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Introduction

IUJ research institute (hereafter IRI) generates a wide variety of publications and working papers of interest to business, banking professionals, policymakers, academics and the general publics. This report provides a list of publications and research generated by IUJ faculty members, IUJers, and IRI researchers in the last few years. The contents are as follows:

- IRI working papers in 2010
- Refereed journal articles and books published in the recent three years

We are hopeful that this report gives you an overview of research activities and high performance achieved by IUJers in an internationally competitive academic environment. Finally, we would like to thank all of IUJ staffs, faculty members and alumni for cooperation, and convey special thanks to our research assistant, Tomo Nakajima, for editing and managing the document and data using the complex TEX documentation system.

Ching Yang Lin, Koji Kotani and Kazumi Imai

This paper develops a theoretical model of voluntary contributions to a public good in a large economy where the impact of each individual’s contribution on the total provision is negligible, and people’s preference consists of extrinsic and intrinsic payoffs. Of particular interest is moral motivation that is assumed to be formulated internally and independently of other people in the intrinsic payoff. Adopting an equilibrium concept, we discuss public provision that could affect moral motivation. With this approach, we demonstrate that a wide variety of crowd-out/in hypotheses can occur within a single framework, once the interplay between extrinsic and intrinsic payoffs is introduced. The model provides the conditions under which public provision induces crowd-out as well as crowd-in. It is shown that the effect of public provision highly depends on the degree of motivational shift originating from the intrinsic payoff as well as the characteristics of the public good in relation to the private good in the extrinsic payoff.

(The revised version is published in *Public choice*, 2011.)

J. Rajasekera and D. Suvashis, *Do the internet security alerts have an impact on lowering ccTLD security risks?*, 2010.

Despite all the security measures to build a safely networked world there are innumerable loopholes for malicious activity. One of the countermeasures to fight such malicious activities is to issue security alerts. The purpose of this paper is to see if there is significant impact by these security alerts; to best of our knowledge, this is the first statistical study to understand such impact of Internet security alerts.


This study examines how the adoption of inflation-targeting influenced exchange rate pass-through and volatility in four Asian countries (Indonesia, Korea, the Philippines, and Thailand) over the sample period of January 1990 to June 2007. We find that reforming policy by adopting inflation targeting generally helped reduce pass-through in Korea and Thailand, while the results are less clear in Indonesia and the Philippines. Still, the findings indicate that inflation targeting has caused a decline in exchange rate volatility in all four countries. The important lesson from the experiences of these Asian countries is that the adoption of inflation targeting contributes to achieving the ultimate goal of inflation stability through reducing exchange rate pass-through or variability.

(The revised version is published in *Japan and the world economy*, 2010.)


This paper studies the effects of labor market policies on R&D activities and unemployment. I develop a search and matching model in which firms’ R&D decisions are endogenously determined. The model demonstrates that more intensive labor market policies that protect workers reduce the levels of R&D activities. This study offers a theoretical framework to understand the relationship between R&D activities, labor market policies, and unemployment which is discussed in empirical studies.

(The revised version is published in *Japan and the world economy*, 2010.)
EMS-2010-5
[5] S. Ok, M. Kakinaka, and H. Miyamoto, Real shock or nominal shock? Exchange rate movements in Cambodia and Lao PDR, 2010. This paper discusses a primary factor responsible for exchange rate fluctuations of the Cambodian riel and the Laotian kip against the US dollar. The dynamic effects of real and nominal shocks are examined through applying a vector autoregression (VAR) model of real and nominal exchange rates under the assumption of the long-run neutrality of nominal shocks on real exchange rates. This approach allows us to decompose exchange rate movements into two components, real and nominal factors, in order to identify how these factors influence exchange rate fluctuations. The empirical analysis demonstrates that real shocks in direction of depreciation lead to real and nominal depreciation, while nominal shocks induce long-run nominal depreciation but real appreciation in the short-run.
(The revised version is published in Singapore economic review, 2010.)

EMS-2010-6
Social media, such as Facebook and Twitter have added new meaning to spreading news and information. While the traditional information channels such as newspapers, radios, and TV, are one-way mediums, the dawn of the Internet and social media have made communication a two-way extravaganza. The lack of any official control, supervision, or regulation has fueled a social media frenzy, which has proved to be a very effective method of rallying around a mass on any significant or even not so significant issue.

