the proceedings, and not the abstracts which were about 100-150 words. From among 63 presentations scheduled in the regular panel, 48 of them were supplemented with the summary of the paper before the deadline, and thus will appear here at the Proceedings of the AP Conference 2012. They include one paper on “Disaster Management”, 10 papers on “Economics”, 6 papers on “Education”, 5 papers related to the “Environment”, 3 papers on “International Relations”, 6 papers about “Management”, 3 papers on issues related to “Politics”, 6 papers on “Public Health”, and 8 papers on “Sociology”. I hope the alphabetical subject listing of the presented papers helps with an easier understanding of the range of themes and topics presented at the “Regular Panel”.

However, I am pleased to announce that all the researchers who attended the AP Conference 2012, whether they submitted the summary version of their research paper or not, are welcome to submit to us the “Full Paper” of their presentation for publication at the next issue of “Ritsumeikan Journal of Asia Pacific Studies”. Because their research has already been screened and accepted for presentation at the conference, the review process would be simpler and mainly consist of an editorial check to confirm that the structure and format of the paper follows the guidelines announced in the homepage of the RCAPS (refer to “Notes for Contributors”). Any issues in the full paper that would require revision would be communicated to the authors through the RCAPS office after consultation by the reviewer and the chief editor of the Ritsumeikan Journal for Asia Pacific studies. Authors who would prefer to submit their work to any other journal are also free to do so and the AP Conference 2012 does not hold any copyright claims over the research papers presented at the conference or published as a summary paper in its proceedings.

Let me also express my appreciation for all the support and assistance we received from the APU faculty and the staff of the Research Office, specially its Manager Mr. Kataoka, Mr. Oshiro and Mr. Tau from the RCAPS division as well as other members of the Research Office. This would have not been possible without your work. There are other APU faculty and office staff who in one way or another helped with this conference though I could have not mentioned all their names. We are also grateful to all the researchers and scholars who responded to our conference call and came all the way to the beautiful city of Beppu in Kyushu, Japan.

Thank you all

Nader Ghotbi, MD, PhD

Director, Ritsumeikan Center for Asia Pacific Studies (RCAPS)

**Coping with changing ‘natural’ hazards in the 21st century:
One decade down, nine decades to go**

Professor Michael H. Glantz, University of Colorado, USA

In 2007 the UN Intergovernmental Panel on Climate change (IPCC) process was awarded a Nobel Prize for its scientific warnings about human-induced climate change and its primarily adverse consequences for societies and the ecosystems on which they depend for their well-being. Warnings have increased since the early 1970s about the enhancement of the naturally occurring greenhouse effect as a result of the burning of fossil fuels and other sources of greenhouse gas emissions into the atmosphere. One of the major societal concerns about global warming has been the expectation that it would lead to an increase in the frequency, intensity, magnitude and location of extreme, often record setting and high impact, events. It appears that science-based expectation is increasingly proving valid as we witness a new phenomenon, the appearance of “Super Events”: Superstorm93 (US 1993), Super Cyclone Orissa (India 1999), Heat Wave (Europe 2003), Super Typhoon Maemi (Korea 2003), Super Hurricane Sandy (US 2012), among others. Each of these high impact events can be viewed as a “teachable moment” in that it identifies the strengths and weaknesses of local to global societal responses to a climate-related hazard and disaster. It is important to realize that all countries, rich and poor, industrialized, emerging and developing, are vulnerable to varying degrees to a changing climate, and water and weather related hazards. Collecting and sharing the lessons of such “teachable moments” strengthens the collective knowledge base that societies will need in order to engage in “resilient adaptation,” as they try to cope more effectively and efficiently with the possible impacts of a variable and changing climate. Societies everywhere are on a learning curve, when it comes to preparing for and coping with climate-related disasters. Given the likelihood of surprising changes, societies cannot expect to rely solely on the past as a guide on how to prepare or respond in the future. Responses to recent disasters (Fukushima, and Hurricane Sandy) suggest that there are structural and functional limits, even in industrialized countries, to the perfect, desired societal responses to hazards and potential disasters.

“Professor Michael H. Glantz is an internationally well-known researcher and scientist. Dr. Glantz received his BS in Metallurgical Engineering in 1961, MA in Political Science in 1963, and PhD in 1970 each from the University of Pennsylvania. In 1972, he switched focus from Africa’s colonial wars and other revolutionary movements to research on the societal aspects of climate variations and change. He worked at the US NCAR (National Center for Atmospheric Research) in Colorado from 1974 to 2008, becoming the science center’s only Senior Social Scientist in its 50-year history. In 1990, Dr. Glantz was the recipient of the UNEP’s Global 500 Award. In 2008, he received a grant from the Rockefeller Foundation and was named a Clinton Foundation’s Global Initiative and his group, the consortium for Capacity Building (CCB) moved to the University of Colorado. His current research attention is centered on seeking ways to bridge climate, weather and water disaster risk reduction (DRR) efforts with climate change adaptation (CCA) programs. Dr. Glantz has published numerous articles and books. His most recent book “Usable Science about climate, water and weather in the 21st Century” was published by the UN University Press (2010, Tokyo). “

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Table of Contents

DISASTER MANAGEMENT

Coordination of *Bousai/Gensai* (disaster prevention and mitigation): Analysis of the Ishinomaki and Oshima Obakatai models and their implications for disaster risk management in Okinawa

Yuji Uesugi 1

ECONOMICS

The 2007 Hong Kong stock prices bubble

Tatsuyoshi Miyakoshi, Kui-Wai Li & Junji Shimada 6

Impact of foreign remittances on poverty in developing countries

Mohammad Imran Hossain 9

Facing the risk of being indebted: Does foreign aid affect economic growth in developing countries?

Mohammad Imran Hossain 12

Estimation of global demand for Ghana cocoa: A Macro Panel analysis

Besseah A. Felix & Kim Sangho 16

The impact of competition on bank performance: An empirical investigation on the banking sector of Bangladesh

S. M. Sohrab Uddin & Yasushi Suzuki 19

Partial privatization and performance of newly privatized SOEs: Evidence from Indonesia

Bin Nahadi & Yasushi Suzuki..... 22

How brands change the goods' elasticity

Xu Xuebo 25

Recent productivity growth across the world

Sangho Kim, Donghyun Park & Jong-Ho Park 27

Japanese consumers' behaviors on the agri-food retailing in Japan: The case of Konohana Garuten

Chalermporn Siriwichai & Kenji Yokoyama 29

Foreign direct investment determinants in the South, East and South-East Asia

Mohammed Omar Sheriff 32

EDUCATION

Enhancing educational opportunities for rural poverty reduction in Sub-Saharan Africa: The case of Sierra Leone

Sheka Bangura 35

Strategies of internationalization of higher education: The case of study abroad programs in an

international university in Japan <i>Patricia Savon Meras</i>	38
Role of motivation in the lower educational achievement among ethnic minority children at secondary level in Lam Dong Province, Vietnam <i>Ngoc Tien Tran</i>	41
Assessing and developing global competence: A Japanese case study <i>Pang Chian Chang & Koichiro Kita</i>	44
The position of English in Japanese kindergartens of Beppu city <i>Asah Adanee Mahre</i>	47
Preserving cultural identity: The use of social networking tools in education <i>Madhumita Bhattacharya</i>	50

ENVIRONMENT

Spatial interpolation of micro-/meso-climatic data using radial basis function neural networks for the use of local farmers <i>Monte Cassim & K.J.C. Kumara</i>	53
GIS fuzzy multi-criteria evaluation for worldwide viticultural zoning using GLDAS data <i>Kazadi Sanga-Ngoie, K. J. C. Kumara</i>	57
A multi-criteria decision analysis of food and biodegradable waste management options in Japan <i>Kazadi Sanga-Ngoie & M.A. Babalola</i>	62
Designing a sustainable food traceability system using a human cloud infrastructure <i>G.D.D. Nishantha & K.J.C. Kumara</i>	66
Towards establishing an integrated framework of food information and opportunities, FOOD ^{info} <i>G.D.D. Nishantha, K.J.C. Kumara & Monte Cassim</i>	69

INTERNATIONAL RELATIONS

Building peace, or deconstructing pre-informed models? The United Nations in Timor-Leste <i>Maria Raquel Freire</i>	73
The right to resistance and democracy, and the impossibility of having a security community in Northeast Asia <i>Itaru Okamoto</i>	76
Is an Asian common market possible? Diverging roads to Asian regional integration <i>Joel R. Campbell</i>	79

MANAGEMENT

An empirical & theoretical measurement of productivity growth in Japanese manufacturing firms; a comparison between high-tech & low-technological firms <i>Mwakalukwa Suma Alfonso</i>	82
Risk perception, human resources and leadership in high technology start-ups: Japanese entrepreneurial voices	

<i>David T. Methé</i>	85
Identifying and modeling supply chain performance in Bangladesh Ready Made Garments (RMG) <i>MD Aynul Hoque</i>	88
Jump-start green technology: Can Proton Malaysia Bhd. ride the challenges? <i>Reihaneh Montazeri Shatouri, Rosmini Omar & Kunio Igusa</i>	91
Defining Thai product quality in the 21 st century <i>Pajaree Ackaradejruangsri</i>	94
Leadership's influence on creativity and innovative behaviors: Can current understanding be generalized to the Japanese context? <i>Rozhan Othman</i>	97
 POLITICS	
Japanese municipal government disincentives to local political participation <i>Dani Daigle Kida</i>	101
Potential impact of the political movement in the Thai red-shirt village on OTOP (One Tambon One Product) organizations <i>Chalermporn Siriwichai & Thomas Diefenbach</i>	104
The netwar strategy of the Free Papua Movement and the response of the Indonesian government <i>Radityo Dharmaputra</i>	107
 PUBLIC HEALTH	
Role of surgeons in a university hospital in Beppu: Risk factors for colorectal cancer in Japan <i>Koshi Mimori</i>	111
Epidemiologic analysis of maternal mortality and morbidity across Kazakhstan over 2007-2011 <i>Aizhan Kyzaeva</i>	114
Distribution of thyroid disorders in Semey in 2009-2010: Screening at primary care clinics in the Republic of Kazakhstan <i>D. Aldyngurov, T.Bulegenov, G.Vaskovskiy, A.Kusainov & A. Myssayev</i>	117
Analysis of students' social life and access to health services, based on a study in Semey State Medical University, Kazakhstan <i>Glushkova Natalya & Rakhyzbekov Tolebay</i>	120
The profile of children in orphanages and the main reasons of institutionalization in Semey city, Kazakhstan <i>Nurgul Yelissinova, Serik Meirmanov & Tolebai Rakhyzbekov</i>	123
Analysis of primary children's disability for the period 2006 to 2010 in the East Kazakhstan oblast <i>Yelissinova Ainur, Meirmanov Serik & Rakhyzbekov Tolebai</i>	126
 SOCIOLOGY	
Checking Myrdal's Cumulative Causation Model: Revisiting Gunnar Myrdal's Asian Drama using Regression Analysis	

<i>Maxwell C Caughron</i>	129
Normalization of United States – Vietnam relations and its impact on the Vietnamese society <i>Le Thi Vinh Ha</i>	133
Japanese identity construction in the discourse on “anti-Japan” <i>Karl Gustafsson</i>	136
Soka Gakkai in Cuba: Strategies of a Japanese new religion in a new socio-cultural setting <i>Girardo Rodriguez Plasencia</i>	139
Kimono and the Internet <i>Sheila Cliffe</i>	141
Does blood matter? A case study of the sense of blood genealogy in Hawaiian homesteads in Wai’anae, O’ahu <i>Masaya Shijo</i>	144
Constructing group identity: Analysis of primordial and instrumental perspectives with case study among Magars of Nepal <i>Shyamu Thapa Magar</i>	146
Cosmopolitan Malayness in globalizing Singapore: Living the local ethnic culture in Kampong Glam <i>David Tantow</i>	149

**Coordination of *Bousai/Gensai* (disaster prevention and mitigation):
Analysis of the Ishinomaki and Oshima Obakatai models and their
implications for disaster risk management in Okinawa**

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Abstract

In the devastating disaster that hit Tohoku area on 11 March 2011, the *Bousai/Gensai* (disaster prevention and mitigation) network of Ishinomaki City, a seriously affected area, served as one of the most fundamental “soft” infrastructures for mitigating the damage of the disaster, which facilitated an efficient coordination and cooperation among key stakeholders of disaster risk management (DRM). Also, a team of local volunteers named “*Obakatai*” in Oshima, a remote island in Kesennuma City, which was formed spontaneously to respond to the disaster, played a pivotal role in coordinating various relief efforts on the ground including those from the U.S. Marines. By examining the cases of Ishinomaki and Oshima, the paper argues that coordination among stakeholders of DRM is critical in mitigating the damage of a disaster, and the presence of an effective *Bousai/Gensai* coordination system, which is supported by functioning human networks and sound leadership, can increase the preparedness and resilience of a society against different types of hazards. In other words, the paper purports to underline the importance of *Bousai/Gensai* coordination not only in the phase of disaster response but also in the phase of disaster prevention and mitigation. Furthermore, this paper applies the lessons learned from the cases of Ishinomaki and Oshima to DRM in Okinawa where unique challenges peculiar to its geographical characteristics lie and special considerations are required due to the presence of U.S. military installations.

Introduction

In the aftermath of the Great Tohoku Earthquake of 11 March 2011, the *Bousai/Gensai* (disaster prevention and mitigation) network of Ishinomaki City, the second largest city in Miyagi Prefecture and one of the most seriously affected areas, served as one of the fundamental “soft” infrastructures for mitigating the damage of the disaster, and facilitated an efficient coordination and cooperation among key stakeholders of disaster risk management (DRM). Also a team of local volunteers named “*Obakatai*” (literally translated as “Folly Corps” in English) in Oshima, a remote island in Kesennuma Bay (7.5 km outside of Kesennuma port) in Miyagi Prefecture, was formed spontaneously to respond to the disaster, and played a pivotal role in coordinating various relief efforts on the ground including those from the U.S. Marines.

By examining the cases of Ishinomaki and Oshima, the paper argues that coordination among stakeholders of DRM (government bodies, police, self-defence forces, medical institutions, fire department, community-based organizations, non-governmental organizations, volunteers etc.) is critical in mitigating the damage of a disaster. The paper goes on and argues that the presence of an effective BOUSAI/GENSAI coordination system, which is supported by functioning human networks with sound leadership, can also increase the preparedness and resilience of a society against different types of hazards. Indeed, sound coordination among various DRM actors is necessary in all phases of DRM including Prevention (Preparation), Mitigation, Response, Recovery, and Reconstruction;

however, the most crucial phase in terms of saving human lives is the prevention (preparation) phase.

In other words, the paper aims to underline the importance of *Bousai/Gensai* coordination not only in the phase of disaster response, which was illuminated in the cases of Ishinomaki and Oshima, but also in the phase of disaster prevention and mitigation. Hence, the term “*Bousai/Gensai*” (disaster prevention and mitigation) coordination is preferred to “*Saigai*” (disaster) coordination in this paper. This paper purports to draw some lessons from the cases of Ishinomaki and Oshima for DRM in Okinawa where peculiar challenges and special considerations exist due to its geographical characteristics as an archipelago and the presence of U.S. Forces and military installations.

Methodology

This paper is based on the findings of field visits conducted in Oshima and Ishinomaki City in March and July 2012, respectively. A series of open and unstructured interviews were conducted to those who played key roles in *Bousai/Gensai* coordination for both Oshima and Ishinomaki City.

Discussion

Common Lessons Learned from Ishinomaki and Ohshima: Successful disaster response requires accurate *information* and effective *coordination*. Information on affected areas, in general, but more specifically on victims, their needs, ongoing and planned relief efforts, is critical for swift and appropriate decision-making, especially in time of emergency. Coordination is also essential for information sharing, demarcation of activities, and avoiding a duplication of aid distributions. In order to respond rapidly and effectively to different types of natural hazards, particularly for such disasters of great magnitude witnessed in 3.11, coordination among relevant stakeholders is an important element of DRM. Proper coordination indeed can save lives and ease sufferings of people in the affected areas.

The cases of Ishinomaki and Oshima demonstrated the value of spontaneous *Bousai/Gensai* coordination mechanisms, which emerged out of necessity on the ground at the time of crisis and contributed to a more systematic disaster response particularly in the area of relief operations. The mechanism fulfilled three critical functions. First, it served as a portal for external supporters to gain access to and have accurate information of affected areas. Second, it served as a “lily pad” and “sorting machine” for the influx of volunteers. Third, it served as a matching body between local resources and external support, which allowed sharing of information, avoiding duplication, and filling the gap (blind spots) of assistance.

Lessons Learned from Ishinomaki: The coordination mechanism established in Ishinomaki City, which later on was named the “Ishinomaki Model,” played an instrumental role in linking key DRM actors and assets on the ground. Three coordination mechanisms were installed in Ishinomaki City: (1) Ishinomaki City Disaster Response Headquarters (DRH), (2) Ishinomaki Disaster Volunteer Center, and (3) Ishinomaki Disaster Recovery Assistance Council (IDRAC).

IDRAC was created as a result of collaborative efforts between Ishinomaki Social Welfare Council (*Shakai Fukushi Kyogikai*), a local community-based organization, and the Peace Boat Disaster Relief Volunteer Center, a highly experienced external aid agent. The case of Ishinomaki City proved that the presence of IDRAC contributed significantly to the surge of the absorbing capacity of the local community in receiving a large influx of external support (relief volunteers and materials). Furthermore, IDRAC matched the demand and supply of relief between the hosting communities and institutions, and external supporters (NGO and individual volunteers).

The decision made by the Mayor of Ishinomaki City to allow the representatives of IDRAC to take part in the official coordination meetings of the DRH was an epoch-making event, which paved the way for divisions of labor and close cooperation between governmental relief services (most notably provided by self-defense forces) and non-governmental efforts (by volunteers). Also, the roles played by disaster prevention hubs (Bousai Kyoten) such as Ishinomaki Red Cross Hospital and Ishinomaki Senshu University are worth paying attention to.

Lessons Learned from Oshima: The case of Oshima's *Obakatai* illustrated the significance of “*Kyojo*” (mutual-support) and the spontaneous formation of a community-based disaster response team in the immediate aftermath of the disaster where no public support was available. In fact, self-help and mutual-support of the residents embodied in *Obakatai* constituted the community resilience of Oshima against the disaster, and was a key source for effective disaster response.

Voluntary actions initiated by six local youths who themselves were victims of the disaster, constituted the foundation for a task force that was later on named as *Obakatai* with the maximum strength of about 50 local volunteers. Despite the fact that it was still in the midst of crisis, ordinary citizens across different generations (ranging from a high school student to 50-year old man) joined *Obakatai* who shared no prior experience of working in a formal DRM related association. Because Oshima is a remote and small island, located in a rural area, its residents' background and way of thinking are not as diverse and dynamic as those in urban cities. This characteristic together with its relatively small size (40-50 members) allowed *Obakatai* to be effective in “self-help and mutual-support” rescue/relief operations in the initial period of three weeks when the island was completely isolated and no official rescue and relief team was despatched.

The chief of *Obakatai* said that close coordination during disaster response was a result of cumulative communication and trust building efforts carried out by community members in peacetime. Strengthening such a network of community members can certainly improve communication among them, and can enhance the capacity of the community to be more disaster resilient in times of crisis.

Not only did *Obakatai* facilitate cooperation among community members, but it also served as a bridge between the local community and external support. For example, when the U.S. Marine Corps relief team (a strength of 177), the first organized external support, landed on Oshima on 1 April 2011, some members of *Obakatai* acted as a “Sherpa” for the U.S. Marine Corps relief team. Later on, when a group of external volunteers started pouring into Oshima, *Obakatai* acted as a disaster volunteer center to coordinate strangers/outside and provided a matching service between local needs and external support.

Challenges of Okinawa: At least two types of special challenges can be identified in relation to DRM in Okinawa. The first category of challenges is based on Okinawa's geographical character, being comprised of 49 populated islands that are scattered in an area of about 400,000 km² with the capital Naha City being located 655 km away from Kagoshima City in Kyushu and 1,552 km away from Tokyo. Due to its distance and vulnerability to isolation, Okinawa and particularly its remote islands have to (1) prepare sufficient stockpiles of life-sustaining materials (water, food, fuel, medicine, generator, water purifier, heavy machinery, etc.), (2) secure transportation and access to remote islands and major supply hubs outside of Okinawa (cargo airplanes, helicopters, ferries, hovercrafts, etc.), (3) establish communication with remote islands and outside of Okinawa (*Bousai* radio, community radio, TVs, mobile phone, satellite phone, SNS, etc.), and (4) organize functioning disaster response mechanisms even in peacetime.

The second category of challenges that require special consideration stems from the presence of U.S. military forces and installations. In the case of 3.11, U.S. Forces in Japan extended their support

to search and rescue operations and post-disaster relief efforts. Nevertheless, if an earthquake and/or tsunami of the same magnitude as of 3.11 hits Okinawa, the U.S. Forces in Okinawa will not be able to extend their support to local communities. Indeed, it is likely that the U.S. military personnel and their families (in total about 50,000) will also be affected by the disaster, and their facilities located in coastal areas (including a certain area of Kadena Airbase) will suffer tremendous damage. While they can be counted as assets for disaster response, in the worst-case scenario they may become additional burdens on local communities. Furthermore, without prior consultation and agreements between local authorities and the U.S. Forces over trespassing of evacuees and emergency relief vehicles upon U.S. installations on the island, some of the U.S. installations will stand in the way of evacuation routes.

Nevertheless, a serious problem exists that undermines required efforts for DRM. The political atmosphere and ideological positions against the presence of U.S. Forces in Okinawa of key DRM stakeholders such as Okinawa Prefectural Government, other local municipalities and media prevent them from envisaging and preparing effective *Bousai/Gensai* coordination between the U.S. Forces and other DRM stakeholders.

Implications for Okinawa: The lessons that can be learned from the case of Ishinomaki for Okinawa is that inclusive coordination mechanisms should be established among various DRM stakeholders in order to save lives and ease human suffering. In particular, both Okinawan and U.S. authorities have to coordinate closely and develop a DRM plan in which the principles and guidelines, roles and responsibilities, and the rules and regulations for DRM are stipulated clearly. From the DRM perspective, the utility of U.S. Marine Air Station Futenma, which is located on a hill in a heavily populated area, is apparent both in terms of a logistical hub of relief activities, and a space for disaster response headquarters and shelter for displaced peoples. The relationship between Ishinomaki City and Ishinomaki Senshu University serves as a reference on this point. It is urgent and vital that the authorities (Governor, Mayors, and Village Chiefs) demonstrate their leadership and make swift and bold decisions to undertake necessary actions for DRM from the standpoint of human security. Political and ideological differences should be put aside for the sake of saving lives and easing sufferings, as it was seen in the case of Ishinomaki.

The lessons learned from the case of Oshima for Okinawa are: it is often challenging for a remote island to receive immediate rescue and relief from outside, and they can easily be isolated from the main land in times of an overwhelming crisis. Due to their inaccessibility and invisibility from the center of gravity, remote islands could be triaged or less prioritized under the circumstance of limited resources. Hence, it is imperative that Okinawa, in its effort towards *Bousai/Gensai*, should develop various mechanisms of self-help and mutual-support, as well as nurture its capacity for receiving external support or “*Juenryoku*” so that its community resilience against disasters can be enhanced.

The U.S. military installations (airports, seaports hospitals, warehouses, communication and transportation devices, etc.) can serve as key hard infrastructures for multiplying “*Juenryoku*” of Okinawa and contribute to overcoming grave challenges that stem from its geographical vulnerability as remote islands.

References

- Hisanori Ohtsuka (ed). 2011. *Jishin Bousai Gaku (Earthquake Disaster Prevention Study)*, Kyushu University Press.
- Ippo Nakahara, 2011. *Kisekino Saigai Volunteer “Ishinomaki Model” (Miracle of Disaster Volunteer)*, Ashahi Shinsho.
- Katsuya Yamori, 2009. *Bousai Ningen Kagaku (Human Science of Disaster Prevention)*, University of

Tokyo Press.

Mashiho Suga, Yusuke Yamashita and Tomohide Atsumi (eds.). 2008. *Saigai Volunteer Ron Nyumon* (Introduction to Disaster Volunteer), Kobundo.

Seiji Kondo and Takumi Miyamoto. 2011. *Bousai, Gensai no Ningen Kagaku* (Human Science of Disaster Prevention and Mitigation), Shinyosha.

Tadashi Ishii. 2012. *Higashi Nihon Daishinsai Ishinomaki Saigaiiryō no Zenkiroku: "Saidaihisaiichi" wo Iryo Houkai kara Sukutta Ishi no 7 kagetu* (East Japan Great Disaster All the Records of Ishinomaki Disaster Medical Service: 7 months of Doctors who Saved "the most Affected Area" from the Collapse of Medical Service), Koudansha.

The 2007 Hong Kong stock prices bubble

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Abstract

We tested whether the modeling of bubbles (rational expectation bubble) in the classical theories can explain the Hong Kong Stock Market. Three kinds of test did not support the uniform results for the existence of rational expectation bubbles. In particular, rational expectation bubbles may exist for Utilities, Commercial & Industrial sectors, while the other industries have different kinds of bubbles. These results report the necessity of another theory for the 2007 Hong Kong stock price bubbles and provide some rationality over the recent literatures studying the Hong Kong Stock Market.

Introduction

Over 7 years from 2000 to 2007, the Hang-Seng Index rose rapidly from 9000 to 30000. However, after the collapse of stock price bubble in October 2007, the index was crawling at the bottom price of 14,000 and recently recovering to 25,000. The bubble seems not to collapse perfectly. The Hang-Seng Index consists of the whole industry (which is classified as four industries: finance, properties in financial category, commerce & industries in non-financial category).

After the collapse of the bubble, the indexes of non-financial industries produced the bubbles repeatedly while the indices of financial industries continue to be stuck at the bottom. What causes the stock price bubbles? How different are the two bubbles?

Methods

Stock price bubbles are defined as deviations from the fundamental prices. There are several types of bubbles. The theory of rational expectation bubbles is proposed by Blanchard and Watson (1982). The prices grow until they burst and then commence grows again. Growing bubbles are characterized by asset prices that continue to grow over time and by returns that surpass the average capital return in the economy. Then, high stock prices are due to opportunistic purchases aimed at future capital gains brought by the expanding bubble components.

Tirole (1982, 1985) found that the high increase of GDP induces rational expectation bubbles in stock prices. These features match the dynamic path of Hong Kong's prices for non-financial index quite well over the past 7 years. However, if it is not a rational expectation bubble, more researches are needed. Then, the present Hong Kong bubbles have to be tested to see whether they are rational expectation bubbles or not.

The econometrics of rational expectation bubbles has been developed by Campbell and Shiller (1987, 1989) and Diba and Grossman (1988) who show that, if rational expectation bubbles do not exist, then real stock prices and real dividends are cointegrated with a constant cointegrating vector, given the assumption of a constant discount rate; Mikhed and Zemcik (2009) among them use a panel cointegration analysis. The contraposition for their proposition is that they show the sufficient

conditions (both are not cointegrated) for the rational expectation bubble. Fukuta (1996) shows that the sufficient condition for the absence of rational expectation bubbles is the stationarity of the first differences of real stock prices, with the assumption that the real interest rate is stationary.

Also, Fukuta (2002) shows that under the assumption of the absence of rational expectation bubbles, if real stock prices are first difference stationary, then real dividends are first difference stationary and vice versa. This is a necessary condition for non-bubble, which is useful for the robustness check on the results by both sufficient conditions. However, to our knowledge, there are no researches for the 2007 Hong Kong stock market bubbles which checks the sufficient conditions for the absence of bubbles by using Campbell and Shiller (1987, 1989) and Fukuta (1996, 2002).

Discussion

The purpose of this paper is to test for the existence of rational expectation bubbles in Hong Kong Stock Market, each by each industry. We test necessary or sufficient conditions of no bubbles proposed by Fukuta (1996, 2002) and by Campbell and Shiller (1987,1989). Although the literature covers many theoretical models on asset price bubbles among Kocherlakota (2009), Burnside, Eichenbaum and Rebelo (2011), and Wang and Wen (2012), our work only focuses on the growing bubbles as defined in Blanchard and Watson (1982). We shed some light on whether the modeling of bubbles in the classical theories can explain the Hong Kong stock market. Thus, we add the results to some works on the 2007 Hong Kong stock market bubbles.

References

- Blanchard,O. and Watson,MW. (1982),” Bubbles, rational expectations and financial markets”, No. 9115. NBER Working Paper Series.
- Burnside, C., Eichenbaum, M. and S. Rebelo (2011), “Understanding Booms and Busts in Housing Markets., NBER wp 16734.
- Craine,R.(1993),”Rational bubbles”,*Journal of Economic Dynamics and Control* 17:829-846
- Campbell JY, and Shiller RJ (1987),”Cointegration and tests of present value models”. *Journal of Political Economy* 95:1062–1088.
- Campbell JY, and Shiller RJ (1989),”The Dividend-Price Ratio and Expectations of Future Dividends and Discount Factors”, *Review of Financial Studies* 1: 195-228.
- Cuñado, J., Gil-Alana, L. A.,and Perez de Gracia, F. (2005). “A test for rational bubbles in the NASDAQ stock index: A fractionally integrated approach. *Journal of Banking & Finance* 29, 2633–2654.
- Diba,B.T. and Grossman,H. (1988),” Explosive Rational Bubbles in Stock Prices?” *American Economic Review* 78: 520-530.
- Engle,R. and Yoo,B-S.(1987), Forecasting and Testing in Co-integration Systems”, *Journal of Econometrics* 35 , 143-159.
- Evans,G.E.(1986),”A test for speculative bubbles in the sterling-dollar exchange rate”, *American Economic Review*76,621-636.
- Fukuta,Y. (1996),” Rational bubbles and non-risk neutral investors in Japan”, *Japan and the World Economy* 8 :459 473.
- Fukuta,Y. (2002),” A test for rational bubbles in stock prices”, *Empirical Economics* 27:587–600
- Koustantis,Z. and Serletis,A. (2005),” Rational bubbles or persistent deviations from market fundamentals?”, *Journal of Banking & Finance* 29: 2523–2539.

- Lehkonen,H.(2010),” Bubbles in China”, *International Review of Financial Analysis* 19: 113–117.
- Lira,K.G. and Phoon,K.H. (1991),” Tests of rational bubbles by using cointegration theory”, *Applied Financial Economics* 1: 85-87.
- Mikhed,V. and Zemcik,P. (2009),” Do house prices reflect fundamentals? Aggregate and panel data evidence”, *Journal of Housing Economics* 18:140–149.
- McQueen,G. and Thorley,S. (1994),” Bubbles, Stock Returns, and Duration Dependence”, *The Journal of Financial and Quantitative Analysis* 29:379-401.
- Miyakoshi,T, Tsukuda,Y. and Shimada,J.(2011),” Size of Market Inefficiency”, mimeo in Osaka University.
- Ren,Y. Xiong, C. and Yuan,Y.(2012) ,”House price bubbles in China”, *China Economic Review*, OnLine First.
- Tirole, J.(1982),”On the possibility of speculation under rational expectations”, *Econometrica* 50:1163–1181.
- Tirole, J.(1985),” Asset bubbles and overlapping generations”,*Econometrica* 53, 1499–1527.
- Wang,X. and Wen,Y. (2012),” Housing prices and the high Chinese saving rate puzzle”, *China Economic Review* 23 : 265–283.
- Ye, Y.Chang,T.,Hung,K. and Lu,Y-C.(2011),”Revisiting rational bubbles in the G-7 stock markets using the Fourier unit root test and the nonparametric rank test for cointegration”, *Mathematics and Computers in Simulation* 82: 346–357.

Impact of foreign remittances on poverty in developing countries

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Abstract

Remittances are increasingly becoming an important source of external financing for many developing nations, and poverty reduction activities in these countries, in a number of ways, rely on overseas earnings from remittances. This study attempts to estimate the impact of remittances on poverty in terms of three variables: Poverty Headcount ratios, Poverty Gap at \$ 1.25 a day (PPP), and Poverty Gap at \$2 a day (PPP). The present study is based on a set of macro data for 13 developing countries covering years from 1988 to 2010 from the World Economic Indicators published by the World Bank (WB). In order to test whether the impact of remittances share in poverty is stronger beyond a threshold level, a separate analysis is undertaken for the group of countries with remittance shares to GDP ratio of 2% or more. The Three Stage Least Square (TLS) was utilized in estimating the set of regression equations. Although the empirical findings of the study indicate that remittances can reduce poverty in the recipient countries, but what makes remittances work for poverty reduction is not clear. Even if poor households receive valuable remittances from their relatives, for any developing economy, the proper use of remittances is important for a sustainable reduction in poverty.

Introduction

Remittances are increasingly becoming an important source of external financing for developing countries. According to Banga and Sahu (2010), in many developing countries, more than 20% of GDP is contributed by remittances. Examples include Tonga (38%), Nepal (22%), Kyrgyz Republic (28%), and Tajikistan (50%). In 2007, the total remittance flow to developing countries through official sources was estimated at \$328 billion and it is likely that billions more are transferred through unofficial channels (World Bank, 2011).

Rampant and persistent poverty is a formidable challenge for almost all developing countries worldwide. Governments in these countries always lack sufficient funds necessary for their development endeavors. Therefore, any kind of foreign funds appear to be a blessing and many economic and social development programs including poverty reduction activities, for a number of ways, rely on overseas earnings from remittances.

Literature suggests that remittances are linked with poverty reduction in many ways. Baseline studies provide sufficient evidence to support the hypothesis that remittances are helpful to the recipient countries and have a significant influence in altering the rate of poverty. Adams and Page (2005) find that a 10 % increase in the share of remittances in a country's GDP leads to a reduction of 1.6 % of the people living under the officially estimated line of poverty. Campos and Palomo (2002) find that in the year 2000, remittances contributed to reducing the national poverty rate by 4.2% and lowered the Gini coefficient from 0.55 to 0.53 in El Salvador. Adams (2005a) also discovers that the squared poverty gap measure in Guatemala declined by 19.8% when international remittances were included as a part of the total household income. A similar study by Taylor et al (2005) utilized the data of 1,782 households from rural Mexico and estimated that both poverty headcount and poverty

gap indices declined by 0.77 and 0.53 respectively with a 10 % increase in international remittances in Mexico.

In this context, it becomes significantly important to estimate and check the impact of remittances on poverty level in a recipient country. Using a set of panel data from 13 developing countries for the period of 1998-2010, this study makes an effort to empirically test the role of remittances on poverty reduction (i.e. Poverty Headcount ratios, Poverty Gap at \$ 1.25 a day, PPP and Poverty Gap at \$2 a day, PPP). In order to test whether the impact of remittance share in poverty is stronger beyond a threshold level, a separate analysis is undertaken for 7 countries among the sample with remittances to GDP ratio of 2% or more.

Methods

The present study is completely based on secondary data. A set of macro data covering 13 years from 1998 to 2010, entirely reflecting the availability of data create the sample size. Sources of Data include the World Data Bank and the World Economic Indicators of the World Bank. The Three Stage Least Square (TLS) was used for the following regression models.

$$\text{Log}(POV_{it}) = \beta_0 + \beta_1 \log(PCY_{it}) + \beta_2 \log(INEQ_{it}) + \beta_3 \log(REMIT_{it}) + \varepsilon_{it} \dots \dots \dots 1$$

$$\text{Log}(REMIT_{it}) = \gamma_0 + \gamma_1 \log(POV_{it}) + \gamma_2 \log(TRADE_{it}) + \gamma_3 \log(EDU_{it}) + \gamma_4 \log(REMIT_{i,t-1}) + \varepsilon_{1it} \dots \dots \dots 2$$

For the above model *POV* stands for poverty rates, *PCY* indicates per capita income of the country, *INEQ* represents inequality index, *TRADE* is for trade ratio, *EDU* implies adult literacy level, and *REMIT* indicates remittances to GDP ratio.

Table: Regression Results

Variables	Dependent Variable- Poverty HCR at \$1.25 a day (PPP)(% of population)		Dependent variable- Poverty Gap at \$1.25 a day (PPP)(%)		Dependent variable- Poverty Gap at \$2 a day (PPP)(%)	
	PHCR	Remittances	Pov. G1	Remittances	Pov. G2	Remittances
Per capita GDP(Current US \$)	-1.1*** (0.09)		-1.11*** (0.098)		-0.91*** (0.08)	
Gini Coefficient	1.67*** (0.41)		2.52*** (0.43)		0.87*** (0.34)	
Remittances as a ratio to GDP	-0.53*** (0.096)		-0.76*** (0.101)		0.45*** (0.08)	
Lagged Remittances		0.97** (0.024)		0.99*** (0.027)		0.97*** (0.024)
Trade (% of GDP)		0.10** (0.05)		0.103* (0.05)		0.116** (0.54)
Education		-0.013 (0.12)		-0.02 (0.11)		-0.044 (0.114)
Constant	2.10*** (0.74)	-0.46 (0.27)	-0.42 (0.78)	-0.17* (0.26)	-3.18*** (0.76)	-0.167 (0.26)
Observations	91	91	91	91	91	91
R square	0.63	0.95	0.69	0.95	0.61	0.96
Chi2	156.47	2146.47	209.93	2132.64	147.14	2204.60

Discussion

The empirical results show that remittances are helpful in reducing poverty among the developing economies that were considered for this study. However, what makes remittances work for poverty reduction is not clear. Even if poor countries receive valuable remittances, the proper use of remittances is more important for a sustainable reduction in poverty. In this front we suggest that there is a need for some consensus at the multilateral level on the poverty-reducing impacts of remittances.

References

- Adams, R. and Page, J. (2005). Do International Migration and Remittances Reduce Poverty in Developing Countries? *World Development*, Vol. 33 (10): 1645-69.
- Adams, R. (2005a). Remittances, Household expenditure and Investment in Guatemala. Policy Research working Paper 3532. The World Bank, Washington, DC.
- Adams, R. and Richard, J. (2005). Remittances, Selection Bias and Poverty in Guatemala. Unpublished Manuscript. The World Bank, Washington, DC.
- Banga, R. and Sahu, P .K. (2010). Impact of Remittances on poverty In Developing countries. UNCTAD, United Nations, Switzerland.
- Pant, B. (2008). Mobilizing Remittances for Productive Use: A Policy-oriented Approach. Nepal Rastra Bank, working paper Serial Number: NRB/wP/4
- Taylor, J. E., Mora, J. and Adams, R. (2005). Remittances, inequality and Poverty: Evidence from Rural Mexico. Unpublished Manuscript. University of California, Davis, CA, USA.

Facing the risk of being indebted: Does foreign aid affect economic growth in developing countries?

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Abstract

There are two opposing schools of thoughts that have emerged in connection to the ongoing debate of foreign aid, its effectiveness and impact on economic growth. The traditional *pro-aid view* advocates that foreign aid supports developing countries. The other one, the *radical anti-aid view* which is backed up by modern empirical findings, claims that the opposite is true. However, recently some authors found that the effects of foreign aid on economic growth in developing countries are not very detrimental. So the question arises: *Is foreign aid effective to accelerate the growth of low income economies* or in other words, *does foreign aid affect the economic growth of developing countries* in general? In respect to borrowing countries that need foreign aid, it is significantly important to understand its contribution to growth. By utilizing a set of time series data from 1980 to 2009 from a sample country (i.e. Bangladesh) this study will make an effort to untangle this relationship by estimating the effects that foreign aid may impose on economic take-off. Macroeconomic data from the World Bank Data Bank, the International Financial Statistics (IFS), The Finance Division of the Bangladesh Government Ministry of Finance, and the Bangladesh Bank Statistics Department were used in the statistical tests. The Ordinary Least Square (OLS) and the Prais-Winsten AR regression techniques have been applied to estimate the specified model.

Introduction

Two opposing schools of thoughts have emerged in connection to the ongoing debate of foreign aid, its effectiveness and impact on economic growth. The traditional pro-aid view advocates that foreign aid supports developing countries to fill up the gap between the existing level in resources and the amount they need in the development endeavor. According to this argument, aid stimulates growth through complementing scarce domestic resources, by easing foreign exchange constraints, through inviting modern technologies and managerial skills, and finally by facilitating an easy access to foreign markets (Papanek, 1972; Ekanayake and Chatrna, 2010).

The other one, the radical anti-aid view claims that the opposite is true: Foreign aid supplants domestic savings, worsens income inequality, funds the transfer of inappropriate technology, finances ineffective projects, and in general helps sustain bigger, more corrupt and inefficient governments in a recipient country (Weisskoff, 1972; Gupta & Islam, 1983; Ahmed, 1992). However, others (Quazi, 2000) found that the effects of foreign aid on GDP growth in developing countries are not very detrimental because foreign aid causes greater utilization of production capabilities by stimulating demand-constrained developing economies.

Historical data in public aid for the developing world indicate that the total volume of Official Development Assistance (ODA) has grown from an annual amount of under US \$5 billion in 1960 to over US \$121.5 billion in 2008 (Todaro and Smith, 2010; World Bank, 2011).

Here the question arises: Is foreign aid effective to accelerate growth of low income economies or in other words, does foreign aid affect economic growth of developing countries in general? Considering Bangladesh as a test case, this study will make an effort to estimate the effects that foreign aid may impose on a developing economy. For the purpose of this paper the empirical study is performed taking Bangladesh as a sample economy, it is because having received around US\$ 66 billion after it got independence in 1971, the country represents an ideal test case for analyzing the effectiveness of foreign aid.

Methodology and Data

The model for this study has been put forth in the conventional way derived from a production function which will add foreign aid as an additional input after labor and capital. In the equation the following form of the production function can be rewritten:

$$Y = f(L, K, A) \dots \dots \dots (1a)$$

where Y represents gross National Income (GNI) in real terms, L is labor input, K is for domestic capital stock, and A stands for stock of foreign aid. Assuming equation (1a) to be linear in log and taking logs and finally differencing, the following equation is found:

$$y = \alpha + \beta l + \delta k + \psi a \dots \dots \dots (1b)$$

for the above equation the lower case letters denote a rate of growth in the respective variables. In the model a dummy variable that captures the effects of natural and political shocks will be included. Finally the following equation is found by including other important growth factors:

$$GPY_t = \beta_0 + \beta_1 K_t + \beta_2 GPOP_t + \beta_3 AIDY_t + \beta_4 INTY_t + \beta_5 INF_t + \beta_6 Dummy_t + \beta_7 TVY_t + U_t \dots \dots (2)$$

where GPY_t represents the per capita GNI growth in year t ; K_t stands for input in private capital in year t ; $GPOP_t$ is growth in population; $AIDY_t$ and $INTY_t$ indicate foreign aid and interest payment for external loans as a percentage of GNI respectively in year t ; the variable INF_t is for inflation, consumer prices (annual, %); $Dummy_t$ represents dummy variables for political disturbances or natural shocks in terms of public unrest or calamities, etc. (we set 1 for the next year if such shocks were experienced by the economy in the previous year and 0 otherwise); TVY_t represents total trade volume as a percentage of GNI; and U_t is for error terms. To construct a capital stock series from data on capital formation, the following procedure is utilized:

$$K_t = I_t + (1 - \delta) K_{t-1} \dots \dots \dots (3)$$

where K_t is the capital stock in year t , and I_t is gross capital formation in year t , and δ is the depreciation rate. Since the depreciation rate varies by country, we simply assume an average 8 percent depreciation rate for our sample economy Bangladesh. This depreciation rate is higher than that of many developed and middle

income countries. Natural disasters and political turmoil pushed developing nations to possess such a higher rate of depreciation.

To obtain initial values for the capital stock, following Fan & Rao (2003), we use the following equation which indicates that capital stock in the current year relies on previous year's investment and depreciation rate. We follow a similar procedure to Kohli (1978) to make an estimation of the initial values.

$$K_{1980} = I_{1980} / (\delta + r) \dots \dots \dots (4)$$

For this study all the variables considered for the above model except $Dummy_i$ and $GPOP_i$ are in real terms. The scope of this paper covers an annual time series data set from 1980 to 2009. The *World Bank Data Bank* acts as the main source. The Ordinary Least Square (OLS) regression techniques are used to estimate the specified model.

Discussion

This paper re-investigated the relationship between economic growth and flow of foreign aid in developing countries using Bangladesh as a test case to see if the latter stimulates or hinders the earlier. This paper finds that foreign aid has reduced GNI growth for the sample economy and this conclusion is in accord with the radical anti-aid view of aid effectiveness.

It is also worth mentioning that it will be incorrect to decide finally that foreign aid contributes nothing in the growth endeavor. To mention one example, broader analyses by some other researchers through disaggregating aid into loans and grants represent much better results. It was found by Quazi (2005) that loans significantly raise GDP growth, while grants do not. Therefore, this paper suggests that if foreign aids can be utilized properly in the productive sector then economic growth will accelerate. When compared to existing literature, this paper also finds that the effects of aid on economic growth are less damaging than predicted by the radical view; the marginal effect of the concerned variable in this study is -0.37 which is much better as compared to, for an instance, -1.19 in Quazi (2000).

References

- Ahmed, Q. 1992. *Foreign Aid, Domestic Savings and Economic Growth: The Experience of Bangladesh, 1972-1991*. (Doctoral dissertation, University of Illinois, 1992). Retrieved from <https://www.ideals.illinois.edu/browse>
- Ekanayake, E. M. and Chatrna, D. 2010. The effect of foreign aid on economic growth in developing countries. *Journal of International Business and Cultural Studies*, 3(10), 1-13.
- Fan, S. & Rao, N. 2003. Public spending in Developing Countries: Trends, Determination, and Impact. *EPTD Discussion Paper, NO. 99*, International Food Policy Research Institute.
- Gupta, K.L. and Islam, M.A. 1983. *Foreign Capital, Savings and Growth. An International Cross-Section Study*. Dordrecht, Reidel Publishing Company
- Kohli, U. 1978. A Gross National Product Function and the Derived Demand for Imports and Supply of Exports. *Canadian Journal of Economics*, 11 (2): 167-82.
- Quazi, R. 2000. Macroeconomic Effects of Foreign Aid in Bangladesh Revisited. *Journal of Bangladesh Studies*, 2(2), 7-15.

- Quazi,R.M. 2005.Effects of Foreign Aid on GDP Growth and Fiscal Behavior: An Econometric Case Study of Bangladesh. *The Journal of Developing Areas*, 38(2), 95-117
- Todaro, M.P. and Smith, S.C.(2010), "*Economic Development*", 10th Edition, published by Pearson Education Limited, Edinburgh Gate, Harlow, England.
- Weisskof, T. 1972.The Impact of Foreign Capital Inflow on Domestic Savings in Underdeveloped Countries. *Journal of International Economics*, 2(1), 25-38.
- White, H. 1992. The Macroeconomic Impact of Development Aid: A Critical Survey. *Journal of Development Studies*, 28(2), 163-240.
- World Bank. 2011. *World Data Bank*. Retrieved October 25, 2011, from <http://databank.worldbank.org/ddp/home.do>

Estimation of global demand for Ghana cocoa: A Macro Panel analysis

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Abstract

The fixed effects estimator shows consistent estimates of the demand for Ghana cocoa on the world market. The equi-directional movement of the own price of cocoa and its demand has several implications for Ghana and the world as a whole. Overall however, all 33 countries but France, Iran, Turkey, and Ghana itself have significant coefficients. The demand for Ghana cocoa depends much on some country-specific effects.