EMS-2010-7
This paper studies worker flows dynamics in Japan for the period between 1980 and 2009. We construct gross worker flows data from the monthly Labour Force Survey. Our data enables us to examine the size and cyclical patterns of the flows and transition rates between the states of employment, unemployment, and not-in-the labor force. We find that the cyclical pattern of worker flows is similar to that found in other countries, while worker flows in Japan are generally smaller than those in the U.S. and European countries. We also decompose changes in unemployment into contributions due to changes in unemployment inflow and outflow rates. We find that both inflow and outflow rate play an important role to account for variation in the unemployment rate in Japan.

EMS-2010-8
Japanese spousal tax deduction and social security systems cause a non-convex piece-wise budget constraint for married women. Using a pooled sample from the Japanese Panel Survey of Consumers, we structurally estimated a labor supply model that explicitly takes into account the nonlinearity in the budget constraint. Our results suggest that the effects of spousal deduction and social security reforms on the labor supply of Japanese married women would be much smaller than what the past reduced form studies suggest. The reform to completely eliminate the spousal tax deduction would increase the population labor supply only by 0.7%, though the labor supply responses of the most affected workers would be nontrivial, with their desired hours worked increasing by as much as 4%. The policy reform to require all women to pay the social security premium regardless of their income level would have almost no effects on the population labor supply. Our results also suggest that lump-sum income transfer programs, such as the current child care support program, would have negligible effects on female labor supply unless the transfers are substantially large.

EMS-2010-9
The aim of this study was to examine how learning styles impact the development of 12 learning skills in higher education by using kolbs learning theory. The results revealed that two learning abilities in the dialectical dimension of concrete experience and abstract conceptualization significantly affected development in three interpersonal and three analytical skills. However, two learning abilities in the other dialectical dimension of reflective observation and active experimentation had a marginal influence on related skill development. Further, more balanced learning styles of the freshmen sample hindered the devel-
opment of three analytical skills and one perceptual skill. In conclusion, university students should learn by specializing in learning abilities to develop their concomitant learning skills except for three perceptual skills. Additionally, students should avoid learning by balancing two dialectical learning abilities, especially concrete experience and abstract conceptualization in order to develop analytical skills in higher education.

EMS-2010-10


We numerically examine the impact of the global economic crisis on the Cambodian garment exports as well as its economy by using the conventional CGE model. A seminal aspect of the paper is that we have successfully estimated the curvature of the CET and CES production functions for the Cambodian economy, by using the time series regression method. One of our most striking results indicates that the welfare cost of the impact of the crisis at least reaches 281 million US dollars, thus resulting in a 0.3 percent decrease in GDP with 20.8 thousand direct job losses in the garment industry. Our simulation results also show that the currently ongoing policy in Cambodia only reduces the negative impact of the crisis by 32 million US dollars, and we propose an expansion of the government budget of 304 million US dollars, in order to neutralize the negative impact of the global economic crisis on the Cambodian economy.

*(The revised version is published in *Economics bulletin*, 2010.)*

EMS-2010-11


The monetary policy targets the very short end of the yield curve although real economic activity is largely dependent upon the medium to long-term market interest rates. Conventional wisdom is that decrease in the monetary policy target rate leads to an immediate decrease in market interest rates, and an increase in bond prices; yet evidence for this view is elusive. Therefore, the question of how do the monetary policy actions translate across the yield curve remain at the forefront of many recent policy debates. Bringing the foundations of expectation hypothesis (EH) and empirical analysis of Sri Lanka money market and government bond daily yield rates for the period 2000 to 2009 through the application of ordinary least squares (OLS) and Vector error correction model (VECM), explains that monetary policy impact monotonically decreases over the yield curve at the short-end and become segmented toward medium to long-term of the yield curve. The impact appears to be waning at a faster pace at times of financial and economic uncertainties compared against stable economic period. This invites policy attention on the part of monetary policy effectiveness, structural impediments and market confidence in Sri Lanka.

EMS-2010-12


This study examined host country nationals (HCNs) in multinational enterprises (MNEs) through the lens of a competency approach. Participants consisted of 500 managers working for a leading Japanese retail MNE, with 100 each from Japan, China, Malaysia, Thailand, and Hong Kong. The study highlighted three competency variables of those managers for 12 skills: the level of competency demands; that of competencies; and that of adaptation as assessed by the fit between the levels of competencies and the levels of corresponding competency demands. Several similarities and differences in the competency variables of the HCN managers emerged. For example, relationship skills were the most demanded competency for all HCN managers as well as the most developed competency for all manager groups except the Thai. Further, goal-setting skills, while highly demanded, showed low adaptation levels for all groups. The strength of the levels of the three competency variables, however, differed significantly among groups. Based on the empirical evidence obtained from this study, practical implications for HR professionals were discussed.