Introduction

The high global demand for Ghana cocoa is perhaps due to its yardstick for measuring quality cocoa on the world market. It is for this reason that the World Commodities Market pays an average \$50-\$100 quality premium compensation for cocoa bean from Ghana (USDA, 2012). Coupled with this quality, Ghana supplies nearly 18 percent of the world cocoa demand. The European Union is the main importer of cocoa from Ghana (IMF, 2007; WTO, 2008). However, 2011 data recognize that the bean is highly sought after by 33 countries from all other regions of the world. What are the factor determinants of Ghana cocoa demand for these importing countries?

International demand for cocoa has key economic implications on fiscal earnings for both exporting and importing countries (UNCTAD, 2011; McKay and Aryeetey, 2004). For the improvement of their economies, the International Cocoa Organisation (ICCO) builds a platform for member countries to improve their cocoa economies (UNCTAD, 2011). The Ghanaian economy gives a significant credence to cocoa for its dominance and importance in export revenue and livelihoods (WTO, 2008).

Cocoa demand has increased annually due to its diversified use on the world market. On the global market, cocoa could be put into several uses and products, including but not limited to cocoa liquor, cocoa powder, cocoa butter, nibs, chocolate, and drinks (ICCO, 2007). Though demand increased by 17 percent from 2001/2 to 2005/6, cocoa witnessed three annual supply deficits between 2006/7 and 2009/10 cocoa season and thus caused an upsurge in the world price (ICCO, 2010; Bresinger, C. et al., 2008). These backward and forward linkages as well as the volatility in prices have in part affected the global economic outlook, and impacted on consumer demand and producer welfare (Abulai and Reider, 1995). This study assesses the implications of these terminal increases in international prices of cocoa in the exporting country Ghana.

Methods

This study jointly assesses the factor determinants of demand for all 33 importing countries using pooled macro-panel data. Data on prices of complements (sugar and wheat), substitutes (tea and coffee) and life expectancy were accessed on the World Bank databank; the tariff rate for respective countries was taken from the WTO online data source; the monthly average prices of cocoa on the world market (NYSE Liffe) and demand for other world cocoa (a proxy for taste) were collected from the ICCO; the

price of coffee was accessed online at ICO website; GDP per capita and population figures from the PWT, and the Ghana Cocobod provided data on the total cocoa demand by each importing country from 2005/6 – 2010/11 cocoa season.

Assuming a deterministic time trend, the method compares the fixed and random effects models in the estimation of demand for Ghana cocoa. Two forms of the fixed effects model were employed. Whilst the fixed effects estimator captures the observed similarities among importing countries, the least squares dummy variable model is used to identify the existence of any country-specific fixed effects and variability in the demand for cocoa using the OLS estimator. The random effects model is used to trace the effects of time variation. The estimated equation is of the form:

$$\text{Ln}Q_{it} = \alpha + \beta_1 \text{Ln}Y_{it} + \beta_2 \text{Ln}K_{it} + \beta_3 \text{Ln}P_{it} + \beta_4 \text{Ln}Dc_{it} + \beta_5 \text{Ln}Le_{it} + \beta_6 \text{Ln}T_{it} + \mu_{it}$$

and, $\mu_{it} = \mu_i + v_{it}$

where the subscript i denotes the i th country ($i=1, \dots, 33$) and t denotes the t th year ($t=1, \dots, 6$)

Q_{it} = Per capita cocoa demanded

Y_{it} = GDP per capita at constant 2005 international prices

K_{it} = Life expectancy rate

Ps_{it} = real prices of substitutes and complements

Dc_{it} = per capita demand for other cocoa

Le_{it} = Life expectancy

T_{it} = Tariff rate

μ_{it} = disturbance term assuming one – way error component

α, β_s , are coefficients to be estimated

Ln = natural logarithm

μ_i = country – specific fixed effects

v_{it} = remaining disturbance

The most fundamental issue of concern is that of choice of the model. Following Wallace and Hussain (1969), the fixed effects model has been used to capture the individual country-specific effects whereas the random error component model earlier advocated by Balestra and Nerlove (1966) has been employed to identify heterogeneity across individual countries. The one-way error component regression model used here assesses the behaviour and specification of these two models.

Discussion

The F -test for joint significance of the dummy variables ($H_0: \mu_1 = \mu_2 = \dots \mu_{33-1} = 0$) was rejected at the 95% confidence interval. This suggests that the intercepts are not equal, and therefore there is a significant difference in country-specific effects. Thus, the data cannot be pooled together with a common intercept parameter. Demand for Ghana cocoa on the world market is determined by some country-specific effects. The overall F -statistics for the Breusch-Pagan LM test ($H_0: \sigma_\mu^2 = 0$) for random effects is significant, implying the existence of random effects.

However, the negative test statistics of the Hausman test was avoided by employing the Mundlak (fixed effects-random effects) test. The overall chi-square statistics is highly significant, leading us to reject the null hypothesis that the coefficient estimates are equal. Thus, the random effects estimate is inconsistent.

The short run own price elasticities of demand from the fixed effects implies that a 1 percent increase in its own price leads to a 3.18 percent proportionate increase in quantity demanded of cocoa from Ghana, *ceteri paribus*. Price and demand moving in the same direction against *a priori*

expectation is a result of the price incentive given to cocoa producers as price increases. On the whole, the own price, prices of complements (wheat and sugar), prices of substitutes (tea and coffee), and other world cocoa demand (a proxy for taste) were significant.

References

- Abdulai, A. and P. Reider, 1995. The impacts of agricultural price policy on cocoa supply in Ghana: An error correction estimation. *Journal of African Economies*, 4 (3): 315-335.
- Balestra, P. and M. Nerlove, 1996. Pooling cross-section and time series data in the estimation of a dynamic model: the demand for natural gas. *Econometrica* 34, 585-612.
- Baltagi, B. H. and D. Levin, 1986. Estimating dynamic demand for cigarettes using panel data: the effects of bootlegging, taxation, and advertising reconsidered. *Review of Economics and Statistics* 68, 148-155.
- Breisinger, C., Diao, X., Kolavalli, S., and Thurlow, J., 2008. The role of cocoa in Ghana's future development. Ghana Strategy Support Program (GSSP), Background Paper No. GSSP 0011.
- Breusch, T. S. and A. R. Pagan, 1980. The Lagrange multiplier test and its application to model specification in econometrics. *Review of Economic Studies*, 47, 239-253.
- COCOBOD (Ghana Cocoa Board). www.cocobod.org
- Cooper, J.C.B., 2003. Price elasticity of demand for crude oil: estimates for 23 countries. Organization of the Petroleum Exporting Countries.
- ICCO (International Cocoa Organisation) 2007. Fine and Flavour Cocoa. <http://www.icco.org/> [Accessed on 21/09/2012]
- ICCO (International Cocoa Organisation) 2010. Annual Report 2009/2010. London: ICCO.
- IMF (International Monetary Fund) 2007. Online Database, International Financial Statistics. <http://www.imfstatistics.org/imf> [Accessed on 29/10/2008]
- Janet S. Netz, 1995. The effects of futures market and corners on storage and spot price variability. *American Journal of Economics*, 77 (1): 182-193.
- Kim S., 2009. Cinema Demand in Korea. *Journal of Media Economics*, 22:36-56. DOI: 10.1080/08997760902724506
- McKay, A., and E. Aryeetey, 2004. A country case study on Ghana. Operationalising pro-poor growth work program: A joint initiative of the French Development Agency (AFD), Federal Ministry for Economic Cooperation and Development (BMZ), German Agency for Technical Cooperation (GTZ), UK Department for International Development (DFID), and the World Bank. Available online at: www.dfid.gov.uk/news/files/propoorgrowthcasestudies.asp. [Accessed on 18/12/2007].
- Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 7.1, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, July 2012.
- USDA (Global Agricultural Network Report) 2012. Cocoa Report Annual, Ghana. GAIN Report Number. GH1202
- UNCTAD (United Nations Conference on Trade and Development) 2011. International Cocoa Agreement. United Nations, Geneva, 2011, TD/COCOA.10/5.
- Wallace, T.D. and A. Hussain, 1969. The use of error components models in combining cross-section and time-series data. *Econometrica* 37, 55-72.
- WTO (World Trade Centre) 2008. Trade policy review for Ghana, Report No. WT/TPR/S/194. Page 44-68. Available online at: www.wto.org/english/tratop_e/tpr_e/s194-04_e.doc [Accessed on 09/09/2012]

The impact of competition on bank performance: An empirical investigation on the banking sector of Bangladesh

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Abstract

Although there is no consensus in the banking literature regarding an optimal banking structure, a handful number of studies have been conducted to investigate the relationship between competition and bank performance. The adoption of financial deregulation with an objective of intensifying banking sector competition in developed and developing countries encourages researchers to undertake such studies. However, in spite of the substantial changes in the banking sector due to the adoption of financial deregulation during the late 1980s, such analysis remains highly insignificant in Bangladesh. In this regard, this paper attempts to assess bank performance, competition, and their relationship empirically by using both the banking sector and individual bank data. Both the performance measures, namely, return on assets and data envelopment analysis grounded efficiency indicate an improvement over the years with a few ups and downs. On the other hand, the level of competition has been consistently increasing in the banking sector as pointed out by all structural measures. The regression results show the evidence of a negative relationship between competition and bank performance and thus, support the structure conduct performance hypothesis.

Introduction

The banking literature remains divided by conflicting findings with regard to the structure of the banking industry. In fact, the literature proposes two different paradigms: structure conduct performance (SCP), also known as structure performance hypothesis, and efficient structure (ES) hypothesis. According to the SCP hypothesis, the performance of banks largely depends upon the structure of the market, and the profitability of banks decreases with the increase of competition. In other words, the SCP paradigm stresses on the importance of increased concentration with a view to reducing competitive behavior of banks (Bikker & Haaf, 2002).

On the other hand, the ES paradigm states that an enhanced performance of banks leads to a higher market share, which, in turn, results in a concentrated market. Thus, according to the ES hypothesis, concentration in the banking sector is not a random event; rather it is the result of a greater efficiency of the dominant banks (Smirlock, 1985). This is possibly due to the fact that banks with either superior management or production technology can lower costs to increase profits and to attain a higher market share. Therefore, the profitability of banks depends on the efficiency rather than on the market structure.

In spite of these contradictory arguments, an analysis of the relationship between competition and bank performance carries a number of policy implications for the banking sector of a country. For instance, in order to identify the impact of financial deregulation on bank performance such an analysis can provide necessary information for the concerned parties (Sharma & Bal, 2010). This is because the impact of competition on bank performance is regarded as an indirect effect of financial deregulation on

the banking sector (Zhao & Murinde, 2011). Moreover, as mentioned by Boyd, Nicolo, and Smith (2004, p. 489), the level of banking sector competition has important implications for the possibility that a banking crisis will take place.

Concerning the banking industry of Bangladesh, many changes were undertaken to lessen the degree of competition during the 1980s and 1990s under the financial reform program (Debnath, 2004). As a result, private and foreign banks that were highly regulated and limited in numbers have become widely available, interest rate is no longer determined by the government and rather market forces are in the driving seat to direct the interest rate; also fixed and pegging systems for the estimation of exchange rate are replaced by a flexible exchange rate system, the heritage of state-directed credit policy has come to an end, various institutional standards have been adopted for strengthening the functioning of the banking system, and so on. However, the number of researches conducted so far with regard to competition and bank performance remain highly insignificant. In fact, no attempt has been made so far for a quantitative assessment of competition and to identify its impact on bank performance.

Data and Methodology

This study uses structural competition measures, namely, the k-bank concentration ratio, Herfindahl-Hirschman index, Hall-Tideman Index, Comprehensive Industrial Concentration, and entropy measure with a sample period of 29 years from 1983-2011 to measure the level of competition. The competition is calculated by using the loan figures, and all the banks operating in a year are considered for the computation. The data are collected from different issues of the “Bank O Arthik Pratisthansamuh Karjaboli”, in Bengali language (in English: “Bank and Financial Institutions’ Activities”) published by the Ministry of Finance of the Government of the People’s Republic of Bangladesh.

On the other hand, for measuring bank performance, both traditional measure and frontier based measure are used. Bauer, Berger, Ferrier, and Humphrey (1998) and Sathye (2003) urge for the simultaneous adoption of both measures for making the results more meaningful and presentable. In this regard, return on assets (ROA) is the traditional measure and data envelopment analysis (DEA) based efficiency is the frontier measure. The yearly ROA figures during the period 1983-2011 represent the banking sector performance as a whole, whereas efficiency is calculated for a sample of 39 banks including 4 state-owned banks, 30 private banks, and 5 foreign banks for a period of 11 years from 2001-2011.

For efficiency measurement, interest expenses, operating expenses, and staff expenses are treated as inputs while interest income and non-interest income are considered as outputs. To determine the inputs and outputs, this study focuses on the intermediation approach due to the fact that studies including Berger and Humphrey (1997) and Casu and Molyneux (2003) regard this approach as superior to the other available approach, i.e., the production approach. The data regarding ROA are collected from different annual reports of the central bank of Bangladesh. The input and output data for measuring efficiency are collected from respective banks’ annual reports. To assess the impact of competition on bank performance, time series in case of ROA, and competition and panel regression in case of efficiency and competition are employed.

Findings and Discussion

All the competition measures adopted in this study indicate a continuous increase of competition during the period under study. Specifically, the banking sector of Bangladesh was a moderately concentrated market in 1983. However, over the years it has shifted to a very low concentrated market. On the other hand, either of the performance measures does not report a continuous improvement in bank performance. The regression results show a statistically significant negative relationship between competition and bank performance.

References

- Bauer, P. W., Berger, A. N., Ferrier, G. D., & Humphrey, D. B. (1998). Consistency conditions for regulatory analysis of financial institutions: A comparison of frontier efficiency methods. *Journal of Economics and Business*, 50, 85-114.
- Berger, A. N., & Humphrey, D. B. (1997). Efficiency of financial institutions: International survey and directions for future research. *European Journal of Operational Research*, 98, 175-212.
- Bikker, J. A., & Haaf, K. (2002). Measures of competition and concentration in the banking industry: A review of the literature. *Economic and Financial Modelling*, 9, 53-98.
- Boyd, J. H., Nicolo, G. D., & Smith, B. D. (2004). Crises in competitive versus monopolistic banking systems. *Journal of Money, Credit, and Banking*, 36(3), 487-506.
- Casu, B., & Molyneux, P. (2003). A comparative study of efficiency in European banking. *Applied Economics*, 35(17), 1865-1876.
- Debnath, R. M. (2004). *Banks and legal environment*. Dhaka, Bangladesh: Nabajuga Prokashani.
- Sathye, M. (2003). Efficiency of banks in a developing economy: The case of India. *European Journal of Operational Research*, 148(3), 662-671.
- Sharma, M. K., & Bal, H. K. (2010). Bank market concentration: A case study of India. *International Review of Business Research Papers*, 6(6), 95 – 107.
- Smirlock, M. (1985). Evidence on the (non) relationship between concentration and profitability in banking. *Journal of Money, Credit and Banking*, 17(1), 69-83.
- Zhao, T., & Murinde, V. (2011). Bank deregulation and performance in Nigeria. *African Development Review*, 23(1), 30–43.

Partial privatization and performance of newly privatized SOEs: Evidence from Indonesia

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Abstract

Using 214 data from all Indonesian SOEs (15 firms) that have been partially privatized from year 1991 to 2007, the research employs Wilcoxon signed-rank test to assess the impact of partial privatization on performance and uses panel regression to investigate the factors affecting the success or failure of privatization. Unlike mainstream argument which proposes full privatization as the most effective way of improving performance (as reported by several previous researches such as Boubakri et. Al, 2005 and D'Souza et.al, 2005), partial privatization (sale of state share without relinquishing control) appears to work very well in Indonesian case. This paper finds that privatization affects positively on the performance of newly privatized SOEs for almost all of performance measures both in the short term and long term. Further investigation finds that internally (firm specific factor) it was due to the presence of non state shareholders as well as better monitoring due to the presence of independent commissioners in the Board of Commissioner. Once the firms are privatized, the government transfers some degree of control from general shareholder meeting to board of commissioner along with other changes in firms' statement of association. With regard to environment specific factors, although the level of the contribution is very marginal in comparison with other predictors, stock market activity also provides a favorable impact to the performance of divested SOEs, especially in the long term. The soundness of privatization design equipped with the commitment of the state to lower its engagement appears to be the key to success of privatization in Indonesia. However, a unique feature following the privatization such as new performance-aligned incentive system cannot be ignored. After all, the gradual, partial, unique Indonesian privatization can be an alternative for other developing countries across the world.

Introduction

The most fundamental question being ever addressed after implementation of privatization policy is whether ongoing privatization would be really effective for improving performance as expected by its supporters or not. Although this subject has attracted many researchers/scholars to carry out numerous works, very few researches have been done in Indonesian context even after more than two decades since the privatization program started. Despite significant discussion in these studies on the particular industry, less has been done to capture the broader aspects of institution as well as the state of governance in the nation. The issue becomes more relevant because privatization in Indonesia has unique characteristics in the sense that it has been gradually and partially pursued.

Many studies report that partial privatization is likely to be less effective in boosting performance in comparison with full privatization. This study is aimed at assessing the impact of partial privatization in Indonesia on the performance of newly privatized SOEs then investigating the determining factors of performance improvement or deterioration in the post privatization period.

Methods

We confine our analysis to partial privatization in which the state still holds more than 50% of remaining shares after privatization. The government of Indonesia basically has adopted this type of privatization because among 16 divested from 1991 to 2007 only PT Indosat divested more than 50%. In this study we include all of those 15 partially divested SOEs.

To assess whether there is a statistically significant change in the mean value of each performance measure pre and post privatization, we employ the Wilcoxon signed-rank test. Meanwhile to investigate the determining factor of either positive or negative performance change found in the first test we employ panel regression.

We divide the analysis into two time frames, short term and extended term. Short term analysis is done by comparing 3 years before and 4 years after privatization to assess the immediate impact of privatization, while extended period analysis examines the impact of privatization in the long term period by all possible data available pre and post privatization. In the latter analysis we use 214 data.

We classify the performance measures into 3 categories, profitability (Return on Sales/ROS), efficiency (Value added/Capital Employed), and productivity (Inflation-adjusted operating income/Number of Employee). Furthermore, we use the remaining state ownership (OWNERSHIP), number of government commissioner (GOVCMSNR), number of independent commissioner (INDPCOMSNR), composite stock index (STOCKINDX), stock turnover (STOCKTURNV) as predictors (independent variables) of the second analysis, and the logarithm of GDP (LogGDP) as a control variable.

Discussion

Generally speaking, the result reveals that there are statistically significant positive changes in the performance of partially privatized SOEs in the post privatization period in comparison with the performance in pre-privatization. All performance measures in two different time periods of analysis, except profitability in the short term period, indicate that privatization brings significant favorable impacts to the performance of divested SOEs. With regard to profitability, apparently for some companies in different sectors of industry it is required several years for privatization to present a favorable impact to the divested firms. Nonetheless, 9 of 14 SOEs (in this analysis we drop one firm considered as significant outlier) demonstrate a positive change in profitability.

Based on the second test, it is revealed that there are several factors affecting the performance enhancement of privatized SOEs. The factors are grouped into two categories, firm specific and environment specific factors. Most of firm specific predictors play a significant role in affecting the performance of the firm. The difference is more on the level and the trend of the importance.

The residual state shares in the divested firms seem to bring a negative impact to the performance of divested firms, especially in the long term period. While in the long term it affects both measures, in the short term it significantly affects the efficiency level, but not the profitability. The influence of the number of government commissioners seems to become less critical in the long term since it favorably affects the profitability only but not the efficiency and productivity.

On the other hand, the role of independent commissioners gets stronger in the long term period. It can be seen not only from its contribution in enhancing profitability and efficiency but also from the increased statistical significance level. With respect to the environment specific factor, our result demonstrates that capital stock activity also presents a positive contribution to the performance improvement after privatization. While in the short term it affects significantly only on the profitability, which is easier to see (might be also easier to make), the importance of capital stock is even more

visible in the long term when efficiency is also affected by it. Nevertheless, compared to other variables the magnitude of stock market importance is very marginal. Lastly, it seems to us that no single variable affects significantly the productivity of the firm in the long term period.

The government of Indonesia seems to use privatization as a momentum to show its commitment to reduce the political intervention problem. It is shown by transferring some degree of control from general shareholder meeting, which is the state itself, to BOC. By doing so, it can lower chances for politicians and bureaucrats to pursue rent seeking activities on SOEs. This action is followed by reducing the number of government commissioners and allowing independent commissioners to be on BOC. In addition, the government also establishes a performance-aligned incentive system by allowing employees and managers to purchase shares particularly allocated for them, in most cases with a special price. Moreover, the government also awards the managers and employee stock options to be exercised at a special discount. These kinds of incentives appear to work well in tackling severe agency problems of divested SOEs.

It is rather surprising to see the result is unlike what reported by several studies in the same issue. Many works such as done by Boubakri et. al, (2005) and D'Souza et.al. (2005) conclude that privatization would be effective in bringing performance enhancement if done fully by relinquishing the control from the state to the private owner. Partial privatization is considered unable to eradicate the main problem of political interference. The only possible source of performance improvement in the case of partial privatization is the presence of a capital market that can bring incentives to the managers in the form of a takeover threat. However, this might not happen in the most developing countries in which stock markets are less developed. On the other hand, developing countries usually face multifaceted macro economy problems ranging from budget deficit to unemployment. Those problems are also important to be taken into consideration in the privatization program. In this respect, privatization model implemented by the government of Indonesia can be an alternative.

References

- Alchian, Armen, and Demsetz, Harold, "Production, Information, Cost, and Economic Organization" American Economic Review, 1972, pp. 777 – 795.
- Arrow, Kenneth, Agency and The Market, in Arrow and Intriligator, eds, "Handbook of Mathematical Economics", 1986.
- Baltagi, Badi, H, "Econometric Analysis of Panel Data", 3rd Edition, John Wiley Sons, England, 2005.
- Bortolotti, Bernardo, Juliet D'Souza, Fantini, Marcella, Megginson, William L, "Privatization and the sources of performance improvement in the global telecommunications industry", Telecommunications Policy 26 2002, 243–268,
- Boubakri, N., & Cosset, J. "The financial and operating performance of newly privatized firms: Evidence from developing countries". Journal of Finance, 53, 1998, 1081–1110.
- Boubakri, Narjess, Jean-Claude Cosset, Omrane Guedhami, 2005. Liberalization, corporate governance and the performance of privatized firms in Developing Countries, Journal of Corporate Finance 11, pp. 767– 790.
- Cook, Paul, and Kirkpatrick, Colin, "Privatization in Developing Countries: An Overview", St. Martin's Press, New York, 1988, pp. 3-46.
- D'Souza, J., & Megginson, W. "The financial and operating performance of privatized firms during the 1990s". Journal of Finance, 54, 1999, 1397–1438.
- D'Souza, Juliet, Megginson, William and Nash, Robert, 2005. Effect of institutional and firms specific characteristics on *post*-privatization performance: Evidence from developed countries, Journal of Corporate Finance 11, pp. 747– 766

How brands change the goods' elasticity

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Abstract

In the traditional microeconomics theories, the elasticity of each good is fixed and elasticity also influences the consumer's demand and producer's supply; thus we can use elasticity to estimate the sales of products and even the profit. However, with the times changing, more and more goods don't obey the traditional elasticity theory in sale, because of brand effectiveness. In this high civilization society brand effectiveness can change the sales of products. Someone may like this brand while another likes another brand. They do not obey the classical economic theory (demand and supply theory). I will use some real events to explain this new theory and explain how brand effects can change the model of sales, what effect they have and how much new profit they can get. At the same time, I will construct a new model to explain this situation. The center topic of this paper is elasticity in the old classical economic theory to new-classical theory until my own theory which I have built.

Introduction

In the 1990s, the most valued automobile brand-Mercedes Benz went to the US and opened a huge market in US. Before going to America, they had had success in Australia where the culture is very similar with the US. Unfortunately, the blueprint was not like what they imagined; they just got a reasonable net of profit without huge profit. At the same time, one brand from Japan, Toyota, found such a huge profit in the US automobile market; after a deeply investigation in the US, they decided to make a new model to open up the American market, and to force Mercedes Benz out of the US, because they were a pair of competitors. Toyota's engineers researched a lot and finally made a new model that had a good performance at speed meanwhile was a comfortable car. So a new brand came into the market which is a famous brand until today – Lexus. Before Lexus went to the American market, each Benz car cost about 72,000 US dollars, and Lexus advertised a very conspicuous advertisement besides Benz's poster, and the poster said: just with 39,000 US dollars, you can take Lexus to your home which is just as comfortable and powerful.

However, Benz not only followed their promotion but also raised their price of each car. This kind of marketing behavior could not be imagined at that time. A month later, an unbelievable phenomenon happened; Benz's net profit didn't go down but went up, and in the US Lexus got little profit from market. As we know, at that time, Americans were not so rich and their GDP was a quarter of that in 2011. For an average person, maybe they needed to use 4 years of average salary to buy a Benz; the Lexus price was half of Benz's price, which had some level of comfort and power. We cannot explain the price elasticity of demand. As we know, automobiles are luxury goods and "e" should be bigger than 1; at the same time, we know the function of e is the margin of price change divided by the margin of quantity change. We can use mathematical models to explain that Lexus should win in this competition fight and Benz must have gone down. But the fact is that Benz won finally.

This example, as well as other examples, shows the impact of elasticity on price was not complete. So we need to use a new model or a new thinking and rewrite the theory of price elasticity of demand, which has been proved not to be perfect in real life.

Methods

From the above real situation, if we use the classical elasticity theory, we cannot explain it. So we need to use some new factors and functions to solve and explain it, and then construct a new elasticity model. As we can easily get from the above example, the value of each product brand is the factor that influences the phenomenon. In the elasticity theory, they just used the price of goods to describe the elasticity; this was not complicated.

If we can take the value of brand to the elasticity theory, maybe the function will change and the elasticity theory will also change. I assume there are two products and for each of them brand price is P_1 and P_2 , and in the first one unit of period, the sale is Q_1 and Q_2 . So we can get P_1/Q_1 , P_2/Q_2 . Which means, how much value for one unit goods (notice: the value is for brand not for goods' price). Because the value of brands are changeable, so in the second unit of period, we can get the above value of brand change into P_3 and P_4 , and the quantity of the products are Q_3 and Q_4 . So I use mathematical methods to get a new value of elasticity model, and I can use my own new model to explain some unusual supply and demand phenomenon, but I think my own model is not perfect and cannot adapt into the whole economic situation except in a microeconomic market.

On the other hand, in my opinion, we can discuss the value of brand in non-perfect competition markets or in monopoly markets. Meanwhile, this is also the characteristic when we research the "value elasticity of demand", so I will also explain the above point in my presentation.

Discussion

I discuss whether my own new thinking is true or not and I also want to receive some advice about my thinking. Meanwhile, I use mathematic methods to prove my thinking. The third issue which I want to discuss is about how I can use my thinking and how I can move ahead with my thinking.

References

- Angel De La Fuente. Mathematics Method and modes theory for economics. Press: Cambridge University.
- Darrell A. Turkington. Mathematical tools for economics. Press: Blackwell publishing.
- James H. Stocks & Mark W. Watson. Introduction to Econometrics. Press: Addison-Wesley.
- N. Gregory Mankiw. Economy in Practical theory. Press: South-Western Cengage Learning.
- Peter Groenewegen. Classics and Moderns in Economics Volume. Press: Roulledge Taylor and Francis Group.
- Robert M. Solow. Economic Growth A Unified Approach. Press: Cambridge University.
- Weibin Zhang. Discrete Dynamical systems, Bifurcations and Chaos in Economics. Press: Elsevier.

Recent productivity growth across the world

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Abstract

Examining trends in total factor productivity growth can inform us about whether economic growth can be sustained in different parts of the world. This, in turn, can inform us about whether global economic growth can be sustained as the unprecedented global recedes and normalcy returns. The results of our empirical analysis of the sources of economic growth show that factor accumulation continued to play a much bigger role than productivity growth in many fast-growing developing countries. This was especially true in Chile, Jordan, Korea, Malaysia, and Thailand where much of economic growth was driven by factor accumulation. Since these economies are at income levels where the source of growth shift from factor accumulation to productivity growth, policymakers must take measures to facilitate and accelerate the transition from accumulation-based growth to productivity-led growth. However, productivity growth had a much larger effect on the economic growth of other fast-growing developing countries. This is true in China as well as some other countries such as Egypt, Poland, Sri Lanka and Tunisia.

Introduction

The central objective of our paper is to empirically examine recent trends in total factor productivity (TFP) growth and its two components – technical efficiency change (TEC) and technical progress (TP) – across 53 countries during 1991-2003 by applying a stochastic frontier production approach to estimate productivity growth.

In recent years economic growth has spread throughout the developing world, including previously stagnant regions such as East and Central Europe, Africa and Latin America. The drivers of superior performance include economic reform, sounder policies and stronger governance, more competitive markets, expansion of trade, and greater integration into the world economy. In short, more and more developing countries are now following in the time-proven paths to prosperity trodden earlier by East Asian countries. Therefore, it is worthwhile to broaden the scope of analysis from East Asia to a much broader group of countries.

Discussion

Regardless of their TFPG, the fact that developing countries substantially lag behind developed countries in TE suggests that productivity growth will depend as much on promoting TEC as TP. That is, in order for developing countries to achieve sustainable economic growth, they will not only have to achieve higher technological levels but also make better use of existing technologies and factor endowments. Their success in meeting this challenge will impinge heavily upon future global economic growth.

References

- Battese, G.E. and T.J. Coelli (1992), "Frontier production functions, Technical Efficiency and Panel Data with Application to Paddy Farmers in India," *Journal of Productivity Analysis*, vol. 3, pp. 153-169.
- Chen, E.K.Y. (1997), "The Total Factor Productivity Debate: Determinants of Economic Growth in East Asia." *Asian-Pacific Economic Literature*, vol. 10, pp. 18-38.
- Cuesta, R.A. (2000), "A Production Model with Firm-Specific Temporal Variation in Technical Inefficiency: With Application to Spanish Dairy Farms," *Journal of Productivity Analysis*, vol. 13, pp. 139-158.
- Fare, R., S. Grosskopf, M. Norris, and Z. Zhang (1994), "Productivity Growth, Technical Progress, and Efficiency Change in Industrialized Countries," *American Economic Review*, vol. 84, 66-83.
- Han, G., K. Kalirajan, and N. Singh, "Productivity, Efficiency and Economic Growth: East Asia and the Rest of the World," *Journal of Developing Areas*, vol. 37pp.99-118.
- Heston, A., R. Summers, and B. Aten (2006), *Penn World Table Version 6.2.*, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.
- Kim, J.-I. and L.J. Lau (1994), "The Sources of Economic Growth of the East Asian Newly Industrialized Countries," *Journal of the Japanese and International Economics*, vol.8, pp. 235-271.
- Kim, S. and Y.H. Lee (2006), "The Productivity Debate of East Asia Revisited: A Stochastic Frontier Approach," *Applied Economics*, vol. 38, pp. 1697-1706.
- Marquetti, A. and Foley, D. (2008), *Extended Penn World Tables: Version 3.0*, Economics Department, New School.
- Young, A. (1994), "Lessons from the East Asian NICS: A Contrarian View," *European Economic Review*, vol. 38, pp. 964-973.
- Young, A. (1995), "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience," *Quarterly Journal of Economics*, vol. 110, pp. 641-680.
- World Bank (1993), "The East Asian Miracle: Economic Growth and Public Policy," Oxford University Press, New York.

Japanese consumers' behaviors on the agri-food retailing in Japan: The case of Konohana Garuten

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Abstract

Since 1990s Japan has challenged the sluggish economy as the only developed country in Asia by having the largest purchasing power in all types of products. Instead of luxurious or technological items, agricultural products are actually the largest imported category of Japan nowadays. However, Japanese farmers are driving to create sufficient domestic supply to the market by differentiating their products value as well as developing efficient retailing channels. These imperative actions should comprise of ample competitiveness to gain consumers' preferences over those relatively cheap and fluctuated ones from China, USA, and ASEAN (Association of Southeast Asia Nations). Consequently, understanding the altering consumer's purchasing behavior is crucial to thrive. Due to a large number of Japanese populations moving towards aging society, their consuming behaviors will also gradually vary in relation with the condition of economy, society, and life style. This research focuses on the primary attitude of Japanese consumers influencing on their buying behavior of agricultural products, for example fruits and vegetables, at the community agricultural food retailer. Using the case of "Kononaha Garuten" at Oyama, Hita which was found to be sustainable 20 years ago to encourage local farmers in harvesting and trading profitably, the main analysis reveals three key outcomes reflecting the current perceptions and consumption pattern of Japanese consumers. First, it will manifest the relevant demographic factor affect on buying behaviors. Second, it will exhibit the dominant issues of purchasing behavior towards agricultural food supply for their daily life. And third, the study intends to show how the competitive advantages might lead to store loyalty. The results will be beneficial and contribute to the efficient strategic retailing for the local cooperatives under high competition in the market.

Introduction

Nowadays Japan, a developed country in Asia, has a growing disparity between an aging population and decreasing number of youth because of the small fertility rate and net immigration (GS, 2012). Until 2020, it is forecasted that about 25% of Japan's population will be composed of 65-year or older people (AAFC, 2011, p. 2).

Seemingly, Japan has reached a maturity in most markets. Although the country has an uneasy situation in its disproportionate population, the attitude and purchasing behavior of Japanese consumers are dynamic with unceasing diversities (IMB, 2010, p. 2). Japanese people were viewed as consumers who are quality-orientated and willing to pay high prices as the main characteristics (Salsberg, 2012, p. 3). Possibly the new government during the 1950s decided to strengthen the nation by modernization against the threat of domination from Western's imperialism (Lincoln, 1990, p. 62). However, these days Japanese people have altered their life-styles and buying behaviors according to the stagnant economic condition, for example in the expansion of private-label foods, bulk buying, and eating in instead of

dining out (Salsberg, 2012, p. 2). The changing patterns are explicitly seen in the food industry (Nguyen, 2010).

Food is one of the physically basic necessities in human life (Maslow, 1943). Agricultural products are the core of it because, basically, food derives from natural resources such as plants and animals. In 2010, World Bank defined agricultural products into four main categories; (1) tropical products, (2) temperate products, (3) seafood, fruits and vegetables, and (4) other processed products (Aksoy & Ng, 2010, p. 18). When Japanese consumers buy food items, they mostly go to either modern trade or conventional channels where Japanese consumers tend to go regularly. It is also called the “two extreme end phenomenon” (Tsunetoshi, 2012a).

This study focuses on the community agricultural food retailing named ‘Konohana Garuten’ – the local chain stores initiated by the Oyama cooperative farmers in Hita, Oita (Savitri, 2008, Okura, 2009). Though this retailer has employed multi channels retailing, standalone stores, supermarket corners or booths, as well as a web site for online commerce, its key characteristics are more or less considered as a traditional selling place. Under the higher competition from the cheap and massive imported agricultural goods, Konohana Garuten constructs a relatively sustainable retail organization, which is able to compete with the modern trade channels, for example supermarkets, department stores, or discount stores, and create a strong position in the consumers’ preferences.

This study, hence, emphasizes on Japanese consumers’ demographics, their buying behavior, as well as attitude towards buying agricultural food products at local retail stores. The research aims to explain the consumers’ characteristics, buying patterns, and community retail’s competitiveness advocating to or contributing to a sustainable community enterprise.

Methodology

This research applies a case-study approach (Yin, 1994) on the agricultural cooperative shop named “Konohana Garuten” as the case study, with the quantitative research methods by applying a structural survey (Saunders et al, 2007) as well as the researcher’s participatory observation on the consumer buying behavior on the store locations. The questionnaires of the pilot study were distributed in 20 sets in order to test questions’ reliability, followed by 400 formal sets in 4 different locations of stand- alone shops; one in Oyama town (Hita district), one in Akeno (Oita city), and the other two in Nomaoike and Momochihama (Fukuoka city).

Discussion

The preliminary findings from empirical research point out that the Japanese consumers have shifted their buying behaviors on food items recently due to the passive economy. A trend of food consumption towards European and American patterns still can be seen in modern trade channels. However, various segments of consumers with different demographic backgrounds can have an influence on store selection and buying behaviors.

The results of questionnaire with customers of Konohana Garuten, a conventional community retailing, reveal many interesting aspects of Japanese consumers’ attitude on buying decision and store selection for the agricultural food products. It is important to know the current inclination into retailing strategies especially for the local or cooperative enterprises. Because of the related demographic factors, such as age, gender, and marital status, and as being the lead purchaser in the house can affect buying behaviors, the dominant

issues of purchasing behavior towards agricultural food supply in daily life are expressed accordingly. Furthermore, the outcomes show that Japanese consumers who buy at the community store remained unchanged, or slightly changed on the key preferences of the agricultural food products. The freshness and plenty amount of products availability are still the major concerns in buying agricultural food items at retail stores. Meanwhile, the desirable number of visits per week reflects the buying frequency and the strong tendency of the store loyalty of the consumers.

The findings from both empirical data and survey data illustrate not only the changing phenomenon of Japanese consumer behaviors on the agricultural food products, but also the critical issues for the application of community retail management.

References

- AAFC. 2011. *Agri-Food Trade Service; Agri-Food Consumer Profile: Japan*. Ottawa: Agriculture and Agri-Food Canada. Retrieved October 30, 2012, from Agriculture and Agri-Food Canada: <http://www.ats-sea.agr.gc.ca/asi/4150-eng.htm>
- Aksoy & Ng. 2010. *The Evolution of Agricultural Trade Flows*. Retrieved April 30, 2012, from World Bank: <http://library1.nida.ac.th/worldbankf/fulltext/wps05308.pdf>
- GS. 2012. *Japan - Country profile, facts, news and original articles*. Retrieved October 31, 2012, from Global Sherpa: <http://www.globalsherpa.org/japan>
- IMB, I. M. 2010. *Market Analysis Report: The Japanese Consumer: Behaviour, Attitudes and Perceptions toward Food Products*. Ottawa: Agriculture and Agri-Food Canada.
- Lincoln, E. J. 1990. *Japan's unequal trade*. Washington D.C.: The brookings Institution.
- Maslow, A. 1943. A Theory of Human Motivation. *Psychological Review*, 50(4), 37-390. Retrieved October 31, 2012, from <http://psychclassics.yorku.ca/Maslow/motivation.htm>
- Nguyen, S. 2010. *The Changing Consumer Behavior in Japan*. Retrieved from Workplace Psychology: People at Work: <http://workplacepsychology.net/2010/03/22/the-changing-consumer-behavior-in-japan/>
- Okura, Y. 2009. Development of research on the "One Village One Product" program in Japan. *Kansai University Review of Business and Commerce*, 5, 17-26.
- Salsberg, B. (2012, November 2). *The New Japanese consumer*. Retrieved June 27, 2012, from McKinsey&Company: https://www.mckinseyquarterly.com/The_new_Japanese_consumer_2548#
- Saunders et al. 2007. *Research methods for business students (4th ed.)*. Essex: Pearson education limited.
- Tsunetoshi, T. 2012. *Japanese Consumers*. Retrieved June 26, 2012, from Intelligence Bridges: <http://www.intelbridges.com/japaneseconsumer.html>.
- Yin, R. 1994. *Case study research: Design and methods (2nd ed.)*. Thousand Oaks, CA: Sage Publishing.

Foreign direct investment determinants in the South, East and South-East Asia

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Abstract

The main purpose of this paper is to analyze the Foreign Direct Investment determinants for a cross comparative study between the South, East and South-East Asia regional blocks. The paper will examine prominent indexes that measure FDI such the UNCTAD Inward FDI performance index (IIOFI) and related indexes, and also conduct a substantial literature review to analyze the determinants and improve the current measurement indexes because they have been openly criticized over some limitations. Developing and transition economies now account for 52% of global FDI inflows and have overtaken those of developed nations. Most flows have been directed toward the ASEAN's five tigers (Malaysia, Indonesia, the Philippines, Singapore, Thailand and Vietnam) and the SAARC (India, Sri Lanka and Bangladesh) region. The pivotal research question from this paper is to understand the determinants that have affected these flows.

Introduction

One of the remarkable features of globalization in the 1990s was the flow of private capital in the form of foreign direct investment. FDI is an important source of development financing, and contributes to productivity gains by providing new investment, better technology, management expertise and export markets (Sahoor, 2004). Domestic investment still accounts for the majority of the total investment in developing economies. Foreign investment can only complement this. However, each form of foreign investment plays a distinct and important role in promoting growth and sustainable development, boosting countries' competitiveness, generating employment, and reducing social and income disparities. Non-FDI flows may work either in association with FDI, or separately from it. As no single type of flow alone can meet investment needs, it is vital to leverage their combinations to maximize their development impact (UNCTAD, 2011) Foreign investors are also expected to transfer intangible assets such as technology and managerial skills to the host country and provide a source of new technologies, processors, products, organizational technologies and management skills as a strong impetus to economic development (Dr Catherine S.F. et al, 2011)

A study conducted by Ernst and Young suggests that "70% of world growth over the next few years will come from emerging markets, with China and India accounting for 40% of that growth". Adjusted for variations in purchasing power parity, the ascent of emerging markets is even more impressive: the International Monetary Fund (IMF) forecasts that "the total GDP of emerging markets could overtake that of the developed economies as early as 2014". Also other emerging markets were identified, as E&Y suggests "the emerging markets already attract almost 50% of foreign direct investment (FDI) global inflows and account for 25% of FDI outflows". In fact the largest and brightest spots for FDI continue to be Africa, the Middle East, and Brazil, Russia, India and China (the BRIC's), with Asian markets (Thailand, Indonesia, Malaysia, the Philippines, Singapore and Thailand) of particular interest at the moment. "By 2020, the BRICs are expected to account for nearly 50% of all global GDP growth" (Ernst & Young, 2011). In fact from the top 20 FDI inflow host countries include China, Hong Kong, Singapore, India and Indonesia which are among the top recipients in the

world. The UNCTAD's World Investment Prospectus Survey (WIPS) confirms that developing and transition economies are becoming important investors, and this trend is likely to continue in the near future (UNCTAD, 2011) "Therefore Securing a strong base in these countries will be critical for investors seeking growth beyond them" (Ernst & Young, 2011).

However despite recent improvements FDI flows have declined in 2012. For the first time developed nations and nations in transition received more FDI than their Asian counterparts during the recent period; this has primarily been a result of volatility in the markets. The capital surge is exposing developing countries to greater instability, putting direct pressure on their exchange rate; and the low interest rate environment will be hard to sustain in the long term (UNCTAD, 2011). While FDI recovery resumes, the worldwide demand for private productive investment is increasing as public investment, which rescued the global economy from declines in FDI in one country after another. With the unsustainable level of debt in many countries, and nervous capital markets, governments must now rein in their deficits and let private investment take over the lead role in generating and supporting recovery. In fact responses by TNC's indicate increasing awareness to invest, and clear priority in opportunistic areas but TNC's feel that increased protectionism coupled by regulatory risks has put a brake on capital expenditures. Many developed nations require private investment rather than public investment, but TNC's are reluctant to invest because past FDI performance would seem to be warranted (UNCTAD, 2011).

The United Nations Conference on Trade and Development has developed several indices to evaluate and compare the location advantages of the countries and their relative success in attracting FDI. However, these indices suffer from several limitations; but it has been used as a benchmark for assessing policy in relation to FDI and it poses a severe limitation. Therefore Carlos Et.al constructed an improved inward FDI potential index that can solve some of those limitations, making use of 70 variables for 49 countries and data reduction techniques. The correlation analysis shows that it fits better with the Inward FDI Performance Index, and thus this new index explains more precisely countries' FDI inflows. Moreover, the larger number of variables included allows us to rank the countries for different kinds of FDI and to assess countries' strengths and weaknesses for policy purposes. Furthermore the Index uses not only variables from model but also encompasses a variety of theoretical literature.

In fact the choice of the variables included in IIFPOI is justified by the following criteria: the theoretical analysis of the determinants of FDI; the empirical studies testing the validity of the theoretical analysis; the availability of quantitative data on the potential determinant factors and their geographic scope.(Carlos Rodríguez, 2009).

Methodology

A mixed method approach to research is conducted gathering secondary data from the World Bank Statistics, International Financial Statistics (IFS) of the International Monetary Fund (IMF) and the Global Market Information Database (GMID), the database of Department of Statistics for each country (Malaysia, Indonesia, Thailand, Singapore and Philippines) and the Bloomberg database. Central bank annual reports of all countries, and primary data analysis will be conducted post testing where interviews with key specialists in the field of Finance and economics will make the results meaningful.

The paper proposes a *multiple regression analysis* method where robustness of results will be tested ascertaining the significant variables using ANOVA, Correlations and Model significance. Furthermore future research will propose a principal component analysis to help ascertain significance of the type of policy that will be used.

This data will be tested using various statistical packages such as SPSS and visually will be shown to the reader via MS project. Then based on the variables ascertained from literature the purposes mentioned will be ascertained. Furthermore, to stimulate the interest of the reader the data will be displayed as much as possible in the research report stage using graphical software such as MS project, Microsoft visio, Mind Mapping software and Matlab.

Discussion

It was found that South, East and South East Asia were receiving the largest FD flows and Indonesia, Malaysia, China and India were among the top 20 recipients of FDI, hence making the results even more significant as it is dealing with the most active FDI destinations.

As for the desired results indicated from the regression, most variables were found to be significant by the analysis. Furthermore at a country level it depicts that each country has varying determinants of FDI, which answers the second purpose of the assignment. A variety of determinants were found to have positive, negative and no significance and hence most variables were backed by empirical findings in previous literature. Furthermore most variables had significant ANOVA, Model, r squared with strong correlations.

However to ascertain policy variables more clearly the research may have to conduct a principal component analysis to see the significance. Certain variables were found to have few null values, but after subsequent reading the data maybe retested with a few minor alterations for the measurement of the variables.

References

- Aziz, R. M. 2011. Ease of doing business and FDI. *CCS* .
- Bryman, A. 2001. *Social research methods*. England: Oxford University press.
- Creswell, J. 2010. *Research Design 4th edition*. Sage Publications.
- Catherine S.F., A. H. 2011. Macroeconomic and country specific determinants of FDI. *The Business Review, Cambridge* , 219-226.
- Guarav Agrawal, V. r. 2011. FDI inflow determinants in BRIC countries: A panel data analysis. *International Business Research* , 1-6.
- Edmiston, K., Mudd, S., & Valev, N. 2011. Tax structures and FDI: The deterrent effects of complexity and uncertainty. *Fiscal studies* , 341-359.
- Jennifer, M. 2002. *Qualitative researching*. London: Sage.
- Mathias Busse, J. K. 2010. FDI promotion through Bilateral investment treaties. *Review of World Economics* , 251-263.
- Mukesh Tyagi, C. J. 2002. *Foreign Direct Investment in Developing countries*. Jaipur: CUTS.
- Neto, P., Brandão, A., & Cerqueira, A. 2010. The Macroeconomic Determinants of Cross-Border Mergers and Acquisitions and Greenfield Investments. *IUP Journal of Business Strategy* , 21-57.
- Pradhan, r. 2010. Interdependence of FDI between India and ASEAN 5: evidence from causality approach. *International Business Journal* , 150-160.
- Pradhan, R. P., & Saha, D. 2009. Determinants of Foreign Direct Investment in SAARC Countries: An Investigation Using Panel VAR Model. *Management International Review* , 36-45.
- rizvi, S. Z. 2009. *Foreign Direct Investment on Employment opportunities*. Karachi Pakistan: Karachi university.
- Thomas, A. 2004. *"problem Identification" in research skills for management*. London: Routledge.
- UNCTAD. 2011. *World Investment Report 2011 : Non-equity modes of international production and development*. Washinton USA: UNCTAD.
- Wang, C., Clegg, J., & Kafouros, M. (2011). Country-of-Origin Effects of Foreign Direct Investment: An Industry Level Analysis. *Management International Review* .
- Yin, R. 2003. *Case study research: Design and Methods*. London: SAGE.
- Young, E. &. 2011. *2011 Global Investment Trends*. Usa: E & Y Global Reporting.

Enhancing educational opportunities for rural poverty reduction in Sub-Saharan Africa: The case of Sierra Leone

Sheka Bangura

Abstract

Effective solutions to rural poverty in Sub-Saharan Africa have been elusive and despite heightened global efforts, indigence has remained endemic on the continent. Inadequate rural education has been a key driver of the problem, which in turn is explained by a number of factors including inappropriate policies, weak institutions, and cultural factors. On the West African Atlantic Coast, Sierra Leone is well documented for high rates of illiteracy and poverty. This paper has analyzed the characteristics and key predictors of the country's rural educational situation based on its National Census 2004 and Household Surveys 2003/04 and 2011, with the aim of advising policy. The most crucial predictors found are the creation of nonfarm jobs and location of households near socio-economic services.

Introduction

Despite its numerous natural resources, Sierra Leone has been one of the poorest countries on Earth. It was amongst African countries with a promising beginning at the wake of the struggles for self-determination in the 1950s and 60s compared with a number of countries that have excelled today in East-Asia. But retrogression started in Sierra Leone from the 1970s, with per capita GDP slipping constantly from 3.8% during 1961-1969 to 2.7, 1.1 and -4.2% in the decades that followed until the end of the civil war (1991-200); meanwhile Asian countries such as Indonesia and Thailand have emerged and maintained growth at impressive levels (Dowling & Valenzuela 2011; and others). Indonesia and Thailand had reduced poverty incidence from 60% in 1965 to 8 and 13% in 2010 respectively (World Bank Development Indicators), while Sierra Leone's incidence remained at 60% by the end of 2010 (Sierra Leone MDGs Report, 2010). Although Sierra Leone is highly endowed with abundant mineral resources, yet its socio-economic performance has been appalling and falling behind other nations with far less natural resources; one could argue that a key predictor of this outcome is an inadequate investment in education and knowledge.

The importance of human capital for rural poverty reduction is captured in five sequential hypotheses put forward by Otsuka et al (2009, pp. 201-209) in discussing farm versus nonfarm income in the transformation of rural Sub-Saharan Africa (SSA) compared to rural Asia. They evoke that societies naturally start from a rural status with farm incomes as the mainstay of progress, before the nonfarm sector (through increased education) takes the lead. "[T]he development of the nonfarm sector and increased access of households to nonfarm labor markets are clearly the major driving force behind the reduction in poverty in rural villages in Asia" (ibid). It is believed that human capital differentials mainly account for the dependency of SSA on farm income compared with other developing regions. Green Revolution is said to be indispensable in combating endemic poverty in SSA, which itself would not have

had the intended impact elsewhere if it were not accompanied by education programs (Dowling and Valenzuela 2010).

Against the premise that farm income is needed but not sustainable for investment in schooling and poverty reduction, the argument for investing in migration has emerged. The high production of remittances in countries such as the Philippines underlies the argument in favor of promoting the nonfarm sector and schooling. The emerging concept of *capability and functioning* underscores the fundamental role of education and knowledge in improving quality of life and well-being (Sen 1993; Wagle 2010).

Empirically, the factors found affecting rural education in the literature include: weak economic policies and institutions, inappropriate farm technology, limited parental education, and remoteness of communities (Matsumoto et al 2009; and others). On the policy and programmatic front, steps taken by countries to address rural educational bottlenecks include compulsory rural education, special incentives to attract teachers to remote areas; decentralized recruitment of teachers; and customized schooling to meet special circumstances of communities (Binglong et al 2009; and others).

Methods

Descriptive and regression techniques were used based on the Sierra Leone Population and Housing Census 2004, Sierra Leone Integrated Household Survey 2003/04 (SLIHS2003/04) and part of SLIHS2011.

Findings and Discussion

In the immediate post conflict phase of Sierra Leone (2001-2004), the national illiteracy rate was estimated at 61%, with the rural areas standing at 63% against 38% for the urban areas (Census 2004). The SLIHS survey 2003/04 estimated the rural poverty incidence at 79% against an urban incidence of 47%. As part of efforts to stem poverty following the end of the war, new educational instruments were developed and Local Councils were resuscitated to facilitate the implementation of programs at the community level. Poverty reduction strategy papers were successively developed and implemented, with education as a key pillar.

But have the results been attractive since 2004, during the implementation of the country's first and second generation PRSPs (2005-2012)? While some significant progress was recorded in terms of access to education during 2005-2012, the 2010 MDGs Report for Sierra Leone indicates that the national illiteracy was still at 61% as at end of 2008 (Sierra Leone MDGs Report 2010, p.11); the rural-urban split was not reported. The SLIHS survey 2011 reveals an illiteracy level of 78% for rural areas (persons 5 years and above), compared to 42% for urban areas based on a sample size of 33,989 persons. While these sample estimates may not be compared to the national census figures (2004) based on a population of 3,954,484 (10 years and above), they leave serious concerns about a possibly deteriorating situation or stagnating/marginal performance in improving literacy in the country.

Farm versus nonfarm employment: It is obvious from the SLIHS survey 2003/04 and 2011 that rural Sierra Leone is still enormously traditional. The vast majority of the households have consistently derived the largest share of their incomes from farming. About 90% of the households derived their income mainly from farming in 2003/04. Generally, the 2011 survey depicts the same outlook as the 2003/04, although it indicates that in the *very long run* a structural shift could be expected from farm to

nonfarm activity—the share of farm jobs declined from 90% in 2003/04 to 85% in 2011. Although mining plays a key role in the economy as the main export revenue earner, rural households appear less dependent on this sector.

It is suggested that Sierra Leone is mostly described by *Hypothesis 1* of Otsuka et al (2009)—it depends on farming predominantly. It seems that not much has been done over the PRSP period (7-8 years) in availing the requisite agricultural support to rural communities and the education and skills that would enable them to substantially shift to the nonfarm sector for better earnings.

From the SLIHS2003/04, two regression models were estimated to explain the status of rural education in Sierra Leone, using the *highest school grade attained by the household head (model 1)* and *spending on child schooling (model 2)* as dependent variables. From *model 1*, a one percent increase in income significantly increased chances of attaining higher school grade by 0.5 points; so did an increase in household size (1.9 points), though perhaps through economies of large size, since it is a little counterintuitive in terms of the possible high dependency on limited resources. Those owning farmland did worse in school. It came out that nonfarm employment had more chances of supporting rural education, as well as living in the West end of the country, and having migrated earlier. These predictors came out the same on *model 2*, where credit to rural household was also significant.

Conclusion

A key conclusion is that the creation of nonfarm jobs is more critical for generating the income needed to support rural education than engaging in farming, implying that Sierra Leone, though still very poor, may be graduating out of Otsuka et al's *Hypothesis 1* which depicts dependency on farm income to support rural education.

References

- Binglong, L. 2009. "Overview on Pro-poor Development Policies in Rural China. Brief on International Poverty Reduction Studies". *International Poverty Reduction Centre in China*.
- Dowling, M. J. and Valenzuela, R. M. 2010. *Economic Development in Asia. 2nd Edition*.
- Matsumoto et al 2009. Role of nonfarm income and education in reducing poverty—Evidence from Ethiopia, Kenya Uganda. In Otsuka et al (Eds.). *Rural Poverty and Income Dynamics in Asia and Africa*. Routledge, London.
- Otsuka, et al 2009. Towards a new paradigm of farm and nonfarm linkage in economic development. In Otsuka et al (Eds.). *Rural Poverty and Income Dynamics in Asia and Africa*. Routledge, London.
- Sen, A. K. 1993. Capability and Well-Being. In A. Sen and M. Nussbaum (Eds.). *The Quality of Life*, pp.30-53. Helsinki, Finland: United Nations University.
- Wagle, U. 2010. Multidimensional Poverty Measurement—Concepts and Applications. *Economic Studies in Inequality, Social Exclusion and Well-Being*. Springer Science+ Business Media LLC.

Strategies of internationalization of higher education: The case of study abroad programs in an international university in Japan

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Abstract

The paper presents a qualitative evaluation of two study abroad programs in a leading international bilingual university in Japan. It also examines the main internationalization reforms in Japanese higher education. The research objectives are: 1) to examine how study abroad programs relate to the university's regular curriculum; and 2) to determine how they meet the academic needs of Japanese students studying at an international university in their own country. The data were collected through interviews with students and teachers before and after their participation in the programs and observations of pre-departure courses. The theoretical framework combines language program evaluation theory with internationalization strategies. The study shows how English language education plays an essential role in the internationalization of higher education in Japan. It also shows that these programs are essential for the preparation, development and improvement of Japanese students' English skills, thus meeting their academic needs. Emerging themes such as self-study skills, intercultural exchange and motivation found in the data may have a positive impact on the university's English courses and future English content classes for Japanese students at the university. This may also contribute to an effective internationalization of the curriculum.

Introduction

In an international university, both domestic and international students are constantly exposed to a very unique cultural and academic environment that can potentially speed up their language proficiency development and expand cultural awareness. Study abroad is a rich, complicated context for language learning research. During the past years, researchers have demonstrated that language learning of many kinds takes place in study abroad, that abilities related to frequent practice in social interactive settings are particularly salient in the repertoires of participants, and that study abroad may have subtle effects on students' orientation toward language learning (Ramsay, 2009).

The case of Japan offers a contrasting view of the role of study abroad in relation to language learning. The study of English in Japan has become very connected with foreign language learning and at the same time with the language-related goals of study abroad.

In 2003, the Japanese Ministry of Education, Culture, Sports, Science and Technology issued an "Action Plan to Cultivate Japanese with English Abilities" calling for reform of language curricula, teacher education and evaluation in the direction of greater focus on communication skills for both teachers and students, increased employment of native-speaking Assistant Language Teachers, creation of opportunities to use English outside of class, and increased participation in study abroad. Listed among the goals under the rubric entitled "Improving Motivation for Learning English" there was the promotion of overseas study for university students, specifically short-term overseas study for

Japanese students using such means as agreements for international exchanges between universities (to be promoted) and the provision of information relating to overseas (to be enhanced).

These reforms are part of the efforts that the Japanese government is making towards internationalization of higher education. As De Wit (2002) has explained, an understanding of the rationales for and the meaning of internationalization of higher education helps with the improvement of the theoretical basis for the analysis of internationalization of higher education. Rationales can be described as motivations for integrating an international dimension into higher education. Different rationales imply the use of different means and ends to internationalization. Knight and de Wit (1995; cited in de Wit, 2002) identify two groups of rationales: economic and political, and cultural and educational. In later studies, Knight (1997, 1999) separates them into four: political, economic, social-cultural, and academic.

From this last classification, the research on this paper focuses on the academic rationales, specifically the active learning programs which serve academic purposes. The paper presents a qualitative evaluation of two study abroad programs in a leading international bilingual university in Japan. It also examines the main internationalization reforms in Japanese higher education. The research objectives are: 1) to examine how study abroad programs relate to the university's regular curriculum; and, 2) to determine how they meet the academic needs of Japanese students studying at an international university in their own country.

As part of a more extensive evaluation of the English language program at this international university, for this paper, I examined the following programs that are part of English education in this institution: 1. Global Collaborative University Education (GLUE). The data collected to study this program consists of interviews with students who were enrolled to participate in it; 2. Super Ryugaku Course (SRC). The data collected to study this program consists of a class observation of the pre-departure course and an interview to a student who enrolled in the course and is currently overseas.

Methodology

A qualitative approach has been chosen, as it was found suitable for language curriculum evaluation. The theoretical framework combines language program evaluation theory with internationalization strategies. The two frameworks have been used because study abroad and immersion programs in general are very connected to language learning inside the classrooms. Students are able to put into practice what they learn in class when they go abroad, as well as to improve their class participation and academic performance using what they learned abroad. Thus it has been necessary to examine how some parts of the curriculum are more effective in enriching students' learning abroad and vice versa.

Discussion

The paper summarizes the main aspects of language learning through study abroad, as well as some essential characteristics of immersion programs in Japan. It examines the main aspects of English language education in Japan as part of the strategies of internationalization of higher education. The last section consists of the description, findings and discussions of the two programs being examined. In the description it looks at specific characteristics of the programs that stand out for students' successful preparation and academic performance.

Through these programs and the pre-departure courses, students not only receive a preparation for one specific program, but also this allows them to improve their English abilities. This also enables them to perform well on the future English content classes they have to take at the university. However, students still need more academic English preparation. It has been found that Advanced English classes are still few at the university and not all students can take these courses.

References

- De Wit, H. & Knight, J. 1999. *Quality and Internationalisation in Higher Education*. Paris: OECD.
- De Wit, H. 2002. *Internationalization of higher education in the United States of America and Europe: a historical, comparative and conceptual analysis*. Westport: Greenwood press.
- Ramsay, V. 2009. Study Abroad and Evaluation: Critical Changes to Enhance Linguistic and Cultural Growth. In: Norris, J.M., Davis, J.M., Sinicrope, C., Watanabe, Y. (Eds.). *Toward Useful Program Evaluation in College Foreign Language Education*. (p.163-181). Honolulu: National Foreign Language Resource Center, University of Hawai'i at Mānoa.

Role of motivation in the lower educational achievement among ethnic minority children at secondary level in Lam Dong Province, Vietnam

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Abstract

This paper explains the academic underachievement of ethnic minority students at secondary levels in Lam Dong Province, Vietnam through an in-depth understanding of the influence of motivation on educational performance. The paper is a part of a research conducted in 2010 searching for the factors affecting educational performance of ethnic minority children and looking for the needs to improve their academic achievement. The findings revealed that motivation became a prominent factor among those contributing to the low educational success of ethnic minority children. Living in a context that was not conducive to schooling, ethnic minority students did not enjoy the sufficient environment for good education performance such as job outcome, parental engagement, peer support in educational motivation, a peaceful academic environment or other social support. Thus, they did not believe that education could bring them a fruitful outcome or make any positive changes in their life. They lacked positive attitudes and strong perceptions towards education. They undervalued education and did not have a strong and positive future orientation. Consequently, they made no effort for higher schooling achievement and were not willing to be engaged in the school activities.

Introduction

Vietnam is a multi-ethnic country with 54 officially recognized ethnic groups. Ethnic Kinh, the most dominant group which makes up 85.5% of the population, is viewed as the majority; others are classified as ethnic minorities. About 90% of the ethnic minority groups reside in remote and mountainous rural areas. They have more difficulties in accessing infrastructure, financial and health services, education and modern technology. This makes them lag behind the majority both politically and economically (Imai & Gaiha, 2007). In education, children of ethnic minority groups are experiencing higher illiteracy rates, lower educational attainments and higher school dropout rates as well as class repeating rates. The reasons for these phenomena are diversified depending on the particular individual, ethnic minority group or their residential area.

In this paper, several factors related to educational motivation are examined to see the link between these factors and the educational outcomes of ethnic minority students in Lam Dong Province, Vietnam. The reasons for exploring the role of motivation in ethnic minority students' schooling performance are because motivation plays a significant role in educational attainment and is the central pillar of the success of a child at school (Wentzel & Wigfield, 2009). The factors that are discussed in this study will be ethnic minority students' beliefs, values and goals for their education, their family background and their parents' engagement to their schooling and other facets of societal dimensions relevant to racial and ethnic status such as discrimination, prejudice and peer pressure. These aspects have been suggested by Wentzel &

Wigfield (2009) and Murdock (2009) to be key elements in deciding the level of motivation that a student and a student of ethnic minority have in their schooling.

Methods

The overall aim of this paper is searching for the causes of low educational motivation and its consequences on school performance of ethnic minority children in Lam Dong Province. It is based on a qualitative research carried out in the provincial capital city and three other districts of Lam Dong Province in 2010. Stratified random methods were used to select these districts among the total of two district-level cities and other ten districts of the province. Qualitative research methods with semi-structured in-depth interviews, informal conversations, group discussions and observations were used. The research participants were ethnic minority students at lower, upper secondary and tertiary education, students' parents, ethnic minority and majority teachers, and commune leaders. Purposeful sampling was used to select the respondents at the sites. During the field research, 39 interviews were conducted with many other discussions and conversations.

Findings and discussion

The majority of ethnic minority households lived in poverty and had to struggle to find enough food for their daily consume. They considered the benefits and values of education as the outcomes in terms of jobs and income to help them to escape from their hunger and poverty. Ethnic minority children seemed to realize that education is important and relevant to their future. However, they failed to explain why education is meaningful and how it is related to their future. The perception that they got at school is different from what really happened in their real life. In the context that off-farm jobs and income in the region were limited and the educational programs did not equip them the practical skills for survival, they realized that education did not make any change. They had to return to their farming work after investing their time, money and other resources for their education. They gradually had the feeling that education was not meaningful, not closely related to their life, did not affect their future and did not help them to gain a better status.

Family backgrounds were also found to have some influence on children's motivation for schooling. Besides that, children would have better educational attainment if their parents had a positive attitude and high aspiration for their schooling. However, the context where the ethnic minority students were living was not conducive for their schooling. Although realizing that education was important for their children and could help their children to be literate and have off-farm jobs in the future, ethnic minority parents did not get involved or did not know how to help their children have better educational attainments. Some even neglected their children's education. They thought that educating children was the schools' duty and teachers' job. This low parental awareness on the education was found to be the result of poverty, isolation, low off-farm job opportunities and low parental education that ethnic minority parents were experiencing. This made ethnic minority parents less assimilated in the society and less integrated into the labor market. Consequently, they did not value education and could not support their children to have better schooling.

Ethnic prejudice, discrimination and peer pressure were discovered to be some of the factors that block ethnic minority children from higher academic achievement. Although these factors were not strong

enough for them to act against the dominant group to protect their self-concepts and their values by devaluing what seemed not to belong to them, as found by (Ogbu, 2008), these aspects did have some influence on ethnic minority students' educational performance. Students of ethnic minorities reported to be teased or discriminated by their majority peers. They were teased or insulted for their different appearance, for their lack of fluency in Vietnamese, for their lower educational attainments, or for their physical maturation. These made the ethnic minority students feel embarrassed and less confident. Furthermore, cases of inducement from out-of-school students to in-school students were reported. The out-of-school children enticed the in-school students to play truant or drop out of school to join them in other activities such as playing games or sports, going to coffee shops, or doing some part-time jobs. Those with low educational performance and boredom with school thought that dropping out of school was more beneficial and enjoyable. This made it easier for the in-school students to give up studying and join the out-of-school groups.

Conclusion

Education has been found to have a well-established link with the life outcomes. Education can enhance life satisfaction and well-being (Chavous et al., 2003). However, each individual may have different perceptions on education, may value education differently, may have different levels of educational goals, beliefs and interests, and may differently invest time and energy to gain high educational achievement.

The questions of how to motivate students to concentrate in education, work purposely and learn for the sake of their own benefits has been raised by Bentley (1998) as the students may believe that school cannot prepare them for their lives. In the case of ethnic minority students in Lam Dong Province, creating a conducive context to schooling, making students believe in the values of education and helping them to form a positive attitude towards education will be the significant solution to deal with the issues of low educational motivation and poor schooling performance.

References

- Bentley, T. 1998. *Learning beyond the classroom: Education for a changing world*. New York and London: Routledge.
- Chavous, T. M., Bernat, D. H., Schmeelk-Cone, K., Caldwell, C. H., Kohn-Wood, L. & Zimmerman, M. A. 2003. Racial identity and academic attainment among African American adolescents. *Child Development*, 74(4), 1076-1090.
- Imai, K., & Gaiha, R. 2007. *Poverty, inequality and ethnic minorities in Vietnam*. Manchester: Brooks World Poverty Institute.
- Murdock, T. B. 2009. Achievement motivation in racial and ethnic context. In K. R. Wentzel & A. Wigfield (Ed.), *Handbook of motivation at school* (pp. 433-461). New York and London: Routledge.
- Ogbu, J. U. 2008. The history and status of a theoretical debate. In J. U. Ogbu (Ed.), *Minority status, oppositional culture, and schooling* (pp. 3-28). New York and London: Routledge.
- Wentzel, K. R. & Wigfield, A. 2009. Introduction. In K. R. Wentzel & A. Wigfield (Ed.), *Handbook of motivation at school* (pp. 1-8). New York and London: Routledge.

Assessing and developing global competence: A Japanese case study

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Abstract

Without a doubt, as globalization continues to reshape our world, global competence has rapidly become a key concept for many in Japan. The recruitment and development of globally competent human resources has become one of the main themes in the Japanese business community. However, unlike basic personality and traits, global competence cannot be properly assessed and evaluated by standardized tests (e.g. SPI2 and TOEIC) currently employed by thousands of Japanese companies. To address this void in current practice, the ‘*Gurobaru taio-ryoku tesuto*’ (GCAA®) was used to conduct an analysis of 92 employees from JTB Corporation. This is a comparative analysis between current employees (n=44), and newly hired graduates (n=48) from the April 2012 intake. Results from the GCAA® were then reported and discussed with the company, while feedback interviews were also conducted with selected employees. Identified in the case study are several significant predictors of global competence, while the link between English proficiency and test performance was also explored. Study conclusions suggest that a mix of both qualitative and quantitative methods to assess and evaluate global competence is needed in order to develop the desperately needed *gurobaru jinzai* (global talent) in Japan.

Introduction

The ‘*Gurobaru taio-ryoku tesuto*’ (Global Competence Aptitude Assessment) (GLE, 2010; LbE Japan, 2012), was launched in Tokyo at the Nikkei Human Capital 2012 Summer Expo (Nikkei BP, 2012). Before the official launch date, several feasibility studies were conducted simultaneously to assess the GCAA’s suitability for the Japanese market. A major part of the feasibility studies involved obtaining GCAA samples from major Japanese firms. Results were then presented to the human resource manager at each company and feedback was collected. This JTB Corporation case study with 92 employees was part of the feasibility studies conducted across Japan. This is a comparative analysis between current employees (n=44) and newly hired graduates (n=48).

Methods

All 92 GCAA tests were conducted in the Spring of 2012. The JTB study had four underlying research questions:

1. Are current employees more globally competent compared to the newly recruited fresh graduates?
2. Are there noteworthy differences in the results between these two groups of employees?
3. What makes a standout performer?
4. How can this study influence the way individuals are assessed and evaluated for global competence?

When the tests were completed, all test papers were collected and the answers were entered manually into the testing site to obtain the scores of each individual. Next, the data were further

analyzed using descriptive statistics, frequency data, independent-samples t-tests, one-way between-groups ANOVA, and hierarchical multiple regression models.

Discussion

The results show, when controls are added for demographic, human capital and confidence, that a difference in performance becomes clear:

1. No statistical significance was observed for “Internal Readiness/IR” (innate characteristics) scores between current and new employees. As the increase in scores involves a shift in attitudes, an improvement in IR is less straightforward.
2. T-tests have shown that current employees generally outperform new employees on the GCAA. Performance differences are significant in the dimensions of “Knowledge about World History”, “Globally Aware”, and “Effective across Cultures”.
3. Those with 10 years or more of experience performed better for “External Readiness/ER” (acquired knowledge and skills). Position wise, employees who occupy supervisory or managerial positions outperformed regular (*ippan shain*) employees. It should be noted that the position of *ippan shain* is comprised of both current and new employees. For the analyses in this study however, they were separated for the purpose of comparison.
4. Those working for the departments of “Business” and “International Education and Exchange” outperformed their peers on the GCAA.
5. Many of the participants work only within the domestic Japanese market. While interactions with foreigners are minimal, the content of their business (Travel and Tourism) plays a part in affecting ER scores.
6. While maturity does play a part in affecting ER scores, the content of an employee’s job at JTB is also a significant factor. However, there are no sharp improvements in scores observed. Despite reaching significance, score differences remain low.
7. Overall, the feedbacks received from the participants were very informative. Both positive and negative feedbacks were collected. Most were impressed with the results as it gave them an indication of their strengths and weaknesses. All participants who were interviewed have stated their intentions to use the results to work on the areas that need improvement. With regard to what makes a standout performer, the author needed to identify important predictor variables linked to higher levels of global competence. As the GCAA scores are continuous variables, hierarchical multiple regression models were used.

The findings were:

1. The number of languages used by an employee was found to affect scores in the dimensions of “Willing to Take Risk”, and “Knowledgeable about World History”. As the t-test analysis has revealed, employees who used an additional language besides Japanese performed better on the ER dimensions than those who used only Japanese.
2. Languages used and the number of hours (per day) spent communicating with foreigners were significant predictors of “Perceptive and Respectful of Diversity” scores.
3. English proficiency was found to be a significant predictor of overall ER scores. However, from an attitudinal (IR) standpoint, English proficiency alone was not a good predictor of global competence.

4. The number of years of experience is a predictor of ER scores. However, as shown in the case studies, even with an average of 16 years of experience, current JTB employees were placed in the “Undeveloped Aptitude” for global competence range.
5. While self-perceived level of global competence was found to be a significant predictor of IR scores in three out of four dimensions, it is not a predictor of ER scores. This goes to show that without an effective method to assess and evaluate global competence, it is hard to differentiate between stated attitudes and actual attitudes and capabilities.

References

- GLE. 2010. *Global Leadership Excellence home page*. Retrieved February 2010, from <http://www.globalcompetence.org>
- LbE Japan. 2012. *Gurobaru taio-ryoku tesuto*. LbE Japan home page. Retrieved May 2012, from <http://www.lbejapan.co.jp/gcaa.html#>
- Nikkei BP. 2012. *Human Capital 2012 Expo*. Nikkei Business Publications, Inc. Retrieved May 2012, from <http://expo.nikkeibp.co.jp/hc/201207/index.html>

The position of English in Japanese kindergartens of Beppu city

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Abstract

The teaching and learning of English has become one of the most important topics in Japanese education, and many Japanese educators and parents feel that exposure to English at an early age is crucial for young children in Japan (Sugino, Koga & Kawashima, 2004; Ikegashira, Matsumoto & Morita, 2009). This study mainly investigates English education in three Japanese kindergartens and examines ways in which the study of English is constructed and delivered. Some educators believe that the use of Japanese language is needed in order for young children to understand and fully experience the joy of English language learning. They argue for the need to re-examine the introduction of English as *ikita eigo* (practical English). The study finds that the study of English in Japanese kindergartens stands as part and parcel of exploring, experiencing and learning for young children. Of particular interest is the importance of the role of a Japanese teacher in the English class. The teaching and learning of English is presented in a fun environment that engages learning through play (*asobi*), sounds and actions. The activities foster learning by encouraging both one-to-one and group interactions, team spirit, repetition and recall.

Introduction

This study aims to find out the place of English in Japanese kindergartens at Beppu city. To answer this question, a series of research questions were formulated based on literature review and a research background of the teaching and learning of English in Japan. The research questions primarily seek to answer what and how kindergarten principals, directors, English teachers, Japanese teachers and parents perceive the learning of English for young children. How do the perspectives of principals and directors as decision makers impact the engagement of English classes, in terms of aims, objectives and expectations? What are the educational practices of English, namely, the perspectives, roles, techniques and strategies of English and Japanese teachers in the English classroom? How do children themselves view the learning of English?

The study was conducted at three kindergartens which are referred to by pseudonyms such as *Hoshi* kindergarten, *Hana* kindergarten, and *Ai* kindergarten located in Beppu city, Oita prefecture, Japan. The study addressed the different issues involved in the introduction of English in Japanese kindergartens and its implementation in the area of ECE. Additionally, the study also wanted to understand the roles played by parents and their importance in their child's learning of English at home. The objectives of the study were threefold: Firstly, observe and describe how English classes are held in Japanese kindergartens. Secondly, investigate into the construction of English through the responses of stakeholders and explore the varying roles, beliefs and practices espoused by the director, English teachers, Japanese teachers and parents. Thirdly, find out the ways in which children experience the learning of English.

Methods

Observation (Johnson & Christenson, 2012) as a method was used throughout the course of fieldwork to procure maximum insights of English classes as well as to become aware of the approaches of the different stakeholders at the kindergarten. In order to understand the perspectives of the principals / directors and English teachers in the engagement of English, an in-depth interview method was used. Owing to the tight schedule of Japanese teachers, open-ended questionnaires were administered to elicit responses regarding their roles, techniques and their perspectives towards young children learning English at their kindergartens.

Similarly, open-ended questionnaires were distributed out to parents through the kindergarten directors. Two out of the three kindergartens allowed access to parents. Additionally, in order to give voice to the perspectives of young children in kindergartens, child-centered activities were improvised where children could freely discuss their thoughts and views about English classes through drawing, craftwork and games (Edwards, Gandini & Forman, 1995; Samuelsson & Carlsson, 2008).

Discussion

The major findings indicate that the place of English is influenced by an amalgamation of the perspectives of stakeholders and can be understood as follows: The first finding is *Japanese language comes first before English*. The second finding is *expectations exceed the reality*. Across all the three kindergartens, the aim of English classes can be understood as follows: English for exposure to ‘intercultural experience’, ‘communication skills’ and ‘native-English sounds’, that is often referred to as ‘*kirei na eigo*’ (beautiful English) or ‘*ikita eigo*’ (practical English) in their standard of understanding English language.

The third finding is *the learning of English comes with added benefits*. All the kindergartens share that one of their primary goals for English classes are to allow children to have intercultural experiences. They seem to equate intercultural experiences as the sum of experiences which enable children to be with a non-Japanese English teacher and celebrate festive occasions. So, these English classes particularly come with added benefits to communicate with a non-Japanese English teacher.

The fourth finding is *English forms a part of the enrichment activities*. According to this study, English is not a special case in Japanese kindergartens. It is simply part of the entire pre-school curriculum, and English classes may take a step back by frequent class cancellations because of other seasonal events or festivals. Additionally, English is taught for exposure to other cultures, sounds and to develop a love for the language.

The fifth finding is *a difference in approaches*. The learning of English is offered more as part of the various enrichment programs in the life of a child, rather than for academic orientation. The sixth finding is the *autonomy of English teachers to implement classes*. According to this study, the unique characteristic in the place of English in Japanese kindergartens is that directors and principals allow English teachers to have complete freedom to decide what and how they want to introduce the teaching and learning of English.

The seventh finding is *a difference in the emphasis on the teaching and learning of English among kindergartens*. The study found Hoshi kindergarten as a model in comparison with the other two kindergartens, Hana and Ai. Hoshi was found to be the kindergarten to have an effective impact in terms of learning English. The case of Hoshi kindergarten is a prime example to other kindergartens which seek to have English classes as part of their curriculum. Two main factors, consistency and review make English classes more effective.

The eight finding is *the important role of a Japanese teacher in the classroom*. She or he contributes to a crucial aspect of classroom practices by being a role model to the students while speaking both in Japanese and English.

References

- Edwards, C., Gandini, L., & Forman, G. 1995. *The hundred languages of children: The Reggio Emilia approach to Early Childhood Education*. New Jersey: Ablex Publishing Corporation.
- Ikegashira, A., Matsumoto, Y & Morita, Y. 2004. English education in Japan: from kindergarten to university.
- Reinelt, R. (Ed.) 2009. *Into the next decade with (2nd) FL teaching*. Rudolf Reinelt Research Laboratory EU Matsuyama, Japan, 16-40.
- Johnson, B. & Christensen 2012. (4th Ed.). *Quantitative, Qualitative and mixed Research Approach* Los Angeles: Sage Publications.
- Samuelsson, I.P & Carlsson, M.A. 2008. The playing learning child: Towards a pedagogy of early childhood. *Scandinavian Journal of Educational research*, 52(6), 623 - 641.
- Sugino, N., Yuya, K., & Hirokatsu K. 2004. A longitudinal study of English language activities at a kindergarten: Focusing on shifts in instructional practices. *Annual Review of English Language Education in Japan*, 15, 71-80.

Preserving cultural identity: The use of social networking tools in education

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Abstract

A questionnaire survey was conducted to investigate the use of social networking tools vs. preserving cultural identity. The sample for this survey was from Japanese international students in a North American University. Results of this survey revealed that in the age of globalization students have strong ties with their culture and cultural identity, and try to preserve their identity. In the response to the questionnaire students made comments about ways they use social networking tools. This research provides guiding principles for the use of social networking tools for educational purposes. This research will help teachers and instructional designers to design and develop culturally responsive activities using social networking tools. The author discusses the results of the survey and provides suggestions for further research in this area. The study reveals that the students prefer to use flexible and autonomous approaches to learning, to demonstrate the knowledge and skills which suits their own learning style. Therefore, constructivist approaches to learning and alternative assessment tasks would be more appropriate for students in a multicultural 21st century classroom. The author provides some appropriate examples of integrating technology and use of social networking tools for creating such a learning environment.

Introduction

The study provides evidence that Japanese international students make conscious efforts to preserve their cultural identity and use social networking tools. This study was undertaken with the view that how important social networking is today for young adults and how potentially effective this could be if there was a synergy, rather than a friction, between the online social interaction drivers of the new generations and the goals that schools in general are trying to achieve (NSBA, 2007).

Bhattacharya and Jorgensen, 2006 discussed the issues concerning the influence of IT on the diversity and global culture by how technology is being used. They developed a model in phases to discuss the difficulties in engaging the technology and thus finding ways to increase its usage, particularly in the education sector.

Traditional educational and academic institutions may be indeed on the verge of a major revolution affecting the whole work marketplace, as they need to face and act upon evidence that the new approaches to learning and working are increasingly providing (masternewmedia, 2012).

Methods

In terms of research approach, the study has taken an interpretivist framework, using Japanese international students in a North American University for the case-study, which is characterized by the

need to generate, process, share and use knowledge on a daily basis in order to remain competitive in providing an ideal environment to host international Japanese students. The case study was analyzed using a qualitative research methodology, composed of open response questionnaire survey analysis as a means of data analysis, thus deriving a characterization of understandings, perceptions and acceptance of social networking systems as a knowledge management tool.

A pilot study was conducted by the author in March-April 2011 to explore the concept of preserving cultural identity in the era of globalization and the opportunities provided by online social networks. It involved 50 Japanese international students enrolled in undergraduate, graduate and certificate courses. A free online survey tool was used to collect anonymous data from the students. After providing initial information about the data collection and its use through face-to-face presentations and via email from the international students office, an open-response questionnaire with 12 questions was posted online to collect the students' responses.

Based on the analysis of survey data the author has created a set of guidelines for integration of social networking systems such as blogs, wikis along with e-portfolios in the formal teaching-learning process for capturing students' learning journey and creating culturally responsive instructions.

Discussion

The analysis of the survey data revealed that the students of 21st century would like and make conscious efforts to preserve their cultural identity through interaction with people from other countries and also through their own work online. The problem students emphasized over and over again was that of the integration of social networking systems in the formal teaching-learning process.

In higher education, where it is generally acknowledged that there is a need to adequately capture, store, share and disseminate knowledge, as this can lead to greater innovation, creativity and productivity, students are suspicious of the nature of the technology and the fact that it could intertwine their own and their students' academic, professional and social life. They may also suspect that the faculty members are not prepared to invest the relatively high effort required in employing social network systems as a knowledge management tool as they also have difficulty in establishing the added value. Consequently, in order to employ social networking systems for knowledge management purposes, cultural, behavioral and organizational issues need to be tackled before even considering technical issues (Nunes et al, 2006).

The study provides evidence that in higher education, where it is generally acknowledged that there is a need to adequately capture, store, share and disseminate knowledge to improve innovation, creativity and productivity, students were suspicious of the nature of the technology and the fact that it could intertwine their professional, academic and social life.

References

- Bhattacharya, M. and Jorgensen, L. 2006. Dimensions of Diversity in the IT Classroom Onground and Online. In G. Trajkovski eds. 2006., *Diversity in Information Technology Education: Issues and Controversies*, Idea group Inc. USA. Chapter 1, pp. 1-14.
- NSBA (National School Boards Association) USA. 2007. *Creating & Connecting: Research and Guidelines on Online Social and Educational Networking*. Available at: <http://www.masternew>

media.org/learning_educational_technologies/social-networking/socialnetworking-in-education-survey-on-new-generations-social-creative-and-interconnectedlifestyles-NSBA-20071109.htm

Masternewmedia. 2012. Available at <http://www.masternewmedia.org/future-education-breaking-connection-learning-assessment/#ixzz2CDBpjqhY> (accessed on July 2, 2012).

Nunes, M. B.; Annansinghe, F.; Eaglestone, B. 2006. Knowledge management issues in knowledge-intensive SMEs, *Journal of Documentation*, 62 (1), pp. 101-1119.

Spatial interpolation of micro-/meso-climatic data using radial basis function neural networks for the use of local farmers

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Abstract

Effects of *Oriography* and associated atmospheric dynamics such as cold air drainage and incidence of solar radiation, local climate are coupled with the characteristics of terrain or the topography, mainly the elevation, the slope and the aspect. Regional scale coarse-grid general circulation models are not sensitive to such variation of local climate, and such parameters are derived from the data measured by weather stations established unevenly and without the interest of the location in general. Therefore users (e.g. farmers) who rely on such information are uncertain or have to assign a higher margin of risk specially when dealing with events like phenological changes, harvesting, pests and decease. In this paper a preliminary analysis is done with multiple linear regression (MLR) technique to interpolate the local weather (e.g. temperature) of Oita prefecture, Japan under the influence of the topographic and land cover characteristics. Although results show a very accurate linear fit ($r^2 > 0.9$) and satisfy the probability tests, further observations show that the range of point error is larger and the overall fit decreases significantly with the increase of spatial resolutions. A radial basis function (RBF) neural network model shows more accurate results compared to both MLR and ordinary kriging.

Introduction

Spatial interpolation of weather parameters have been studied since a long time ago using an ample of various analytical, numerical, statistical methods (Cressie, 1991) in different scales (micro-, meso-, regional-, global-) for different locations. Geostatistical methods (Chiles & Delfiner, 2012) that consider spatial variations and trends have also been used and have become more common with the integration of GIS techniques and remote sensing data (Spatial Interpolation for Climate Data, 2007). Among several geostatistical methods, inverse distance weighting (IDW), Ordinary kriging (OK) and Ordinary co-kriging (OKG) are the most common in the literature (Li & Heap, 2011). Under numerical methods, many analysis have been carried out using integration of various artificial intelligence related methods (Jeansoulin, Papini, Prade, & Schockaert, 2010) such as artificial neural networks (Rigol, Jarvis, & Stuart, 2001), fuzzy logic reasoning (Petry, Robinson, & Cobb, 2005), genetic algorithm (Huang, Wong, & Gedeon, 1998), self-organizing maps-SOMs (Stümer, Kenter, & Köhl, 2010), and support vector machines-SVMs (Cai, Hu, Kang, & Liu, 2011).

Influence to the local climate due to the variation of terrain or the topography, mainly the elevation, the slope (Daly, Neilson, & Phillips, 1994) and the aspect are some of the orographic effects associated with atmospheric dynamics (Lin, 2012) including cold air drainage and incidence of solar radiation (Chen & Lin, 2004). Regional scale coarse-grid general circulation models are not sensitive to such variation of local climate, and such parameters derived from the data measured by weather stations are uneven and lack the interests of the location in general (Daly, Conklin, & Unsworth, 2009). The PRISM (Parameter-elevation Regressions on Independent Slopes Model) has been developed incorporating station weather data, digital elevation map (DEM) data, and expert knowledge of complex climatic

extremes such as rain shadows, coastal effects, and temperature inversions (Daly, 2012). Data products of PRISM mainly contain the monthly normal and 800 m resolution temperature and precipitation data under weather category.

Farmers always benefit from local weather information specially their site specific micro-/meso-scale climatic changes to make decisions at various stages of the farming or agricultural production process (Stone & Meinke, 2006). Today most of farming community access climate information via the internet using different options of technology available in the market and therefore a system with web portal that provides agro-meteorological and climatological information to the farmers' hand is highly demanded (Chakraborty & Subramanian, 2011). This has been brought to a big step further with the introduction of agro-forestry based social networking and information sharing web platform equipped with precision agricultural tools and techniques (including GIS and remote sensing), and expert knowledge support for decision making as major functional modules (Giguruwa, Cassim, & Nishioka, 2011; Kumara, Sanga-Ngoie, & Nishantha, 2010). This whole system of decision support platform is driven by data collection through real-time field sensing networks integrated into agro-meteorological stations at specific locations of the fields; the modeled stations virtually can be located anywhere at high resolution spatial and temporal grids. This paper presents our initial works addressing the needs of real-time high resolution interpolation of air temperature using RBF neural networks manipulating data sets of selected geographical, topographical and environmental parameters.

Data sets & Methodology

The main study site is Oita prefecture, Japan; Ajimu farm village (in Usa city, Oita Prefecture) was selected for validation of interpolated results. Six parameters are selected considering the spatial, orographic and vegetation influence on micro-/meso-climate as listed in Table 1. Air temperature (T) data for the year 2010 is collected from 15 weather stations (Figure 1) of Japanese Meteorological Agency (JMA) and two agro-meteorological weather stations at Ajimu. Geographical (latitudes and longitudes) and topographical (elevation, slope and aspect) data sets are obtained from Aster DEM data. The monthly normalized difference vegetation index (NDVI) data with 250m×250m spatial resolution obtained from the Geospatial Information Authority of Japan and Tokai University was used.

Table 1: Selected parameters and their influence to the micro-/meso-climate

Parameter	Description
Latitude (x_1)	influence of Solar radiation, day light variation and spatial difference in x_1 direction
Longitude (x_2)	influence of spatial difference in x_2 direction
Elevation (x_3)	influence of lapse rate and spatial difference in x_3 direction
Slope (x_4)	influence of cold air circulation, solar radiation and shading
Aspect (x_5)	influence of solar radiation
NDVI (x_6)	influence by climatic water balance, heat and cold air circulation

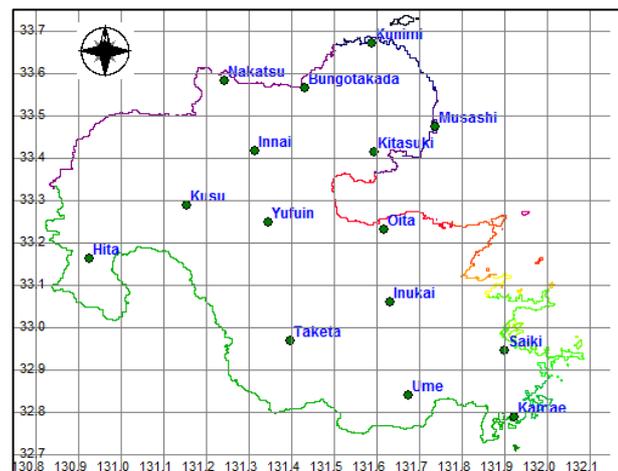


Figure 1: Weather Stations of Oita Prefecture (Source: www.jma.go.jp)

A correlation analysis is carried out see if there is any linear or obvious inter correlation between independent variables selected. Data sets are prepared for each independent variable in 250m×250m spatial resolution and monthly values recorded for NDVI and air temperatures for year 2010. MLR analysis is carried out following the modified equation of general MLR equation (Yan & Su, 2009) neglecting the bias coefficient ($\beta = 0$) as given by equation 1 where \tilde{T} is the estimated value of air temperature, a weight matrix and X is a independent variable matrix with X_i for $i = 1$ to 6 as in Table 1.

$$\tilde{T} = AX + \beta \quad (1)$$

Probability tests (t – test and f – test) are carried out to check the significance of the regression coefficients. Calculated values are compared with the observed data in the range of station (point) errors. A spatial model is constructed to estimate point error of MLR above using RBF NNs where the Gaussian activation function $\psi_j(x)$ of j th hidden neurons are given as:

$$\psi_j(x) = \exp\left(-\sum_{i=1}^n \left(\frac{x_i - c_{ij}}{\sqrt{2}\sigma_{ij}}\right)^2\right) \quad (2)$$

where c_{ij} are center states and σ_{ij} are standard deviations. Then air temperature is estimated as:

$$\hat{T} = \tilde{T} + \hat{w} \quad \psi_j(x) \quad (3)$$

and \hat{w} values repetitively calculated by using the weight tuning algorithms as given in (Kumara & Kumarawadu, 2007).

A web interactive application is developed to retrieve air temperature at any location of fine resolution grid (250m×250m) as a virtual weather station and simulate historical records integrated with the data from two weather stations at Ajimu, JMA with data from the Ajimu project social networking and information sharing platform.

Results and discussion

Simple correlation is carried out by plotting six variables, selecting one pair each time. NDVI values for January 2010 were selected to demonstrate one set of results and it showed that there was no linear correlation among the selected variables. Results of MLR showed that independent variables are fit with the temperature data with $R^2 > 96\%$. Results of f -and t - probability tests are also in the positive margin of higher significance.

It was found that the station error (difference between observed and calculated) ranged from 0.07 to 1.40 °C and was about 5 to 56% of the observed range. The point errors were fed to the RBF NN (with initial test properties; 7 hidden neurons, $-2 \leq c_{ij} \leq 2$, $0 \leq \sigma_{ij} \leq 1$) and temperature data were estimated using the model given by equation (1) to (3). Results show that error values are improved and values are fitted to the model with higher R^2 values. The final model is used to prepare a virtual temperature map for Oita prefecture and it was further validated by the temperature data calculated from data in 1 minute intervals observed at two weather stations located at Ajimu.

Conclusion

In this paper, a numerical spatial interpolation model is developed integrating MLR and RBF NNs that guarantee more than 96% of fit and very low point errors. RBF NNs are selected considering their simplicity in programming, fast learning and universal approximation properties (Kumara &

Kumarawadu, 2007). Further correlation between point errors and input variables shows that stations' errors correlate with the average station elevation and monthly NDVI values.