EMS-2010-13


In the context of the transition period to a market oriented economy, Vietnam attracts foreign capital to strengthen the supply-side economy. FDI plays a very important role in achieving export-led growth and contributes to the steady economic growth rate of 6-8%/macro model system (IUJ GM25), it is expected that the Vietnamese economy is likely to
experience high growth, achieving a take-off stage with an export-led growth against the background of strong economic growth in Asia. It is noteworthy that the Vietnamese macro imbalances, including I-S and trade imbalance, and so on, are also expected to be improved if FDI will be increasing.

EMS-2010-14

[14] H. Miyamoto, *Cyclical behavior of a matching model with capital investment*, 2010. This paper studies the role of capital investment in a search and matching model. I develop an endogenous job separation matching model in which a firm’s irreversible capital investment is endogenously determined. The incorporation of capital investment provides an additional channel for firms to respond to productivity shocks, significantly magnifying labor market fluctuations. The numerical results demonstrate that the incorporation of irreversible capital investment improves the ability of the standard search and matching model to generate cyclical fluctuations of unemployment and vacancies in response to productivity shocks. Moreover, my model can generate the pro-cyclicality of vacancies, which the standard endogenous separation models often fail to generate.  
(The revised version is published in *The B.E. journal of macroeconomics*, 2011.)

EMS-2010-15

[15] Z. Jingchao and K. Kotani, *The determinants of household energy demand in rural Beijing: Can the environmental-friendly technologies be effective?*, 2010. With rapid economic growth, total energy demand in rural China has increased dramatically and its structure is in the transition from non-commercial to commercial energy. At the same time, it is also expected that households in rural areas will face energy shortage and cause more environmental problems without having more access to renewable energy technologies. However, little is still known about (i) the transition of the energy use and (ii) whether the technologies introduced have been effective or not. To analyze these issues, we have estimated energy demands of rural households by utilizing a survey data taken from Beijing’s ten suburban districts. The data contains the information of both non-commercial and commercial energy use, key characteristics of the households and several renewable energy technologies. Our empirical analysis reveals three main results. First, the per capita income is a key factor to per capita energy consumption. More specifically, a rise in per capita coal consumption strongly diminishes as per capita income increases. Second, coal and LPG prices do not exhibit any substitution effect, but an increase in these prices has strong negative effects on their own energy use. Third, the renewable energy technologies are identified to reduce the coal consumption and induce more energy efficiency. Overall, these findings suggest a positive perspective: if the Chinese government could appropriately design policies associated with renewable energy technologies and with the related energy price controls, then coal consumption will be induced to decline in the near future and the substitution effects to cleaner energy use will speed up. This implies that the smooth energy transition in rural China can be made in more environmentally sustainable manners.

EMS-2010-16

[16] J. Kim, *Political institutions and public R&D expenditures in democratic countries*, 2010. While research and development (R&D) expenditure is crucial in a nation’s competitive advantage, factors determining levels of public investment in R&D have yet to be examined. This paper seeks to fill this void, focusing on different democratic institutions such as presidential versus parliamentary systems, majoritarian versus proportional electoral systems, federal versus unitary systems, bicameral versus unicameral legislatures, and the effective number of parties. Using public R&D appropriations data from 18 OECD countries between 1981 and 2007, this article reports that democratic institutions do matter in the levels of public R&D spending. However, the effect is more complicated across the different types and performers of research than expected. Additionally, the effect of one institutional dimension is found to be moderated by the existence of the other dimensions, which makes it clearly more challenging to sort out different degrees and directions of the relationships between R&D expenditures and political institutions.

EMS-2010-17

[17] P. Barnwal and K. Kotani, *Impact of variation in climatic factors on crop yield: A case of rice crop in Andhra Pradesh, India*, 2010. This study examines the effects of temperature and precipitation on the mean and variance of seasonal rice yield in Andhra Pradesh, India, over a period of 33 years (1969-2002). For this purpose, two distinct approaches are employed: (i) panel data analysis using Just and Pope stochastic production function and (ii) quantile regression approach. The first approach
suggests that, in general, an increase in temperature as well as inter-annual variance of temperature and rainfall adversely affect the mean crop yield, while the effect of increase in precipitation highly depends on the cropping season. Furthermore, an increase in average temperature, rainfall and their respective inter-annual variance are likely to increase inter-annual variability in crop yield. Second, the quantile regression reveals that rice yield’s sensitivity to climate change differs significantly across the quantiles of yield distribution. In particular, the adverse effect of climate change is found to be more profound for the crop yields in lower quantiles. In addition, evidences in support of heterogeneity in the impact of climate change across the agro-climatic zones are also found. Overall, these findings call for a more location specific adaptation policies to address heterogeneity and an integrated policy framework covering the downside risk to build resilience in the food security system.