References

- Cai, Z., Hu, C., Kang, Z., & Liu, Y. 2011. *Advances in Computation and Intelligence: 5th International Symposium, ISICA 2010, Wuhan, China, October 22-24, 2010, Proceedings*: Springer.
- Chakraborty, S., & Subramanian, L. 2011. *Location specific summarization of climatic and agricultural trends*. Paper presented at the Proceedings of the 20th international conference companion on World wide web, Hyderabad, India.
- Chen, S. H., & Lin, Y. L. (2004). Orographic effects on a conditionally unstable flow over an idealized three-dimensional mesoscale mountain. *Meteorology and Atmospheric Physics*, 88(1-2), 1-21. doi: 10.1007/s00703-003-0047-6
- Chiles, J.-P., & Delfiner, P. 2012. *Geostatistics: Modeling Spatial Uncertainty*: John Wiley & Sons.
- Cressie, N. A. C. (1991). *Statistics for spatial data*: J. Wiley.
- Daly, C. (2012, 2012/11/15). PRISM Climate Group, from <http://www.prism.oregonstate.edu/>
- Daly, C., Conklin, D. R., & Unsworth, M. H. 2009 (accessed 2012/11/15). Local atmospheric decoupling in complex topography alters climate change impacts, from <http://ir.library.oregonstate.edu/xmlui/handle/1957/15402>
- Daly, C., Neilson, R. P., & Phillips, D. L. 1994. A Statistical-Topographic Model for Mapping Climatological Precipitation over Mountainous Terrain. *Journal of Applied Meteorology*, 33(2), 140-158. doi: 10.1175/1520-0450(1994)033<0140:astmfm>2.0.co;2
- Giguruwa, G. D. N., Cassim, M., & Nishioka, K. 2011. *A Social Networking Approach for Implementing Precision Agriculture: The Case of the AJIMU Project*. Paper presented at the 2nd Annual Conference of International Association of Asia Pacific Studies, Beppu, Japan.
- Huang, Y., Wong, P., & Gedeon, T. 1998. Spatial Interpolation Using Fuzzy Reasoning and Genetic Algorithms *Journal of Geographic Information and Decision Analysis*, 2(2), 204-214.
- Jeansoulin, R., Papini, O., Prade, H., & Schockaert, S. 2010. *Methods for Handling Imperfect Spatial Information*: Springer.
- Kumara, K. J. C., & Kumarawadu, S. 2007. Intelligent Control of Vehicles for "ITS for the Sea" Applications *3rd International Conference on Information and Automation for Sustainability (ICIAFS)* (pp. 141- 146). Melbourne, Australia: Institute of Electrical and Electronics Engineers (IEEE).
- Kumara, K. J. C., Sanga-Ngoie, K., & Nishantha, D. 2010. *GIS MCE and ICT based Precision Agricultural Model for Rural Agricultural Development*. Paper presented at the Research Symposium on Engineering Advancements Malabe, Sri Lanka.
- Li, J., & Heap, A. D. 2011. A review of comparative studies of spatial interpolation methods in environmental sciences: Performance and impact factors. *Ecological Informatics*, 6(3-4), 228-241.
- Lin, Y.-L. 2012. (accessed 2012/11/15). Terrestrial, Atmospheric and Oceanic Sciences, from <http://tao.cgu.org.tw/index.php?id=96>
- Petry, F. E., Robinson, V. B., & Cobb, M. A. 2005. *Fuzzy Modeling with Spatial Information for Geographic Problems*: Springer.
- Rigol, J. P., Jarvis, C. H., & Stuart, N. 2001. Artificial neural networks as a tool for spatial interpolation. *International Journal of Geographical Information Science*, 15(4), 323-343. doi: 10.1080/13658810110038951
- Spatial Interpolation for Climate Data: The Use of GIS in Climatology and Meteorology*. 2007. (1 ed.): Wiley-ISTE.
- Stone, R. C., & Meinke, H. 2006. Weather, climate, and farmers: an overview. [10.1017/S1350482706002519]. *Meteorological Applications*, 13(S1), 7-20.
- Stümer, W., Kenter, B., & Köhl, M. 2010. Spatial interpolation of in situ data by self-organizing map algorithms (neural networks) for the assessment of carbon stocks in European forests. *Forest Ecology and Management*, 260(3), 287-293. doi: 10.1016/j.foreco.2010.04.008
- Yan, X., & Su, X. G. 2009. *Linear Regression Analysis: Theory and Computing*: World Scientific.

GIS fuzzy multi-criteria evaluation for worldwide viticultural zoning using GLDAS data

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Abstract

Vineyard zoning and site selection for potential vineyards worldwide are becoming important issues in the context of growing international wine markets and growing wine-grapes demand. This leads to the expansion of existing vineyards and the exploration of potential viticultural zones, particularly in the emerging grape growing countries beyond the traditionally accepted isothermal and geographical limits. The Fuzzy GIS multi-criteria methodology proposed here describes the definition and evaluation of selected macro-scale bioclimatic indicators. The selected eight bioclimatic indices describe the viticultural potential of the Northern hemisphere based on the daily and monthly values of near surface air temperature and precipitation data sets for the year 2011 obtained from Global Land Data Assimilation System (GLDAS) Noah model. The zones identified within both the temperate and tropical areas show possibilities for locating new vineyards for emerging wine producing countries. Each pixel value on the map of these newly identified zones represents how strongly or weakly is the location related to the capacity of high quality wine-grapes production, and describes the capacity variations within the boundary of each classified category. The possibility of further detailed analysis for vineyards and viticultural potentials is emphasized.

Introduction

Traditional viticultural regions have been defined worldwide as those grape-growing regions located between the 10°C and 20°C isotherms in both hemispheres, mainly because of the climatic friendly conditions due to their geographical position on the globe (Jackson, 2008). Other important factors are: the region's soil, geology and topography, as well as the grapevine varieties that grow well and produce quality grapes. Together with these factors, certain wine traditions practiced for decades contribute to creating the wine terroirs of the region. And the same reasons are behind the secret of French wine (Wilson, 1998) and wine produced by the best wine terroirs of the world (Fanet, 2004; Winkler, 1962).

Viticultural terroir unit (VTU), which is defined by a certain combination of meso climate, soil and associated substratum for a series of years or vintages, has been referred to in the literature (Deloire, Vaudour, Carey, Bonnardot, & Van Leeuwen, 2005) for the assessment of homogeneity of a viticultural zone. Tonietto and Carbonneau (Tonietto & Carbonneau, 2004) proposed three indices, the heliothermal index, the cool night index and the dryness index, as a new set of primary indicators for classification and comparison. The Cool night Index (CI) which evaluates the minimum night temperature of the month where ripening usually occurs and beyond is considered as the indicator of the qualitative potential of wine growing region. Eight viticulture bio-climatology indices were proposed to investigate spatial climatic variability of a vineyards' region (Blanco-Ward, Garcia Queijeiro, & Jones, 2007); and 14 climatic parameters were extracted from weather stations data sets to summarize important indices that would be good candidates for zoning of viticultural regions in Europe (J. A. Santos, Malheiro, Pinto, & Jones, 2012; Trnka et al., 2011) and some other parts of the world (Blanco-Ward, et al., 2007; Hunter & Bonnardot, 2011; Montes, Perez-Quezada, Pena-Neira, & Tonietto, 2012).

A composite index that integrates the lower lethal limit of the grapevine, hugging index, dryness index, and hydrothermic index is recently proposed for selection of suitable climate or the best year as a percentage and as an index to observe climatic variability (Jones, Duff, Hall, & Myers, 2010; Malheiro, Santos, Fraga, & Pinto, 2010; J.A. Santos, Malheiro, Karremann, & Pinto, 2011; J. A. Santos, et al., 2012). A recent work on agroclimatic conditions in Europe under climatic change (Trnka, et al., 2011) proposed 11 indices and analyzed the data sets in the 1971-2000 period as a baseline scenario of 5^oC increase of temperature. Indicators based on agroclimatic factors such as potential biomass and crop development, crop growth period, ranges and extremes of temperatures, water deficit, harvesting and other sowing conditions during the growing season are some of factors that can be used for zoning.

Several other studies have been done on zoning (Queijeiro, Blanco, & Álvarez, 2006) (Shanmuganathan, 2010) and potential site selection in micro-/meso- scales ((Heidari & Saeidabadi, 2010; Jones & Hellman, 2002); (Kurtural, 2002; Smith, 2002; Stafne, 2007; Wolf & Boyer, 2003) at regional scale (Malheiro, et al., 2010; J. A. Santos, et al., 2012; Trnka, et al., 2011) (Malheiro et al., 2010; J. A. Santos et al., 2012; Trnka et al., 2011) or global level (Tonietto & Carbonneau, 2004) and several issues were identified related to the actual use of indicators developed, data sets used and methodology followed (Vaudour & Shaw, 2005). According to the same literature, grouping and ranking of potential viticultural areas by their degree of suitability, capacity of production and environmental interactions (e.g. soil conditions, water table) provide detailed information on suitable verities (Jackson, 2008), vineyards' techniques and management.

However multi-criteria based assessment for evaluation of vineyard potential is still inadequate or not well reported. Literature on viticultural potential and zoning in tropical and sub-tropical regions is limited compared to research in cool climatic regions. Literature is still lacking on the definition and the quantification of weights or degree of importance of factors for multi-criteria analysis.

Our main aim is to develop a set of bioclimatic indices and soft classification methodology based on fuzzy weight based multi-criteria evaluation (Eastman, 2009b; Malczewski, 1999) in GIS software platform (i.e. representing each indicator and criteria by cartographic information or as maps) for macro scale zoning of potential viticultural regions, and specific and detailed indicators representing climate, soil, terrain and proximity of water bodies, and land cover and land-use. The first set of indices are developed using air temperature and precipitation as the key drivers of viticultural fruit production. This paper is mainly dealing with macro scale analysis and the latter set of indicators (Kumara & Sanga-Ngoie, 2010b) are employed for evaluation of existing viticulture, and to identify potential zones for site selection.

Data sets & Methodology

The new methodology that we have developed has two objectives: evaluation of viticultural potential and the proposal of suitable sites based on dominant observations of results. Our analysis consists of two stages. In Stage I, a macro scale analysis is carried out for selected bioclimatic indicators to identify climatic potential zones in 0.25^o x 0.25^o spatial resolutions. In Stage II, a detailed analysis is carried out in micro scale by using a set of indicators addressing soil, topography and land cover/ land use for the zones obtained in Stage I, to delineate more precise potential zones.

Temperature is the key driver of viticultural growth and its phenology as it has commonly and more frequently been used in related studies (Anderson, Findlay, Fuentes, & Tyerman, 2008; Gladstones, 2000; Jones, 2003; Jones & Davis, 2000; Seguin & Garcia de Cortazar, 2005; Trnka, et al., 2011; Van Leeuwen, Bios, Pieri, & Gaudillere, 2007; Winkler, Cook, Kliewer, & Lider, 1992). Our selected indices are (i). HI: the heliothermal index (Huglin, 1978), (ii). DI: the dryness index, (iii) CI: the cool night index (Tonietto & Carbonneau, 2004), (iv). Hyl: hydrothermic index (Branas, Bernon, & Levadoux, 1946; J. A. Santos, et al., 2012), (v). T_{avg}: the average growing season

temperature (Jones, Michael, Owen, & Karl, 2005), (vi). T_{\min} : extreme low temperatures (J. A. Santos, et al., 2012) (vii). T_{\max} : extreme high temperatures (Webb et al., 2009) and (viii). PPI: the photosynthetic productivity measuring index (considering temperature effects only).

The first two indicators that are classified by constraints are assigned 1 for potential zones and 0 for unsuitable places. All other indicators are assigned fuzzy weights. The GLDAS NoaH model data (3 hours temporal resolution and $0.25^{\circ} \times 0.25^{\circ}$ spatial resolutions) is used for the initial analysis. Geographical coordinates of the existing vineyards world-wide (Johnson & Robinson, 2007) (Tonietto, 2008; Wilson, 1998) including the Asia pacific region were collected based on the literature (Papademetriou & Dent, 2001) and country wise agricultural records published at WWW. All individual zoning maps are finally aggregated together using the MCE module of IDRISI GIS software (Eastman, 2009a) which calculates the overall potential zone.

Results and Discussion

Results of our analysis include maps of seven zoning indices, their individual potential zones showing soft classified zones (in fuzzy scale) and the final aggregated zones in the Northern hemisphere. We run the aggregation process several times until it overlaps on existing vineyard regions of Europe to improve the accuracy of the method or until it assigns more precise weights.

The methodology based on Fuzzy MCE is used for the first time in zoning of worldwide viticultural with the dominant set of indices although fuzzy MCE method has been proposed or applied in site selection (Farzanmanesh, Naeeni, & Abdullah, 2010), focused on vineyard (Boyer, 1998) (Kumara & Sanga-Ngoie, 2010a) (Boyer, 1998; Kumara & Sanga-Ngoie, 2010) and zoning (Shanmuganathan, 2010) or other zoning related analysis e.g. forest zoning (Mello & Costa, 2011). The data set used covers the whole globe (longitudes: 179.875°W to 180.125°E and latitudes: 59.875°S to 90.125°N) and is validated for ground measurements, and provides sufficient accuracy for macro scale analysis (Kato et al., 2007; Syed, 2008) compared to the data coverage of previous studies e.g. Geoviticulture multi criteria climatic system (Tonietto, 2008).

Zones classified based on boundary classification method are subsets of zones classified here e.g. HI, DI and CI based zones. Values beyond certain limits are avoided by defining the minimum and maximum values as a methodology is developed for exploration of potential zones rather than classification of existing vineyards. One can extend the macro scale zoning by assigning certain fuzzy membership function to classify existing vineyards based on an output quality indicator e.g. vintage rating of wine produced by these vineyards, as used elsewhere to analyze climate change impacts (Jones, et al., 2005). Thereby better zoning maps can be obtained by reducing the classification uncertainty and automating the process of classification.

Conclusion

The proposed GIS multi-criteria evaluation approach with the set of indicators presented here shows a great potential in extending the performance of previous research on zoning and vineyard site selection. Indices are evaluated based on updated datasets to produce more accurate maps for potential viticultural zones worldwide using GIS. This helps to further delineate zoning and potential sites by combining individual suitability maps of indicators in micro-/ meso- scales. The newly produced viticultural zoning maps for the Northern hemisphere provide more information on viticultural potential and describe variations within the class with more space for a detailed analysis.

Micro scale analysis in the second part of the research works on more specific indicators for the site's micro-/meso-climatic variations, soil conditions, terrain influences and land cover and land use.

References

- Anderson, K., Findlay, C., Fuentes, S., & Tyerman, S. 2008. Viticulture, Wine and Climate Change *Online Garnuat Climate Change Review: Online Garnuat Climate Change Review*.
- Blanco-Ward, D., Garcia Queijeiro, J. M., & Jones, G. V. 2007. Spatial climate variability and viticulture in the Mino River Valley of Spain. *Vitis*, 46(2), 63-70.
- Boyer, J. D. (1998). *Geographic Analysis of Viticulture Potential in Virginia*. Master thesis, Faculty of the Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Branas, J., Bernon, G., & Levadoux, L. 1946. *Éléments de Viticultura Générale*. Bordeaux: Imp. Déhan.
- Deloire, A., Vaudour, E., Carey, V., Bonnardot, V., & Van Leeuwen, C. 2005. Grapevine response to terroir: A Global Approach. *Journal International des Sciences de la Vigne et du Vin*, 39(4), 149 - 162.
- Eastman, J. R. 2009. IDRISI Taiga. Worcester, MA: Clark University.
- Eastman, J. R. 2009. *IDRISI Taiga Guide to GIS and Image Processing* (Vol. 16.02). Worcester, MA: Clark University.
- Fanet, J. 2004. *Great Wine Terroirs*. Berkley: University of California Press.
- Farzanmanesh, R., Naeni, A. G., & Abdullah, A. M. 2010. Parking site selection management using Fuzzy logic and Multi Criteria Decision Making. *Environment Asia* 3, 109-116.
- Gladstones, J. 2000. Past and future climatic indices for viticulture. *Australian and New Zealand Wine Industry Journal*, 15(2), 67 - 73.
- Heidari, H., & Saeidabadi, R. 2010. Multicriteria Climatic Classification Grape-growing Regions in Iran. *Physical Geography Research Quarterly*, 41(68).
- Huglin, P. 1978. *Nouveau mode d'évaluation des possibilités héliothermiques d'un milieu viticole*. France: C. R. Academy of Agriculture.
- Hunter, J. J., & Bonnardot, V. 2011. Suitability of Some Climatic Parameters for Grapevine Cultivation in South Africa, with Focus on Key Physiological Processes. *South African Journal of Enology and Viticulture*, 32(1), 137-154.
- Jackson, R. S. 2008. *Wine Science: Principles, Practice, Perception* (3rd ed.). London: Elsevier.
- Johnson, H., & Robinson, J. 2007. *World Atlas of Wine* (6 ed.). London: Mitchell Beazley.
- Jones, G. V. 2003. Winegrape Phenology. In M. D. Schwartz (Ed.), *Phenology: An Integrative Environmental Science*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Jones, G. V., & Davis, R. E. 2000. Climate Influences on Grapevine Phenology, Grape Composition, and Wine Production and Quality for Bordeaux, France. *American Journal of Enology and Viticulture*, 51(3), 249-261.
- Jones, G. V., Duff, A. A., Hall, A., & Myers, J. W. 2010. Spatial analysis of climate winegrape growing regions in the Western United States. *American Enology and Viticulture*, 61, 313-326.
- Jones, G. V., & Hellman, E. 2002. Site selection. In E. Hellman (Ed.), *Oregon Viticulture* (pp. 44-50). Corvallis: Oregon State University Press.
- Jones, G. V., Michael, W., Owen, C., & Karl, S. 2005. Climate Change and Global Wine Quality. *Climate Change*, 73, 319-343.
- Kato, H., Rodell, M., Beyrich, F., Cleugh, H., Gorsel, E. v., Liu, H., & Meyers, T. P. 2007. Sensitivity of Land Surface Simulations to Model Physics, Parameters, and Forcings, at Four CEOP Sites. *Journal of the Meteorological Society of Japan*, 85A, 187-204.
- Kumara, K. J. C., & Sanga-Ngoie, K. 2010. *Developing a High Precision GIS Multi-Criteria Evaluation Agricultural Model that Integrates Responses to Climate Change*. Paper presented at the 1st Annual General Meeting of International Association of Asia Pacific Studies, Ritsumeikan Asia Pacific University, Beppu, Japan.
- Kumara, K. J. C., & Sanga-Ngoie, K. 2010. *GIS Multi-criteria evaluation Approach for Vineyard Site Selection for Expansion of Vineyards Ajimu in Usa City, Oita, Japan*. Paper presented at the 49th Autumn Conference of Remote Sensing Society of Japan, Kagoshima, Japan.
- Kurtural, S. K. 2002. *Vineyard Site selection Cooperative extension services*. Lexington: College of Agriculture, Department of Horticulture, University of Kentucky.
- Malczewski, J. 1999. *GIS and Multicriteria Decision Analysis*. New York: John Wiley and Sons.

- Malheiro, A. C., Santos, J. A., Fraga, H., & Pinto, J., G. 2010. Climate change scenarios applied to viticultural zoning in Europe. *Climate Research*, 43, 163-177.
- Mello, R. d., & Costa, L. d. S. 2011. *A Fuzzy Logic Classification Method for Zoning Conservation Units Forests. A Case Study in Southern Brazil*. Paper presented at the XVII International Conference on Industrial Engineering and Operations Management, Belo Horizonte, Brazil.
- Montes, C., Perez-Quezada, J. F., Pena-Neira, A., & Tonietto, J. 2012. Climatic potential for viticulture in Central Chile. *Australian Journal of Grape and Wine Research*, 18, 20-28.
- Papademetriou, M. K., & Dent, F. J. (Eds.). 2001. *Grape Production in the Asia Pacific Region* (Vol. 7). Bangkok: FAO Regional Office for the Asia & Pacific.
- Queijeiro, J., Blanco, D., & Álvarez, C. 2006. *Climatic zoning and viticulture in Galicia (North West Spain)*. Paper presented at the 5th International Terroir Congress, Bordeaux.
- Santos, J. A., Malheiro, A. C., Karremann, M. K., & Pinto, J. G. 2011. Statistical modelling of grapevine yield in the Port Wine region under present and future climate conditions. *Biometeorology*, 55, 119-131.
- Santos, J. A., Malheiro, A. C., Pinto, J. G., & Jones, G. V. 2012. Macroclimate and viticultural zoning in Europe: observed trends and atmospheric forcing. *Climate Research*, 51, 89–103.
- Seguin, B., & Garcia de Cortazar, I. 2005. Climate Warming: Consequences for viticulture and the notion of terroirs in Europe. *Acta Hort. (ISHS)* 689, 61-70.
- Shanmuganathan, S. 2010. *Viticultural Zoning for the Identification and Characterisation of New Zealand "Terroirs" Using Cartographic Data*. Paper presented at the GeoCart'2010 and ICA Symposium on Cartography, Auckland.
- Smith, L. 2002. *Site Selection for Establishment & Management of Vineyards*. Paper presented at the 14th Annual Colloquium of the Spatial Information Research Centre, University of Otago, Dunedin, New Zealand.
- Stafne, E. T. 2007. Indices for Assessing Site and Winegrape Cultivar Risk for Spring Frost. *Fruit Science*, 7(4), 121-132.
- Syed, T. H., J.S. Famiglietti, M. Rodell, J.L. Chen, and C.R. Wilson. 2008. Analysis of terrestrial water storage changes from GRACE and GLDAS. *WaterResources Research*, 44.
- Tonietto, J. 2008. Geoviticulture MCC System Retrieved August 20, 2012, from <http://www.cnpuv.embrapa.br/tecnologias/ccm/ccm.en.html>
- Tonietto, J., & Carbonneau, A. 2004. A multicriteria climatic classification system for grape-growing regions worldwide. *Agricultural and Forest Meteorology*, 124(1-2), 81–97.
- Trnka, M., en, J. E. v. i. n. d. o. e. s., Kersebaum, K. C., g, A. O. S., itzinger, J. E., Seguin, B., . . . Alud, Z. 2011. Agroclimatic conditions in Europe under climate change. *Global Change Biology*, 10(1111), 1-21.
- Van Leeuwen, C., Bios, B., Pieri, P., & Gaudillere, J. 2007. *Climate as a Terroir Component*. Paper presented at the Congress on climate and viticulture, ,, Zaragoza.
- Vaudour, E., & Shaw, A. B. 2005. A Worldwide Perspective on Viticultural Zoning. *South African Journal of Viticulture*, 26(2), 106-115.
- Webb, L., Watt, A., Hill, T., Whiting, J., Wigg, F., Dunn, G., . . . Barlow, E. W. R. 2009. Extreme heat: Managing grapevine response. Documenting regional and inter-regional variation of viticultural impact and management input relating to the 2009 heatwave in SE Australia. Parkville Victoria: School of Agriculture and Food Systems, University of Melbourne.
- Wilson, J. E. 1998. *Terroir: The Role of Geology, Climate, and Culture in the Making of French Wines*. Berkley: University of California Press.
- Winkler, A. J. 1962. *General Viticulture*. Berkeley: University of califonia Press.
- Winkler, A. J., Cook, J. A., Kliewer, W. M., & Lider, L. A. 1992. *General Viticulture*. Berkley: University of California Press.
- Wolf, T. K., & Boyer, J. D. 2003. *Vineyard Site Selection Virginia Cooperative Extension*. Petersburg: Virginia Tech, Virginia State University.

A multi-criteria decision analysis of food and biodegradable waste management options in Japan

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Abstract

Dealing with large-scale Food and Biodegradable Waste (FBW) often results in many logistical problems and environmental impact considerations. These can become hindrances to the integration of solid waste management. To plan such waste disposal or treatment services and facilities, extra care is taken, especially in respect to ecological impacts and issues. Decision making with regards to the sustainable use of these facilities also involves tradeoffs between criteria and a number of conflicting objectives, since increasing one benefit may decrease the others. A Multi-Criteria Decision Analysis (MCDA) is presented in this study to evaluate different waste management options and its applicability in Japan. The analytical process aims at selecting the most suitable waste treatment option, using pairwise comparisons conducted within a decision hierarchy that was developed through the Analytical Hierarchy Process (AHP). We conclude that anaerobic digestion should be chosen as the best FBW treatment option with regard to resource generation. We also present some conditions and recommendations that can enhance the suitability of other options like incineration and compost.

Introduction

Food and biodegradable waste management (FBWM) in the municipal solid waste management is beginning to attract a lot of attention due to environmental issues and concerns. The enormous amount of FBW generated due to preference for raw food (raw egg, sashimi, sushi, etc), particularly fresh fruits and food, along with population growth, changes and improvements in standards of living and life style, have introduced many logistical problems that result in massive amounts of FBW (MAFF, 2008). The environmental impact of this problem can become a hindrance to the integration of solid waste management. Further use of reduction, reuse and recycling of FBW and adoption of the right waste disposal/treatment services, facilities and location will significantly contribute to success in FBWM sustainability.

In Japan, the biggest source of FBW is from the food industrial sectors followed by the supermarkets and convenience stores. In essence, the convenience stores and hotels are responsible for 6 million tons of the total 19 million of FBW. In 2006, the yearly generation of food waste in Japan was estimated at 11.3 million tons (MAFF, 2007; 2008). This figure indicates a reduction of 10,000 tons in comparison with the amount of FBW generated in 2005 (about 19 million tons of food related waste, 6 million tones of which is considered edible by the government). In addition, about 11.3 million tons came from food related industries and households (MAFF, 2007; 2008).

Currently, FBW has become a serious concern to both the government and the general public. However, it could be seen as an opportunity if these wastes are used as resource. As such, approaches to FBWM are being reevaluated in and across Japan. Thus, options and strategies to divert FBW from incinerators are being introduced (Matsumoto et al., 2009). In spite of these efforts, with regard to improving FBWM options and strategies, incineration has been the main process for discarding and volume reduction of FBW in Japan (Izumi et al., 2010; Philip B. Shepherd, 1993).

In line with the above situation, this study examines the potential contribution that the treatment of FBW could make towards achieving sustainable waste management targets, and the barriers that would have to be overcome in the current waste system. The evaluation will be done in the framework of “Waste Management and Public Cleansing Law” and other related waste policies and legislation, the treatment technologies currently available, and the decision making process (MOE, 2002).

The process of selecting the right FBW disposal method is a complex and complicated issue that involves many criteria and factors (such as public health, environmental, social, cultural, political, technological and economic concerns). The selection of the proper and right disposal treatment will not only save money and time but also help in reducing the environmental impact. It as well protects human health and social amenities, and reduces the risk to water, air, soil, plants and animals. Numerous disposal methods have been adopted to treat FBW in different parts of the world, including Japan. Examples of the most well-known methods are open dumping, sanitary land filling, incineration and composting, among others. This study will stick to the usage of prescribed methods under the Food Waste Recycle Law for example, composting, animal feeds, anaerobic digestion (or methanation), oil & fat products, and the two primary disposal methods in use; namely, incineration and landfill (MAFF, 2008). Animal feeds and oil & fat products will not be considered in this study.

Nevertheless, in order to plan such waste disposal/treatment services and facilities, extra concern or consideration beyond ecological impacts is required. Decision making with regards to the sustainable use of these facilities involves tradeoffs between criteria and a number of conflicting objectives since increasing one benefit could decrease the others. Therefore the consideration of environmental, socio-cultural, political, technical, and economic dimensions, reducing conflicts between stakeholders, and integrating these realities in the proposed framework can be seen as an optimization process.

There have been numerous studies that use MCA methodology to resolve waste management issues. This study demonstrates how AHP approaches in MCA can be used to address the FBWM dilemma, thus showing the strengths and weaknesses. The proposed course of action developed in this study not only complements the current solid waste management system but supports and recommends the development of a comprehensive integrated solid waste management plan in the future and in the long term.

Methodology

For over three decades, waste management problems have been addressed through the use of MCA techniques, a method that involves the integration of environmental, political, social, cultural, and economic values and preferences of stakeholders, while upsetting the challenges in monetizing essentially non-monetary elements or factors. The application of MCA techniques to waste management has been numerous (Chung & Poon, 1997; Garifi et al, 2009; Generowicz et al., 2011; Hokkanen & Salminen, 1997). Most of these studies start with reasonable decision making regarding waste management requirements. They consider a broad range of impacts,

including social, cultural, environmental, economic, land use and resource use as in recycling and reuse. However, these impacts are frequently not considered in economic analyses due to the lack of measurement in terms of monetary value (Nijkamp et al., 1990). As a result, the technique is used to consider both qualitative and quantitative information in real decision making situations.

In this study, AHP is the MCA tool employed to analyze and evaluate the waste disposal options in Japan. The AHP hierarchy incorporates a large number of pairwise comparisons between criteria, sub criteria and between options into a reliable set of scaled scores that assist in making the final choice by decision makers. The hierarchy structure in this study includes one goal, four criteria, sixteen sub-criteria and four options organized into three levels. The criteria comprise the main concerns involved in waste management, for instance environmental, socio-cultural, technical, and economical aspect. In most cases, the weight of the pairwise comparisons among these criteria is provided by the decision makers (preferences). The analysis is done by analysts rather than decision makers or consensus experts; hypothetical decision maker standpoints are used to explore the decision (Yeh et al., 1999).

Discussion of results

This study presents an evaluation of the existing food and biodegradable waste management system (FBWS) in Japan as a whole, including an assessment of the Waste Management and Public Cleansing Law and the Food Waste Recycling Law. The investigation is based on some key factors, such as waste generation, waste disposal practices, waste collection and reuse, recycling and reduction. The proposed solution by this study can be seen as an enhancement upon the current practice and existing system of food waste management.

The results from the analysis indicate that the most suitable waste disposal facility for FBWM using the AHP technique is anaerobic digestion, followed by incineration and compost, while landfill is the least option to be considered. Anaerobic digestion ranked the best option in both overall goal and all levels of criteria.

There have been numerous studies that use MCA methodology to resolve waste management matters. The methodology presented in this study can be used as a well-organized strategic decision support tool for decision makers, politicians and planners with essential and consistent (goals and objective) information.

Conclusion

Recommendations for treatment of FBW Japan rely to some degree on the assessment of criteria and the factors and the impacts of the respective weights. Anaerobic digestion of FBW is the suitable choice with respect to all considered criteria; besides, it is the first choice when recirculation of nutrients is considered while composting can be the main choice if fertilizer recovery is prioritized. Provided that all by-products from waste can be fully re-utilized, anaerobic digestion and central composting with nutrients recovery appears to be the best combined option, suggesting that it could be a good solution for the treatment of FBW. The increasing FBW generation may be influenced by waste management policies and regulations; the feedback of these policies and regulation could be included in the long term waste management plans, in order to evaluate the entire solid waste management system.

References

- Chung, S. S., & Poon, C. S. 1996. Evaluating waste management alternatives by the multiple criteria approach. *Resources, Conservation and Recycling*, 17(3), 189-210.
- Garfi, M., Tondelli, S., & Bonoli, A. 2009. Multi-criteria decision analysis for waste management in Saharawi refugee camps. *Waste Management*, 29(10), 2729-2739.
doi:10.1016/j.wasman.2009.05.019
- Generowicz, A., Kulczycka, J., Kowalski, Z., & Banach, M. 2011. Assessment of waste management technology using BATNEEC options, technology quality method and multi-criteria analysis. *Journal of Environmental Management*, 92(4), 1314-1320.
- Hokkanen, J., & Salminen, P. 1997. Choosing a solid waste management system using multicriteria decision analysis. *European Journal of Operational Research*, 98(1), 19-36.
- Izumi Kouichi, Okishio Yu-ki, Nagao Norio, Niwa Chiaki, Yamamoto Shuichi, and Toda Tatsuki. 2010. Effects of particle size on anaerobic digestion of food waste. *International Biodeterioration & Biodegradation*, 64(7), 601-608
- Khalid, A., Arshad, M., Anjum, M., Mahmood, T., Dawson, L. 2011. The anaerobic digestion of solid organic waste. *Waste Management*, 31(8), 1737-1744.
- Knipe A. D. 2005. The Management Of Household Food Waste. Green Cone.
<https://www.greencone.ca/pdf/managementoffoodwaste.pdf> (Accessed 25/10/11)
- Matsumoto Naoko, Sano Daisuke, and Elder Mark (2009) Biofuel initiatives in Japan: Strategies, policies, and future potential. *Applied Energy*, 86(1), S69-S76.
- Ministry of the Environment (MOE). 2002. Regulations of Waste Management and Public Cleansing Law: Ordinance No. 35 of Ministry of Health and Welfare of 1971 (Latest Amendment by Ordinance No. 1 of Ministry of Environment of 2002)
- Ministry of the Environment (MOE), 2010. Establishing A Sound Material-Cycle Society: Milestone toward a sound material-cycle society through changes in business and life styles. Biomass Nippon Strategy. http://www.env.go.jp/en/recycle/smcs/a-rep/2010gs_full.pdf (Accessed on 20/09/11)
- Ministry of Agriculture, Forestry and Fisheries (MAFF). 2007. 2007 Report Outline of Survey Results on Food Recycling as Renewable Resources. <http://www.maff.go.jp/e/maffud/2007/pdf/no684.pdf> (Accessed on 03/12/10)
- Ministry of Agriculture, Forestry and Fisheries (MAFF). 2008. Annual Report on Food, Agriculture and Rural Areas in Japan FY 2007. http://www.maff.go.jp/e/annual_report/2007/pdf/e_all.pdf (Assess 03/12/10)
- Nijkamp P. & Rietveld P., Voogd H. 1990. Multicriteria evaluation in physical planning. Amsterdam, Netherlands. Elsevier Science Pub.
- Philip B. Shepherd. 1993. Integrated Solid Waste Management in Japan. *CSI Resource Systems, Incorporated Boston, Massachusetts* www.nrel.gov/docs/legosti/old/5692.pdf (Assess 08/12/10)
- Yeh, C.-H., J. Willis, R., Deng, H., & Pan, H. 1999. Task oriented weighting in multi-criteria analysis. *European Journal of Operational Research*, 119(1), 130-146.

Designing a sustainable food traceability system using a human cloud infrastructure

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Abstract

Despite the increasing demand for food safety in the industry, deployment of food traceability systems is not yet treated with priority in most SMEs due to the technology gap between traditional food supply chains and advanced traceability methods. Traditional ways to track and trace food production/supply chains (FSC) invariably involves cost intensive procedures such as a huge amount of paper based manual investigations, a considerable cost of labor, and long tracing delays. A smooth take off for FSC to integrate advanced food traceability measures should focus on matching technology deployments that do not require intensive human resource training and elaborate system modifications. This paper presents a novel food traceability system, FOOD^{TR}, developed based on the latest digital input technologies coupled with Human Expert Cloud services (HEC). Capturing of hand written records using digital pens, development of HEC, and optimization of food traceability matrix are the dominant research components covered in this work. The authors also present their experience in applying the designed system in the sweets industry in Oita Prefecture, which can be followed as a model in deploying traceability systems to SMEs. System precision and food safety requirements imposed by global food standards are also discussed to project a stepwise adoption of emerging technologies and exploring of emerging business opportunities in a sustainable manner.

Introduction

Food safety monitoring is an essential feature of any food production/supply chain (FSC) implemented in different scales with the support of ICT technology and human resources. Information flow across food supply chains, today, is characterized by much diversity (Hoorfar, Jordan, Butler, & Prugger, 2011) such as record type, record granularity, persistent history, geographical location of workshops, devices involved, tolerable human errors, and system accuracy etc. Despite the increasing demand for food safety in the industry, traceability system deployment is not yet treated with priority in most small and medium enterprises (SMEs) due to the technology gap between traditional food supply chains and advanced traceability methods (Samarasinghe, Nishantha, & Shutto, 2009).

Traditional ways to track and trace food supply chains, in SMEs, entail labor and time intensive processes resulting in low cost-benefit gains, leaving traceability practices for just legal and obligation reasons. The leap from traditional food traceability systems towards technology enabled systems involves high capital investment for the infrastructure and training of workers that would not be recoverable in short term (FMRIC, 2007). With the advancement of technology, different types of food traceability systems are deployed at large scale FSCs, where the cost and adaptability are not major issues. This situation is critical in the context of SMEs where feasibility and adaptability are high hurdles to keep phase with evolving technologies associated with the information recording and extraction of FSCs.

This paper presents the rationale of a novel traceability system, FOOD^{TR}, which features smart digitization of records using a human cloud service. FOOD^{TR} borrows the generic food traceability features from its predecessor that was developed by the authors, previously (Nishantha & Wanniarachige, 2011). The novel design is formulated on the grounds of implementing a highly pragmatic traceability solution focusing on the much needed short term deployment aspects. The potential of FOOD^{TR} towards gradual system evolution by absorbing emerging technologies is also discussed.

Methodology and Discussion

Deploying food traceability systems for FSCs in traditional sweets making industry is challenging due to its complexity caused by many reasons such as a large number of ingredients, many domestic/foreign sourcing locations, a large number of manufacturing chains involving several hundred different processes, diversity in final packaging, and the multimodal nature of the information flow across FSCs etc. Moreover, the information recording mechanism in FSCs is very chaotic due to its size, recording technologies used, and absence of general standards.

FOOD^{TR} addresses these challenges by (a) introducing digital pen based input methodologies with minimum modifications to the existing system, (b) proposing a human expert cloud (HEC) infrastructure that can provide intelligent decision making services, and (c) devising a food traceability matrix to implement accurate and fine grain tracing and tracking.

The concept of processing multimodal inputs in a food supply chain using HEC is described here. Changes to the information capturing process in FSC are kept to a minimum by simply replacing writing devices with digital pens. Input form layouts are mapped against recorded form data using masking and marking in order to filter out industrial secrets and to identify form layouts, respectively.

Although an accurate text/number conversion of image segments is the primary function of employing HEC in the initial implementation of FOOD^{TR}, the authors believe that HEC is a promising technology for food traceability systems and it may rapidly evolve by adopting advanced FSC technologies in a sustainable manner. The device system can adapt to situations which involve multimodal inputs ranging from scanned papers to auto IDs as well as providing HEC services ranging from simple digitization to on demand food safety certification and consultancy services dispatched by world recognized institutions.

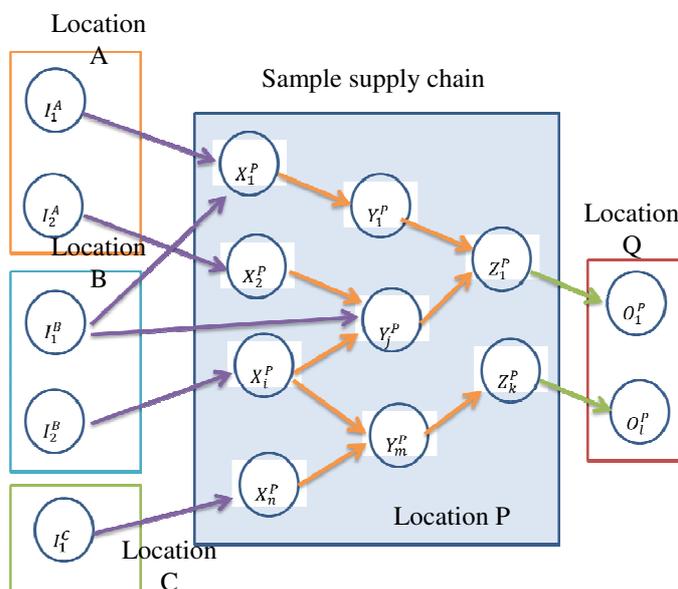


Figure 1: Food traceability Matrix and Code format

The food traceability matrix shown in Figure 1 is modeled by elements represented by a code format. The code is designed so that it can be adopted for any location to identify a product at any point in the production line (or supply chain). Location P is the SME interested in deploying the food traceability system. Location A through C represent incoming ingredients for processing in P , whereas location Q represents outgoing product from P , as illustrated by the input-output nodes. (Notation I_1^A represents ingredient I from location A while X_i^P represents the intermediate product i at location P). Recording of the complete FOOD^{TR} matrix with each X_i^P filled with its input and output elements creates a tree structure that can be traced and tracked efficiently starting from any point in the production line. The traceability matrix also provides an insight to the understanding of changes required in the production system and lot sizes to optimize the traceable unit size at various points.

Conclusion

A novel food traceability system developed to undertake a smooth take off for traditional food supply chains of SMEs is presented. The key features of this system are the integration of multi modal input methods with a human expert cloud that makes digitizing effortless and provides a promising platform to adapt to evolving technologies.

References

- FMRIC. 2007. *Handbook for Introduction of Food Traceability Systems: Guidelines for food traceability* (2nd ed.). Tokyo: Food Marketing Research and Information Center (FMRIC).
- Hoorfar, J., Jordan, K., Butler, F., & Prugger, R. 2011. *Food Chain Integrity: A Holistic Approach to Food Traceability, Safety, Quality, and Authenticity*: Woodhead Publishing.
- Nishantha, G. G. D., & Wanniarachige, M. K. 2011. *A Community Wide Framework to Ensure Food Safety in SMEs*. Paper presented at the Annual Conference of International Association of Asia Pacific Studies (IAAPS), Beppu, Japan.
- Samarasinghe, R., Nishantha, G. G. D., & Shutto, N. 2009. *Total traceability system: A sustainable approach for food traceability in SMEs*. Paper presented at the International Conference on Industrial and Information Systems (ICIIS).

Towards establishing an integrated framework of food information and opportunities, FOOD^{info}

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Abstract

Despite the fact that food is required to sustain human life, little consideration is given to create an archive of food information, which can be shared among the stakeholders in the food supply chain. Lack of an elaborate and trustworthy food information archive has made food and food producers less transparent to the consumers, and result in a fragmented food value chain. In this research, we present our preliminary work towards establishing a Food Information and Opportunities Framework, FOOD^{info}, which can enhance food value chains in many important aspects such as consumer awareness, farmer transparency, food safety, nutritional values, possible allergies, and other potential business opportunities. FOOD^{info} is essentially a distributed and multi-tier/multi-layer model that can store a wide range of hierarchical information, facilitated by multiple stake holders from international and national institutions to general consumers. FOOD^{info} also deals with business implications to sustain its development.

Introduction

It is likely that the first evidence of food information recording, in the form of a ‘nutrition scale’, was produced as early as 1818. Today, food information archives exist in several different forms serving different target objectives. Food composition databases, food nutrition databases, and recipe databases are some of the representative forms of food information archives established with various purposes ranging from mere hobbies to observation of international level nutritional transfer. There has been several recent efforts to standardize food archiving systems such as harmonizing decentralized food information archives, and standardizing food composition databases in Europe. Table 1 summarizes some of the existing food information archives.

Methods and Discussion

Despite the availability of diverse food information archives, two important issues are likely to be caused by food information inadequacy. Firstly, there exists a commercial bias towards keeping consumers less informed about the food they eat, making them unnecessarily tied to food marketplace decision making rather than appreciating the real food values. Secondly, there exists a bias towards a food stakeholder community handicapped with a lack of access to food information, making it difficult for them to explore innovative business opportunities. Answers to the above questions starts with the reasoning that an effortless access to diverse information across food supply and value chains (FSC/FVC) may resolve some of the above issues pertaining to today’s extremely fragmented food industry.

Despite the fact that food is the most needed commodity to sustain human life, little consideration is given to creating of a unified system of food information that can be seamlessly integrated and shared

by various stakeholders across the food supply/production chain (FSC). This paper presents the rationale of developing an Integrated Framework of Food Information and Opportunities, FOOD^{info}, which is inspired by several motivations.

Table 1: Food information archives at present

Food Information Archive	Purpose
International Network of Food Data Systems (INFOODS), established in 1984 (http://www.fao.org/infoods/en/)	Food composition database established by FAO that aims to promote international participation and cooperation in the acquisition and dissemination of complete and accurate data on the composition of foods, beverages and their ingredients.
The European Food Information Network (EuroFIR) , established in 2005 (http://www.eurofir.net/eurofir_knowledge/europe_an_databases)	This is an international non-profit association that offers a unique range of standardized food information for individuals or organizations.
Dietary Supplement Ingredient Database (DSID), established in 2003 (http://www.ars.usda.gov)	DSID is a food information archive that provides estimated levels of ingredients in dietary supplement products sold in the U.S.
Food Composition Database in Sugiyama University, established in 2002 (http://database.food.sugiyama-u.ac.jp)	Developed based on the Standard Table of Food Composition in Japan to educate on daily dietary lifestyles for prevention of lifestyle diseases
German Nutrient Database (BLS) established in 2004 (http://www.nutrientdataconf.org)	German based food information archive that introduces new foods, updates precise ingredient information, and supports epidemiological studies.

The biggest motivation of our research is the lack of such a framework; a comprehensive archive of food information and food opportunities that will continue to spread and provide seamless opportunities for the food industry; and the challenge is to consolidate various sporadic implementations of food related databases such as food composition, food nutrition, food recipes, food consumption etc., by bringing them to a harmonized platform. However, the proposed system will serve the food industry with following immediate benefits:

- 1- Ensures transparency among farmers, food producers, and consumers that will in turn enhance the mutual understanding and awareness about the total FSC. This offers a golden opportunity for the general public (consumers) to know broadly about the food they eat and enhance the level of appreciation of food and decreasing their distance to farmers and food producers.
- 2- Ensures consolidation of extremely fragmented farm to fork food supply chains, and relaxes some of the hurdles against business evolution by improving the visibility across FSCs. With FOOD^{INFO} that integrates different types of information associated with food, various potential business opportunities can be explored.
- 3- Provides a firm base of reference to engage in cross cultural dialogues regarding foods. This serves different countries and societies to learn and teach about the potential of food and food cultures.
- 4- Enables e-business and social networking systems to seamlessly integrate with FOOD^{INFO} and adapt contents dynamically to match user needs.

Design of FOOD^{info} entails answering to several important questions concerning data collection, database architecture, ensuring reliability, securing data integrity, and most importantly regarding business models likely to be leveraged by the system. The authors identify that the proposed food information platform will support multi-tier data entities hosted in distributed databases via an array of service APIs for data authoring, retrieval, and navigation. The authors also identify the need of establishing a custodian body for regulating and maintaining the FOOD^{info} platform. To this end, the

authors have started the ground work towards forming a global FOOD^{info} consortium as the initial step towards legitimizing the proposed framework.

The design architecture of FOOD^{info} is illustrated in Figure 1. It involves different types of Food Information Authors (FIA) to ingest information into the system at varying degrees of freedom, as illustrated on the left side of the diagram. CAFÉ front end and APIs provide a unified access interface to the stakeholder community. Human Expert Cloud (HEC) is a collection of Internet users endorsed by the FOOD^{info} consortium, which is expected to have a good potential to leverage new business models as the HEC evolves. To keep the system complexity low and focus fully on implementing a sound base for FOOD^{info}, the initial implementation is restricted to archiving the information of fruit and vegetables. Formal recognition of various kinds of fruit and vegetables grown in different parts of the world, identifying various processed food items, recording of food composition details, and nutrition values are some of the major archiving categories. The authors have invited national level research institutes in Japan, and some neighboring countries to form the founder FOOD^{info} consortium.

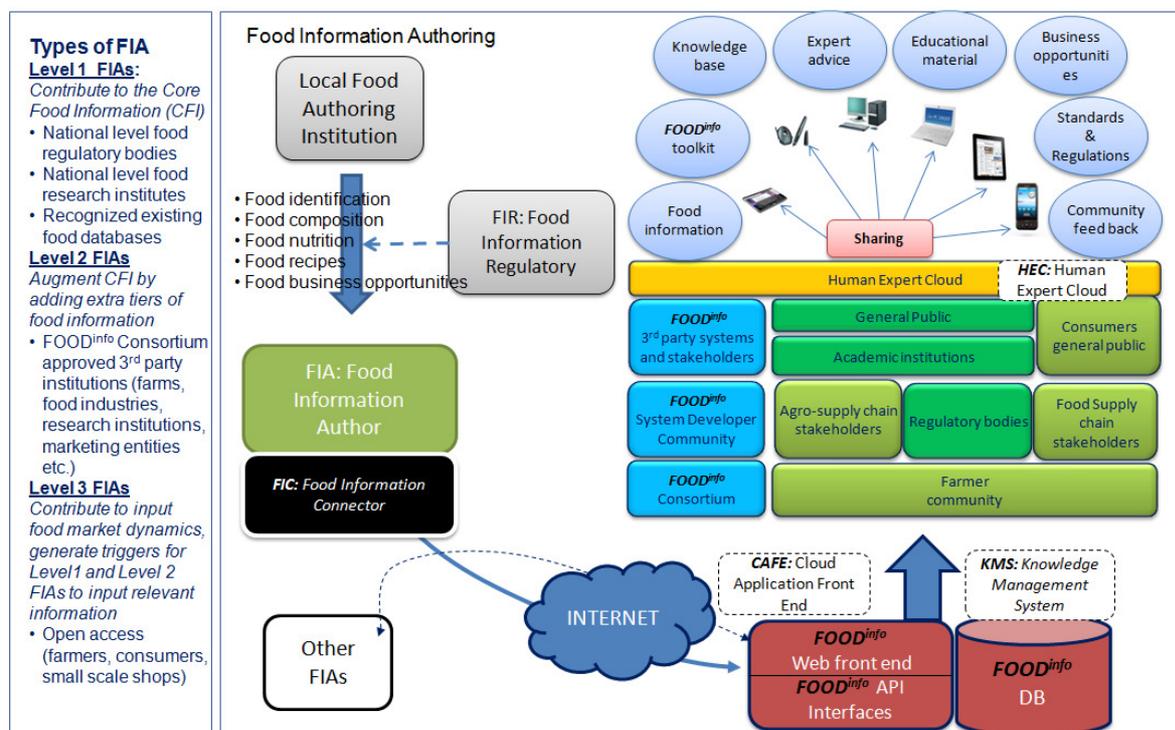


Figure 1 Food Information Framework Architecture

Conclusion

In this research, we present our preliminary work towards establishing a Food Information and Opportunities Framework, FOOD^{info}, which can enhance food value chains in terms of many important aspects such as consumer awareness, farmer transparency, food safety, nutritional values, possible allergies, and other potential business opportunities. The action plan towards forming the FOOD^{info} consortium and business implications to sustain the development of FOOD^{info} is the work under focus; the most challenging topic for future work is the acceptance of a global system and taking steps towards inviting of FIAs to systematically develop a near exhaustive food information archive.

References

- A. T. Merchant and M. Dehghan. 2006. "Food composition database development for between country comparisons." *Nutr J*, vol. 5, p. 2, 19.
- H. Pakkala, T. Christensen, I. M. de Victoria, K. Presser, and A. Kadvan. 2010. "Harmonised information exchange between decentralised food composition database systems." *Eur J Clin Nutr*, 64(Suppl 3): S58–S63.
- H. S. Costa, E. Vasilopoulou, A. Trichopoulou, and P. Finglas. 2010. "New nutritional data on traditional foods for European food composition databases." *European Journal of Clinical Nutrition*, 64: (S73–S81).
- J. Ireland, A. M. J. van Erp-Baart, U. R. Charrondiere, A. Moller, G. Smithers, and A. Trichopoulou. 2002. "Selection of a food classification system and a food composition database for future food consumption surveys." *European Journal of Clinical Nutrition*, 56(5): S33.
- "Recipe Puppy Web Site," <http://www.recipepuppy.com/> (accessed in Nov. 2012).
- S. M. Church. 2006. "The history of food composition databases." *Nutrition Bulletin* 31(1): 15–20.

Building peace, or deconstructing pre-informed models? The United Nations in Timor-Leste

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Abstract

Southeast Asia is a region marked by differences in political projects, economic development and social options, though common economic and political interests and histories render it a dynamic area. Timor-Leste, a recent country in this area, has been through the process of state building after its independence in 2002, aiming at assuming an international position that allows its integration within the enlarged South-East Asian community. This paper analyses the role of the United Nations in the peacebuilding process in Timor-Leste, and how through its differentiated presence, the UN managed to (or did not) contribute to the consolidation of the state. The paper adopts a neoliberal democratic approach critical of the UN interventionist model which often times was revealed as distant from the local realities. The paper argues that through its activities it is not always easy to understand whether the UN is building the peace or instead is faced with a deconstruction of its own pre-defined models of intervention in face of challenging contexts. Though these two dimensions need not be exclusive, their integration demands innovative thinking and optimally, innovative acting.

Introduction

The United Nations (UN) has a fundamental role in international peace and security, as envisaged in its founding Charter, and though peace missions are not objectively formulated in the Charter, its principles have provided the ground for a doctrinal consolidation on interventionism. In fact, peace missions have become a privileged instrument for UN actuation, with the case of Timor-Leste representing a most interesting case study for the differentiated missions that have been deployed, from transitional administration to electoral observation, including the use of force when the situation on the ground required it.

The flexibility of UN interventions is translated in fundamental documents such as *An Agenda for Peace* (Boutros-Ghali, 1992), the *Brahimi Report* (2000) or the *Capstone Doctrine* (UN, 2008), among others. However, the consolidation of principles and practices of intervention does not mean the process has been an easy one. It is in this context that this paper looks at the UN contribution to peacebuilding in Timor-Leste.

Methods

This paper draws on primary sources, including extensive field work done by the author in June and July 2012, where several interviews were conducted with senior UN officers as well as Timorese authorities and representatives from civil society, in Díli, Timor-Leste.

This study also looks at official documents from the Timorese government and the UN, as well as to official speeches and declarations, and journalistic pieces that assist in understanding the context. The paper also discusses secondary sources mainly in the area of peace studies, with peacekeeping and peacebuilding as central analytical concepts. Manuscripts, book chapters and international refereed journals have been the main sources of secondary data.

Discussion

From the transitional administration responsible for setting up the basic institutions and rules for a functioning state, to the monitoring and advice-oriented role it has been pursuing more recently, and taking into account the withdrawal of the United Nations Integrated Mission in Timor-Leste (UNMIT) by the end of 2012 and its substitution by a UN political presence, the time is ripe for an analysis of the UN's role in building the peace in Timor-Leste. This is fundamental for understanding the path Timor-Leste has been following since the restoration of its independence in the context of South-East Asia.

The main obstacles and possibilities to the UN model of intervention are analyzed, focusing especially on the role of UNMIT, as an integrated, multidimensional mission which combines civilian and military tasks in its mandate, and a broad range of activities in terms of security-promotion, social and economic empowerment, and educational projects which have been directed to the consolidation of stability in the country.

The paper argues that through its activities it is not always easy to understand whether the UN is building the peace or instead is faced with a deconstruction of its own pre-defined models of intervention in face of challenging contexts. In fact, a direct application of the UN model is not sufficient, demanding flexibility as well as capacity of adaptation to differentiated contexts, as in the case of Timor-Leste. Additionally, there are procedures within the UN that need to be fine-tuned in order that its involvement is engaged and does not become alien to local realities.

Though these two dimensions need not be exclusive, their integration demands innovative thinking, and especially, innovative acting. The paper suggests the need for a better inclusion of local dynamics in the UN intervention mechanisms from the very beginning, implying a sense of ownership and making it easier, although it is always a complex process to define the exit strategies. This might be accomplished in various ways, as the paper further explores.

References

- Bellamy, Alex *et al.* 2007. *Understanding Peacekeeping*. Cambridge: Polity.
- Boutros-Ghali, Boutros. 1992. *An Agenda for Peace: Preventive Diplomacy, Peacemaking and Peacekeeping*. (A/47/277-S/24111, 17 June 1992). <http://www.un.org/docs/SG/agpeace.html>
- Cottey, Andrew. 2008. "Beyond Humanitarian Intervention: The New Politics of Peacekeeping and Intervention", *Contemporary Politics*, 14(4), 429-446.
- Cummins, Deborah and Leach, Michael. 2012. "Democracy Old and New: The Interaction of Modern and Traditional Authority in East Timorese Local Government", *Asian Politics & Policy*, 4(1), 89-104.
- Governo Timor-Leste (s/d) "História". <http://timor-leste.gov.tl/?p=29&lang=pt>
- Groves, Eva C.; Resurreccion, Bernadette and Doneys, Philippe. 2009. "Keeping the Peace is Not Enough: Human Security and Gender-based Violence during the Transitional Period of Timor-Leste", *Journal of Social Issues in Southeast Asia*, 24(2), 186-210.
- Gusmão, Xanana. 2004. *A construção da nação timorense. Desafios e oportunidades*, Lisboa: Lidel.
- Jakobsen, Peter Viggo. 2002. "The Transformation of United Nations Peace Operations in the 1990s: Adding Globalization to Conventional 'End of the Cold War Explanation'", *Cooperation and Conflict*, 37(3), 267-282.
- Leach, Michael. 2009. "The 2007 Presidential and Parliamentary Elections in Timor-Leste", *Australian Journal of Politics and History*, 55(2), 219-232.

- Lemay-Hebert, Nicolas. 2011. "The 'Empty-Shell' Approach: The Setup Process of International Administrations in Timor-Leste and Kosovo, Its Consequences and Lessons", *International Studies Perspectives*, 12, 190-211.
- Lothe, Elisabeth and Peake, Gordon. 2010. "Addressing symptoms but not causes: stabilisation and humanitarian action in Timor-Leste", *Disasters*, 34(3): 427-443.
- Lundahl Mats and Sjöholm, Fredrik. 2008. "The oil resources of Timor-Leste: curse or blessing?", *The Pacific Review*, 21(1), 67–86.
- Newman, Edward; Paris, Roland and Richmond, Oliver. 2009. *New Perspectives on Liberal Peacebuilding*. Tokyo: United Nations University Press.
- O'Neill, John Terrence and Rees, Nicholas. 2005. *United Nations Peacekeeping in the Post-Cold War Era*. London: Routledge.
- Otunnu, Olara A. and Doyle, Michael W. 1996. *Peacemaking and Peacekeeping for the New Century*. New York: Rothman & Littlefield Publishers.
- Paris, Roland. 2000. "Broadening the Study of Peace Operations", *International Studies Review*, 2(3), 27-44.
- Brahimi Report. 2000. "Report of the Panel on United Nations Peace Operations" (A/55/305-S/2008/809). New York: United Nations.
- Richmond, Oliver. 2008. *Peace in International Relations*, London: Routledge.
- Richmond, Oliver. 2011. "De-romanticising the local, de-mystifying the international: hybridity in Timor Leste and the Solomon Islands", *The Pacific Review*, 24(1), 115-136.
- Shoesmith, Dennis. 2011. "Timor-Leste On the Road to Peace and Prosperity?", *Southeast Asian Affairs*, 1, 323-335.
- Smith, Adam C. 2011. "Peacekeeping: The Global Enterprise", *International Peacekeeping*, 18(5), 511-515.
- UN. 2008. "United Nations Peacekeeping Operations: Principles and Guidelines." New York: United Nations – Department of Peacekeeping Operations and Department of Field Support.
- UNMIT. 2012. "UNMIT – United Nations Integrated Mission in Timor-Leste – UN Police".
- UN official documents and several interviews conducted with various senior officials from Timor-Leste authorities, UNMIT, civil society representatives, among other.

The right to resistance and democracy, and the impossibility of having a security community in Northeast Asia

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Abstract

Recently, many diplomatic and intellectual efforts have been made to establish “security communities” (a la Deutsche) in Asia. Although we see a potential security community in ASEAN, no successful cases can be observed in North-East Asia; the ASEAN Regional Forum has been incapable of dealing with Northern problems and the only function of the Six Party Talk has been to give North Korea time to fulfill its nuclear ambition. Why? One explanation might be that obsolete cold-war legacies, such as Korean divide or Taiwan’s de-facto independence, hinder the development of such communities. If that is the case, eliminating them would bring peace. In this paper, I demonstrate that the political divergence between liberal democracies, including Taiwan, and authoritarian/totalitarian regimes, e.g., PRC, is the fundamental reason for the absence of a security community in the region. According to John Locke, people must have the Right of Resistance against the state in order to secure their democratic rights. In the international realm, a democracy has to defend its people’s rights against coercion by foreign powers. This is why North-East Asian democracies cannot disarm vis-à-vis their authoritarian neighbors and hence, why no security community is possible in the region.

Introduction

In the field of international relations, Karl Deutsch’s classical contention of Security Community has recently been reevaluated in the context of Constructivist IR theory. The resurgence of the Security Community debate pushes researchers to broaden the regional horizon of the debate, from its original orientation in the North Atlantic towards other fields, notably to East Asia.

Thanks to Acharya’s pioneering work, now we have a well-grounded discussion on Southeast Asian Security Community. Even in the Northeast Asia, where cold-war antagonism still lingers on, there have been many explorations written and presented, many of which argue over the possibility and desirability of a Northeast Asian Security Community, not surprisingly with a view to the geo-political/geo-economic significance of the region.

Still, we have to find the problem in applying the Security Community theory to the Northeast Asia. In Deutsch’s original discussion, one of the essential conditions for the formation of the Security Community is “compatibility of major values relevant to political decision-making,” which is totally absent in the region. In Northeast Asia, there is a great gap in political systems. Some states, such as Japan, South Korea, and Taiwan, maintain democratic principles, i.e., rule of law and constitutionalism, fair general election of public offices, and the guarantee of basic human rights. On the other hand,

nations like China and North Korea still stick to their one-party or one-person dictatorships, and the people have to live without freedom. Other countries are somewhere in between these two poles. Is it possible to create a Security Community in Northeast Asia? If your answer is yes, do you think Deutsch agrees with you?

In this essay, I explore the possibility/impossibility of Security Communities in the divergence of political systems in general, and in Northeast Asia in particular. For that purpose, I focus on an often forgotten element of democratic constitutionalism: the “rights of resistance” in Lockean context.

Methods

Except for the introduction and conclusion, the essay is composed of three sections, two of which analyze the problem theoretically, and one employs descriptive inference. The first theoretical part points to the irrelevance and relevance of the two theories, constitutionalism on one hand, and Security Community on the other.

The second section combines the two theories and figures out the conditions under which people’s inalienable rights are secured. A critique on Acharya’s argument is also included in the section. In the third section, through a brief historical review on East Asian security cooperation and non-cooperation of past four decades, I examine my theoretical hypothesis that no Security Communities can exist under a fundamental disparity of the political systems.

Discussion

The first theoretical section discusses two realms of political theory, constitutionalism and the security community. In traditional political science, the two theories are assumed on different levels of analyses, one fundamentally domestic and the other international. By unpacking the two theories into components, i.e., respective actors, the principles of their behaviors, and social structures, I demonstrate the two theories are *ex facto* inseparable in a globalized setting.

The second theoretical part discusses why and how the two theories are inter-connected. The essence of constitutionalism is to secure people’s rights from arbitrary political power (usually state authority) via the rule of law, constitution, and other institutional arrangements. If globalization weakens state sovereignty and lowers national boundaries, actors can exert influence from the outside. Then, a person’s fundamental rights might be threatened not only by her/his domestic authority, but also by foreign political entities. Unlike domestic authority, foreign powers are not constrained by domestic laws/institutions. In order to secure their rights, a state has to exercise the “right of resistance” a la John Locke, against the foreign powers. The most certain tool to secure the right of resistance is military capability. This is why democracies, if they intend to remain as democracies, cannot disarm themselves vis-à-vis their powerful un-democratic neighbors, and hence cannot create Security Communities with the un-democracies. Of course, when the un-democracies are not powerful enough, democracies can ignore oppressive neighbors.

The paper also delineates the post-1970s security arrangements in East Asia and failures thereof. I

argue that in the presence of (a) powerful un-democracy (or un-democracies) democracies are incapable of forming regional Security Communities.

References

- Acharya, Armitav. 2001. *Constructing a Security Community in Southeast Asia : ASEAN and the problem of regional order*. London ; New York : Routledge.
- Adler, Emanuel and Michael Barnett (eds). 1998. *Security Communities*. Cambridge, Cambridge University Press.
- Ashcraft, Richard. 1986. *Revolutionary Politics and Locke's Two Treatises of Government*. Princeton, Princeton University Press.
- Deutsch, Karl W. et al. 1957. *Political community and the North Atlantic area; international organization in the light of historical experience*. Princeton: Princeton University Press.
- Deutsch, K. W. 1954. *Political Community at the International Level*. Garden City, NY, Doubleday & Company.
- Dunn, John. 1968. *The Political Thought of John Locke*. Cambridge, Cambridge University Press,.
- Franklin, Julian. 1978. *John Locke and The Theory of Sovereignty*. Cambridge, Cambridge University Press.
- Haas, Michael. 1986. "Comparing Regional Cooperation in Asia and the Pacific," in *Toward a World of Peace: People Create Alternatives*, in Mass, Jeannette and Robert A. C. Stewart (eds), Suva, Fiji: University of the South Pacific Press.
- Locke, John. 1960. *Two Treatises of Government*. Cambridge, Cambridge University Press.

Is an Asian common market possible? Diverging roads to Asian regional integration

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Abstract

The process of creating a regional integration framework for the Western Pacific and Oceania has taken several major steps forward since the Asian financial crisis of the 1990s. The ASEAN+3 process has brought the major nations of Northeast Asia together with ASEAN members in regular meetings and a financial architecture, and efforts to forge bilateral and multi-lateral free trade agreements have made significant progress. The path to such an integrated framework faces many obstacles, as geopolitics, great power interests, territorial disputes, and sovereignty concerns may limit the possibilities of tighter integration. This paper looks at the future process that may lead to an Asian Common Market. The success or failure of Asian integration may hinge on creation of a new structure for harmonizing political and economic policy. Sino-Japanese relations provide a test bed for attempts to build Northeast Asian cooperation. As the two largest Asian economies, their ability to work together would bring along the entire region. The two giant Northeast Asian nations may construct a “Grand Bargain” that involves solving some of their most intractable issues. While this will not be easy, in recent years bilateral relations have significantly improved.

Introduction

ASEAN was founded in 1967, and its birth certificate was the Bangkok Declaration. The 1960s was a particularly difficult time in Southeast Asian history. Almost all of the countries, excepting Thailand, had become independent after World War II, and struggled to build effective states while forging a sense of national identity. Major border conflicts between Indonesia and Malaysia (made worse by Indonesian President Suharto’s call for *konfrontasi* against his northern neighbor) and Malaysia and the Philippines made state-to-state relations difficult at the best of times. Singapore was expelled from the Malaysian Federation after only two years due to irresolvable strains between the Malay leaders and the Singaporean Chinese elite. The Vietnam War created fears among regional leaders that Communist subversion could spill over their borders and ignite separatist forces. The Chinese Cultural Revolution underlined concerns about political instability. Two unsuccessful attempts at regional integration nonetheless showed the way forward. The New Indonesian leadership under Suharto was committed to regional cooperation, and this paved the way for ASEAN.

In its first twenty years, the organization was little more than a vehicle for high level regional diplomacy, but ASEAN began to speak with a common voice on key issues, such as the Vietnamese occupation of Cambodia in the 1980s. Negotiations for settlement of that issue led to improved relations with Hanoi, and to the expansion of the organization’s membership in the 1990s. ASEAN was now ready to take on a major economic role through creation of a free trade agreement (fully implemented after

2002), and erected a functional architecture involving common regional concerns, from drug trafficking to terrorism.

ASEAN was unable to deal effectively with either the Asian Financial Crisis (1997-1998) or the frequent regional haze (caused by indiscriminate forest burning in Indonesia), but began to draft regional economic schemes with Northeast Asian partners after 1999. For the past decade, ASEAN has put itself at the center of regional integration efforts, as the Northeast Asian giants (the +3 in ASEAN+3: Japan, China, and South Korea) have too many disagreements to lead such efforts. One may now think of four concentric circles in Asia's recent open regionalism: 1) the ASEAN ten, 2) ASEAN+3, 3) India, Australia and New Zealand, and 4) outer partners (Russia and the U.S.).

Discussion

Regional integration remains stunted in Northeast Asia, largely due to the contentious power politics among Japan, China, and South Korea. The most difficult issues between Japan and China involve the historical legacy of the World War II era, territorial conflict over the Senkaku/Diaoyu Islands in the East China Sea, and control over oil and gas resources of the East China Sea. Japan and China have been unable to reach the kinds of pacts that Germany and France used in the early postwar era as a start for improved relations and the creation of the European Community. Unresolved issues over North Korea and Taiwan further complicate the region.

Which regional integration theories best explain East Asia's experience? The most useful theories may be the most well-known approaches to regional integration in Europe, i.e., functionalism, neo-functionalism, inter-governmentalism, and liberal inter-governmentalism. Functionalism suggests that by cooperating on ordinary bilateral or multilateral problems, states develop a habit of working together that creates a "spill-over" effect in other areas and forges cooperation across all areas of relations. Eventually, nations may decide to deepen their integration. This is exactly what Europe did in the early postwar years, as it constructed, first, the European Coal and Steel Community and Euratom, and then the European Economic Community.

Neo-functionalism posits that nations can best achieve cooperation when presented with a high-level, high profile integration project. The effort to create the European Union, from 1985 to 1992, was such an effort. Inter-governmentalism asserts that it is the major states that drive the formation and operation of regional integration organizations, while liberal inter-governmentalism suggests that the creation of ongoing structural ties among states within a regional organization provide the glue that holds such organizations together.

Applying ideas developed to explain the European experience may not fit well with the experience of other regional organizations. Mercosur in South America, for instance, is a much more explicitly politically-driven process. Europe's path to integration derived from its specific conditions after World War II, i.e., the need to rebuild the continent's economies while facing the nearby Soviet military threat. Asia's development was driven by a series of crises in the 1960s, and thereafter by East Asia's fast economic development and shifts among stakeholders in regionalization. This regional transformation was quite unlike Europe's quick recovery, economic maturation, and end of the Cold War. Also, Southeast Asians harbored no ambitions for the kind of high level integration (i.e., economic union) seen in Europe.

They only wanted an organization that would assist their fragile states to maintain national integration and sovereignty.

Asia's next large step forward likely will be along one of two paths. The first, championed by Japan, is more open regionalism involving stronger trans-Pacific relations with the U.S. Given Japan's postwar reliance on the bilateral defense alliance with America and access to the American market, along with her long-standing use of Southeast Asia as a resource and market backyard, this strategy makes a good deal of sense. The second path, put forth by China since the late 1990s, is erection of an Asia-centered bloc centered in Northeast Asia. This is a natural strategy for a rising political, military, and economic power in East Asia. An Asian bloc could be more easily dominated by China than an open grouping.

When put to the test over the past decade and a half, the Japanese approach has won out almost every time. Possibilities of a "grand bargain" between the two Northeast Asian giants along the lines of the post-World War II Franco-German concord may be unlikely as long as the two countries retain significant mistrust and mutual suspicion. Is an East Asian Common Market possible? As a cohesive unit headed toward economic union, no; in a more diffuse form than in Europe, based on a gradually more streamlined collection of free trade and other economic agreements, possibly.

References

- Andrew Walter and Xiaoke Zhang. 2012. "Debating East Asian Capitalism: Issues and Themes." In Walter and Zhang, eds. *East Asian Capitalism: Diversity, Continuity, and Change*. Oxford: Oxford University Press.
- Christopher M. Dent. 2008. *East Asian Regionalism*. New York: Routledge.
- Indermit Gill and Homi Kharas. 2007. *An East Asian Renaissance: Ideas for Economic Growth*. Washington: The World Bank.
- Ming Wan. 2008. *The Political Economy of East Asia: Striving for Wealth and Power*. 2008. Washington: CQ Press.
- Peter Nolan. 2004. *Transforming China: Globalization, Transition and Development*. London: Anthem Press.
- Steven K. Vogel. 2006. *Japan Remodeled: How Government and Industry are Reforming Japanese Capitalism*. Ithaca, NY: Cornell University Press.
- Young-Iob Chung. 2007. *South Korea in the Fast Lane: Economic Development and Capital Formation*. Oxford: Oxford University Press.

An empirical & theoretical measurement of productivity growth in Japanese manufacturing firms: A comparison between high-tech & low-technological firms

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Abstract

Technological progress contributed significantly to the remarkable economic growth of the Japanese economy in the post WW II period. Nishimizu and Hulten (1978) quoted in Shujiro and Hiroki (2002) that as much as 30 percent of Japan's economic growth in the 1955-1971 was attributable to technological progress (as measured by growth in total factor productivity). While the rate of economic growth declined substantially in the early 1970s, technological progress continued to contribute significantly to economic growth (Shujiro & Hiroki 2002). Shinada Naoki (2011) described that, faced with a rapidly aging population and low fertility rate, Japan must enhance productivity growth to maintain economic dynamism. This study aims to measure the productivity growth of Japanese manufacturing firms on low and high technological firms in the years 1990-2011. It compares the productivity growth between low and high technological Japanese firms' by measuring value added and R&D. Top 30 Low-tech firms (i.e. textiles) and top 30 High-tech firms including pharmaceuticals are taken into the study. Parametric (Cobb-Douglas, Tornqvist) methods are used for this comparative measurement. High-tech firms have high productivity growth while low-tech firms have low productivity growth according to the various studies as a result of R&D spending and sales (value added), labor and capital.

Introduction

Technological change and learning generally has been known from its objective to improve the productivity of inputs and thence a reduction in cost. Shinada Naoki (2011) described that Japan, faced with a rapidly aging population and low fertility rate must enhance its productivity growth to maintain economic dynamism.

Total Factor Productivity (TFP), is a productivity measure which considers all factors of production, provides a more reliable analytical framework for the most empirical research on productivity. A production function postulates a clear relationship between vectors of maximum producible output versus a vector of production factors (input) (Wong Raynon Wei Soon, 2009).

Although many previous studies were done on manufacturing industries but there are no studies done comparing low and high technological manufacturing firms' productivity including sales, and R&D. This study attempts to focus on pharmaceutical and textile firms in Japan.

Productivity measures the ratio of outputs (sales), in comparison to inputs used to produce such as labor, capital, R&D, and therefore TFP. A productivity measure that considers all factors of production is used in this study to measure Japanese manufacturing firms. Total factor productivity measures, which include total factor productivity (TFP), obtain an output to input ratio value which takes into account all outputs and all inputs.

Methodology

In this study value added is used instead of sales as a measure of output in the Japanese manufacturing firms. This is because value added specification has the advantage of being largely immune to sales problems in the sense that output and materials vary proportionally. However, it is clear that sales specification duly including materials and the value added specification both suffer from other problems since they still give rise to estimates of large decreasing returns to scale in the within-firm dimension (Cuneo & Mairesse, 1983).

A parametric (Cobb-Douglas, Tornqvist) method is used for this comparative measurement of productivity growth. In this study the parametric Cobb-Douglas is used to analyze the productivity growth of the manufacturing firms in Japan over the period of 1990 to 2010. Cobb-Douglas measures the responsiveness of output to a change in inputs.

The models (SFA) utilize econometric (parametric) techniques whose models of production recognize technical inefficiency and the fact that random shocks beyond producers' control may affect the product. SFA allows for deviations from the frontier, whose error can be decomposed for adequate distinction between technical efficiency and random shocks (e.g. labor or capital performance variations) (Constantine, 2009).

The Cobb-Douglas production function is also known as Factor input frontier production function – factor because it deals only with factor inputs of labor and fixed capital, and assumes all other inputs are adjusted as required; and frontier because it relates to only technically efficient combinations of inputs- where there is no possibility to reduce the quantity of any one input without increasing the quantity of another input while still producing the same quantity of output per period (Constantine, 2009).

Discussion

High-tech firms have high productivity growth while low-tech firms have low productivity growth as a result of R&D spending and sales (value added), labor and capital. High technological pharmaceuticals firms are highly dependent on technological assimilation for productivity growth as sales also increase. Low technological firms like textiles are not highly dependent on technological assimilation for increasing productivity growth and increased sales.

Economic dynamism in Japan causes changes in TFP also to be so dynamic in the years 1990s and therefore year 2000 was affected as a result of R&D activity increases in high tech firms. Using the results from 1990, the extent of multifactor productivity change over such period can largely determine technological change (although the effect of economies of scale is likely also to have been of significance) (Dudley (1998, p 41).

The results for the index of multifactor productivity show that multifactor productivity varies but increased from 1996 to 1999 in case of high tech firms and kept decreasing for the case of textile firms. The trend in the growth rate of output of high tech manufacturing firms per year is because of the increase in multifactor productivity more than half, and the rest as a result of growth of combined factor input (122.0669). Compared to low-tech firms the growth of output per year is a result of growth of combined factor input (CFI) more than half (157.0946) and the rest is a result of multifactor productivity.

The results show that the increase of multifactor productivity was quantitatively very important in contributing to the growth of output in high tech firms as compared with low-tech manufacturing firms in Japan. Conversely, the growth rate of output is considerably greater than can be accounted for simply by the increase in combined factor input for low-tech textile manufacturing firms.

Capital input grew more over the entire period than did the labour input ie. increase of capital-labour ratio over these period in both high tech and low tech firms. But this capital-labour ratio is greater in low tech firms than high tech pharmaceutical firms.

Japan's economy has been stagnant more or less continuously for more than a decade (Japan's so-called "Lost Decade"), and Japan's growth rate during this period has been the lowest among the major industrialized countries of the world. During the 1995–2002 period, for example, the annualized growth rate of Japan's real gross domestic product (GDP) averaged only 1.2 percent, which is lower than all of the other G7 countries – Canada (3.4 percent), the United States (3.2 percent), the United Kingdom (2.7 percent), France (2.3 percent), Italy (1.8 percent), and Germany (1.4 percent) – as well as the Euro area average (2.2 percent) and less than half of all of the other larger OECD countries, Korea (5.3 percent), Australia (3.8 percent), Spain (3.3 percent), The Netherlands (2.9 percent), and Mexico (2.6 percent) as well as the OECD-wide average (2.7 percent) (Horioka, 2006).

Most studies of the "lost decade of Japan," broadly explain the real and domestic aspects, such as TFP growth decline, non-performing loans, and governance. By tracing the course of real exchange rates after the Accord, the author argues that the roles of monetary and international factors were as equally important as those of non-monetary and domestic factors in generating the stagnating path of the Japanese economy during this period (Hamada & Okada, 2009).

References

- Constantine, P. M. 2009. Cobb-Douglas, Translog Stochastic Production Function and Data Envelopment Analysis in Total factor productivity in Brazilian Agribusiness. *Journal of operations and supply chain management* , 2, 20-34.
- Hayashi, F. &. 2000. The 1990s in Japan: a lost decade.
- Hamada, K. &. 2009. Monetary and International factors behind Japans lost decade. *Journal of the Japanese and international economies* , 23, 200-219.
- Horioka, C. H. 2006. the causes of japan's lost decade: the role of household consumption. *Japan and the world economy* , 18, 378-400.
- Shujiro, U. & Hiroki, K. 2002. Technological progress by small and medium enterprises in Japan. *Small business economics* , 18, 53-67.
- Watanabe, C. & Asgari, B. 2003. dynamic interactions between assimilation capacity, technology spillover, sales, and R&D intensity-the case of electrical machinery industry in Japan. *Technovation* , 23, 15-34.
- Yang, L. & Jin-LI, H. 2002. Technical efficiency and location choice of small and medium-sized enterprises. *Small business economics* , 19, 1-12.

Risk perception, human resources and leadership in high technology start-ups: Japanese entrepreneurial voices

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Abstract

This paper is concerned with how entrepreneurial/intrapreneurial managers, view the risks involved in starting up a new project in a high technology industry. It presents the findings of interviews that were conducted over a two-year period. This study focuses on the perception of risk and the sources of risk. One critical source of perceived risk is finding employees. This source of risk is intricately linked to the leadership characteristics of the entrepreneur/intrapreneur, especially in new start-up ventures.

Introduction

An area of continued fascination for both scholars and practitioners alike is the study of entrepreneurship and entrepreneurs and intrapreneurs. In our study we examined how the various managers involved with new business activities defined risk. As such we are looking at the simple empirical question of “how do managers view risk?” The fostering of high technology start-ups is particularly important in that these types of organizations tend to generate radical innovations (Methé, Mitchell, Swaminathan, 1996) and are also seen as a primary engine of growth and renewal in economies. Entrepreneurs must be ingenious in coping with the risks inherent in starting a new business. This is especially so when the new business is in a technology intensive industry and the entrepreneur is starting up in Japan (Methé, 2005) because the institutional environment for business startups in Japan has been consistently rated as one of the most difficult (JSBRI, 2005; Methé and Bracker, 1994).

How risk has been conceptualized over the years has changed and evolved and researchers have examined the topic (Knight, 1921). The classical definition of risk in decision theory, as the variance of the probabilities of various gains and losses generated from an alternative (Pratt, 1964; Arrow, 1971) is still accepted as the standard definition of risk and still taught in MBA programs. Subsequent research has looked into various aspects of risk. The behavioral economics school has examined how framing affects risk perception (Tversky and Kahneman 1991). Other scholars have examined how risk tolerance and other attributes affect risk perception (Sitkin and Pablo, 1992). In spite of this progress in understanding various aspects of risk, March and Shapria (1987) call for more empirical work on how managers actually perceive risk, because little empirical work has been done in understanding how managers actually perceive risk. Further, much of the work that has been done is primarily based on US samples with few in Japan (Bracker and Methé, 1994).

Methodology

The research project was conducted over a three-year period from 2005 to 2007. An open-ended questionnaire was developed in 2005 drawing on previous research in the area of risk, risk perception, risk attitude, risk tolerance, and risk capacity. After several revisions, the final version of the

questionnaire in English and Japanese was used to conduct quasi-structured interviews that ranged from one and a half hours to three hours in length. These interviews were conducted from 2006 to 2007, and involved about 21 companies and managers.

In this multiple case study, eight venture businesses (VB), seven small/medium sized established companies (SMEC) engaged in product launches involving new technology, two foreign subsidiaries of non-Japanese venture businesses (FS), and four venture angel companies (VA) which were also newly established ventures in their own right, were examined. All these companies were involved in the semiconductor industry, an industry characterized by successive waves of technological innovation in both products and processes (Méthé, 2006; Méthé, 1992). Each of the managers interviewed had considerable business experience that ranged from about 10 years to about 30 years. Most of the managers acquired their business experience as engineers and managers in Japan's large established companies. This study uses the qualitative data collected during the interviews, supplemented where possible with data collected from other archival sources.

Findings on Risk

Overall, our study supports the notion that there is a difference between 'risk' as defined in the classical literature on decision-making under uncertainty and 'risk' as a problem or hazard. Risk is also perceived as an inherent part of business activities and intricately intertwined in management decision-making. Finally, risk in Japan has aspects related to the institutional environment in which managers must make decisions. The consequence of business failure through the impact on personal assets and the manager's status in Japanese society was quite evident. The magnitude of the consequences of failure, for those involved in starting a venture business in the institutional context of Japan is important in understanding the comparatively low level of entrepreneurial start up initiation (JSBRI, 2005).

Common thinking among those interviewed and an important aspect of the leadership qualities of being an entrepreneur/intrapreneur was that risk was perceived as an inherent part of the managerial function, whether that manager is in a larger established company or a newly founded start-up.

Findings and Discussion

Our study indicates that the acquisition of business resources is a major source of risk for managers involved in new business development activities. In this paper, we focus on the acquisition of human resources, as a particularly important element of the leadership aspects of managing human and social capital and as indicative of being an entrepreneur (Hitt and Ireland, 2002).

Our study broadly supports the work of Sarasvathy (2001) in that we found that when entrepreneurs are confronted with uncertainty they often effectuate responses by starting from a given set of means related to "who they are", "what they know" and "whom they know". As such the entrepreneur plays a critical leadership role because as the first source for "legitimizing" the venture business as a real company, knowing who they are and what they know is crucial in the process of establishing a new venture's legitimacy. These two means are exhibited as leadership characteristics of the entrepreneur, especially in the attitude, experience and skills needed to cope with risk and to inspire others to join what are objectively uncertain and speculative endeavors. Without this legitimating capability the entrepreneur/intrapreneur would be unable to attract the funds necessary to start the business, the human resources necessary to develop the business or the customers necessary to grow the business. The final means, "whom they know", is critical in accessing the human resources required to establish the company.

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References

- Arrow, K.J. 1971. *Essays in the Theory of Risk Bearing*. Markham, Chicago.
- Bracker, Jeffrey and David T. Methé. 1994. A Cross-National Study of Planning Characteristics of U.S. and Japanese Entrepreneurs, *International Journal of Management*, 11/2.
- Hitt, M.A. and R.D. Ireland. 2002. The Essence of Strategic Leadership: Managing Human and Social Capital. *The Journal of Leadership and Organizational Studies* 9/1:3-14.
- JSBRI. 2005. *White Paper on Small and Medium Enterprises in Japan: Structural Changes in Japanese Society and the Dynamism of Small and Medium Enterprises*. Japan Small Business Research Institute, METI Tokyo Japan.
- Knight, F. H. 1921. *Risk, uncertainty and profit*. New York, Houghton Mifflin.
- March, J.C. and Z. Shapira. 1987. Managerial Perspectives on Risk and Risk Taking, *Management Science* Vol. 33, No. 11, pp.1404-1418.
- Méthé, David T. and Jeffrey Bracker. 1994. A Cross-National Study of Perceptions of the Business Environment by U.S. and Japanese Entrepreneurs, *International Journal of Management*, 11/1.
- Méthé, David T., William Mitchell, Anand Swaminathan. 1996. The Second Special Issue on Telecommunication Policy and Strategy. Underemphasized Role of Established Firms as the Source of Major Innovations. *Industrial and Corporate Change*, 5/4: 1108-1203.
- Méthé, David T. 1992. The Influence of Technology and Demand Factors on Firm Size and Industrial Structure in the DRAM Market - 1973-1988", *Research Policy* Vol. 21.
- Méthé, David. 2005. Continuity through Change in Japanese Management: Institutional and Strategic Influences, in Haak R. and M. Pudelko (eds.) *Japanese Management: The Search for a New Balance between Continuity and Change*. Palgrave Macmillian, New York.
- Méthé, David. 2006. Institutional, Technological and Strategic Factors in the Global Integrated-Circuit Industry: The Persistence of Organizational Forms. In Okada Yoshitaka (ed.) *Struggles for Survival: Institutional and Organizational Changes in Japan" High-Tech Industries*. Sptinger-Verlag, New York.
- Pratt, J.W. 1964. Risk Aversion in the Small and in the Large, *Econometrica* Vol. 32, pp. 122-136.
- Sarasvathy, S.D. 2001. Causation and Effectuation: Towards a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review* 26/2: 243-263.
- Sitkin, Sim B., and Amy L. Pablo. 1992. Reconceptualizing the Determinants of Risk Behavior. *The Academy of Management Review* 17/1: 9-38.
- Tversky and D. Kahneman. 1991. Loss Aversion in Riskless choice: A reference-Dependent Model, *The Quarterly Journal of Economics*, Vol. 106, No. 4 pp. 1039-1061.
- Xu, Hongwei and Martin Ruef. 2004. The myth of the risk-tolerant entrepreneur. *Strategic Organization* 24/4: 331-355.

Identifying and modeling supply chain performance in Bangladesh Ready Made Garments (RMG)

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Abstract

In general, lead time reduction, and quality and service improvement have been recognized as the main performance indicators, and the use of information technology and collaborative planning among supply chain partners as enablers in the Ready Made Garment (RMG) supply chain of Bangladesh. To date, there are only a few comprehensive academic studies of this kind. To identify the present practice of supply chain performance variables (enablers, performance or results and concerns) in Bangladesh RMG sector, a survey was conducted among senior supply chain professionals, merchandisers and top management personnel in Bangladesh. Then an analysis was carried out to identify the causal relationships among the variables. A system dynamics simulation approach was used to propose an effective model among the three kinds of variables and how they are inter-related in terms of feedback on performance of other variables and, as a whole, on the total supply chain system. This model is useful to understand the dynamic behavior among variables and thus management will be able to take an effective decision to enhance performance in the supply chain.

Introduction

The impressive growth of garment sector in Bangladesh in recent years has dramatically changed the landscape of the export composition of the country. Once heavily dependent on exports of primary products led by Jute, the economy of Bangladesh is now experiencing almost 76% (Nuruzzaman, 2009) export contribution from Readymade Garments (RMG). The sector now occupies an important place in the national economy. With the blessings of cheap labor, pressure for globalization of production based on location economies as well as a favorable treatment from developed countries, Bangladesh and some other developing countries have gradually become the global suppliers in the international trade of RMG.

However, the Multi-Fiber Arrangement (MFA) facility, which was extended to favor the less developed countries in exporting garments and textile phased out after 2005. Consequently, the beneficiaries of MFA, including Bangladesh are facing severe competition in the unprotected world market. At present, this sector is facing numerous challenges from numerous competitors nationally and globally in respect with cost, quality, customer service, lead time, etc. In recent years many reputable organizations are purchasing products, sourcing, distributing and selling goods and services on a global basis in order to meet customers' needs on a timely basis, with relevant and high quality products produced and delivered in a cost effective manner.

To achieve efficiency and responsiveness, the concept of supply chain management has proven to be of vital importance especially for the Bangladeshi textile and garment industries. It was the traditional view of all companies that they will exist as a single and complete unit and compete against each other in order to survive. However, such mindset cannot be sustained, because no company or organization can operate alone in complete independence. Through managing supply chain the ultimate objective of companies is to maximize supply chain surplus to meet customers' needs either with responsiveness or efficiency. Thus, corporate strategy should include organizing, coordinating and executing the process of product flow in a competitive manner and as a source of potential competitive advantage (Nuruzzaman et al, 2010) which is possible through designing supply chain performance.

The current RMG business manufacturers of Bangladesh are facing lead time problems due to import dependency i.e. import of fabrics from the foreign market. This problem is increased due to inefficiency in the supply chain management. Lead time could be further reduced by taking some appropriate measures in manufacturing, unloading and transportation system through supply chain integration among upstream and downstream partners so that RMG manufacturers can be more competitive (Nuruzzaman & Haque, 2009).

Lead time is the greatest problem for RMG sector of Bangladesh and among the top five causes behind the problem of long lead time which are mostly issues in supply chain management (Nuruzzaman et al, 2010). They (Nuruzzaman et al, 2010) also emphasized that SCM is a complex process basically for countries like Bangladesh. This idea is new in the apparel sector and very new in the least developed countries like Bangladesh. Nuruzzaman et al, (2010) concluded that countries like Bangladesh may create a remarkable position in the world's total apparel export by managing the partners of supply chain in terms of reduction of lead time.

Including the above ones many studies concerning SCM have been conducted in various sectors worldwide. But to the best of my knowledge there are very few in-depth studies about SCM for Bangladeshi RMG sector and few studies with indications on how we can increase productivity, reduce costs, and respond to the changing customer needs using effective supply chain management. The main purpose of this research is to obtain an in-depth knowledge on the present status of SCM practices and concerns, and model the performances of the RMG sector in Bangladesh.

Methodology

Both qualitative and quantitative research strategies were applied in order to identify and classify the SCM performance index such as enablers, result and inhibitors. For this research, a survey questionnaire was designed from secondary sources and primary data were collected through the questionnaire survey. Respondents were contacted through email and phone. Convenience sampling method was applied to select sample factories. Doing a survey of factories meant that the unit of sampling was factory not an individual manager or respondent. Managers, senior managers & factory owners of RMG sector of Bangladesh were selected for the survey. One respondent was selected from

each factory.

Discussion

System dynamics (SD) was used to simulate and correlate the performance variables in RMG supply chain. Vensim software was used to draw causal loop diagram (CLD) and model the performance variables to perform sensitivity analysis of RMG supply chain. Vensim was chosen because it is more robust in terms of feedback loop designing and sensitivity analysis than Ithink, Powersim software. Few CLD were identified among enablers (market sensitiveness, process integration, use of IT, collaborative planning etc), results (cost reduction, quality, lead time reduction etc) and inhibitors (supply chain complexity, uncertainty) in the RMG supply chain of Bangladesh. The ultimate objective was to maximize the supply chain performance index (SP Index) which is the summation of enablers, results and inhibitors.

There are some goal seeking loops, namely, cost minimization, lead time reduction and quality improvement. Systems dynamics can analyze the dynamic behavior of performance variables in the model to attain different goals in the goal-seeking loops as well as imply the policies for different markets. EU buyers, in general, look for quality and fashion which means impact on short lead time. On the contrary, US buyers, generally, look for cost efficient garments. To achieve different supply chain performances in the same RMG firm, system dynamics can help analyze the variables under a simulation technique with Vensim and based on the results we can reform policies accordingly.

References

- Khan M. A. H , Hossain M. M, Shahriar M. J. H, Hassan M.. A. M, Shamshuzzaman M. and M.D. Hossain. 2011. 'Performance evaluation of Bangladeshi Apparel and Textile supply chain –A case study', *World Review of Business Research* Vol. 1. No. 1. March 2011. Pp. 211 – 218.
- Nuruzzaman, M & Haque, A. 2009. 'Lead time management in the garment sector of Bangladesh: an avenues for survival and growth', *European Journal of Scientific Research*, vol. 33, no. 4, pp.617-629.
- Nuruzzaman, Ahasanul Haque and Rafiq Azad. 2010. 'Is Bangladeshi RMG Sector Fit in the Global Apparel Business? Analyses the Supply Chain Management' *the south East Asian journal of management*, April 2010, Vol. IV, No.1

Jump-start green technology: Can Proton Malaysia Bhd. ride the challenges?

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Abstract

It was not so long ago that the world community comprehended not pursuing technology advancement and social development would result in a long-term degradation and possibly irreversible damage to the natural environment and human health (Nunes and Bennett, 2008). Growing global environmental concerns and developing international environmental standards are creating the need for businesses to adopt formal environmental strategies and programmes (Sudin, 2011). The transportation sector as the main cause of worldwide pollution emissions has long been an increasing source of environmental deterioration, abnormal climate, and energy crisis in the developing nations of Southeast Asia (Chyi Chua and Hui Oh, 2011). Although protection against air pollution by motor vehicles is considered an important issue in the 21st century, too little has been done by the Southeast Asian countries (Sudin, 2011). According to the SMURT-KL Study, in 1997, Malaysia faced a problem of the ambient air quality in Kuala Lumpur with unfavorable conditions prevailing at heavy traffic crossings. Increasing the number of car owners in Malaysia and the wide variety of non-green automobiles would cause a corresponding increase in the air pollution exposure (Mohamad and Kiggundu, 2007). Therefore, greening of the auto industry has become a core determinant of economic competitiveness and sustainable development through its effects on economic growth, social progress, and environmental protection while alleviating poverty through promoting sustainable patterns of production and consumption that are energy efficient, produce low carbon emissions, low waste, and are non-polluting and safe (United Nations Industrial Development Organization, 2011).

Introduction

This study is focused on Proton Holdings Berhad as the first automaker in Malaysia commercial vehicle industry. In recent years, although automakers have been upgrading their techniques towards sustainable production to promote innovative pollution prevention technologies (Organization for Economic Co-operation and Development, 2007), Proton is still at the early stages and has not grown enough to reach the goal of hitting green vehicles sales in the market. With tightening emissions legislations and growing consumer enthusiasm to reduce the costs of driving, in the near future the Malaysia automotive industry may confront strong pressures to produce green vehicles to reduce fuel consumption and improve vehicle efficiency (Amin, 2009).