EMS-2010-18


There has been an on-going debate on whether dollarization helps stabilize exchange rates for emerging economies. This paper discusses this issue in a highly dollarized country, Cambodia, by empirically examining the relationship between dollarization and exchange rate movements. The GARCH analysis suggests that dollarization induces the depreciation of the Cambodian riel as well as intensifies exchange rate variability. The result is consistent with the argument that dollarization is one of the crucial causes of exchange rate instability. Dollarization in Cambodia could be a constraint on poverty reduction since it tends to affect the living standard of the poor who earn the income in the riel through the depreciation of the currency and intensified volatility of exchange rates.

EMS-2010-19


This paper presents a computable general equilibrium (CGE) framework to numerically examine the effect of tax and subsidy policies on the medical service sector and the pharmaceutical industry. The generalized framework with the latest Japanese input-output table of year 2005 with 108 different production sectors provides the following results: A welfare gain is approximately 97,402 million yen when the subsidy rate of the sector of private hospitals and the medical analyzing industry increases by 10 percent if the government budget is not considered explicitly, while the same policy reversely induces approximately a 54,256 million yen welfare loss if the government finances the shortage caused by the policy change by a non-dictionary income tax on individuals. Furthermore, the effect of tax and subsidy policies on individual medical sectors differs, while the high dependency of the pharmaceutical industry with other medical sectors can be found. In particular, the pharmaceutical industry is mostly better off not by a decrease in its own production tax rate but by a decrease in the production tax rate of the sector of private hospitals and the medical sample analyzing industry.

EMS-2010-20


Tapioca starch and palm oil industries are considered as ones of the fast growing agro-industries in Thailand. Both industries release a significant amount of wastewater with high organic content as a result of their production processes. Traditionally, open pond systems have been used to treat wastewater and consequently achieve compliance with environmental standards. Over the last few years however, more sustainable, expensive and modern alternatives have begun to be used to treat wastewater (mainly anaerobic reactors). The start of clean development mechanism (CDM) projects in Thailand has also contributed significantly to this expansion. One significant advantage of the anaerobic reactors, over the open ponds, is the possibility of capturing, in a controlled environment, the greenhouse gases (GHGs) generated, principally biogas with a high concentration of methane. The biogas can be used to generate heat and/or produce electricity, substituting fossil fuels as an energy source. The number of biogas utilization projects in Thailand and the Southeast Asia region has been increasing substantially in recent years. While a biogas plant can bring economic benefits with respect to energy self-sufficiency and cost saving over time, the design and operation of a biogas plant requires high investments and is still perceived as a risky business due to a number of barriers. In addition, actual data from biogas plants indicate that the performance of a biogas plant with
respect to the amount of biogas is not as attractive as it was initially expected among the project developers. Even though many literatures show the performance of biogas plants in certain experimental conditions, surprisingly, few literatures have explained or have shown data about the low performance of the biogas plants compared to the expected projected performance or design. The purpose of this study is to identify these barriers in biogas technology implementation and operation in Thailand, and to determine how these barriers lower the performance of the biogas business. The study was conducted based on the analysis of 48 selected CDM projects in Thailand and further analysis through consultation with relevant professionals in CDM and the biogas business in Thailand. The results of this study provide important lessons for future biogas utilization and greenhouse gas emission reductions in the Southeast Asian region.
Refereed Journal Articles

Banking and international finance


This paper empirically investigates the long-run relationship between effective exchange rates and foreign exchange reserves in Mongolia over the period of June 1997 to June 2007. In particular, to allow for a structural break, we conduct the stationarity analysis of Zivot and Andrews (1992) and the cointegration analysis of Gregory and Hansen (1996). The results demonstrate clear evidence supporting the presence of a long-run relationship between exchange rates and foreign exchange reserves, even though conventional tests do not detect such a long-run relationship. This study also argues that the estimated timing of the structural break is consistent with significant economic shocks in Mongolia.


This paper studies sources of fluctuations in real and nominal US dollar exchange rates in Cambodia and Lao PDR by decomposing them into the components induced by real and nominal factors. These shocks affecting real and nominal exchange rates are identified by using a structural vector autoregression (SVAR) model with the long-run neutrality restriction of Blanchard and Quah (1989). The empirical analysis demonstrates that real shocks in direction of depreciation lead to real and nominal depreciation, while nominal shocks induce long-run nominal depreciation but real appreciation in the short-run. Several economic implications are also discussed.


This study examines how the adoption of inflation targeting influenced exchange rate pass-through and volatility in four Asian countries (Indonesia, Korea, the Philippines, and Thailand) over the sample period of January 1990 to June 2007. We find that reforming policy by adopting inflation targeting generally helped reduce pass-through in Korea and Thailand, while the results are less clear in Indonesia and the Philippines. Still, the findings indicate that inflation targeting has caused a decline in exchange rate volatility in all four countries. The important lesson from the experiences of these Asian countries is that the adoption of inflation targeting contributes to achieving the ultimate goal of inflation stability through reducing exchange rate pass-through or variability.


This paper examines the mean return and volatility spillover effects from the three influential stock markets of the US, Japan, and China to the two emerging stock markets of Indonesia and Malaysia over the sample period from 2005 to 2007. By analyzing GARCH models, we verify that there are significant mean spillover effects from the three major markets to the two emerging markets. The magnitude of the mean spillover from the US market is the most significant compared to the Japanese and Chinese markets. This would be consistent with the conventional wisdom in which the US market is believed to be the most influential market in the world.
In terms of the volatility spillover, the empirical results reveal that the US market is more influential to Indonesia, but less to Malaysia, and recently growing Chinese market has a significant influence to both of the two emerging markets.

# Business and financial market


Wireless technologies have created an unprecedented opportunity for rural customers in the developing world to solve their communication and information problems in an instantaneous, interactive and customised way. The framework of the study focuses on existing mobile village phone model in Bangladesh and suggests ways to make it sustainable through mobile information services marketing. The study has treated ‘village phone’ as a cost effective and interactive channel through which various information services can be marketed to serve customers in the rural settings.


We estimate a mixed logit demand model for the Japanese digital content market and measure willingness to pay for service attributes. We find that the willingness to pay for an extra unit of service quality ranges from 62 Yen to 83 Yen per month. Meanwhile, the switching cost, a measure of disutility from switching to other service providers is estimated as 340 Yen ($3) per month, which is approximately the same as the current monthly subscription fee.


Using data from three countries that differ economically, culturally, and geographically, this study examines the role of Prospect Theory’s reflection effect, a psychological factor, in combination with Uncertainty Avoidance (UA), a cultural factor, on the choice of mortgage products. Experiments were conducted using business professionals in the United States, Germany, and Japan. The results suggest that risk-averse people tend to become more risk seeking, leaning more toward adjustable-rate mortgages (ARMs) when choosing a mortgage type, and that this psychological effect may underlie the mortgage choices of people who tend to choose ARMs, even across countries with different cultures.


We examine the performance of pairs trading in the U.S. REIT market compared with that in the U.S. general stock market over the period 1987 to 2008. The results suggest that the REIT market provided superior profit opportunities for this strategy over common stocks after accounting for the effect of the bid-ask bounce between 1993 and 2000. This was likely because of the unique characteristics of REITs, which permitted the selection of good pairs of close substitutes and the structural changes that occurred in 1993 in the REIT market. The superior trading profits in REITs disappear after 2000.


With a shift from ‘product-out’ to ‘market-in’ approach, the demands of today’s consumer for high-quality goods and service have forced producers and service providers to apply quality-management practice throughout industry. The purpose of this paper is to explore how a company would maintain a competitive edge in a market by taking into account psychological and emotional needs of the consumers called ‘Kansei’ in Japanese. We explore how Kansei Engineering (KE) can be used along with New Just-In-Time (JIT), pioneered by Toyota, to gain a manufacturing cost advantage. The effects of our approach are demonstrated through a simulated experiment.
Environment, natural resource and agriculture


In this study, we develop a bioeconomic model of human alveolar echinococcosis (HAE) and formulate the optimal strategies for managing the infection risks in humans by applying optimal control theory. The model has the following novel features: (i) the complex transmission cycle of HAE has been tractably incorporated into the framework of optimal control problems and (ii) the volume of vermifuge spreading to manage the risk is considered a control variable. With this model, we first obtain the stability conditions for the transmission dynamics under the condition of constant control. Second, we explicitly introduce a control variable of vermifuge spreading into the analysis by considering the associated control costs. In this optimal control problem, we have successfully derived a set of conditions for a bang-bang control and singular control, which are mainly characterized by the prevalence of infection in voles and foxes and the remaining time of control. The analytical results are demonstrated by numerical analysis and we discuss the effects of the parameter values on the optimal strategy and the transmission cycle. We find that when the prevalence of infection in foxes is low and the prevalence of infection in voles is sufficiently high, the optimal strategy is to expend no effort in vermifuge spreading.