Although Proton is the pioneer in Malaysia's capabilities in automobile engineering, research and development (R&D), and manufacturing, it needs more innovative thinking towards future

development in terms of concept, styling, design, and technology. Proton regularly needs to update its directions into the philosophy of new automotive business trends. The company is dedicated to the development of green technology innovation in line with the government's initiative to make Malaysia a regional hub for eco-friendly vehicles.

Although, in comparison with global OEMs (Original Equipment Manufacturers), Proton is a relatively smaller company, which has not allocated much investment in green technology, it has made a great step towards upgrading its engineering capabilities with the acquisition of Lotus Group International Limited (Proton Holdings Berhad, 2011). However, on the way to pursuing the implementation of green technology, Proton needs to effectively manage the human capital and budget first.

Discussion

The main objective of this study is to identify the most influential challenges that impede green technology implementation in Proton Holdings Berhad, Malaysia. The primary technique is conducting in-depth individual interviews with five key players (top management, middle management, the R&D unit, engineering, and technical departments) who are involved in the green technology process in Proton manufacturing plant, Shah Alam, Malaysia.

The findings obtained from in-depth interviews show that insufficient investment in human resources, tough competition with well-known international brands, high costs of technology outsourcing, inadequate infrastructure, and lack of government financial support are the major challenges to green technology development in Proton. Meanwhile, undefined R&D strategies and scanty funds will hamper efforts to carry out the green programs.

Furthermore, the investigations reveal that although Proton is still in the prototype stage of EV (Electric Vehicle) production, it has received some awards and accolades for innovative green concepts during the last two years. It is implied that the high cost of technology outsourcing pushed Proton to wisely use the internal ideas, develop them through innovative methods, and make in-house products. This has economically shortened the way of manufacturing green vehicles.

Indeed, forming strong strategic partnerships with government agencies, engineering consultants, and academic institutions and devoting more efforts to retain employees with the right and distinctive capabilities, may help the company to improve its green innovation plans and move towards sustainable development. Moreover, continuous training to update the employees' knowledge and skills is a necessary condition for successful innovation as it helps the company to benchmark the hottest manufacturing technologies in the industry and stay ahead of competition.

Even if the employees have high performance capabilities, lack of technical knowledge and expertise to incorporate green initiatives hinder effective function. Thus, Proton needs to conduct training sessions to all staff, particularly unskilled and semi-skilled employees who control production activities in the manufacturing plant. Concurrently, R&D strategies and dedication of a sufficient budget in the direction of the green programs would be efficient.

Although this study has made every effort to contribute best in its own capacity, there have been some limitations such as a limited familiarity with the respondents that leads to selecting a small sample. In addition, findings of this research can only be true for Proton Holdings Berhad, Shah Alam Campus and cannot be generalized for other automotive manufacturers. However, further studies can be carried out on other automakers to see if there are similarities with the factors influencing green

technology development. In particular, the results of this study can be compared to the competitors of Proton in Malaysia, namely Perodua and Naza.

References

- Amin, A.T.M. Nurul. 2009. "Reducing Emissions from Private Cars: Incentive Measures for Behavioural Change." United Nations Environment Programme.
- Chyi Chua, Shing, and Hui Oh, Tick. 2011. "Green Progress and Prospect in Malaysia." *Renewable and Sustainable Energy Reviews* 15(6): 2850-2861.
- Mohamad, Jamilah, and Kiggundu, Amin. 2007. "The Rise of the Private Car in Kuala Lumpur, Malaysia- Assessing the Policy Options." *IATSS Research* 31(1): 69-77.
- Nunes, Breno, and Bennett, David. 2008. "Green Innovation Management in the Automotive Industry." Aston University: UK.
- Organization for Economic Co-operation and Development. 2007. "Innovation and Growth: Rationale for an Innovation Strategy." OECD.
- Proton Holdings Berhad (623177-A). 2011. Proton 2011 Annual Report.
- Sudin, Suhaimi. 2011. "Strategic Green HRM: A Proposed Model that Supports Corporate Environmental Citizenship." Proceedings of the 2011 International Conference on Sociality and Economics Development. Singapore: IACSIT Press, 79-83.
- United Nations Industrial Development Organization. 2011. "UNIDO Green Industry: Policies for supporting Green Industry." UNIDO: Vienna.

Defining Thai product quality in the 21st century

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Abstract

There is no single universal definition on product quality. Different people view product quality differently and this makes product quality extremely difficult to define. This research takes Thailand as a case study, and examines 4 different key sectors to participate in interviews as well as questionnaires to share their opinions and thoughts on defining Thai product quality. As a result, the research proposes “*being good in all aspects and fitness with intended use*” to be the most up to date definition of Thai product quality. This definition arises accordingly to the results that show Thai people value “reliability”, “function”, and “durability” as their most influential attribution factors on consumer buying decision; furthermore, “support service”, “value for money” and “adaptability” are other important attribution factors that Thai people use in evaluating product quality.

Introduction

Everyone may sensibly understand what product quality is, however, no one could give a clear definition of it. *Why?* There are several reasons why no one could come up with a definite definition. First, the term “quality” is very difficult to define, measure, and assess unambiguously, and second, the character of quality is also changing over time (Curry and Fauld 1986). Accordingly, when it comes to product quality, it is challenging to agree on one absolute definition on what product quality means. This also includes looking from what perspectives and what academic paradigms.

In literary terms, the word “*Quality*” derives its root back in Old French from the word “*Qualite*” and “*Qualitas*” in Latin; this term originally referred to ‘character, disposition’ and ‘particular property or feature’ (Baldick, 2008), and may refer to ‘degree of excellence’ or ‘superiority in kind’ in the present Merriam-Webster Dictionary. However, from the management gurus’ viewpoints, for instance Philip B. Crosby and Joseph M. Juran, it refers to ‘Conformance to requirements’ – Crosby (1979), and ‘A fitness for use’ – Juran (1988).

Moreover, defining product quality becomes much more complicated when we look at different perspectives and academic paradigms. In manufacturing/supply base, producers value product quality to the degree in which the product was produced correctly and conforms to the requirements. On the other hand in user/demand base, consumers view product quality on specifications in which the product satisfies consumers’ needs and wants. Furthermore considering product alone, in the product base, product quality puts more emphasis on measurable variables; the differences in product quality also reflect the differences in product quantity, and yet in terms of the value base, product quality is evaluated as acceptable costs and acceptable prices.

As quality/product quality is a perception, condition, and subjective attribution, to decide which definition is more correct and appropriate to all, is a difficult task and a very challenging job.

Methodology

Two primary data collection methods, interviews and questionnaires, were applied in conducting this research. For interview, 3 governors: Permanent Secretary of the Ministry of Industry of Thailand,

Director of One Stop Export Service Center, Executive Chairman of Industrial Promotion of Region 9; 4 product producers/manufacturers in 3 distinctive product categories (electronics and IT products, automobiles, and home appliances) and 11 intermediate sellers of those 3 focused product categories were interviewed with the same set of questions:

“What are the factors that influence customer’s decision in buying a product?”

“What is/are other factor(s) that can be used to evaluate product quality?”

“What is your definition of product quality?”

“What could be the differences in today’s product quality and the next 5(10) years’ product quality?”

“Why do you think so?”

For the first interview question, *what are the factors that influence customer’s decision in buying a product?*, the participants were requested to rank their preferences in 7 given attribution factors, including “function”, “ease of use”, “reliability”, “durability”, “design”, “eco-friendliness”, and “customer satisfaction”

In addition, 308 questionnaires were distributed and collected from the consumers at point of sale (POS) at various stores and shopping malls in Chonburi Province. Right after their purchases, consumers who just bought a mobile phone, computer, laptop, tablet, car, television, refrigerator, washing machine, and air conditioner were asked to fill out and answer the following questions:

“What kind of product(s) did you buy today?”

“What factors influence your decision in buying a product?”

“What is/are other factor(s) that can be used to evaluate product quality?”

“What is your definition of product quality?”

“What could be the differences in today’s product quality and the next 5 years’ product quality?”

“Why do you think so?”

Similar to the interview, for the second question of *“what are the factors that influence customer’s decision in buying a product?”*, the respondents were also requested to rank their preferences in 7 given attributions.

Results and Discussions

The results can be discussed in 3 subtopics which are effects of attributions on consumer buying decision, prospects of product quality, and product quality definition.

Effects of attributions on consumer buying decision: “what factors influence customer’s decision in buying a product?”- for interview results, all three sectors, the government officers, product producers/manufacturers, and intermediate sellers, strongly suppose “*reliability*” and “*function*” have the utmost effect on overall consumer buying decision; in contrast, eco-friendliness should be the least influential one. However for the questionnaire results, consumer-purchasing (attribution) factors are varied and depend on each product category. But, still there is substantial evidence, which verifies that “*reliability*” and “*durability*” are the most influential attribution factors on consumer buying decision and unexpectedly “customer satisfaction” was the least influential one.

“What is/are other factor(s) that can be used to evaluate product quality?” All three sectors as well as consumers similarly pointed out that “*support service*”, “*value for money*”, and “*adaptability*” could be the attribution factors in evaluating product quality.

Prospect of product quality: “what would product quality be in the next 5 years?” All interview participants and questionnaire respondents shared parallel thoughts and ideas that in the next 5 years, product quality will unquestionably differ from today and develop in many aspects: sophisticated in both hardware and software, safety for human life, achieve international standards, deliver superior

services, going toward green concepts, more efficiency with long term usability, and above all responding to consumers needs and exceeding consumers expectations. However, some participants and respondents argued that as product quality becomes more advanced, product quality in the next 5 years, in terms of durability, and life cycle may become shorter and quality itself might not develop as much as the market expects.

Product quality definition: “what could be the definition of product quality?” Different people view product quality differently, and yet their definitions of product quality are varied, however, *to meet quality standards and requirements, excellence in both hardware and software, supplement support service, continuous improvement, fitness with intended use, be economic and environmental friendly, satisfy consumer needs/wants and exceed consumer expectations* are common definitions of product quality defined by Thai governors, producers/manufacturers of the products, intermediate sellers, and consumers.

Conclusion

A search for product quality definition in the case of Thailand has yielded significant results. First, *reliability, function, and durability* are the 3 most important attribution factors that have the most influence and effects on Thai consumers’ buying decision.

Second, *support service, value for money, and adaptability* are additional attribution factors, which all sectors believed could be applied and have an effect on evaluating the Thai product quality.

Finally, a more precise definition of product quality in the 21st century in the case of Thailand is “*being good in all aspects and fitness with intended use*”; *good in all aspects* implies good in both hardware and software, also economically, and environmentally, while *fitness with intended use* signifies the use in the regulators’ perspective, use in the manufacturers’ perspective, and use in the users’ perspective.

References

- Cambridge University Press, C. U. 2008. *Cambridge Advanced Learners Dictionary* .
- Chowdhury, S. 2005. *The Ice Cream Maker: An Inspiring Tale About Making Quality The Key Ingredient in Everything You Do*. New York: Doubleday, Random House.
- Crosby, P. 1979. *Quality is Free*. New York: McGraw-Hill.
- Curry, D., & Faulds D. (1986). Indexing product quality: Issues, theory, and results. *J. Consumer Res.* 13: 134-143.
- Juran, J. M., Gryna, F. M., & Bingham, R. S. 1988. *Quality Control Handbook*. McGraw-Hill.
- Merriam-Webster. 2005. *The Merriam-Webster Dictionary*. Springfield, MA, USA: Merriam-Webster Incorporated .
- Quality, How Do You Define It?* 1999. Retrieved 20 April 2012, from Quality Digest: <http://www.qualitydigest.com/html/qualitydef.html>
- Robinson, W. T., & Fornell C. 1985. The sources of market pioneer advantages in the consumer goods industries. *J. Marketing Res.* 22: 297-304.
- Shankar, V. 1999. New product introduction and incumbent response strategies: Their interrelationship and the role of multimarket contact. *J. Marketing Res.* 36(3): 327-344.
- Tellis, G. J., & Golder P. N. 2001. *Will and Vision: How Latecomers Grow to Dominate Markets*. McGraw-Hill, New York.

Leadership's influence on creativity and innovative behaviors: Can current understanding be generalized to the Japanese context?

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Abstract

There has been considerable interest in understanding how leaders nurture creativity and innovative behaviour among followers. Studies on this topic have grown to cover many variables said to affect creativity and innovation. Most of these studies are done within a Western context. However, the stream of research on implicit leadership theories shows that a leader's attempt to influence is affected by the expectations that followers have of the appropriate leader behavior. Evidence indicates that there is considerable variation in followers' expectations of these behaviors across cultures. This paper argues that a leader's effectiveness in generating creativity and innovative behavior among his followers is contingent on the cultural context of their relationship. The discussion in the extant literature suggests that some aspects of Japanese management and leadership practice are distinct from Western management practices and may not be conducive to generating creativity. Yet, Japan's leadership in technology and innovation is not disputed. This begets the question of whether the current understanding of innovative leadership behavior can be generalized to non-Western contexts. This paper raises the question whether a different dynamics may be operating in nurturing creativity and innovation in Japanese organizations.

Introduction

There has been considerable interest in the leadership literature in understanding how leaders nurture creativity and innovation. Much of the empirical work on this subject has been in the Western context. However, evidence shows that effective leadership behavior varies across cultures (Abdalla and Hamoud 2001; Holmberg and Akerblom, 2006; Konrad, 2000; Subramaniam, Othman and Sambisivan, 2010). It is therefore logical to expect that leader behaviors affecting creativity and innovative behavior may also differ across cultures.

The extant literature on implicit leadership theories argues that followers develop expectations about the ideal leadership behavior (Konrad, 2000). A leader's attempt to influence is accepted when the leader's behavior is consistent with the followers' expectations of acceptable leadership behaviors. On the other hand, leaders who differ too much from these expectations are more likely to find their attempts to influence resisted by their followers. Ekvall and Ryhammar (1996) point out that leaders shape the creative climate within which followers operate. It is therefore expected that followers' willingness to exercise creative efforts will also be affected by leader behaviors that are consistent with their expectations; these behaviors are expected to differ across cultures.

Discussion

The discussion on Japanese management in the literature suggests that the Japanese work values and behavior tend to emphasize harmony, conformity and collective decision making. Japanese organizations are said to be hierarchically oriented, use generalized pay systems and promote people based on seniority (Adhikari and Hirasawa, 2010; Benson and Debroux, 2004; Mujtaba and Isomura, 2012; Sullivan, 1994). Whereas employment relationships in Western organizations are seen as an exchange relationship, employment relationships in Japan are seen as social bonding with the organization becoming like a quasi family to the employees (Adhikari and Hirasawa, 2010; Sullivan, 1992). Decision making is usually consensual and leaders serve a coordinative role that often involves extensive consultation with relevant parties (Mujtaba and Isomura, 2010). As such, decision making is much slower than in Western organizations. Discussion is more about seeking consensus and employees tend to avoid conflict and saying anything critical. Japanese organizations are also said to be more focused on improving execution of decisions, and they make changes to their strategy and structure less frequently than Western organizations (Adhikari and Hirasawa, 2010).

The notion of social bonding means that Japanese employees are less calculative in their expectations of reward compared to those who view their employment relationship as an exchange relationship. Consistent with the notion of social bonding, Japanese organizations' approach in managing employees is characterized by welfarism which is reflected in the practice of providing lifetime employment, seniority based promotion and job security. Japanese workers also see work as a moral act and not as an instrument for seeking reward (Sullivan, 1992). Work is considered as something that every good person would do. In such a climate, it can be argued that employees' relationship with their organization relies less on short-term reciprocity, and the role of short-term incentives is less important.

Past studies on leadership and innovation have been mostly in individualistic societies (Jogulu, 2010). There is the need to ask whether the findings in these studies would be applicable in collectivist societies. Ekvall and Ryhammar (1996) argue that creativity requires a climate where there is considerable debate over ideas. This is necessary to support variation maximization which is considered necessary in searching for radical and discontinuous innovation (Benner and Tushman, 2003). This appears not to be the case in Japanese organizations. The emphasis on harmony and consensus in decision making tends to engender conformity. This makes variation maximization less likely. Sousa and Coelho (2011) consider conformity as part of the conservation dimension of personal values that they consider as counter creative.

De Jong and Den Hartog (2007) believe that providing recognition is an important behavior in generating creativity and innovativeness. Given the emphasis on generalized pay and seniority based promotion in Japanese organizations, the degree of freedom Japanese leaders have in providing recognition, especially in the use of reward, may be somewhat limited. Innovation, which is concerned with implementing new ideas, requires high action orientation (Rank, Pace and Freese, 2004). However, consensus seeking is time consuming and is sometime seen as procrastination. Zhang, Tsui and Wang (2011) found that a transformational leadership behavior is positively related to creativity among followers. Yet, the opportunity to be transformational may be more limited in Japanese organizations because of the focus on operational improvement. On the surface, these characteristics appear to be counter-creative and counter-innovative.

Nevertheless, the performance of the Japanese economy and firms over the last 50 years shows that it will be incorrect to believe that Japanese firms have not been creative and ineffective in innovation.

Instead, it raises the question of whether the current understanding of leadership, creativity and innovation can be generalized to the Japanese situation. Japanese organizations present a different socio-psycho context from Western organizations. Perhaps a different dynamics is operating in supporting creativity and innovation in Japanese organizations. Is it not possible that the route to creativity and innovation is varied and Japanese leaders rely on a different set of behaviors and management practice to nurture creativity and innovation?

For instance, it is possible that Japanese emphasis on harmony and consensus lead to better sense in assessing problems and new ideas and in evaluating creative input. Likewise, the use of a generalized pay system and lifetime employment may provide people with a higher sense of security and make them less short-term oriented and more patient in searching for new ideas.

In addition to addressing the above issues, there is also the need to recognize that the slow down in the Japanese economy has led to changes in the management practice of Japanese companies (Abe 2010; Adhikari and Hirasawa, 2010). This makes it necessary to revisit Japanese management and seek a much deeper and a more current understanding of the subject.

References

- Abdalla, I. A., & Al-Homoud, M. A. 2001. Exploring the Implicit Leadership Theory. In *The Arabian Gulf States. International Association of Applied Psychology*, 50(4): 506-531.
- Abe, M. 2010. Japanese management in the 21st century. In *Innovation in Japanese Management edited by Haghirian*, London: Palgrave.
- Adhikari, D. R and Hirasawa, K. 2010. Emerging scenarios of Japanese corporate management. *Asia-Pacific Journal of Business Administration*, 2:2, 114-132.
- Alves, J. C., Lovelace, K. J. Manz, C, Matsypura, D, Toyasaki, F. and Ke, K. 2006. A cross-cultural perspective of self-leadership. *Journal of Managerial Psychology*, 21:4, 338-359.
- Benner, M. J. and Tushman, M. L. 2003. Exploitation and exploration, and process management: the productivity dilemma revisited. *Academy of Management Review*, 28,. 238-256.
- Benson, J and Debroux, P. 2004. The changing nature of Japanese human resource management. *International Studies of Management and Organization*, 34:1, 32-51.
- De Jong, J. and Den Hartog, D. N. 2007. How leaders influence employees' innovative behavior. *European Journal of Innovation Management*, 10:1, 41-64.
- Ekvall, G and Ryhammar, L. 1996. The creative climate: its determinants and effectiveness at a Swedish University, *Creative Research Journal*, 14:4, 303-310.
- Holmberg, I., & Akerblom, S. 2006. Modelling Leadership-Implicit Leadership Theories in Sweden. *Scandinavian Journal of Management*, 22: 307-329.
- Jogulu, U. D. 2010. Culturally-linked leadership styles. *Leadership and Organization Development Journal*, 31:8, 705-719.
- Konrad, E. 2000. Implicit Leadership Theories in Eastern and Western Europe. *Social Science Information*, 39 (2): 335-347.
- Mujtaba, B. and Isomura, L. 2012. Examining Japanese leadership orientation and their changes. *Leadership and Organization Development Journal*, 33:1, 401-420.

- Rosing, K., Frese, M. and Bausch, A. 2011. Explaining the heterogeneity of the leadership-innovation relationship: ambidextrous leadership. *The Leadership Quarterly*, 22, 956-974.
- Sousa, M.P and Coelho, F. 2011. From personal values to creativity: evidence from frontline service employees. *European Journal of Marketing*, 45:7, 1029-1050.
- Subramaniam, A., Othman, R. and Sambisivan, M. 2010. Implicit leadership theory among Malaysian managers: Impact of the leadership expectation gap on leader-member exchange quality. *Leadership and Organizational Development Journal*, 31:4, 351-371.
- Sullivan, J. 1992. Japanese management philosophies: from the vacuous to the brilliant. *California Management Review*, Winter, 66-87.
- Tsurumi, Y. 1979. Two models of corporation and international transfer of technology. *Columbia Journal of World Business*, Summer, 43-50.
- Zhang, A., Tsui, A and Wang, D. 2011. Leadership behaviours and group creativity in Chinese organizations: the role of group processes. *The Leadership Quarterly*, 22, 851-862.

Japanese municipal government disincentives to local political participation

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Abstract

This paper argues that on a municipal level, where politics are closest to the people, there is an institutional disincentive for citizens to actively participate in politics and policy decisions. Critics of a strong centralized Japanese government claim that the central government yields too much power in deciding how local Japanese governments run their municipalities by dictating the allocation of funds collected from local taxes. However, the municipal government's unilateral approach to policy making, which allows no space for citizen participation, parallels that of the central government's actions and its disregard for the input of the municipal government for which it is criticized. Though some scholars claim that activist mayors and municipal governments have encouraged citizen participation by enlisting issue oriented groups to have input in related decisions, this benevolence on the part of municipalities to "listen" to some groups is not enough to comprise a space for widespread citizen participation. This paper, which is based, in part, on data collected from interviews with Oita city council members, maintains that citizens are prevented from engaging in the decision making process by local assembly proceedings that are opaque and comprised of city councilor members that directly represent specific local industries. Regardless of the composition and clarity of the city council meetings, and because there are no regular public forums for citizens to participate in the decision making process, it should be of no surprise if citizens express a low level of efficacy at the national level. Decentralization efforts, which have received much media attention in 2012, will do little to bring decision making closer to the people until an institutionalized space is created where the policy dialog is regular, publicized and open to citizen participation.

Introduction

The last eight years in Japan have seen seven prime ministers take office, along with the DPJ's historical usurpation of power from the LDP's fifty year stronghold. The electorate, instead of viewing the momentous political upheavals with optimism, continues to hold the same cynicism towards politics they have had for the last thirty plus years.

In 1975 when a study was conducted to assess the democratic political attitudes of various countries, Japanese trust of political institutions was low as was the level of efficacy to affect political change, compared to the other democracies studied. Twenty-five years later, when the study was revisited by Pharr and Putnam, attitudes towards politics in the other countries studied had significantly worsened, but Japanese attitudes remained the same (Pharr: 2000). The other countries increasing mistrust of government was ascribed, partly, to a continuing decrease in social capital, but in Japan, where social capital is still vibrant, the general malaise towards politics was attributed to widely publicized bad acts and corruption by public officials (Pharr:2000,Yamada: 2008). Nevertheless, as the Asian Barometer report

shows, Japanese, especially when compared with citizens in neighboring Asian nations, underestimate the level of cleanliness in their own political system (Yamada: 2008).

This paper argues that negative feelings towards the government and particularly, low levels of political efficacy are due, in large part, to the citizens lack of access to the political decision making process. This research looks at the relationships between city council members and citizens through town meetings in an attempt to elucidate the barriers and incentives for citizens to participate. It examines the methods citizens have for political participation on the municipal level, the access to policy decisions, and how they are encouraged or deterred from the said participation.

Methods

This research employed structured and semi-structured interviews with city council members, town meeting attendees, neighborhood association members, city officers, politician support group members and average citizens (Yin: 1994). The city council members were selected for interviews according to their associated party, political affiliation, age, number of terms in office, electorate support, and former industry. Participant observation was also conducted at an annual, week long group of town meetings held in various areas of Oita city, along with community development and neighborhood association meetings, and various community activities in which the aforementioned respondents were in attendance.

Discussion

This case study shows the limitations of town meetings that are not supported by institutional structures committed to a meaningful dialog. The outcome shows: poor attendance by the community; “same faces” in attendance representing the neighborhood associations’ hierarchy; scarcity of knowledge on how to question policy, a lack of policy relation in the proceedings, and most prevalently, the insincerity of the event and its being of little use for anyone involved, i.e., just a big “show,” as most respondents attested.

While these initial findings are discouraging for the state of local political participation through town meetings, there are a few promising findings; when city council members were questioned about institutionalized incentives in the form of regular town meetings, many of the council members pointed to their own individual acts of encouraging participation.

Though citizens in this case study have not taken advantage of town meetings as a way of creating dialog about policies that affect them, they do have easy access to local city council members (and seemingly prefectural and national diet members) who spend a great deal of their time on constituent outreach projects such as visiting private family homes, attending social and civic meetings, and gathering their own constituents for listening groups. Conversely, this system further propagates the traditional patronage system which allows for arbitrary participation at best, and at worse, further encourages an opaque political system in which the power elites have unlimited access to power and average citizens’ opinions continue to be marginalized in policy decisions.

References

- Bestor, T. 1989. *Neighborhood Tokyo*. Stanford: Stanford University Press.
- Curtis, G. 1971. *Election Campaigning Japanese Style*. NY: Columbia University Press.
- Muramatsu, M. 1997. *Local Power in the Japanese State*. Berkley, University of CA.
- Ohsugi, S. 2008. *Local Assemblies in Japan. Papers on the Local Governance System and Its Implementation in Selected Fields in Japan No. 5*. Council of Local Authorities for International Relations (CLAIR), Institute for Comparative Studies in local Governance (COSLOG), National Graduate Institute for Policy Studies (GRIPS).
- Ohsugi, S. 2007. *People and Local Government- Resident Participation in the Management of Local Governments. Papers on the Local Governance System and Its Implementation in Selected Fields in Japan No. 5*. Council of Local Authorities for International Relations (CLAIR), Institute for Comparative Studies in local Governance (COSLOG), National Graduate Institute for Policy Studies (GRIPS).
- Pharr, S. & Putnam, R. 2000. *Disaffected Democracies: What's troubling the trilateral nations*. Princeton: Princeton University Press.
- Verba, S. 1978. *Participation and Political Equality- A Seven Nation Comparison*, Chicago: University of Chicago Press.
- Yamada, M. 2008. *Country Assessment Report on the State of Democratic Governance Japan: Pessimism in Mature Democracy. An Asian Barometer Conference on the State of Democratic Governance in Asia: Democratic Regimes in Northeast Asia*.
- Yin, R. 1994. *Case study research: Design and methods (2nd ed.)*. Thousand Oaks, CA: Sage Publishing.

Potential impact of the political movement in the Thai red-shirt village on OTOP (One Tambon One Product) organizations

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Abstract

In 2001 Thailand adopted the Japanese concept of OVOP (One Village One Product) organizations via its country-wide OTOP (One Tambon One Product) program. The results of OTOP organization development are mostly discussed with regard to development and community-based enterprise. However, there is little focus on organizational participation within OTOP organizations as a reflection of external political ideas. For example, one year ago the “Red-Shirt village” movement was initiated in many parts of Thailand. This movement represents, amongst other things, people’s specific community-oriented understanding of democracy and collaboration embedded in their daily lives. But officially, there are no links between OTOPs and the “red-shirt movement”. In contrast, this paper investigates how this new form of political movement might influence OTOP organizations at village level towards a more democratic organization. The analysis focuses on two main issues. First, it shows how processes of formal and informal decision-making with regard to the management, administrative structure as well as social interaction amongst OTOP members might be influenced by the idea of ‘political participation’. Second, it interrogates how the notion of ‘political participation’ of the villagers contributes to, and alters, decision-making processes in OTOP organizations under the ongoing democracy dilemma in Thailand. The paper will identify key criteria for the possible sustainability of OTOP structures within the changing political and economic environments.

Introduction

Originally obtaining a model from the OVOP (One Village One Product) movement in Oita, Japan (Fujimoto, 1992), the OTOP (One Tambon One Product) project in Thailand was initiated in 2001 according to the government’s policy to encourage economic growth. According to the report of the Community Development Department (CDD) in Thailand, OTOP’s sales sharply multiplied 4.6 times during 2002-2008. This economic growth happened largely in two main types of OTOP organizations: community-based enterprises (CBEs) and small and medium-sized enterprises (SMEs). However, only around 34% of community-based enterprises are involved in OTOP schemes. Some scholars pointed out that in contrast to official claims, practices of OTOP projects were not as sustainable. Main reasons for this are that the organizations hugely relied on the central government; after a new government empowered by the military came to power in 2009, the OTOP program was swept away from the original route (Natsuda et al, 2012, pp. 375-376).

OTOP projects are mostly stagnant at the level of local authorities or provincial powers, such as local governors, head of *tambons* (sub-districts in Thailand), head of villages and the like. Budgets from the central government are used mainly by these local power elites (Ockey, 2004). In contrast, villagers are given simple tasks and are largely excluded from participation in decision-making or operation management. Local communities, which were supposed to gain direct benefits, hardly take part in the OTOP organization.

But there are more country-wide developments in Thailand which might counteract this local elitism. Since the military coup d'état in 2009 in Bangkok, the rural villagers have constantly changed their attitudes towards political situations. The conditions of political knowledge and understanding about the country sovereignty are pervasively expanded and increased. Consequently, new forms of group and union fighting for more democracy have emerged. Such group claims for more democracy might come in different approaches and perspectives. Many of them illustrate their political positions by the colors of shirt or T-shirt that they wear when they participate in political activities (Thaizer, 2009). The biggest and most controversial alliance is the "red-shirt people". Members of this movement can be found predominantly in rural areas. They support mostly the previous government headed by the former Prime Minister Thaksin (Petty, 2010). Main activities of the red-shirt village federation are encouraging democratic movements, such as democratic community invigoration and self-reliant rural development via cooperative projects (Boonyarattanasoontorn, 2006; Kurokawa, 2010; Kurokawa et al., 2010; Lortanavanit, 2009).

This research, thus, focuses on how the red-shirt village movement might influence OTOP organizations and in which ways. The study intends to reveal the possible impact of political participation in the decision-making process, formally and informally, of the communities as well as its contribution to the villagers in the OTOP organizations.

Methodology

For this research, a case-study approach (Yin, 1994) and qualitative research methods (Saunders et al, 2007) were chosen, especially semi-structured in-depth interviews and participatory observation. Altogether, 12 interview sessions were held with leaders, participating villagers, and former members of OTOP organizations in red-shirt villages in three regions of Thailand: provinces in the North (Chiang Mai and Phrae), in the South (Songkhla), and in the North-east / 'Isaan' region (Udon Thani and Sakon Nakhon).

Discussion

Primary findings of our empirical research suggest that the OTOP project focuses on the concept and model operation rather than the root cause of local development. Although OTOP organizations in Thailand are mostly managed by CBEs, they are hardly providing opportunities for villagers in each community to participate in decision-making processes.

Moreover, interviews with former members of OTOP organizations revealed that many OTOP products are not sellable and difficult to gain attention from consumers. As a result, OTOP organizations appear only on the surface of provincial, regional, and national levels, for example the provincial councilors, OTOP websites, and a few related and designated government departments such as the Community Development Department (CDD) ("Thai Products (OTOP): Once Tambon One Product", 2012), and the Department of Export Promotion (DEP) (Ninnart, 2004).

Our research shows that less influential members of local communities are not satisfied with OTOP activities and their results from the past ten years. The existing OTOP organizations seemingly have evolved into fairly orthodox businesses where members of local elites primarily pursue their own interests, seek their own advantages and accumulate power and resources in their hands.

Such developments have encouraged many villagers to seek for alternatives. For example, cooperative schemes provide them with better opportunities to pursue their interests and to participate

in all activities. Because of the latest political developments, such alternatives are now actively offered to them by the red-shirt village federation, which also has the same political ideology. This corresponds with classical ideas of community development, i.e. that local initiatives such as OTOPs or cooperatives should be developed bottom-up and, as a consequence, be able to improve the well-being and life quality of villagers.

The findings from both empirical data and research interviews not only verify that political participation is the key motive in an active participation in the decision-making process for community development (and as such opening community cooperative stores and market services), but also show that it can drive people to initiate and create sustainable democratic organizations in their community. This incubating scheme can potentially enhance and reconnect the missing link of OTOP structures in the long term.

References

- "*Thai Products (OTOP): Once Tambon One Product*". 2012. Retrieved October 29, 2012, from Bangkok.com: <http://www.bangkok.com/shopping-good-buys/thai-products.htm>
- Boonyarattanasoontorn, J. 2006. Do poverty alleviation policies contribute to the welfare of poor people in rural communities?: A case Study of six villages in Chiang Rai Province. *Thammasat Review*, 11(1), 87-114.
- Fujimoto, I. 1992. Lessons from abroad in Rural Community Revitalization: The One Village, One Product Movement in Japan. *Community Development Journal*, 27(1), 10-20.
- Kurokawa, K. 2010. Food Education as a Regional Development Policy for All - With Implications from Community Development in Japan and Thailand. *Australian Journal of Regional Studies*, 16(1), 61-80.
- Kurukawa et al. 2010. "Challenges for the OVOP movement in Sub-Saharan Africa: Insights from Malawi, Japan and Thailand". *JICA-RI Working Paper no.18*. Japan: JICA Research Institute.
- Lortanavanit, D. 2009. Decentralization, empowerment and tourism development: Pai town in Mae Hong Son, Thailand. *Southeast Asian Studies*, 47(2), 150-179.
- Natsuda et al. 2012. One Village One Product – rural development strategy in Asia: the case of OTOP in Thailand, Canadian. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 369-385.
- Ninnart. 2004. *One Tambon One Product (OTOP): A Showcase for Thai Folk Crafts*. Retrieved October 29, 2012, from Thaiways: http://www.thaiwaysmagazine.com/thai_article/2014_one_tambon_one_product/one_tambon_one_product.html
- Ockey, J. 2004. *Making Democracy : Leadership, Class, Gender, and Political Participation in Thailand*. Honolulu: University of Hawai'i Press.
- Petty, M. 2010. *Q+A: Thailand's escalating color-coded crisis*. Retrieved October 29, 2012, from Reuters: <http://www.reuters.com/article/2010/04/23/us-thailand-politics-idUSTRE63M15T20100423>
- Saunders et al. 2007. *Research methods for business students (4th ed.)*. Essex: Pearson education limited.
- Thaizer. 2009. *Who are the Yellow Shirts and Red Shirts?* Retrieved October 29, 2012, from Thaizer: Thailand travel guide: <http://www.thaizer.com/politics/who-are-the-yellow-shirts-and-red-shirts/>
- Yin, R. 1994. *Case study research: Design and methods (2nd ed.)*. Thousand Oaks, CA: Sage Publishing.

The netwar strategy of the Free Papua Movement and the response of the Indonesian government

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Abstract

This paper seeks to analyze the reason behind the Indonesia Government's policy of ignorance concerning the netwar strategy of the Free Papua Movement (Organisasi Papua Merdeka/OPM). Using John Arquilla and David Ronfeldt's theory on state response to the netwar strategy, the cost-benefit calculations of the possible strategy, the securitization-desecuritization process, the strategic culture of Indonesia regarding the OPM, and based on my research on this matter, I propose that the ignorance policy is driven by several considerations. Firstly, with the failure of the cost-benefit calculations to explain convincingly the ignorance strategy, I propose that the successful desecuritization process by several actors in the government and the redefinition of Indonesia strategic culture towards the OPM prompted the government to choose the ignorance policy, until now. This paper will also analyze the consequences of the ignorance policy. These answers will provide some lessons to other governments in the Asia Pacific region, such as China, Philippines, and also other countries facing a similar threat of a secessionist group, which uses similar tactics like the Free Papua Movement.

Introduction

The state's response towards the strategy taken by the secessionist movement has become an interesting subject in the study of international relations. In the contemporary context, especially in the information age, conflict between states and the secessionist movements have become more complex. This research analyzes the choice of strategy that was taken by the government in response to the action of the secessionist movement. The focus of the case was the Indonesian government's policy in responding to the netwar strategy of the Free Papua Movement (OPM).

This case was interesting because of the anomaly in the Indonesian response. The government opted to ignore the netwar strategy of OPM. In similar cases, where both the Russian and Sri Lankan government faced similar threats of the netwar strategy from Chechen and Tamil Tiger, they opted to respond by implementing a counter-netwar policy or by engaging the secessionist group in a cyberwar. Against that background, this research was conducted to explain the anomaly in the Indonesian government policy.

Methods

This research is a qualitative-descriptive study using the inductive process of collecting data, and then leading to a deeper understanding of the issues related to the state's response to the netwar strategy of the separatists. The induction process was performed after collecting data through in-depth interviews of policy makers in Indonesia, especially to see the response of policy makers to the netwar strategy of OPM. Interviews were engaged with the representatives of the Ministry of Foreign Affairs, Ministry of

Defense, Ministry of Communication and Information, Office of the Special Staff of the President on the International Affairs and the intelligence community.

Apart from policy makers, interviews were also conducted on groups of academics, especially those that have a role in providing input to policy makers. To understand the netwar conducted by OPM, this study also emphasizes on data about the netwar effort by OPM, which is obtained through the websites of OPM, managed by the Collective Editorial Board of the Diary of Online Papua Mouthpiece (CEB DoOPM).

In a theoretical context, this study was based on four main arguments that are derived from multiple approaches and concepts. The first argument was based on the views of game theory that considers the actor always acts rationally and always chooses the action that will benefit it, as well as the arguments about the prisoner's dilemma that the actor will choose the option that is likely to harm the opponent. A proposition can be formulated that Indonesia's response in the form of ignorance on OPM netwar strategy is based on cost-benefit considerations, in consideration that it will be more beneficial to ignore the netwar strategy of OPM, compared with the strategy of opposing or beckoning. The second argument, based on the concept of strategic culture, is that Indonesia's response in the form of ignorance was associated with the strategic culture of Indonesia related to Papua. The third argument, which is raised from the approach of aspirational constructivism, argues that the response was not only based on the strategic culture of the country, but also on the basis of historical legitimacy and rationality of the elite or policy makers. The last argument, also the main argument of this study, is based on the concept of securitization-desecuritization, that the choice of ignorance strategy is related to how the process of securitization-desecuritization was conducted by the policymakers.

Those four arguments are the basis of this study, although they were used more as a guide in the process of data gathering. The findings of the research will be used for arguing which proposition is a more relevant argument. Consequently, the approach and theory that was more relevant in this study may be more relevant in similar studies in the future.

Discussion

The analysis of the gathered data and facts showed several things. Related to the first proposition of the cost-benefit analysis, this study found that the threat posed by the OPM netwar strategy could potentially threaten the sovereignty of Indonesia, mainly through the network of international NGOs sympathetic to OPM. This phenomenon, although on one hand may damage the international image of the Indonesian government, does not prompt the government to act more strategically. The results of cost-benefit analysis have shown that if the Indonesian government develops the counter-netwar strategy, the war between the Indonesian government and the OPM in the context of information warfare will be quite balanced. The findings show that the government has the potential to defeat the global network of OPM. Therefore, the proposition that the ignorance strategy was chosen because it was the most profitable and rational, is no longer relevant.

The second and third argument, formulated based on the concept of strategic culture and the approach of aspirational constructivism, were not the main aspect in the ignorance policy. The findings show that the only possible influence exerted by both the culture and history was within the framework of the previous policy against OPM, which is more militaristic. From this research, it is quite difficult to clearly connect the cultural and historical background with the ignorance policy due to the militaristic identity towards the Papua. It is also quite hard to gather data from interviews that show the relations between Indonesia strategic culture or historical legitimacy and the ignorance policy.

The argument that actually had sufficient supporting data was the fourth proposition regarding the securitization-desecuritization process. This process transpires the presence of solid groups that encourage the desecuritization efforts, including the Minister of Defence and Minister of Foreign Affairs during 1999 until 2004. This view is also reinforced by the “neutral” position of the intelligence which was more neutral than the position of the officials (from the Ministry of Defense) within the military background. The absence or the lack of actors promoting the classical security paradigm is the possible reason for the absence of extraordinary measures with regard to the netwar strategy of OPM. However, the internal dynamics of the groups and the presence of military forces and officials with a military background have driven the debate into a deadlocked position. This is the reason why the government chose the ignorance policy, because of the equal composition of the securitizing actors and the desecuritizing actors.

As such, there are 3 (three) arguments that need to be reviewed at the end of this brief summary. The first is that the argument put forth by Arquilla and Ronfeldt, that the ignorance policy was simply chosen because of the lack of threat, is not apparent in this case. The configurations of the securitizing groups and desecuritizing groups have resulted in the choice of ignorance.

The second is that the principle of identity, which is associated with the strategic culture and historical aspirations, was not easy to explore in the interview process, because of the reluctance of the policy makers to respond explicitly to the issue of identity in their position towards Papua.

Thirdly, this research is still in the form of exploratory research, because of the lack of previous analysis of state policy, especially in Indonesia, in terms of the information warfare against the secessionist group. Therefore, the future researchs could benefit themselves by focusing on the effort to analyze the identity aspects of the state’s chosen strategy.

References

- Arquilla, J. & Ronfeldt, D. 1997. The Advent of Netwar. In J. Arquilla & D. Ronfeldt (eds.), *In Athena’s camp: Preparing for conflict in the information age*. Santa Monica, CA: RAND Corporation.
- Arquilla, J. & Ronfeldt, D. 2001. The Advent of Netwar (Revisited). In J. Arquilla & D. Ronfeldt (eds.), *Networks dan netwars: The future of terror, crime, and militancy*. Santa Monica, CA: RAND Corporation.
- Arquilla, J. & Ronfeldt, D. 2001. What Next for Networks and Netwar? In J. Arquilla & D. Ronfeldt (eds.), *Networks dan netwars: The future of terror, crime, and militancy*. Santa Monica, CA: RAND Corporation.
- Ayoob, M. 2005. Security in the Age of Globalization: Separating Appearance from Reality. In E. Aydinli & J. Rosenau (eds.), *Globalization, security, and the nation state: Paradigms in transition*. New York: State University of New York Press.
- Brauch, H. G. 2008. Securitization of space and referent objects. In H G. Brauch, et al. (eds.), *Globalization and environmental challenges: Reconceptualizing security in the 21st century*. New York: Springer.
- Buzan, B. 2008. The Changing Agenda of Military Security. In H G. Brauch, et al. (eds.), *Globalization and environmental challenges: Reconceptualizing security in the 21st century*. New York: Springer.
- Buzan, B. & Hansen, L. 2009. *The evolution of international security studies*. New York: Cambridge University Press.
- Clunan, A. 2009. *The social construction of Russia’s resurgence: Aspirations, identity, and security interests*. Baltimore: The Johns Hopkins University.

- Dannreuther, R. 2007. *International security: contemporary agenda*. Cambridge: Polity Press.
- Departemen Pertahanan RI 2008. *Buku putih pertahanan Indonesia 2008*. Jakarta: Departemen Pertahanan Republik Indonesia.
- Harsanyi, J. 1969. Game theory and the analysis of international conflict. In J. Rosenau (ed.), *International politics and foreign policy: A reader in research and theory*. New York: The Free Press.
- Johnston, A. I. 1995. Thinking about strategic culture. *International Security*, 19(4), 32-64.
- Karatzogianni, A. 2006. *The politics of cyberconflict*. Oxon: Routledge.
- Karatzogianni, A. 2009. Introduction: new media and the reconfiguration of power in global politics. In A. Karatzogianni (ed.), *Cyber conflict and global politics*. Oxon: Routledge.
- Ronfeldt, D. & Arquilla, J. 2001. Emergence and influence of the zapatista social netwar. In J. Arquilla & D. Ronfeldt (eds.), *Networks and netwars: The future of terror, crime, and militancy*. Santa Monica, CA: RAND Corporation.
- Snyder, J. L. 1977. *The Soviet strategic culture: Implications for limited nuclear operations*. Santa Monica, CA: RAND Corporation.
- Waever, O. 2008. The changing agenda of societal security. In H G. Brauch, et al. (eds.), *Globalization and environmental challenges: Reconceptualizing security in the 21st century*. New York: Springer.

Role of surgeons in a university hospital in Beppu: Risk factors for colorectal cancer in Japan

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Abstract

Kyushu University Hospital includes three hospitals: the main hospital and a dentistry hospital in Hakata, and the hospital in Beppu as the third one. In this hospital, we work at the department of surgery especially on gastro-intestinal tract and breast malignancies. This hospital has been treating cancers since 1931 as well as doing research. Recently we are improving surgical techniques by using endoscopic procedures and sophisticated anti-cancer drugs for our patients. However, in the current presentation, I would like to introduce our recent research study on the risk factors for colorectal cancers, such as genetic background, environmental factors and food/lifestyle. This is based on the data of collaborating work with 9 major universities and hospitals all over Japan. This study will also be of benefit to people overseas, and we would like to contribute to the internationalization of Beppu City through surgical work and research on cancer.

Introduction

Today's talk is based on our recent data, and will be of benefit to prevent from colorectal cancer which is a lethal disease whose number of patients is increasing exponentially. The morbidity and mortality of colorectal cancer (CRC) have been increasing in Japan since 1955. The identification of factors governing the development and progression of CRC would contribute to an improvement of the preventive measures and therapeutic outcomes. Multiple factors are thought to affect the colorectal epithelium during cancer development, such as the influence of epidemiological and environmental factors.

Materials and methods

Detailed information in regard to demographic characteristics was collected using a standardized questionnaire. The collected information included the following demographic characteristics: height, weight, smoking and drinking habits, activity, sleeping, stress, dietary habits, medical history, present illnesses, drugs, medications and vitamins, body condition, familial diseases and female-specific diseases. All control subjects had total colon fiberoptic examinations to confirm the absence of malignant lesions in the colon and/or the rectum. Odds ratios and 95% CIs were calculated using unconditional logistic regression models, adjusted for sex, age (5-year categories), and study area (Honshu and Kyushu).

Findings and Results

There were many cases of CRC associated with epidemiologic factors. The average age was significantly higher in 1,511 cases (63.72) than 2,098 controls (60.80) ($p < 0.0001$, student's-t test).

Weight at presentation was higher among the control (59.35kg) than cases (58.53 kg) ($p=0.0298$). As for smoking, total smoking period was much longer among cases (30.51 year) than controls (28.75 year) and was significant ($p=0.0082$). As for alcohol drinking, the period since quitting drinking was shorter among cases (5.21 years) than controls (9.60 years) and was significant ($p<0.0001$). As for the sort of alcohols, Japanese sake, distilled spirits, whisky and wine indicated a higher risk for CRC which was significant.

After the adjustment of data by the location, age and sex, they were evaluated to find out bona-fide epidemiologic and environmental risk factors. As for body mass index (BMI) at age 20, the odds ratio of CRC among cases with a BMI >25 was 1.94 (95% CI 1.25-3.02). The odds ratio for a BMI increment of one was 1.05 (95% CI 1.01-1.10) in men.