This paper analyzes an individual lending credit market in a rural society, where potential borrowers have a dynamic incentive of strategic default, and a benevolent lender gives them a credible threat to cut future credit when loans are not repaid. A crucial issue is that social sanction of default depends on the default rate in the society. Our analysis suggests that for a relatively small financing cost, a credit market exists where borrowers have little motivation to default voluntarily, associated with intense social sanctions. The results also reveal that a relatively large financing cost causes the credit market to collapse, since it raises motivation of default, associated with less intense social sanctions. These results could justify government support to reduce the lender’s financing cost. The model further illustrates the plausibility of two equilibria: a low default rate associated with a low lending rate and intense social sanctions, and a high default rate with a high lending rate and less intense social sanctions. This could explain the possibility that the default rate is different from village to village even though these societies seem to share an almost identical environment.


The terminology of renewable resource management becomes to span not only prototype harvesting problems but also various new types such as invasive species one. In all of these problems, process uncertainty of stock growth associated with environmental variability is one of the critical factors that significantly affects the management efficiency. While it may seem that a series of past researches fully examine optimal policy under process uncertainty, the case of convex unit harvest costs has not been fully characterized yet. Focusing on such a case, this paper addresses how the degree of process uncertainty affects optimal escapement level. The result suggests that optimal escapement level does not monotonically vary with process uncertainty. In many plausible cases, it should be adapted in a U-shaped manner, which is in contrast with the conventional wisdom.


The problem of controlling invasive species has emerged as a global issue. In response to invasive species threats, governments often propose eradication. This article challenges the eradication view by studying optimal strategies for controlling invasive species in a simple dynamic model. The analysis mainly focuses on deriving policy implications of catchability in a situation where a series of controlling actions incurs operational costs that derive from the fact that catchability depends on the current stock size of invasive species. We analytically demonstrate that the optimal policy changes drastically, depending on the sensitivity of catchability.
in response to a change in the stock size, as well as on the initial stock. If the sensitivity of catchability is sufficiently high, the constant escapement policy with some interior target level is optimal. In contrast, if the sensitivity of catchability is sufficiently low, there could exist a threshold of the initial stock which differentiates the optimal action between immediate eradication and giving-up without any control. In the intermediate range, immediate eradication, giving-up without any control, or more complex policies may be optimal. Numerical analysis is employed to present economic intuitions and insights in both analytically tractable and intractable cases.


We develop discrete-time models for analyzing the long run equilibrium outcomes on invasive species management in two-patch environments with migration. In particular, the focus is upon a situation where removal operations for invasive species are implemented only in one patch (controlled patch). The new features of the model are that (i) asymmetry in density dependent migration is considered, which may originate from impact of harvesting as well as heterogeneous habitat conditions, and (ii) the effect of density-dependent catchability is well-taken to account for the nature that the required effort level to remove one individual may rise as the existing population decreases. The model is applied for agricultural damage control in the raccoon problem that has occurred in Hokkaido, Japan. Numerical illustrations demonstrate that the long run equilibrium outcomes highly depend on the degree of asymmetry in migration as well as the sensitivity of catchability in response to a change in the population size of invasive species. Furthermore, we characterize the conditions under which the economically optimal effort levels are qualitatively affected by the above two factors and aiming at local extermination of invasive species in the controlled patch is justified.


The problems of controlling exotic species have been acknowledged as serious threats to an indigenous ecosystem as well as to society. In response to these threats, various management programs of exotic species have been proposed for supporting eradication in many regions. Although eradication is regarded as the first-best solution, such attempts have been unsuccessful in reality due to mainly two factors: (1) stock-dependent catchability, and (2) uncertainties. This article demonstrates when to aim at eradication through addressing an optimal adaptive management strategy in the framework of a bio-economic model with the aforementioned factors. The study sets out that the sensitivity of catchability in response to a change in the existing stock determines whether or not aiming at eradication is justified. The results also show that process uncertainty associated with stock growth significantly affects the timing of removal actions for eradication, and an increase in the degree of uncertainty could help achieve eradication in a cost effective manner if we optimally adapt our removal actions to the uncertainty.


Matching grants are a prevalent mechanism for funding environmental, conservation, and natural resource projects. However, economists have largely been silent regarding the potential benefits of these mechanisms at increasing voluntary contributions. To examine the behavioral responses to different match levels, this research uses controlled laboratory experiments with generically framed instructions and introduces a general-form matching-grant mechanism, referred to as the proportional contribution mechanism (PCM). Results show that contributions are positively correlated with both the match and the induced value of the public good even when a dominant strategy is free-riding. An implication of this partial demand revelation result is that manifestations of this type of helping hand social preference should be counted in benefit-cost analysis.


The management programs for invasive species have been proposed and implemented in many regions of the world. However, practitioners and scientists have not reached a consensus on how to control them yet. One reason is the presence of various uncertain-
ties associated with the management. To give some guidance on this issue, we characterize the optimal strategy by developing a dynamic model of invasive species management under uncertainties. In particular, focusing on (i) growth uncertainty and (ii) measurement uncertainty, we identify how these uncertainties affect optimal strategies. Our results suggest that a rise in growth uncertainty causes the optimal strategy to involve more restrained removals and the corresponding value function to shift up. Furthermore, we also find that a rise in measurement uncertainty affects optimal policies in a highly complex manner, but their corresponding value functions generally shift down as measurement uncertainty rises. Overall, a rise in growth uncertainty can be beneficial, while a rise in measurement uncertainty brings about an adverse effect, which implies the potential gain of precisely identifying the current stock size of invasive species.


The classic theory of fisheries management seeks a maximum sustainable yield from a target species. There are several variations that include uncertainty, fluctuation, and species interactions. The knowledge that sustainable fisheries do not always guarantee conservation of a diversity of species is well known. Ecosystems provide several categories of ecosystem services to human wellbeing: supporting, provisioning, regulating, and cultural services. Fishery yields belong to provisioning services. The existence of living marine resources may maintain these services, and certainly a much larger contribution from regulating services than that from fishery yields. Therefore, we define an optimal fishing strategy that maximizes the total ecosystem service instead of a sustainable fishery yield. We call this the fishing policy for maximum sustainable ecosystem service (MSES). The regulating service likely depends on the standing biomass, while the provisioning service from fisheries depends on the catch amount. We obtain fishing policies for MSES in a single species model with and without uncertainties and in multiple species models. In any case, fishing efforts are usually much smaller than those for a maximum sustainable yield (MSY). We also discuss the role of fisheries in sustaining ecosystem services, and the nature of ecosystem co-


In the middle of the 1990s, Pacific saury fishery vessels began to install “size separators” to selectively land large-size class fish with a higher price. Contrary to expectations, this resulted in removal of the separators in 2006 because fishers believed the separators had contributed to price collapses in the 2000s. The intent of this paper is to investigate the effects of separators on both the fishery economy and stock of Pacific saury by simulating population and economic models under a single framework. For this purpose, we developed (1) an age-structured population dynamics model with stochasticity, and (2) an economic model spanning both price and inventory dynamics with stochasticity, in which each set of model parameters were estimated on the basis of time series data. In a 10-year simulation, the harvest quota was set constant from 20,000 to 400,000 t at intervals of 20,000 t, and the effects of separators were incorporated by controlling the catchability of 0-year-old fish. We found that separators increase the expected yield and reduce the deficit risk for harvests of 140,000 t and smaller. However, separators have the opposite effects for harvests of 160,000 t and larger.

Human resource and labor


By using a data set of academic economists from Japanese universities, we estimated the effect of refereed articles on salary, promotion and labor mobility. Results show no effect of refereed articles on salary and on promotion. However, there is a statistically significant effect of refereed articles on labor mobility, though the magnitude of the effect is rather small. Publishing one additional refereed article increases the probability that an academic has worked in exactly two universities by 0.4%. In addition, pub-
lishing one additional refereed article in the US or Europe increases the probability that an academic has worked in exactly two universities by 1%. Refereed articles published in Japan have no statistically significant impact on the probability of working in more universities. We conclude that publishing refereed articles does not reward Japanese economists by a direct increase in salary and accelerated promotion. Our results are thus consistent with the beliefs within Japanese academia that publications do not affect salary or promotion.