A review of the medical histories revealed that the odds ratio of diabetes mellitus for CRC was 1.50 (95% CI 1.05-2.14) in men. This finding is identical to the previous study by Campbell et al¹. However, a history of drinking alcohol was not a CRC risk factor in men or women. The odds ratio of cataracts in men was 0.46 (95% CI 0.30-0.72), suggesting that it reflects a protective marker for CRC. With regard to food intake specifically, with a higher frequency of pork and beef consumption, (i.e., more than 3 times per week), the odds ratio for CRC was concordantly increased (OR = 1.26 (95% CI 1.09-1.47)). Vitamin intake was a protective factor for CRC in men with an OR = 0.69 (95% CI 0.49-0.96).

Discussion

In the current study, we found that the presence of diabetes mellitus and higher BMI at age 20 were risk factors for CRC development, while high tuna and vitamin intake were protective factors against CRC. These four factors were associated with CRC and diabetes in general.

Recently, the American Diabetes Association and the American Cancer Society stated that diabetes (primarily type 2) is associated with an increased risk of some cancers, including colorectal cancers². They speculated that the association between diabetes and cancer may be due in part to shared risk factors between the two diseases such as aging, obesity, diet, and physical inactivity. Possible mechanisms for a direct link between diabetes and cancer include hyper-insulinemia, hyperglycemia, and inflammation. However, they concluded that many research questions remain. The above statements are in accord with our current findings, particularly as relates to the role of diabetes, obesity and lipid metabolism. However, the hazard ratio of those factors was very low (less than 2.0); therefore, it is possible that CRC is provoked not by a single factor, but by multiple factors, including interactions among genetic and environmental backgrounds.

In spite of the low odds ratio (less than 2.0) for CRC, previous studies have indicated that the 8q24 SNP is a risk allele for various types of malignancies, including colorectal cancers.

Against colorectal cancer, in recent years we have always applied "laparoscopic surgery" instead of the conventional methods. This approach enabled us to provide the following benefits: 1) Reduced stress and invasiveness for patients. 2) Shorten the period of hospital stay. 3) Minimize the surgical scar and better for cosmetic reasons. 4) Operation performed by highly skilled surgeons. Therefore, we would like to serve these technological innovations to the people living in Beppu City.

However, prevention of CRC is preferable to any treatments against cancers. Therefore, we have a plan to screen and choose the high-risk cohorts among a large number of the population (above 40 years old). As a matter of fact, we have a scoring sheet that contains less than 10 questions and the results of 5 certain blood tests. We use these to predict the risk of CRC and/or esophageal cancer. This may be followed by routine fiberoscopy every 6 months.

In conclusion, our hospital works and the current study will be of benefit for people from overseas, and we would like to contribute to the Internationalization of Beppu City through surgical work and research against cancers.

References

- Campbell PT, Deka A, Jacobs EJ, et al. Prospective study reveals associations between colorectal cancer and type 2 diabetes mellitus or insulin use in men. *Gastroenterology* 139:1138-46.
- Giovannucci E, Harlan DM, Archer MC, et al. 2010. Diabetes and Cancer: A Consensus Report. *CA Cancer J Clin.* 60:207-21.
- Berndt SI, Potter JD, Hazra A, et al. 2008. Pooled analysis of genetic variation at chromosome 8q24 and colorectal neoplasia risk. *Hum Mol Genet.* 17:2665-72.
- Li L, Plummer SJ, Thompson CL, et al. 2008. A common 8q24 variant and the risk of colon cancer: a population-based case-control study. *Cancer Epidemiol Biomarkers Prev.* ;17:339-42.
- Tomlinson I, Webb E, Carvajal-Carmona L, et al. 2007. A genome-wide association scan of tag SNPs identifies a susceptibility variant for colorectal cancer at 8q24.21. *Nat Genet.* 39:984-8.
- Takatsuno Y. 2012. The rs6983267 SNP Is Associated with MYC Transcription Efficiency, Which Promotes Progression and Worsens Prognosis of Colorectal Cancer. *Ann Surg Oncol.*

Epidemiologic analysis of maternal mortality and morbidity across Kazakhstan over 2007-2011

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Abstract

Taking care of the mother and child welfare is one of the major priority tasks of the Kazakhstan healthcare system and the strategic development of the country in general. We have analyzed the main socio-demographic indicators and data on maternal mortality, abortions and pregnancy complications, acts of delivery and the health status during the puerperal period by the regions of the country over the five-year period 2007-2011. The key cause of maternal mortality in the Republic of Kazakhstan is extragenital diseases; 31 cases in 2011 (over 47%). As regards with the duration of gestation, 80% of maternal deaths are accounted for by lying-in women and obstetric patients. Annually, around 100,000 abortions are registered in Kazakhstan. There is a high level of unprompted miscarriages among the abortions in RK (more than 47% of total abortions, 44,949 over 2011). Most abortions are registered in the Almaty and East-Kazakhstan Regions (above 12,000, equal to 13% of total abortions in RK). The total contraception coverage in Almaty in 2011 was 184,832 women, while the number of women of the reproductive age in this city amounted to 457,600 persons, i.e. 40% of total. The high percentage of mortality and pathology of pregnant women, lying-in women and obstetric patients reveal imperfections in the work of the primary-level medical personnel and family planning services in the said regions, and may be associated with a lack of specialists.

Introduction

The maternity and child welfare services are a major priority for the Kazakhstan healthcare system and the strategic development of the country on the whole. However, in spite of the achieved progress in the reduction of maternal and infant mortality in Kazakhstan, the data is one of the highest in the European region according to the World Health Organization, higher than the average index by the CIS countries, and compared to the countries with a high average income level (as stated by the World Bank) (17,4 per 100,000 of live-born children in 2011, and 22,4 per 100,000 live births in 2010).

Besides, cases of criminal abortion have been registered in the Republic up to now (22 cases in 2011,) and a few women have died because of these abortions (case mortality caused by abortions was 0,001 according to the data over 2011) as well as a high share of complications across pregnancy, delivery, and during the puerperal period (7571.2 per 100,000 women of the reproductive age in 2011).

To develop a maternal and perinatal mortality reduction strategy, it is necessary to have epidemiological evidence on the existing situation by the R.K. regions.

Methods

We have made an analysis of the main socio-demographic indicators and data on maternal mortality, abortions and complications of pregnancy, acts of delivery, and during the puerperal period by the regions of the country over the 5-year period (2007-2011), and a content-analysis of regulatory legal

acts relating to activities of public health organizations and mother and child welfare in RK. The following methods were used: collecting information and analytical, mathematical and comparative analysis.

The 5-year interval (2007-2011) was chosen not coincidentally: over these years, a whole number of active measures were taken for the reduction of maternal and infant mortality in Kazakhstan with the assistance of international organizations (USAID, UNICEF etc.), and the following program documents were elaborated and implemented: the State Program of reforming and developing public health for 2005-2010, the State Program of developing public health for 2011-2015 «Salamaty Kazakhstan», and since 2010 the National Universal Health Care has been implemented.

In addition, to implement principles of safe pregnancy and adherence to international standards of administering medical aid to women and children, in 2008, Kazakhstan was one of the first among the CIS countries to switch to the WHO live birth criteria; moreover, since 2007 diagnostics and evidence-based treatment protocols have been implemented, and since 2008 “BABIES Matrix” has been widely used to evaluate and monitor perinatal services. Furthermore, supported by international organizations, perinatal care improvement policies have been implemented such as «Safe Maternity Policy» and «Perinatal Care Efficiency Assistance».

On the average, over 360,000 acts of delivery are registered in Kazakhstan annually, most of which (99,5%) occur in hospitals; this proves accessibility of medical aid to obstetric patients in the Republic. Acts of delivery in Kazakhstan are included in the list of free care, but along budgetary divisions, there are paid ones as well.

Maternal mortality in Kazakhstan showed an explicit tendency to reduction during the last decade. At the same time, maternal mortality rates were very high in some regions. Thus, according to the data of 2011, most of maternal deaths are accounted for by the Akmola and Mangistau Oblasts (32,3 and 30,9 per 100,000 live births, respectively), and the least in the West, in Kazakhstan and Pavlodar Oblasts (0 cases and 7,8 per 100,000 live births, respectively).

When analyzing maternal mortality cases subject to the duration of gestation, it was found that most of the deaths occurred at the labor stage and the down-lying. As for the reasons, mortality from extragenital pathology (47% in 2011, Statistics Digest of 2012) ranks first in the maternal mortality structure; obstetric hemorrhage ranks second followed by toxemia of pregnancy. At the same time, just 14.4% are accounted for by extragenital pathology in developed countries, while deaths due to other reasons rank first in the maternal mortality structure (usually through the cesarean operation and anesthetic implications, etc.).

The Jambyl Oblast is in the lead in relation to the registered complications of pregnancy, acts of delivery, and those of the puerperal period (12,8 per 10,000 women of the reproductive age) together with Almaty City (12,1 per 10,000 women of the reproductive age). The said pathology more often occurs with women in towns and cities than those in rural areas; anaemia is at the top of complications of gestation (above 45%), and there is no tendency to reduction.

The situation with abortions is still difficult. On the average, over 100,000 abortions are registered in the Republic on an annual basis; at the same time there has been a tendency to decrease in abortions over the last 5 years (95,288 in 2011 against 133,097 in 2007). Most of abortions are procured in the East- Kazakhstan Oblast and Almaty City (over 12,000, i.e. about 13% of all in the country). Spontaneous miscarriages are at the top of the abortion structure (more than 47 % in 2011).

One should take into account that, in spite of abortion legalization in Kazakhstan and availability of reproductive health protection services, illegal interventions have been registered until now (22 cases in 2011). The East-Kazakhstan, the North-Kazakhstan and the Akmola Oblasts are in the lead with regard to illegal abortions. Complications caused by abortions in Kazakhstan have a tendency to

reduction. Other reasons (extragenital pathology, implications after anesthesia and others) rank first among abortion complications from year to year, followed by hemorrhage, infections and perforation. A high rate of abortions reflects failures of family planning services and access to contraceptives (thus, for example, in 2011 contraception in Almaty covered 184,832 women among 457,600 women of the reproductive age, i.e. 40% in total). High rates of maternal mortality and morbidity of pregnant women, obstetric patients and lying-in women, and a share of abortions reveal imperfections of the primary level and of family planning services, or the lack of specialists.

Discussion

The disputable matter is still the reliability of statistical data presented in the official statistics, since there are some discrepancies with such data as published in the World Health Statistics.

Secondly, the analysis of reasons of sharp “jumps” of rates by some regions requires a detailed study: thus, for instance, in the Akmola Oblast the maternal mortality rate was 0 per 100,000 of live births in 2010; it changed over a year into 32,3 per 100,000 live births in 2011, and in the Atyrau Oblast maternal mortality could be reduced more than twice over 2007-2008 (90,3 and 37,1 per 100,000 live births and so on).

Thirdly, migration movements as well as the number of illegal immigrants (mostly in the southern regions) must also be taken into account. Fourthly, the study of reproductive losses and health of pregnant women, obstetric patients and lying-in women separately in rural areas and towns and cities requires more detailed analysis due to the impact of a great number of social factors and specifics of delivery of healthcare.

References

- A.A. Smailov. 2011. Regions of Kazakhstan. Statistics Agency of the Republic of Kazakhstan, Astana, 24 pages (in Russian).
- Khalid S Khan, Daniel Wojdyla, Lale Say, A Metin Gьlmezoglu, Paul F A Van Look. 2006. Lancet 367: 1066–74 Published Online March 28.
- Purposes of development of the millenium in Kazakhstan in 2010, UN Country Office, R.K. Government.
- RK regulatory legal acts for health protection.
- Statistics Digest 2012. “Health of the population in the Republic of Kazakhstan and activities of public health organizations in 2011”, Astana.
- WHO analysis of causes of maternal death: a systematic review.
- World Health Statistics, 2010, WHO, Geneva, 2010.
- World Health Statistics, 2012, WHO, Geneva, 2012.

Distribution of thyroid disorders in Semey in 2009-2010: Screening at primary care clinics in the Republic of Kazakhstan

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Abstract

The population of Semey is in high risk of thyroid pathology, as the city is only 170 km from the nuclear test site, with a history of over 40 years of nuclear tests, where people may have been exposed to chronic exposure by low doses of radiation. In our study, we present data with distribution of various types of thyroid pathology in the city of Semey. Design of research work is a cross-sectional study with screening at primary care clinics, with a sample size of 1,659 people. The examination of the thyroid gland was performed in the period from September 2009 to May 2010 by the ultrasound method in combination with hormonal tests. Results of the study show that about 24% of examined residents have organic changes of the thyroid gland. About 229 (13.8%) people have nodular pathology, 69 (4.1%) have different types of goiter, 46 (2.8%) suffer from chronic thyroiditis, 28 (1.8%) show a decreased volume of gland, 22 (1,3%) show cystic changes, and 19 (less than 1%) show adenomas and colloid formation. An analysis of the data of hormonal status shows a high frequency of lack of hormones in 755 (45.5%) of the surveyed population, so that one can assume a high frequency of hypothyroidism.

Introduction

The prevalence of all thyroid disorders in adolescents and adults is estimated to be 1-4% and increases with increasing age¹⁻³. The annual incidence in adults has been estimated to be 0.05-0.1% for hyperthyroidism and 0.08-0.2% for hypothyroidism^{4,5}. Advances in thyroid diagnosis have created a new category of thyroid disorders such as subclinical hyperthyroidism and subclinical hypothyroidism⁶. Subclinical thyroid dysfunction is defined as an abnormal biochemical measurement of thyroid hormones without any specific clinical signs or symptoms of thyroid disease and no history of thyroid dysfunction or therapy⁷.

Subclinical thyroid dysfunction, which can be diagnosed by thyroid function tests before symptoms and complications occur, is viewed as a risk factor for developing hyperthyroidism and hypothyroidism. The goal of screening is to identify and treat patients with subclinical thyroid dysfunction before they develop any complications⁸⁻¹⁰. In this article we discuss the distribution of thyroid disorders among the population of Semey city, based on data of primary care clinics.

Subjects and Methods

We sought to investigate the distribution of thyroid disorders among population of the Semey city, Kazakhstan. This study included 1,659 subjects. Thyroid volume and structural disorders were measured with ultrasonography. Examination of thyroid gland was performed in the period from

September 2009 to May 2010. We also sought to identify the distribution of thyroid diseases in the following age groups: 15-35 years, 36-55 years, and 56 years or above. All subjects were characterized by gender, and age groups in comparison with ultrasound findings and hormone levels. In addition, patients with unclear structural abnormalities were sent for biopsy, if clinically indicated.

Certainly, thyroid diseases are more common among women than men. Blood samples were drawn and stored at - 20 C. In the end of each month samples were analyzed in laboratory. Thyroid-stimulating hormone (TSH) and free thyroxine (T4) levels were measured to assess clinical thyroid dysfunction. Antithyroid globulin (ATA) levels were quantified as immunological measures of autoimmune thyroid disease.

All statistical analyses were performed using SPSS version 20 for Windows. For sample characteristics, data were evaluated using descriptive statistics for measurement of central tendency (mean) and dispersion (standard deviation, 95 % CI) or frequency and percentage, as appropriate.

Findings and Discussion

Thyroid disease is much more common than overt disease in primary care populations. In our study there were 1,384 (83,4 %) females and 275 (16,6%) males, in total 1,659 subjects. The average age in examined residents was 44,1 (SD ± 15,26) in females and 44,8 (SD ± 14,96) in males, with no significant difference (p=0,45). All participants were divided into three age groups: young adults (15-35 years), middle (36-55 years), and older adults (56 < years) to estimate the distribution of thyroid diseases in different age groups.

The number of participants in age groups were 15-35 (26.5%), 36-55 (47.6%), 56 <(25.8%) in males and 15-35 (30.3%), 36-55 (43.5%), 56 <(26.1%) in females. A comparison of the age groups showed no statistically significant difference between men and women (p <0,366, 95%CI).

Ultrasound findings of the study showed that 92 (18,7%) young adults, 197 (26,9%) middle adults and 125 (28,9%) old adults had parenchymal disorders (Table 1). In addition, a large number of structural findings were thyroid nodules. Of course we should remember that different variations of organic disorders are possible.

Table 1. Prevalence of thyroid structural disorders in the studied population

	Age groups		
	15-35 (%) n=493	36-55 (%) n=733	56< (%) n=433
No pathology	401 (81,3%)	536 (73,1%)	308 (71,1%)
Nodularity	48 (9,7%)	107 (14,6%)	74 (17,1%)
Thyromegaly	18 (3,6%)	43 (5,8%)	8 (1,84%)
Thiroiditis	12 (2,4%)	20 (2,7%)	14 (3,2%)
Hypoplasia	5 (1,01%)	13 (1,7%)	10 (2,3%)
Cysts	8 (1,6%)	7 (0,9%)	7 (1,6%)
Adenomas	-	5 (0,6%)	9 (2,07%)
Colloid goiter	1 (0,2%)	2 (0,2%)	2 (0,4%)

The next step in the screening of thyroid disorders was to assess subclinical and clinical thyroid disorders by using TSH and T4 levels. About 45% of participants had decreased levels of T4 and increased TSH indicating subclinical hypothyroidism and increased T4 and decreased TSH of about 11% indicating the presence of subclinical hyperthyroidism. Only 14% of cases had an increased ATA level that suggests chronic inflammation in the gland.

According to studies in different countries diagnosed thyroid pathology ranges from 7,5 - 11%, and increases with age. Thus, we may suppose how many people could have asymptomatic thyroid disorders. The population of Semey region exposed to low doses of radiation during a few years, and low level of iodine intake may explain the level of subclinical thyroid disorders. Previous screening was conducted among population of Semipalatinsk nuclear test site in 1998 and showed a prevalence of thyroid disorders in the range 28-31%. In addition, further studies are needed to develop a comprehensive strategy to define the prevalence of thyroid disorders in the general population.

References

- Bensenor I. 2002. Screening for thyroid disorders in asymptomatic adults from Brazilian populations. *Rev Paul Med* 120(5):146-51.
- Berg A. 2004. Screening for Thyroid Disease. U.S. Preventive Services Task Force. AHRQ Pub. No. 04-0530A.
- Danese MD, Powe NR, Sawin CT, Ladenson PW. 1996. Screening for mild thyroid failure at the periodic health examination: a decision and cost-effectiveness analysis. *JAMA*.;276(4):285–292.
- Dos Remedios LV, Weber PM, Feldman R, et al. 1980. Detecting unsuspected thyroid dysfunction by the free thyroxine index. *Arch Intern Med*. 140:1045–1049.
- Eggertsen R, Petersen K, Lundberg P-A, et al. 1988. Screening for thyroid disease in a primary care unit with a thyroid stimulating hormone assay with a low detection limit. *BMJ*.;297:1586–1592.
- Falkenberg M, Kagedal B, Norr A. 1983. Screening of an elderly female population for hypo- and hyperthyroidism by use of a thyroid hormone panel. *Acta Med Scand*.;214:361–365.
- Ladenson PW, Singer PA, Ain KB, et al. 2000. American Thyroid Association guidelines for detection of thyroid dysfunction. *Arch Intern Med*.160:1573–1575.
- McDermott MT, Ridgway EC. 2001. Subclinical hypothyroidism is mild thyroid failure and should be treated. *J Clin Endocrinol Metab*. 86:4585–4590.
- Sundbeck G, Lundberg P-A, Lindstedt G, et al. 1991. Incidence and prevalence of thyroid disease in elderly women: results from the longitudinal population study of elderly people in Gothenburg, Sweden. *Age Ageing* 20:291–298.
- Tunbridge WMG, Evered DC, Hall R, et al. 1977. The spectrum of thyroid disease in a community: the Whickham survey. *Clin Endocrinol (Oxf)* 7:481–493.

Analysis of students' social life and access to health services, based on a study in Semey State Medical University, Kazakhstan

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Abstract

Young adults are faced with health problems, as well as problems of access to healthcare facilities. In the present study, we assessed socio-economic status and presence of access barriers to health services among the youth. The subjects were 1,178 young people (276 males and 902 females), with a mean age of 19.51 ± 1.44 SD years, from Semey State Medical University, Kazakhstan, who decided to participate in the study on a voluntary basis. We evaluated the Socio-economic status and presence of access problems [Total number=6; "Normal"("0-1 barrier") or "poor" (2-6 barriers)] by using self-reported questionnaires. The obtained results represent indicators of access to health services (number of barriers), and reveal that poor access to health services can be associated with socio-economic status among these young adults.

Introduction

There are hundreds of original studies dedicated to reproductive, mental, general health problems, as well as access to healthcare services among young adults. The major health problems for young people are largely preventable (Andre Tylee, Dagmar M Haller, Tanya Graham, Rachel Churchill, Lena A Sancu, 2007). A large number of the youth are students of colleges and establishments of higher education with special conditions of life (Babar T. Shaikh, Education for Health, 2004). Young people are faced with health problems and health-risk behaviors, and at the same time with barriers of access to healthcare facilities (S.Quine, M.Booth, 2003).

Health services are often of poor quality both in the way in which they are provided, and in the way in which they meet the expectations of young people (the European magazine for sexual and reproductive health, 2009). Students from 1st to 4th course are young adults with immense changes that take place during adolescence, heralded by puberty. WHO defines adolescents as people aged 10–19 years, youth as those aged 15–24 years, and young people as those aged 10–24 years. Also, medical students have close contacts with all types of health and social services, and special knowledge about health risk factors, but still remain unhealthy and show adherence to the risk behaviors.

The purpose of this study was to assess the socio-economic status and presence of access barriers to healthcare services in students of Semey State Medical University, the Republic of Kazakhstan.

Methods

A cross-sectional study was conducted among students of the General Medicine faculty from 1st to 4th course, Semey State Medical University, the Republic of Kazakhstan. Before enrollment of students in the study, an informed consent was obtained from each individual. A total 1,187 students participated in this study. The response rate was 99.24% (1178 out of 1187). All subjects were consistently

distributed for sex, age, language of education (Russian/Kazakh), living status (with family/living alone), and form of education (budget/commercial form), financial status and scholarship assistance from the university, self-assessed health status, readiness to improve the quality of healthcare to young adults, and were divided into two groups as follows: “Normal” access and “Poor” access to healthcare facilities.

The questionnaire form was based on the WHO basic points of delivering healthcare to youth. The access variable categorized students according to whether they reported the absence (as normal) or presence of barriers, with poor access signifying more than one barrier to healthcare facilities. The highest score, according to the number of questions about barriers, was six. Results were summarized using descriptive statistics for measurement of central tendency (mean) and dispersion (standard deviation). For continuous data conforming to normal distribution, significant differences between two groups were assessed using *t*-test and for quantitative data significant differences between two groups were assessed using χ^2 -test. Statistical significance was set at $\alpha=0.05$. Statistical analysis was performed using the Epi Info software, version 3.5.4 for Windows.

Discussion

The total number of respondents was 1,178, out of which 276 (23.4%) were men and 902 (76.6%) were women. The mean age of the women (19.43 ± 1.31 years) was significantly higher than of the men (19.78 ± 1.76 years, $p < 0.001$). There were 475 students with Russian language of education (40.3%) and 703 with Kazakh language of education (59.7%). Most indicated that they lived independently (live alone) 799 (71.4%), while the number of participants living with family was 320 (28.6%). A large majority of students received the governmental grant for education 867 (79%), and only 230 (21%) had to pay for education in the university. Those on scholarship were 808 (69.1%), and without were 362 (30.9%). About half of students 514 (45.1%) reported that they had a “bad” financial status (“have money only for living or need it badly”). Also, a large number of participants assessed own health status as “bad”; 680 (59.2%).

A high percentage of young adults maintained that they wanted to participate in improving of the current healthcare system, especially medical services activities; 707 (61.6%). With answers to questions about barriers we calculated the sum of barriers for each student and divided them into two groups. The classification of “normal” access to healthcare facilities was based on assumption that only one barrier was present, such as the chance of developing in city youth-friendly services. This assumption was limited only by the barrier of equity as the indicator of violation of human rights.

Then we classified “poor” access to healthcare facilities as a sum of barriers from 2 to 6 (maximal score for one person is 6). Based on this classification we defined the group of “Normal” 609 (51.7%) and group of “Poor” 569 (48.3%) access to healthcare facilities. All participants of study had at least one barrier of access to healthcare services. When we divided all participants into two groups according to classification of quality access, no differences in language of education ($p = 0.852$) and readiness to improving the quality of healthcare system to young adults ($p = 0.597$) were observed between each group. There were significant differences based on gender ($p = 0.067$), age ($p = 0.055$), living status ($p = 0.004$), form of education ($p = 0.029$), financial status ($p < 0.001$), scholarship assistance ($p = 0.033$) and self-assessed health status ($p < 0.001$). These factors were identified as key factors for determination of access to healthcare facilities.

The population of students has always been vulnerable to lack of time to visit a healthcare service facility due to academics obligations to spend the whole day in the seminars, lectures and clinical

bases. Even among medical students close to health facilities, their self-assessed health status remained poor as shown in this study as well as studies in other countries.

In the context of this study several limitations should be noted. Our subjects had an average age from 18 to 21 years appropriate to the range of the WHO definition of young people, but the results of this study cannot be representative of the general population. In particular, medical students have special conditions of daily life and may not show the daily activity of ordinary young adults. Students who participated in this study have been volunteers from Semey State Medical University. So, findings from this study may not be representative for all graduate and undergraduate university students. Data were collected using a self-report method. Self-report collection of information cannot guarantee true answers, which therefore limits generalizability.

In this cross-sectional study, we found a high rate of barriers among young people, despite the fact that they would be future doctors and should be informed about activities of healthcare services. In conclusion, we identified that living status, financial and self-assessed health status can be associated with access to healthcare facilities in students of medical universities. Further studies are needed to confirm the association of these factors with access to healthcare facilities.

References

- Andre Tylee, Dagmar Haller, Tanya Graham et al. 2007. Youth-friendly primary-care services: how are we doing and what more needs to be done? *Lancet*, 7, 1- 9.
- Babar T. Saikh. 2004. Stress among medical students. *Education for Health*, 17-3, 346-353.
- S.Quine, M.Booth et al. 2003. Health and access issues in Australian adolescents: a rural-urban comparison. *Rural and Remote Health Research*, 245, 1-11.
- World Health Organization. 2009. *The European magazine for Sexual and Reproductive Health*.

The profile of children in orphanages and the main reasons of institutionalization in Semey city, Kazakhstan

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Abstract

More than 153 million children worldwide have been orphaned by the loss of one or both parents, and millions more have been abandoned. In 2010 the rate of institutionalisation of children in Kazakhstan (1593,9 per 100,000) was the highest in the Commonwealth of Independent States. We investigated the profiles of children and main reasons of child abandonment through the retrospective analysis of the documentation of orphanages. The research was done in the orphanage for 0-4 year-old babies (74 babies) and the orphanage for 8-18 year-old children (82 children) of Semey city (East-Kazakhstan oblast of the Republic of Kazakhstan). We took into account such factors as child's sex, age at admission, period of residence at the orphanage, place of residence of parents (urban, rural), parents' age on the birth of their children, their marital and social status, chronic diseases of the parents, number of children in the family, factors of social risk in the family and the reasons of institutionalisation. The main reasons of child abandonment were deprivation of parental rights, children abandonment, voluntary abandonment of parents due to severe child pathology and poor material conditions. The obtained data show the need to strengthen the work of social services in the region.

Introduction

In 2010 the rate of institutionalisation of children in Kazakhstan (1593,9 per 100,000) was the highest in the Commonwealth of Independent States. Findings across time and studies consistently show the negative impact of institutionalization on children's intellectual, physical, behavioral, social and emotional development. Saving the child's biological family is not only in the interest of the child and his parents, it is also beneficial to the society and the state. The cost of maintaining one orphan at the orphanage during a year is comparable to the costs of the successful prevention of almost nine cases of abandonment.

Therefore, a study to identify the causes of child abandonment is one of the topical and social issues facing our society today. Only by analyzing the problem of child abandonment, we can talk about ways to reduce the growth of child abandonment and increase the efficiency of the prevention and the possibility of providing timely assistance to families in difficult situations.

Methodology

Our study was conducted in the children's homes and orphanages. With the method of cross-sectional survey we conducted a retrospective analysis of documents of 82 children at their homes and 74 children in the orphanages in Semey (2012), with informed consent and compliance of confidentiality. The obtained information was entered into records of medical social survey of children of orphanage and children's home, and then these data were processed using the statistical program EpiInfo (CDC).

Discussion

Age of children in the orphanage was from 8 to 19 years, the average age was 14.7 years, and mode 16 years. The age of children in the orphanage ranged from 4 days to 5 years 3 months, average age of 2 years, mode of 1 year 8 months. Among all children boys (61,5%) prevailed, and girls were fewer (38,5%).

Distribution by nationality was as follows: in the orphanage there were equal number of Kazakh and Russian children (39,2%), children of mixed ethnicity were fewer, such as Tatars and Germans. At the children's homes distribution was different; among older children, more than half of children were of Russian nationality (58,5%), children of Kazakh nationality were less (25,6%), and then children of mixed ethnicity, Tatars and Germans.

The age of children of the orphanage when they were for the first time taken for the care of the state institution ranged from 4 days to 4 years 3 months; with the average age of 10 months. Most of the orphanage children come here at the age of 1 year. The age of children living at home when they were taken for the care of the state institution for the first time ranged from 1 year to 17 years, with an average age of 7.5 years, mode - 10 years.

As a rule children often come to orphanages from family and maternity homes. Older children often come to the children's homes from the center of temporary isolation, adaptation and rehabilitation of juveniles and from the shelter "Teenager", and then from family, as well as hospitals where children were left by their parents. The period of stay in the orphanage at the time of the study for children ranged from 0 to 4 years 5 months, on average 1 year 2 months, mode 5 months. The period of stay in the children's home for older children ranged from 1 year to 17 years, on average 7 years 4 months, mode 8 years.

Among the reasons of placing children in the orphanage the first place was for deprivation of parental rights, then application for temporary raising in the group "Hope" for the period of 3 months, and the third place exposed children, then refusal of parents to raise a child in connection with the severe pathology of the child, then parents' refusal to raise a child for other reasons, often due to poor financial situation, or lack of a spouse. True orphans, for whom these state institutions are meant do not make up the largest share of all children.

At the children's home a number of causes of giving children to the state institution for upbringing exist, headed by deprivation of parental rights, at the second place death of one or both parents, and the third place refusal of parents to raise a child for other reasons. Refusal due to severe pathology is absent here because children with pathology are denied at their young age and placed in institutions after orphanage.

As seen from the above data, the majority of children have living parents. The age of mothers at the time of birth of children was 15 to 44; the average age was 26 years, with a mode of 22 years. Information on the age of fathers of children in the orphanage was known only in 39% (29) cases, in the children's home in 31.7% (26). The age of fathers at the time of birth of children was from 19 to 54 years, the average age of fathers was 33 years, with a mode of 30 years.

According to marital status of mothers the number of single mothers 57.7% prevails, those who are in a civil marriage are 21.2%, those who are in registered marriage are 13.5%, widowed 3.2%, divorced 1.3%, and single fathers 0.6%.

Overall the index of social status of mothers is such that 70.5% of mothers are unemployed, i.e. unable to support a child on their own. The social status of fathers could not be determined reliably, because the data on this are almost absent (74,4%).

As for the number of children in families both children of the orphanage and children's home it is most often the case that there are one (31,1%), two (28,1%), three (22,2%), four (10,4%) children, and

a very small share for families with five, six and seven children. The birth order of the child who is brought up in the orphanage and children's home is about similar: 41.4% of children the first-born, 26.3% the second born, 16.5% the third-born, fourth (6,0%), fifth (4,0%), sixth (0,8%), and seventh-born (4,5%).

About 41.0% of women suffer from alcoholism, 6.4% from tuberculosis, and in 5.1% of women alcoholism is combined with cardiovascular diseases, 3.8% have venereal diseases, and tuberculosis is combined with alcoholism in 2.6%, heart disease 2.6%, and 1.9% suffer from mental illness; other problems 5.8%.

It was observed that drinking, even in the most harmless form, has a negative impact on the physical and mental development of the child. In families that use alcohol, the current situation makes it impossible to fully educate and train children.

Conclusion

Orphanages are not filled with orphans who have really nobody to take care of them, but with children who have parents, siblings, relatives; it is a phenomenon called "social orphans". Among the main reasons for the placement of children into public care, deprivation of parental rights and voluntary abandonment of parents to bring up their children prevail. The main reasons for the deprivation of parental rights are alcoholism and its harmful consequences.

In the case of voluntary abandonment of children the main reason is hard conditions and the lack of adequate facilities for the education and care of ill children. Biological families of these children are often families of non-working single mothers with low material prosperity, and signs of social distress. The above facts enable us to make a conclusion that on the way to prevent the placement of children in state institutions it is necessary to revitalize social services on family support, drug treatment services and promote family values in society.

References

- MacLean K. 2003. The impact of institutionalization on child development. *Dev Psychopathol*, 15:853–84.
- Pluye P, Lehinge Y, Aussiloux C, et al. 2001. Mental and behavior disorders in children placed in long term care institutions in Hunedoara, Cluj and Timis, Romania. *Sante*, 11:5–12.
- Spitz R. 1945. Hospitalism: a follow-up report. *Psychoanal Stud Child*, 2:113–8.
- Spitz R. 1945. Hospitalism: an inquiry into the genesis of psychiatric conditions in early childhood. *Psychoanal Study Child* , 1:53–74.
- Trans MONEE database. 2012. http://www.transmonee.org/index_ru.html
- UN Children's Fund (UNICEF), 2011. Prevention of child abandonment at birth. Materials for professionals and managers of health and social protection, guardianship authorities. p.99.

Analysis of primary children's disability for the period 2006 to 2010 in the East Kazakhstan oblast

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Abstract

According to the World Health Organization (WHO), the number of people living with disabilities exceeds one billion or about 15% of the world's population (the estimated global population in 2010). This rate is a higher than the previous estimate made by the World Health Organization in 1970 (10%). The number of people with disabilities in the Republic of Kazakhstan as of 1 January 2011 has been 506,400, including 45,800 disabled children. The number of disabled people with respect to the total population of the country is equal to 2.9%. According to the results of a retrospective analysis of the reports of the medico-social expertise made in the East Kazakhstan oblast, the greatest number of children with disabilities at the age up to 18 was in 2008, when this number amounted to 599 children (Intensive index-15,9), of which children with disabilities under the age of 16 amounted to 559 in the same year, and the largest number of disabled children at the age 16 to 18 was in 2006, when their number was 46. The structure of primary disability among children up to the age of 18 from 2008 to 2010 on the East Kazakhstan oblast looks as follows: first rank has been occupied by congenital malformations, deformations and chromosomal abnormalities, illnesses of the nervous system rank second, and psychic and behavioral disorder third.

Introduction

According to "The World Health Survey", approximately 785 million people (15.6%) aged 15 and older live with disabilities, while in the "Report on the global burden of disease" another estimate is made: around 975 million people (19.4%). Based on these evaluations the "Review of World Health" gives an estimate of 110 million (2.2%) having a very severe difficulty of functioning, whereas according to the "report on the global burden of disease" 190 million (3.8%) have a "severe disability", which is disability caused by such conditions as quadriplegia, severe depression or total blindness. The measurement of childhood disability (0-14) is carried out only in the "Report on the global burden of disease", according to which 95 million children (5.1%) live with disability, of whom 13 million (0.7%) are "severely disabled".

Analysis of data on general health DISSTAT the UN shows that the prevalence of disability varies from less than 2% in Syria, Bangladesh and Tunisia, to about 20% in Australia and New Zealand. The range of prevalence is related to the use of different concepts and indicators of functional limitations which are described by the ambiguous term "disability". Different approaches to measuring yield different results.

In Japan the number of persons with disabilities is 7,091,000. The share of persons with disabilities of the total number of the population is 5 %.

In the Republic of Kazakhstan the number of disabled people on January 1, 2011 year was 506.4 thousand people, including 45.8 thousand children with disabilities. The number of persons with disabilities per total population was 2.9%. The index of primary disability among children in the Republic of Kazakhstan is 18.5 per 10,000 population.

Methods

The aim was to study the dynamics and structure of primary disability among children in 2006-2010 in the East Kazakhstan oblast. A retrospective analysis was done over the reports of the form №7 about primary healthcare and social expert commission for 2006-2010 in the East Kazakhstan oblast.

Results and discussion

Table 1 – Established primary disability among children in 2006-2010 in the EKO

Years	Total children recognized as disabled	High-level index for 10, 000 persons	group I age 16-18	group II age 16 - 18	group III age 16-18	Disabled child age 0-16
2006	570	14,2	2	15	29	524
2007	517	13,4	2	19	21	475
2008	599	15,9	2	11	27	559
2009	553	14,9	3	16	15	519
2010	579	15,6		12	14	553

Table 1 gives the dynamics of primary disability among children in the EKO where the highest level of primary disability was in 2008, 15,9 per 10,000, and the lowest level was in 2007, 13,4 for 10,000 persons.

A chief cause of primary disability for 2006-2007 was congenital malformations, deformations and chromosomal abnormalities, in second place psychic and behavioral disorders, and in third one illnesses of the nervous system. In the period 2008-2010, congenital malformations, deformations and chromosomal abnormalities continued to be a leader, and illnesses of the nervous system took the second place as the main disability, respectively; psychic and behavioral disorders were in the third place. The smallest share of the primary causes of disability was for the human immunodeficiency virus.

Table 2 – Structure of primary disability among children under the age of 18 living in urban areas for the period 2006-2010 in the EKO.

Years	2006	2007	2008	2009	2010
1. Congenital malformations, deformations and chromosomal abnormalities	27,6%	28,7%	32,8%	32,9%	36%
2. Illnesses of the nervous system	19%	19,1%	17,8%	21,5%	17,8%
3. Psychic and behavioral disorder	19%	12%	9,7%	11,3%	7,8%

Table 2 shows that among the causes of primary disability congenital malformations, deformations and chromosomal abnormalities prevail; and in second place the illnesses of the nervous system and in the third place there are the psychic and behavioral disorders. The share of congenital malformations, deformations and chromosomal abnormalities in 2006 was 27.6%, which grew by 8.4%, and in 2010 they formed 36% of all primary causes of disability.

In Table 3 in 2008 there is a similar distribution of the primary causes of disability among children like those children living in urban areas, and in other years congenital malformations, deformations and chromosomal abnormalities prevail, in the second place psychic and behavioral disorders, and in the third place illnesses of the nervous system.

Table 3 – Structure of primary disability among children under the age of 18 living in rural areas for the period of 2006-2010 in the EKO.

Years	2006	2007	2008	2009	2010
1. Congenital malformations, deformations and chromosomal abnormalities	25,5%	30%	26,9%	27%	31,3%
2. Psychic and behavioral disorder	21,4%	27,7%	17,5%	21,8%	19,5%
3. Illnesses of the nervous system	19,3%	15,4%	25%	18%	17,3%

Conclusion

The highest level of primary disability was in 2008, 15.9 per 10,000 persons, and the lowest level was in 2007, 13.4 for 10,000 persons. In the dynamics of 2008-2010, congenital malformations, deformations and chromosomal abnormalities continued to be a leader, and illnesses of the nervous system took the second place on the ground of the primary disability; psychic and behavioral disorders were in the third place.

When comparing the structure of primary disability among children living in urban and rural areas it was revealed that in both groups disability due to congenital malformations, deformations and chromosomal abnormalities prevailed; among children living in rural areas the second place was taken by psychic and behavioral disorders, and illnesses of the nervous system were in third place. Among urban children on the contrary, the main cause of disability were illnesses of the nervous system in the second place and psychic and behavioral disorders in the third place. A study of the parameters studied depending on the place of residence showed that there is a trend to an increase in the level of primary disability of children living in urban areas.

Considering the fact that within 5 years of study of the causes of child disability in the EKO congenital malformations, deformations and chromosomal abnormalities are taking a leading place, it is necessary to register pregnant women in due time and to screen them for intrauterine infections, to improve personnel training (obstetrician-gynecologists, geneticists, doctors specializing in ultrasound investigation), and to improve equipping of medical organizations with modern medical equipment.

References

- Japan. 2006. Services and Supports for Persons with Disabilities in Japan, Ministry of Health and Labour and Welfare, accessed from www.mhlw.go.jp/english/wp/policy/dl/02.pdf 26 July 2011.
- Astana. 2011. National Action Plan for the long term to ensure the rights and improve the quality of life of disabled people in the Republic of Kazakhstan for 2012 - 2018 years. p.1-2.
- WHO/ ESCAP. 2009. Manual on Disability Statistics. <http://www.unescap.org/stat/disability/manual/> World report on disability. 2011. P: 8.

Checking Myrdal's cumulative causation model: Revisiting Gunnar Myrdal's Asian Drama using regression analysis

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Abstract

In his massive 1968 three volume *Asian Drama* Swedish sociologist Gunnar Myrdal outlined several reasons why post-independence South and Southeast Asia failed to develop as quickly as anticipated by both economists and by the populations themselves. Unlike the neoclassical economists before him, Myrdal felt that underappreciated “non-economic” factors such as health, politics, corruption, and historical context among others were vital in explaining why Asian growth had sputtered, and why poverty remained. Central to his thesis was the concept of *cumulative causation* in which the factors described above reinforced one another in either upward (spread effects) or downward (backwash effects) movements in different areas, in his terminology. This paper employs a primarily quantitative human geography approach to test Myrdal's cumulative causation hypothesis using secondary statistical data and indicators to find whether areas which were doing well at the “initial” stage continued to do well, and which areas which were underdeveloped remained so. Because *Asian Drama* focused primarily on India and because historical data is available at the district level, this paper similarly uses India as the test case for regression analysis. Specifically, this paper focuses on literacy rates and tests them against other indicators such as, gender gaps, and health indicators such as infant mortality against more economic indicators such as per-capital GDP, gini coefficients, and the human development index using regression analysis.

Introduction

This study uses quantitative state-wise data to evaluate the usefulness of Myrdal's contribution to the Young-Kaldor concept of cumulative causation in explaining development in India, as outlined in the 1968 study *Asian Drama: An Inquiry into the Poverty of Nations*. Published just over twenty years after Indian Independence, Myrdal wrote three volumes based on ten years of field research as to why Southern Asia¹ had not developed economically as quickly as the equilibrium theorists, then the dominate paradigm of the day, had proposed that it would. To test Myrdal's understanding of cumulative causation described below, we used simple regression data analysis to test the significance of the relationship between economic and non-economic development indicators.

Although Myrdal's original work examined all of Southern Asia, this work will focus on states in India. It was found that there was no strong single indicator which could account for the literacy rates as

¹ In Asian drama Myrdal study referred to “South Asia” as the territory administered by modern day Pakistan, India, Nepal, Sri Lanka, Bangladesh, Myanmar (Burma), Thailand, Vietnam, Laos, Cambodia, Malaysia, Indonesia and Singapore. To avoid confusion between Myrdal's definition and our contemporary understanding of the region as confined to Pakistan, India, Sri Lanka, Bangladesh and Nepal, we employ the broader term “Southern Asia”.

of 2011. However, this is in line with Myrdal's understanding that there are no magic bullets for development other than complex relationships as to why states develop or not.

Organizationally, this paper begins with a discussion of Myrdal's cumulative causation model compared to the equilibrium model that it challenged. There is a brief section on the methods used in the research followed by a discussion of the methods. This study intends to test the research methods so that by testing the methodology at an early stage comments and suggestions can be incorporated into subsequent research to expand the indicators used as well as include data from provinces in the Philippines, Indonesia, Thailand, and Malaysia, with an additional GIS component.

Cumulative causation theory emerged as an alternative to the neo-classical economic theory in general and the equilibrium concept in particular which dominated developmental economics in the decolonization era. The equilibrium concept suggested that by concentrating specifically on economic indicators (especially GDP), poorer newly independent countries in Southern Asia would catch up to the developed countries. In his *Economic Theory and Underdeveloped Regions* (1957), Myrdal disagreed with this paradigm on several levels, and argued that his contemporaries were too focused on simple hypothetical models and falsely assumed that complex social forces followed a set positive direction at a determinable pace as the neo-classicists assumed.

Breaking with the neoclassical approach and adopting the term "cumulative causation" from labor and manufacturing economists, Young (1928), Vedoorn (1949) and Myrdal along with contemporary N. Kaldor (1972), asserted that equilibrium economic models erroneously minimized the importance of what were then thought to be 'non-economic' social and institutional factors such as education, health, inequality, population control, secularization, and corruption among others. Creating an alternative model, Myrdal suggested that rather than a predestined gradual movement upward towards equilibrium with the developed world, non-economic factors reinforced one another in such a way which either accelerated development or calcified stagnation. In one example, Myrdal suggested improving general health would improve productivity thus leading to a stronger economy. He referred to these positive impacts as the 'spread' effects that have subsequently been referred to as virtuous cycles.

Conversely, he coined the term 'backwash' for the opposite phenomenon, later referred to as 'poverty traps', or 'vicious circles' where poor performance in one non-economic area would impact other areas negatively, suggesting that for instance the corrosive effects of corruption would slow down economic growth due to Byzantine layers of red-tape. Combining the 'spread' and 'backwash' effects, Myrdal's cumulative causation theory suggests that a country, state, or region could develop very quickly if the spread effects trumped the backwash effects; otherwise the backwash effects would not be held in check. It should be noted that throughout Myrdal's economic research, he is more focused on poverty alleviation rather than improving the economy as a whole.

Methods

When writing *Asian Drama*, Myrdal relied strongly on a qualitative understanding of much of the non-economic data that he attempted to integrate into economic discussions using the cumulative causation model. Much of the non-economic data he needed to support the cumulative causation hypothesis did not exist at the time (such as Transparency International Corruption Index) or lacked a significant temporal scale. Therefore, Myrdal was unable to support many of his claims with qualitative data. Instead, he would often offer his observations and those of regional experts and lines of inquiry for subsequent

research. However, today we can test some of Myrdal's hypothesis quantitatively due to the availability of new and tested indicators for many of the non-economic issues that Myrdal examined nearly fifty years ago.

This research uses qualitative state-wise secondary data collected by the Indian National Statistics Office to conduct simple correlation and regression analysis to examine the quantitative relationship between different indicators. Specifically, we concentrate on the r^2 and adjusted r^2 values to determine the relationship between variables. The final paper will use other statistical tools including GIS, and multiple factor recession analysis to test Myrdal's cumulative causation models.

This research uses two different time periods for analysis. For long term data analysis we analyze data collected continuously at the state level from 1961 to 2011. Doing so creates a large "n" value needed to test Myrdal's cumulative correlation hypothesis. Then we look more in-depth at the twenty year period between 1991 and 2011, given the improvement in the number of statistics available for analysis, the number of states and territories keeping records and with access to the impact of the 1991 economic reforms on the rate and speed of growth in non-economic social and health indicators.

The current article is an initial attempt to test the research methodology using state-wise data from India alone. Subsequent research will expand geographically to include other countries in the region including Philippines, Indonesia, Thailand, and Malaysia. Other indicators can be added to subsequent research upon availability. Also, making this initial research available, the author hopes to receive comments on other data analysis tools that might be used later. Finally, subsequent research will also include GIS components to see if there are geographical and topological patterns in the data.

Discussion

Due to space constraints this section presents an example of the findings in the data. Specifically we look at the impact of literacy on other indicators related to development as defined by Myrdal. A more detailed discussion is given in the conference which includes similar sections on health, education, corruption, population growth, and population density.

Literacy has improved markedly in India since Myrdal's publication of *Asian Drama* in 1969. However, there remain large differences between the most and least literate states in India. States with already high literacy rates, especially Kerala often retained high literacy rates; however some states such as Lakshadweep started from a very low literacy rate of 15.23%, and by 2011 rivaled Kerala at 92% literate. Also notable, is that states with low initial literacy rates, such as Orissa, Rajasthan, and Jammu have had an exponential literacy rate growth between 1971 and 2011, but still have relatively low literacy rates of 73%, 67%, and 68%, respectively. Conversely states with high initial literacy rates such as Kerala Chandagarth, and Delhi have much flatter literacy expansion but higher current rates in 2011.

Unlike Myrdal's suggestion that improvements would reinforce themselves, literacy steadily increased each decade, but at often varying speeds. It is also worth noting that surges in literacy as high as twenty percent in one decade occurred in several states throughout the period. These spikes in literacy most often took place in the period between 1981 and 1991 or between 1991 and 2001. Also, only one such literacy spike occurred between 2001 and 2011 (and in the small territory of Dadra and Nagar Havelid) during the period of the fastest economic growth. Further research should examine whether these rises are outliers in the data or are the result of particularly effective literacy drives; periods of particularly poor literacy expansion should also be examined.

No indicator could account significantly for the 2011 literacy rate or the rate of change in literacy between 2001 and 2011 using single indicator regression data analysis. However, given a low significance of F- value, we can say that the tests were statistically valid. The lack of high r-squared values suggests that no one indicator is able to fully explain either the 2011 literacy rates or the change in literacy rates during the test period 2001 to 2011.

References

- Government of India. 2001. *Census Data 2001*. Delhi: Government of India.
- Government of India. 2011. *Census Data 2011*. Delhi: Government of India.
- Kaldor, N. 1972. The Irrelevance of Equilibrium Economics. *Economic Journal*, Vol 28, 1237-1255.
- Myrdal, G. 1957. *Economic Theory and Underdeveloped Regions*. London: University Paperbacks, Methuen.
- Verdoorn. 1949. Fattori che regolano della produttività del lavoro. *L'industria Vol. 1*, (English translation Thuirllwall, A.P. "Factors that Determine the Growth of Labor Productivity", in McCombie, J., Pugno, M. and Soro, B. (eds.) 2002).
- Young, A. 1928. Increasing Returns and Economic Progress. *The Economic Journal*, 527-542.

Normalization of United States – Vietnam relations and its impact on the Vietnamese society

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Abstract

Given the bitter past, one could hardly expect the relations between Vietnam and U.S. to progress quickly. However, since the normalization treaty in 1995, relations have improved across a wide spectrum of issues. Vietnam has been one of the world's fastest-growing countries. At the same time, the normalization process has lasted for over 15 years. This study tries to examine what impact the treaty has had on Vietnamese society by asking "how the society in Vietnam has changed since the normalization treaty with the U.S.". To achieve the general objective of the study, qualitative methods are used. The forms of data collection are participant observation and in-depth interviews as well as secondary document analyses. Observation was conducted to see how changes appear in life, and how people perceive and interact with the social transformations. In-depth interviews using semi-structured questions were conducted with the informants such as school teachers, shop operators and state officials in the age range of 45 to 60 year old. The study postulates that the normalization treaty created a cascade of events that affected political organization, economic well-being and cultural aspects of life within Vietnam. The normalization treaty is an umbrella event under which society within Vietnam changed drastically.

Introduction

The reunification of Vietnam with the departure of the United States (U.S.) did not bring the expected economic benefits to the people of Vietnam. American economic sanctions with the political isolation imposed by the allies of the U.S. hurt Vietnam very badly. The collapse of the Soviet Union and increased political differences with China made the conditions within Vietnam unbearable for people who expected that a united Vietnam would bring about an economic renaissance.

The last two decades have seen major events in the relationship between Vietnam and the United States of America. The announcement by President Bill Clinton about normalizing diplomatic relations between the two countries in 1995, twenty years after the Vietnam War ended, was a truly historic event in the relationship between the two former adversaries and opened up a new chapter in Vietnam-US relations. Since the normalization treaty, overlapping strategic and economic interests have led the two sides to improve relations across a wide spectrum of issues (Manyin, 2005)

Apparently, the subject of normalizing diplomatic relations between Vietnam and United States has been the concern of sociologists, economists, policymakers and educators. However, the published studies have focused on the two-side relation between Vietnam and the US; scholars have engaged in a long debate on the impact that the normalization had mostly on bilateral economic and political relations. Much has been written on political and trade outcomes due to the normalization treaty between the US and Vietnam. However, little research has been done to examine how the normalization of political relations

have influenced the society of Vietnam. Neither does it touch the wider picture of the relations – not only the bilateral relations between the two countries but also bringing the world to Vietnam. There exists a gap to fill. This study takes up the challenge of examining the impacts of normalization to the Vietnamese society, which is still noticeably absent from debates around the issue of normalization.

Methods

To attain the aims of the research, qualitative research methodology is used. Data is collected through secondary data analysis, and field research with in-depth interviews. To get deep information in the perspectives of the informants on the topic of changes around normalization in the real society of Vietnam, qualitative methods were seen as the best choice. One of the major uses of qualitative methods is to explore phenomena and experiences from the perspective of individuals experiencing them. In-depth interviews with semi-structured and open-ended questions were conducted. To get a deep insight into changes in the Vietnamese lives, in-depth individual interviews were conducted simultaneously with the use of life histories and narrative inquiry methods. Life histories and narrative inquiry are methods that gather, analyze, and interpret the stories people tell about their lives (Marshall & Rossman, 1999). Narrative is an interpretive approach in the social sciences and involves using storytelling methodology (Marshall & Rossman, 1999).

The main stakeholders interviewed for this study are people in the political dimension, educational dimension and economic dimension including scholars, officials, and business owners. For instance, school teachers, shop-owners and state officials are interviewed. Well-informed people in the age group from 45 to 60 year old are chosen as the targeted group. The reasons for choosing these informants are that they have lived through the period before and after normalization. These people have directly and closely experienced the changes over the last 2 decades of normalization. They have the most profound understanding of events, problems and transformations during the process.

The field work was carried out in Vinh city, the largest city of North Central Region of Vietnam and also one of the six largest cities of Vietnam. The main reasons for selecting the research site are that Vinh city is a large municipality located in the northern half of the country and is regarded as one of the economic, cultural, political and social centers of Vietnam. Therefore the city may have experienced the significant transformation after Vietnam and the US signed the normalization treaty.

Discussion

After nearly 17 years, the normalization treaty has created a cascade of events that affected political organization, economic well-being and cultural aspects of life within Vietnam. The treaty, though between US and Vietnam, opened the entire world to Vietnam. It helped to integrate Vietnam into Southeast Asia and the rest of the world. Not only the US, but also the rest of the world are connecting to Vietnam. And thanks to normalization, isolation has turned into integration and Vietnam is linked with the rest of the world. Domestic political reform in Vietnam has seen significant progress but to some extent still lags behind the stunning transformation of the economy.

Economic reform enjoys broad-based support and now seems irreversible (Quinn-Judge, 2006). Its progress can be measured by hard data, and it is benefiting the whole population, from party cadres to

street vendors. It is clearly seen in people' living standards, in the physical outlook of the country as well as people' consuming habit. Political reform experienced changes in politics scene, in the nature of election, in the rebirth of civil society, and more democratic processes being set up. Social life witnessed Westernization, generational difference, as well as changes in societal relations.

This research can significantly contribute to Vietnam as well as to other societies in transition. After having a deep insight into the normalization process issues, particularly Vietnamese policy makers can draw up and implement appropriate policies to take full advantages of this chance to strengthen all dimensions of society. Moreover, the history of the Vietnam-US normalization process provides a scenario useful for resolving disputes and establishing normal relations between the United States and other countries (Clark & Sidel, 1998). Vietnam's experience highlights the successful strategies used by pro-normalization factions on both sides that could be adapted to other similar situations. Examining the factors that facilitated the Vietnam-US normalization process may be useful for exploring the possibilities inherent in other cases. What can Cuba, Iran, Iraq, and North Korea learn from Vietnam-US normalization that may be useful in their bilateral relationships?

References

- Clark, D., & Sidel, M. 1998. *The United States and Vietnam: three Years After Normalization*.
- Manyin, M. E. 2005. *The Vietnam-US Normalization Process*. Retrieved from <http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA461414>
- Marshall, C., & Rossman, G. B. 1999. *Designing qualitative research*. Sage Publications.
- Quinn-Judge, S. (2006). Vietnam's bumpy road to reform. *Current History-New York Then Philadelphia*, 105(692), 284.

Japanese identity construction in the discourse on “anti-Japan”

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Abstract

In Japan, as elsewhere, national identity is constructed in relation to various “others”. The paper explores Japanese identity construction in relation to one group of such “others”, those labeled as anti-Japanese (*han'nichi*) through a discourse analysis of how the concept of “anti-Japan” is discussed within Japan. Who are considered by the producers of the discourse to be anti-Japanese? Are the “others” grouped together as internal (domestic) as well as external (foreign) anti-Japanese? What is constructed as anti-Japanese behavior? Are those branded anti-Japanese seen as threatening Japan? Who are the actors responsible for the discourse? Do these actors form a more or less homogeneous group with a clear agenda or are there competing discourses? How is the concept of “Japan” constructed in relation to the threat of anti-Japanism? In other words, what identity is ascribed to Japan in the examined discourse? The analysis of these questions pays attention to change and continuity over time in the Japanese discourse on anti-Japan in a range of printed material, including parliamentary debates, books, newspapers and magazines. It is argued that the analysis of the discourse on anti-Japanism provides critical insights into the link between identity and threat constructions, which contain explicit or implicit foreign policy implications.

Introduction

In recent years, some literature has focused on the role of identity in Japan’s international relations and foreign policy (Ashizawa 2008, Bukh 2010, Catalinac 2007, Hagström 2012, Oros 2008, Schulze forthcoming 2013, Tamaki 2010). In this paper, an approach to the study of Japanese identity is presented that differs slightly with the ones common in existing research. It focuses not on how Japanese identity is constructed in relation to one particular “other”. Instead, it analyses the discourse within Japan on the concept of “anti-Japan” (*han'nichi*). The possible advantages of such an approach are that concentrating on ideas about what is “anti-Japanese” directs us to threat constructions—to constructions of threats to what is created as Japanese-ness and by extension to Japan. In addition, it allows the analyst to see how several “others” are related in a specific overarching discourse. It is argued that the analysis of the discourse on anti-Japanism provides critical insights into the link between identity and threat constructions, which may contain explicit or implicit foreign policy implications.

Methods

A wide range of printed material, including excerpts from parliamentary debates, books, newspaper editorials and magazine articles was collected. A search for books the titles of which carry the word “anti-Japan” was conducted in the National Diet Library’s database. Searches for newspaper editorials published between 1 January 1990 and 31 August 2012 in which the word “anti-Japan” is mentioned

was carried out in the *Asahi* and *Yomiuri* newspaper databases. In addition, a search was performed for statements made by lawmakers during Diet sessions in which the word “anti-Japan” is mentioned.

The following questions were posed to the material collected: Who are considered by the producers of the discourse to be anti-Japanese? What is constructed as anti-Japanese behavior? How are those branded anti-Japanese seen as threatening Japan? Who are the actors responsible for the discourse? Do these actors form one more or less homogeneous group with a clear agenda or are there competing discourses? The analysis of these questions pays attention to change and continuity over time in the discourse on “anti-Japan” within Japan.

Discussion

The search in the database for Japanese parliamentary debates (Gikai Kaigiroku) between 1 January 1990 and 23 October 2012 yielded 351 hits for the word “anti-Japan” (*han'nichi*). While there are fluctuations in the discourse in the Diet, 204 out of 351 statements appear in 2004 or later with very large peaks in 2005 (70), 2006 (34) and 2010 (31).

When it comes to newspapers, 60 out of a total of 84 editorials published in the *Yomiuri* since 1990 were published in 2003 or later. In *Asahi*, the corresponding number is 81 out of a total of 123. Even though the total number of editorials published in *Asahi* in the period analyzed is considerably larger than in *Yomiuri*, the number of articles that mention the word in the title of the article is greater in *Yomiuri*, where 11 titles include the word compared to five in *Asahi*. Whereas there are differences between the two newspapers, there are also similarities. For example, in the early 1990s, mainly in 1990 and 1991, the USA is associated with anti-Japanism. The USA then more or less disappears from the discourse in both papers with South Korea appearing frequently in the 1990s, especially in *Yomiuri*. China is more or less absent from the discourse until around 2003 after which it appears with great frequency, especially from 2005 onwards.

The search for books, which mention the word “anti-Japan” in their titles, yielded 115 results. 88 of these books were published in the 2000s and 80 were published since 2004. It is of course interesting that the number of published books mentioning “anti-Japan” in their titles has increased tremendously in recent years. However, it is even more interesting to know who is associated with anti-Japanism in these books. Among the books published since 2004, many deal with foreign countries. Some books discuss several countries that are grouped together as anti-Japanese. There are 44 dealing with China, 27 that discuss South Korea, 6 North Korea, one deals with Russia and one deals with the US. In addition, there are 20 books that focus on anti-Japan Japanese. Those labeled “anti-Japan Japanese” are usually parts of the media, for example *Asahi Shimbun*, and left-wing unions such as *Nikkyōso*. Interestingly, China does not appear until 2003. From the early 1990s up until 2002 South Korea dominates.

The discourse on anti-Japanism has undergone a change since the beginning of the 1990s. The word “anti-Japan” became much more prominent in the 2000s. In the 1990s, South Korea was the country most commonly associated with anti-Japanism. In the 2000s, especially since 2003-2004, China has emerged as the country by far most often linked to anti-Japanism. It is sometimes the case that those labeled anti-Japanese are depicted as threats to the type of Japanese identity constructed in the process. Importantly, the labeling of certain Japanese, usually left wing groups, as “anti-Japan Japanese” is a way of defining a specific kind of Japanese identity that excludes those who disagree with certain measures and policies. Such groups are often linked in the discourse to the foreign countries that are labeled anti-Japanese. The analysis of newspaper articles in the *Asahi Shimbun*, however, demonstrates how those labeled anti-Japanese (as *Asahi* often is) fight back by rejecting the

way in which Japanese identity is often constructed by some of the agents actively involved in creating the discourse.

In one such example, in an editorial published in the *Asahi* on 28 April 2004, a statement made by an LDP lawmaker, Kashimura Takeaki, concerning the kidnappings of Japanese nationals working as aid workers in Iraq is discussed. Kashimura had stated that among those kidnapped “apparently there are those who have openly criticized the dispatch of the SDF to Iraq. To use hard-earned tax money for such anti-government, anti-Japanese elements cannot but give you a strong sense of discomfort and unpleasantness”. It is mentioned that according to an April 2004 opinion poll, more than 30 percent of the Japanese population wanted the SDF to be withdrawn from Iraq. It is then asked whether these people are all “anti-Japanese”. It is argued that the “anti-Japanese” labeling of those who disagree with the government is undemocratic and akin to the labeling of people as “traitors” in wartime Japan.

The example demonstrates how political actors, in this case a parliamentarian, attempt to use the label “anti-Japanese” in order to promote or at least strengthen support for certain policies. By excluding those who criticize a policy from the Japanese national collective and depicting their views as anti-Japanese, a certain Japanese identity is constructed, an identity which proscribes and prescribes certain behavior. At the same time, it demonstrates that there is resistance to such attempts.

The way of studying Japanese identity presented in this paper differs from existing approaches in several ways. It might be argued that it is limited as it focuses on one word. At the same time, it arguably has several advantages. To begin with, it directs attention not only to how Japanese identity is constructed in relation to one “other” but to a number of others. In addition, it is possible to see how these “others” differ over time. Finally, it makes it possible to examine not only discussions of external others but also to illuminate how a key term is used in domestic struggles over Japanese identity.

References

- Ashizawa, Kuniko. 2007. ‘When Identity Matters: State Identity, Regional Institution-Building, and Japanese Foreign Policy’, *International Studies Review*, 10, pp. 571-598.
- Bukh, Alexander. 2010. *Japan’s National Identity and Foreign Policy: Russia as Japan’s ‘Other’*, Abingdon: Routledge.
- Catalinac, Amy. 2007. ‘Identity Theory and Foreign Policy: Explaining Japan’s Responses to the 2003 U.S. War in Iraq’, *Politics & Policy*, 35(1), 58-100.
- Hagström, Linus. 2012. ‘Japan, International Relations and Identity: Between “Normality” and “Abnormality”, Between the USA and China’, Paper presented at the *Collective Memory, Identity and International Relations* symposium held at Lund University, Sweden, 6-7 November 2012.
- Oros, Andrew L. 2008. *Normalizing Japan: Politics, Identity, and the Evolution of Security Practice*, Stanford: Stanford University Press.
- Schulze, Kai. (forthcoming 2013). *From “Head of Flying Geese” to “Thought Leader”: The Rise of China and Changes in Japan’s Foreign Policy Identity*, unpublished Doctoral Thesis, Department for Social Sciences/Institute of East Asian Studies, Duisburg-Essen University.
- Tamaki, Taku. 2010. *Deconstructing Japan’s Image of South Korea: Identity in Foreign Policy*, New York: Palgrave Macmillan.

Soka Gakkai in Cuba: Strategies of a Japanese new religion in a new socio-cultural setting

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Abstract

Soka Gakkai International (SGI) is a Japanese new religious movement based on Nichiren Buddhism. With chapters in 192 countries, SGI has become a global movement, claiming a world membership of 12 million individuals. It has developed in Cuba after the official visit of its President Daisaku Ikeda in 1996. The Soka Gakkai in Cuba (SGRC) received juridical recognition by the State in 2007. With a national membership of around 400 members and other followers, it has spread to most of the provinces in the country. How does a foreign religion like Soka Gakkai develop in such a different sociocultural setting? This presentation explores the development strategies of this Buddhist organization in Cuba. Drawing upon fieldwork in Havana in 2011 and theoretical perspectives on the religious economies model, I argue that SGI is developing in Cuba by keeping cultural continuity with the dominant state ideology that regulates the religious market, by supplying both general and specific compensators, and by maintaining an ambiguous medium-level tension with the socio-cultural environment to find a religious niche in the local sacred landscape. The specific implementation of these strategies takes place through 1) the linkage of SGI Buddhist humanism with National Hero José Martí's life and thought; 2) the institutional supply of both humanistic values and practical religious benefits, and 3) a dual discourse about Cuban religious culture.

Introduction

Soka Gakkai International (SGI) is a Japanese new religious movement (NRM) that has spread into more than 190 countries and claims a world following of 12 million individuals. It was founded in Japan by an educator Tsunesaburo Makiguchi (1871-1944) in the 1930s. Soka Gakkai ("Value Creation Society") draws its doctrines and rituals on the teachings of Nichiren, a Japanese Buddhist priest of the 13th century. After WWII, Soka Gakkai became Japan's largest lay Buddhist movement and began global expansion from the 1960s, under its subsequent presidents Josei Toda (1900-58) and Daisaku Ikeda (1928-) (Metraux, 2010).

In 1996, SGI's President Daisaku Ikeda visited Cuba in response to an official invitation from the Cuban government. He was then awarded the PhD Honoris Causa by the University of Havana and received some important State distinctions.

After Dr. Ikeda's official visit, the SGI began to develop in Cuba in the form of some small groups in Havana, the capital city. In 2007, it was officially recognized as Soka Gakkai of the Republic of Cuba (hereinafter, SGRC), becoming thus the first Buddhist organization with a juridical status before the Cuban government. At present, the SGRC has spread into 11 provinces and claims a membership of 400 individuals and some other sympathizers.

Although it remains a minority religion, its development and modest growth is significant when one considers the "cultural distance" between Buddhism and Cuban religious culture, and especially, the fact that none of its members is of Japanese descent. How does a foreign religion like Soka Gakkai

develop in such a different sociocultural setting? This presentation explores the development strategies of this Buddhist organization in Cuba.

Methods

I have collected the relevant data in Havana, Cuba's capital, from January to September 2001. Following a qualitative methodology, I conducted in-depth interviews with 15 adherents (9 women and 6 men), 1 visitor (male) and 1 disaffiliated (male). Interviews were conducted in Spanish, mostly at members' houses, and usually lasted more than one hour. During the period of fieldwork, I had several informal talks and telephone conversations with the informants to confirm or expand the contents of the interviews. I also attended two SGI group meetings and a gathering of the Youth Division. In addition, I analyzed documents by or about SGRC (like a dialogue between D. Ikeda and Cuban intellectuals (Ikeda & Vitier, 2001).

Taking SGRC as a case of the spread of this Japanese New Religion, I use the theoretical framework of the religious economies model (Stark & Bainbridge, 1996; Stark & Finke, 2000), particularly the supply-side approach, to describe and explain the institutional strategies that Soka Gakkai is implementing in Cuba.

Discussion

From the empirical data, I was able to identify the following strategies in the SGRC:

- 1) Keeping cultural continuity with the dominant state ideology that regulates the religious market, through the linkage of SGI Buddhist humanism with National Hero José Martí's life and thought.
- 2) Supplying both general and specific compensators, as humanistic values and practical religious benefits, respectively.
- 3) Maintaining an ambiguous medium-level tension with the socio-cultural environment to find a religious niche in the local sacred landscape, especially through a dual discourse about Cuban religious culture.

References

- Ikeda, D., & Vitier, C. 2001. *Diálogo sobre José Martí, el Apóstol de Cuba*. La Habana: Centro de Estudios Martianos.
- Metraux, D. A. 2010. *How Soka Gakkai became a global Buddhist movement: the internationalization of a Japanese religion*. Lewiston: Mellen.
- Stark, R., & Bainbridge, W. S. 1996. *A theory of religion* (1st paperb.). New Brunswick N.J.: Rutgers University Press.
- Stark, R., & Finke, R. 2000. *Acts of Faith: Explaining the Human Side of Religion*. Berkeley: University of California Press.

Kimono and the Internet

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Abstract

This paper examines the role of the internet in the present revival of kimono wearing in Japan. Kimono has continually changed through its history according to the political and social situation, and also with developing technology. The present revival of kimono could be considered as being driven by developing technology, but rather than technology in the methods of production, internet technology has enabled new developments in the way that kimono, kimono discourse, and information are appropriated. Kimono discourse is now "out there" rather than being locked into the world of the kimono schools and businesses. This has resulted in a great challenge to the regular channels for the appropriation and education of kimono. The paper outlines the many ways in which kimono wearers are using the internet to bypass the established channels in favor of a casual and democratic exchange of information. This is resulting in a change in the meta-knowledge that surrounds kimono, and a rejection of the established and iconic image of a formal and doll-like Japanese woman, in favor of a fashionable and expressive garment that is useful for everyday and is an option for wearing in the street.

Introduction

Clothing is part of material culture and has a double face. It is at one and the same time public and private, material and symbolic, always caught between the lived experience and providing an incredible tool with which to study culture and history (Paulicelli, E. and H. Clark 2009:3).

This paper grew out of a part of my doctoral thesis, "Revisiting Fashion and Tradition through the Kimono". The thesis discusses Western fashion theories which do not account for fashion in non-European nations and historical research on the kimono which demonstrates both a dynamic change in form and in social role, indicating the presence of fashion. It then continues by examining contemporary kimono from multiple angles, to reveal the garment in both global and personal, material and symbolic dimensions, as a fashion with depth, as a consumer product in the market place, as a casual garment worn by fashion conscious Japanese, and as a catalyst for group-forming activities. It became clear through this multi-methodological research that the internet was playing a key role in all these studies, and so this paper examines how the present revival of kimono, as a street fashion or a casual garment, has been driven by the motor of cyberspace.

Methods

To think of the internet as one technology is rather misleading, as there are several different platforms and ways of using it. Three methods have been used to explore online activity. Firstly, to establish the extent of internet activity, blogging activity was tracked over time to find out whether it was increasing or decreasing. To further investigate this phenomenon, I went to one specific blogging host site, *Blog Mura* (blog village) and in a similar way, traced the number of blogs over time. On this site, the blogs were categorized and data could be collected in each different category.

Another type of online forum is a facebook fandom. The second investigation was to become a fan of a kimono fandom and post updates, and see what kind of a response, if any, happened. On September 5, 2009, I discovered the kimono fandom page on facebook, which had started in February 2009. When I discovered the page there were 400 fans, and none of the postings came from Japan. There was little information and few postings on it. I started to post regular updates from Japan on to the page, to determine how big it would grow, and what kind of response would emerge.

Thirdly, I decided to conduct survey research abroad, using the internet as a platform, to determine whether it would be an effective tool for surveying kimono wearers, using the same survey that had been used in Japan. A comparative survey was conducted, using the same questionnaire that was used at Kimono de Ginza and Kimono Jack kimono wearing groups.

Results

There has been a constant increase in the number of kimono blogs on the internet, the rate of which is growing. This signifies a growing number of people interested in kimono. In 2012 there are almost 25 million people blogging about kimono, a lot of kimono talk. The majority of blogs are written by women. These women are computer savvy, with enough time to write a blog. They may be young housewives, or working women, but clearly this explodes the myth that it is only old women who are interested in kimono. The data shows that there has been a vast increase in blogging about fashion at *Blog Mura* over these three years. Over the same period of time, there has not been a corresponding decrease in kimono blogging (which would indicate that it is irrelevant clothing), but there has been a corresponding increase in blogs about kimono, indicating that it is a part of the general increase of interest in fashion.

In particular, by 2012, there are six new categories of kimono blogs. Increases of tenfold in the areas of *kitsuke*, men's kimono, *wasou* Japanese fashion are recorded. Everyday kimono blogs are ten times as frequent as *furisode* (formal kimono) blogs. This data all points to the fact that people are interested in, and would like to wear kimono as an everyday dress. People are not interested in kimono as a form of social or cultural distinction, which would be demonstrated by a higher number of formal kimono blogs, but are interested in kimono as street wear or ordinary fashion.

I decided to start posting on a fandom in September 2009. The fandom began to grow by about 50 fans per week, reaching 1,000 fans on November 5, and 2,697 on May 14, 2010. The rate of growth was steady and I was asked to become the administrator of the group in May 2010. The group provides a forum for asking questions, voicing opinions, and sharing links to exhibitions, fashion shows etc, and the membership is now over 7,500.

The survey monkey tool was useful for data gathering in a relatively easy way; however, the format was rather limited, as it only allowed ten questions. Only questions could be asked; check boxes could not be used. This meant that the categories had to be produced from the written results. This was not always easy, and not all respondents answer a question in the same way, making some of the results unexpectedly difficult to tabulate or use for comparisons. The results also demonstrated that whilst I may have thought that the questions were clear and unambiguous, two questions asked for overlapping information as pointed out by two respondents. The survey also revealed information that had not been directly asked, such as the extent of the informants' knowledge of kimono types, accessories etc, and also what appear to be the limits of resources available to overseas kimono wearers.

Discussion

The internet is the key tool in spreading information about kimono. It is used for shopping, with thousands of kimono for sale online, everyday. It is convenient and avoids the pushy staff of the kimono shops. For almost all kimono wearers outside Japan, it is the only source of kimono. The internet is also the preferred way to learn to dress, if there is nobody who can teach. Youtube and the Immortal Geisha forum are the two most frequently cited sources of information for those outside Japan. There are millions of kimono blogs in Japanese, and also many in English. Social networking sites, Mixi in Japan, and Facebook outside Japan, provide a network of like minded people, and are a way of developing friendships. They also function as notice boards for groups to post their events. Twitter and mixi are the preferred sites amongst the Japanese for arranging and posting event news. One could go as far as to say that this increase in kimono activity would have been impossible without the power of the internet. The implications of this movement are as follows:

- The data show that this is a growing movement. How far it will continue to grow is unknown, but it is spreading from the Japanese center to other countries.
- Evidence suggests that contrary to the assessment of Bauman, the relationships forged on the internet are not superficial, but lead to physical relationships and networks, and also to commitment to causes, and involvements that result in action.
- The data also show that people are interested in kimono in it casual, everyday form, not in kimono as a national dress, or with some form of social distinction.
- The evidence suggests that it is very possible to learn to wear kimono without going to a *kitsuke gakuin*. Youtube, and other websites demonstrate clearly the dressing process. People can tailor their learning to their own needs and can learn for free, in their own homes, rather than paying for a series of formal lessons. These schools will need to find some other role if they are to survive. So far, it appears that the schools have largely chosen to ignore what is happening in the street and in cyberspace.
- The internet is birthing a generation of non-Japanese kimono wearers. These wearers are unburdened by the conventions and rules of Japanese traditional kimono wearing, but are well educated in kimono meta-knowledge, and they may change kimono wearing in unexpected ways.
- The internet is a democratic tool, and through it people can bypass the official channels for appropriation and education about kimono. Wearers and consumers can meet with kimono makers. Japanese can meet with non-Japanese kimono wearers. Age and status become irrelevant.

The kimono has been continually changing, throughout its history, and advancing technology has continued to move its evolution forward. Until now however, the developments have largely been in production. Today the developments in dissemination of information appear to have an even greater influence on the kimono world, than do new technologies of production. It is through these channels that a resurgence of kimono wearing is being generated.

References

- Bauman, Z. 2004. *Identity*. Cambridge, New Malden: Polity Press.
- Bauman, Z. 2006. *Liquid Love*. Cambridge, New Malden: Polity Press.
- Beward, C and C. Evans. Eds. 2005. *Fashion and Modernity*. Oxford: Berg.
- Paulicelli E. and H, Clark. Eds. 2009. *The Fabric of Cultures*. London and New York; Routledge.
- Rheingold, H. 1995. *The Virtual Community, Surfing the Internet*. p297. London, Auckland, Melbourne, Singapore, Toronto: Minerva.

Does blood matter? A case study of the sense of blood genealogy in Hawaiian homesteads in Wai'anae, O'ahu

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Abstract

This paper sheds a light upon the on-going dispute over a Hawaiian “blood quantum” rule in Hawai'i, where family genealogy traditionally was not necessarily determined by blood. We further elaborate how the sense of blood genealogy has affected and shaped the Hawaiian society. On the west side of O'ahu, Wai'anae District there is the most populous Homestead in Hawaii; often referred to as “Hawaiian Lands”, there are an estimated 8,600 Homestead residents constituting almost one-fourth of the Wai'anae coast's population. The Department of Hawaiian Homelands states that lease applicants “must be a native Hawaiian” defined as “any descendant with not less than one-half of blood coming from the races who inhabited the Hawaiian Islands before 1778”. This requires a “blood quantum” of at least 50% native Hawaiian, with 25% for the successors. For many Hawaiian families it has over time become increasingly difficult to meet this blood quantum mandate. To keep the land for the next generation, the residents of the Homesteads often tell the children to marry to a Hawaiian who has more Hawaiian blood.

Methods

The federal government provided this “blood quantum” rule for Hawaiians in 1920, and issued a law in 1921 in order to rehabilitate the Hawaiian society that was struggling with economic and cultural problems at the time. The purpose of this paper is to analyze the Hawaiian society from a perspective of “blood quantum”. In order to understand how the blood-based kinship concept was structured, first we go through the drafting process of Hawaiian Homestead Commission Act (HHCA), which determined the 50% rule, by looking at the work of Kauanui (Kaunanui 2008). Based on a thorough review of the federal documents, Kauanui has pointed out that the HHCA was only an interim law to provide help for Hawaiians. Secondly, we consider the traditional structure of Hawaiian kinship system which is considered a fundamental unit of the society (Carsten 2000, etc). According to data from a two-year experience of living in Hawaiian Homestead, the author of this paper examines the influence of the “blood quantum” rule on Hawaiian people.

Discussion

The “blood quantum” rule has long been playing an important and somehow dominant role in Hawaiian society, though 91 years has passed since the rule was introduced to the people. Over these years, the ethnic varieties in Hawaii have diversified even more and as a result the Hawaiian “blood quantum” has become thinner. For many Hawaiian families it has over time become increasingly difficult to meet this “blood quantum” mandate. To keep the leasing license of the Hawaiian Homestead and pass it on to the next generations, the residents of the Hawaiian Homesteads often tell their children to marry to a Hawaiian who has more Hawaiian blood.

This type of focus on ethnicity can also be observed outside of the Homestead. Since the Hawaiian Homestead provides not only a residential right but also some form of tax exemption, the people of Hawaii find it a significant factor for acquiring an ownership of the land.

The indigenous Hawaiian society is known for its strong ethnic identity through various socio-cultural movements and activities. The on-going phenomena that are observed around the “blood quantum” rule let us see an alternative aspect of the contemporary Hawaiian society.

References

- Andrade, Naleen Naupala and Bell, Cathy Kaheau'ilani. 2011. 'The Hawaiians' *People and Cultures of Hawai'i*, Univeristy of Hawai'i.
- Carsten, Janet. 2000. *Culture of Relatedness*, Cambridge University Press.
- Carsten, Janet. 2011. 'Substance and Relaxionality: Blood in Context' *Annual Review of Anthropology* 40: 19-35.
- Handy, E.S. and Handy, Elizabeth Green. 1972. *Native Planters in Old Hawaii: Their life, Lore & Environment*, Bishop Museum Press.
- Howes, Craig and OSORIO, Jon. 2010. *The Value of Hawai'i: Knowing the Past, Shaping the Future*, University of Hawai'i Press.
- Kauanui, J. Kehaulani. 2008. *Hawaiian Blood: Gender and Nation on Contemporary Hawai'i*, Duke University Press.
- Tengan, Ty P. Kawika. 2008. *Native Men Remade: Colonialism and the Politics of Sovereignty and Indigeneity* , Duke University Press.

Constructing group identity: Analysis of primordial and instrumental perspectives with case study among Magars of Nepal

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Abstract

Nepal, a very small country in South Asia is in a political transition phase after 1990's People's Movement threw down thirty years of autocratic Panchayat System. This democratic movement became a turning point for identity politics in Nepal. All indigenous ethnic groups started constructing their group identity using cultural codes different from others. Constructing group identity with primordial thoughts helped them to realize the importance of collective power and was instrumental in getting access to the state resources. Each group started to raise voices for equal participation, representation and equal access to state resources upon a social organization that is established for the cultural development of the community. Among them, Magars the largest minority group in the country is also constructing their Magar identity using cultural codes. These codes have been taken as the main mantra by Magars who are working as Magar activists. The cultural construction of Magar identity was based on their ethnic markers in the beginning which turned towards political movement by demanding for the Magarath Autonomous Region. The ethnic markers are taken as a medium to achieve political economic gains for the group and individuals affiliated with the group.

Introduction

Nepal, the small country in South Asia is in a political transition phase after 1990's. Many deprived groups of the society came into surface. They started a social organization to bring all members of the community into one place for a collective voice. In this process of group identification many indigenous ethnic groups also started forming their ethnic social organization for the collective voices of the ethnic groups. Magars, one of the largest indigenous ethnic groups of Nepal are also constructing their group identity using cultural codes. The social organization they formed has given an opportunity to all Magar individuals to feel as members of the community. The Magar ethnonym has become the shared identity among them. To be different from others they are using invented (Hobsbawan and Ranger, 1983) cultural codes (Sustakov, 2008) to construct an imagined community (Anderson, 1991). Nepal Magar Association, a social organization, has become a center for the Magars to construct group identity among others in Nepal.

This organization has helped Magars to groom as activists to talk for the Magar community. Their involvement carries the primordial thoughts of being a separate group with a distinct culture, language, religion following their own dress codes. The goal of cultural development by social organization has moved towards a political movement demanding for the Magarath Autonomous

Region. This paper explains the Magars' distinct group identity construction process.

Methods

For better understanding and extensive field work, an exploratory and descriptive research design has been followed for the objectives of this ethnographic qualitative study (Babbie, 2007:88-89).

Ethnography is an empirical approach that needs to remain open (requires flexibility without a preoccupied mindset) in the field or resolutely grounded in specific contexts; it follows participant observation in which researcher is immersed in the day-to-day lives of the people with observation and interviews of key informants. Studying the behavior, language, and interactions among members of the cultural-sharing groups are the main work of ethnographers (Creswell, 2007:68-69). Magars are the unit of analysis for this study.

The data for this study were basically collected from the field. The fieldwork was carried out through the period of October 2010 to March 2012 mainly in Kathmandu valley the capital, the heart of Magar activism in Nepal, as well as seven districts outside Kathmandu to see the district level understanding. Several key informant interviews, focus group discussions and some case studies were performed with Magars and non-Magars in the districts as primary information, and were supported by secondary information collected from several published and unpublished books, journals and bulletins.

Discussion

The population of Magars in the country covers 7.4 percent of the total population. They mostly depend upon subsistence agriculture. Many of them glorify the history of working as Gurkha soldiers commonly known as *lahure*, a martial tribe of the country. Magars of Nepal are commonly known as Barha and Atharamagarath based on their settlement; another one is the *kaike* language speakers living in Dolpa district. Based on these settlements three kinds of Magar language are spoken among them. Dhut Magar language is spoken by Barhamagarath Magars, *Kham* is spoken by the Magars from Atharamagarath area and the *Kaike* speakers from the Dolpa district, which they call as the language of the goddess.

The Magars of Nepal construct their group identity using cultural codes different from other groups in the country. Traditional dress codes are invented along with a declaration of being Buddhist as opposed to Hindu religion, and declaration of a Magars festival and as demand that it becomes a national holiday. The Magars movement turned towards political movement with the declaration of an ethnic based Magarath Autonomous Region. They believe that only an ethnic autonomous region can provide them full participation and proportionate representation in the country.

Those Magars who are affiliated with Nepal Magar Association are working as activists. They have a feeling as members of the community who can develop their individual stance on Magar Association. The impacts of politics are apparent among Magar activists. Magar activists are divided

into different political parties. Their membership within the organization is associated with their affiliation with different political parties. The majority of members have the same political ideology that brings them within the Nepal Magar Association, the only organization established to bring all Magars into one place for the development of their culture and political movement.

This political movement has provided a strong position for Magars to raise their voices collectively for the group identity movement and its stance. To belong in a group with specific characteristics helps them feel like they belong to a group and to compete with non-Magars over the national resources. Many of them are becoming instrumental by using their membership of the organization to stand as Magar leader which gave them individual development, recognition and enhancing their networking. This networking extends their recognition beyond Magar by helping them stand as potential party cadres. In this way individuals may develop as potential activists who can contribute to their community.

References

- Anderson, B. 1991. *Imagined communities* . London: Verso.
- Babbie,Earl. 2007. *The Practice of Social Research* (Eleventh edition). USA: Thomson Wadsworth.
- Creswell, John.W. 2007. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (Second Edition). University of Nabraska. Lincoln. Sage Publication, California.
- E, Hobsbawm. 1983. *Introduction and Inventing Tradition: The Invention of Tradition*. (Ranger Hobsbawam and TerenceEric) Cambridge: Cambridge University Press.
- Shestakov, A. Alexander. 2008. *Cultural Codes Concept in Contemporary World*. Department of Public Administration and Organizational Theory, Bergen University.websites: //https://bora.uib.no/bitstream/1956/2861/1/4/7382752.pdf.

Cosmopolitan Malayness in globalizing Singapore: Living the local ethnic culture in Kampong Glam

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Abstract

The representation of Malay-Muslim heritage in Singapore has changed repeatedly in relatively short periods of time. Until the 1990s, an exclusively rural legacy was showcased as the ethnic heritage of Singapore's Malay community. The alleged Malay 'failure' to function in urban society is rooted in administrative shortcomings of the colonial era, when other Muslim migrants interacted with the British leaders on behalf of the Malay community. When attempts to redress this situation did not show immediate success in the 1920s, the Malay ineptness for participation in urban economic and cultural life was believed to be definitely proven. In terms of socio-demographic indicators, this negative attitude quickly became a self-fulfilling prophecy contributing to the marginalization of Malays. Urban Malay heritage would be rare and, where it existed, in squalid conditions and better complemented by the built legacy of Arab trading history. This orientalizing of Malays continues to hinder the representation of their heritage as part of Singapore's cosmopolitan legacy. The current representation of Kampong Glam as 'less Malay than Arab' is not self-evident, but a consequence of a particular conceptualization of Malayness. New initiatives to boost the Malay character of Kampong Glam are best understood in the context of previous neglect of Malay contributions to cosmopolitan connections. Recently, young Malays have rediscovered the side streets of Kampong Glam as a popular hangout for leisure activities. The 'Arab' theming of Kampong Glam has attracted many Middle Eastern eateries and cafés to Kampong Glam. Singapore's young Malays embrace the revitalization of Kampong Glam and contribute to it with their frequentation of food and beverage outlets, especially. With their presence, they re-shape the local representation of heritage and establish Malayness as an integrated part of Singapore's cosmopolitan culture.

Introduction

Malay-Muslim heritage is an important part of Singapore's multicultural legacy. The city state in Southeast Asia categorizes its citizens in three main ethnic groups, Chinese, Malays and Indians (the 'CMI'-races, making up 75%, 14% and 9% of the population respectively, leaving the rest to the 'other' or 'O' residual category). According to a multiracial ideology, each of them is free and even encouraged to keep up a distinct identity as long as the cohesion of the nation-state is not compromised.

A similar idea applies to religion; religious practice is encouraged as a moral basis for good citizenry but must be kept separate from national politics (Kamaludeen and Pereira 2008). In the case of Singapore's Malays, the link between ethnicity and religion is a peculiar one. As the indigenous Malay community is almost entirely Islamic, the terms 'Malay' and 'Muslim' are sometimes used as synonyms.

The problem with using the term ‘Malays’ as an umbrella term for all Muslims in Singapore is that there are also Arab, Indian and even Chinese Muslims – all of them would be excluded by such a terminology.

For this research work, Kampong Glam is discussed as the heritage district for Singapore’s Malay *and* Muslim community, as it is a central venue for many Islamic religious and cultural institutions. Other heritage districts, Little India and to a lesser degree Chinatown, are also a draw for local Muslim visitors, but Kampong Glam is the only central area where commercial life and cultural venues have been predominantly catering to Muslims (Tantow 2010). Kampong Glam is, however, also heavily influenced by non-Islamic culture, as it is home to traditional Chinese clan associations and a hub for many Indian textile outlets (only some of them are owned by Indian Muslims; many belong to local Hindu or Sikh families). Despite these influences, the study area for Kampong Glam has largely remained Malay and Muslim in character and is as such a unique urban quarter in Singapore’s central city area (Perkins 1984).

Today, Kampong Glam’s ethno-cultural space has become a popular heritage attraction for tourists and local sightseers. The Singapore government authorities and statutory boards, such as the Urban Redevelopment Authority (URA) and the Singapore Tourism Board (STB) have commissioned revamps of major parts of the district to showcase a coherent heritage to tourists. The influx of sightseers and tourists, however, is not the only factor shaping place identity and local culture. In the case of Singapore and other states of Southeast Asia, the changing self-perception of Malay Muslims has for decades been linked to particular representations of its heritage for *purposes of nation building*. In the postcolonial context of Singapore, Kampong Glam is designated as offering a perspective on the heritage of Singapore’s Malay and Muslim people. However, the underlying cultural policies of heritage representation (in short: politics of heritage) since independence have changed repeatedly, resulting in twists and turns in the local representation of Malay-Muslim heritage. For the first 25 years of nationhood, the conceptualization of Malays as non-enterprising and rural-dwelling prevented a prominent presentation of Malayness in centrally-located Kampong Glam; the district was substituted by a “Malay Village” built in suburban Geylang Serai.

Kampong Glam’s increasing popularity as a heritage tourism attraction has, in principal, the potential to rectify such stereotyping depictions of Malayness. For an accurate representation of Malay-Muslim heritage in Kampong Glam, the role of Malays in Singapore history needs to be revisited; this would enable a timely update on the storytelling for heritage tourism, including their urban legacy. The continuing orientalizing of indigenous Malays (including occasional self-orientalizing) shows that the underlying politics of heritage continues to shape the postcolonial tourism landscapes. The influences of cultural globalization on representations of heritage are limited compared to the impacts of politics of heritage as an integrated component of nation building.

Methodology

In order to uncover local representations of heritage, academic texts and popular listings were analyzed. An analysis of representations in contemporary guide books is provided. At the field site of Kampong Glam, two samples of 180 local visitors and tourists were surveyed to compare their attitudes on the heritage district. In addition, 120 shop owners participated in an in-depth survey and 15 expert interviews were conducted to learn about the reactions to the representation of ethnic heritage by various parties (Tantow 2011).

Discussion

In terms of heritage representation, Kampong Glam has taken on the constant role of the latecomer since Singapore's independence. Even though it became an official heritage district in 1989 along with Chinatown and Little India, no improvement initiatives followed since it remained unclear what Kampong Glam was meant to represent. Finally, a commercial flagship project on Bussorah Street was initiated to halt the severe decay, albeit without making much progress in terms of defining the cultural heritage in Kampong Glam. This waiting game has made the local Malay and Muslim heritage vulnerable to distortions.

Indications for this vulnerability appeared in the 1990s when the Singapore government embarked on cosmopolitan cultural policies to correct the orientalizing of local Malays as village-dwellers. Tourism brokers, led by the STB, saw the opportunity to finally represent Malay and Muslim heritage in Kampong Glam more prominently, and hastily re-constructed the legacy of transnational maritime connections of the former port settlement. The STB had, however, underestimated the persistence of powerful stereotypes about Malays as locally rooted, non-enterprising rural inhabitants (today, suburban heartlanders), which other government agencies had only partially tackled or ignored.

The persistence of such stereotypes led to a paradoxical perception of cultural qualities which hindered and delayed the representation of Malay heritage at a time of a potential opportunity. If Kampong Glam is cosmopolitan, so the simple but misleading supposition goes, it cannot be Malay in character (cf. Ismail 2009). An 'Arab buzz' was unduly pushed to compensate for ostensible 'Malay shortcomings' so that Singapore's nation building project of an interconnected global city state could proceed smoothly. The representation of Kampong Glam as 'less Malay than Arab' is thus not self-evident, but a consequence of a narrow conceptualization of Malay heritage and an exclusionary take on Malayness. Recent initiatives to boost the Malay character of Kampong Glam are best understood in the context of initial neglect of existing Malay contributions to cosmopolitan connections.

References

- Ismail, R. 2009. 'Di waktu petang di Geylang Serai' Geylang Serai: maintaining identity in a globalised world. In R. Ismail, B. Shaw and G.L. Ooi (eds), *Southeast Asian culture and heritage in a globalising world: diverging identities in a dynamic region*. Bradford Emerald Group Publishing, pp. 19–42.
- Kamaludeen, M.N. and Pereira, A. 2008. Defensive dining: notes on the public dining experiences in Singapore. *Contemporary Islam* 2: 61–73.
- Perkins, J. 1984. *Kampong Glam: spirit of a community*. Singapore: Times Publishing.
- Tantow, D. 2010. Islamic heritage in Singapore: the Kampong Glam historic district. In Noel Scott and Jafar Jafari (eds), *Tourism and the Muslim world (Bridging tourism theory and practice 2)*. Bradford: Emerald Group Publishing, pp. 303–20.
- Tantow, D. 2011. Researching heritage tourism in Singapore – an outsider perspective as an asset? In Michael Hall (ed.), *Fieldwork in tourism: methods, issues and reflections*. London: Routledge, pp. 127–39.