After the 1990s, the Australian coal industry vigorously eliminated two types of task demarcations: (I) the demarcation between production and maintenance stream tasks and (II) the demarcation within the production stream. Using data covering 1985-2005, we estimate the effect of the elimination of these demarcations on productivity, then analyze several explanations for how multi-tasking would affect productivity. The results show that the elimination of between demarcation would increase coal production by 27%, while the elimination of within demarcation has no effect on productivity. Furthermore, the relationship between coal demand uncertainty and the elimination of demarcations is weak. These patterns are inconsistent with a common explanation for how multi-tasking affects productivity: the ability of mines to freely redeploy workers enables mines to fully utilize labor, and to adjust to demand fluctuations. Rather, these results are better explained by the elimination of redundancies: the bundling of overlapping tasks reduces duplication of effort and unnecessary wait time.


This article examines the determinants of job-related stress for academic economists in Japan. Our results suggest that relative deprivation effects are associated with pursuing academic achievements. If an academic’s yearly publication rate of refereed articles or the amount of external grants is below average, the academic is more likely to report higher stress levels. In addition, academics with greater teaching loads or administrative duties are more likely to report higher stress levels. Female academics are 15 percent more likely than males to report higher levels of stress.


By using unique survey data, we conduct a detailed study of the gender salary gap within economics departments in Japan. Despite the presence of rigid pay scales emphasizing age and experience, there is a 7% gender salary gap after controlling for rank and detailed personal, job, institutional and human capital characteristics. This gender salary gap exists within ranks. We find no gender promotion differences. In addition, we find a concentration of the salary gap in public universities and in research oriented universities. Our results show no evidence that the gender salary gap is reducing over time, and reject the hypothesis that females’ choice between household work and market activities is responsible for the gender salary gap.


We compared predictors of job satisfaction across three countries, China, Japan, and Malaysia, by surveying 600 managers from these countries who worked for the leading Japanese retail firm AEON Co. Ltd., as it strategically expanded across Asia. Learning is a particularly critical area for human resource management (HRM) in developing countries because of the need to adapt and learn. Therefore, we viewed employee adaptation to the host company culture of AEON through the lens of experiential learning theory and learning style. Results showed that Japanese managers preferred learning through feeling and reflecting; Chinese managers preferred learning through thinking and reflecting; and Malaysian managers preferred learning through thinking and acting. Furthermore, Chinese managers showed more balance as learners, whereas Malaysian managers were comparatively in the middle and Japanese managers exhibited the most specialization in their learning orientation. The study also suggested that learning style is a stronger predictor of job satisfaction than culture and ethnicity, but not as strong as some control variables such as language skills. Work satisfaction has been widely used as an indicator of successful HRM practices in multinational companies in advanced, Western and individualistic cultures. Taken
together, the measures of learning style and work satisfaction provide the basis of further study into relationship between Confucianism, capitalism and HRM practices.

This study investigates expatriate adaptation using a sample of Japanese expatriates in the US. For a comprehensive understanding, home managers in Japan and host managers in the US were also used. This study is unique in that it examines expatriate adaptation through an analysis of the change of a fit between 12 learning skills and the skills demands. The degree of expatriate adaptation increased in accordance with the length of the current overseas assignment tenure in the host country, along with an increase in job satisfaction.

In this paper, we explored differences in consumer behavior between the mobile and pc internet. Specifically, we estimated mixed logit demand functions for mobile and pc subscribers in the Japanese digital content market and measured consumers’ willingness to pay for attributes related to service quality. We found that the willingness to pay for more robust and more frequently updated content was on average higher in the mobile segment than in the pc segment. In addition, the overall switching costs mobile subscribers attributed to content providers were far higher than pc subscribers for the same content. The results suggest that significant and measurable differences exist in the effectiveness and impact of similar content across different interactive media channels.

International relation and politics

This study explores the impact of campaign web sites on electoral civic engagement by examining 2004 Internet Tracking Survey data. Propensity score matching and the recursive bivariate probit model are employed to deal with endogeneity and the missing data problem, which are often ignored in existing literature. Findings show that effects of campaign web sites vary across individual engagements and generally support reinforcement theory rather than mobilization theory.

The article reviews the turbulent domestic politics of Myanmar in 2007. The politics drew global condemnation because of the brutally suppressed anti-government demonstrations by its military regime that also turned down the United Nations proposal of holding a meaningful dialogue with opposition parties and went forward with their own roadmap to political transition.

This chapter studies the importance of China factor in Myanmar foreign policy and highlights the Myanmar governments attempts to constantly negotiate its place in asymmetric nature of Sino-Myanmar bilateral relations. It argues that neither the Sinocentric world order of tributary relations nor the Westphalian world order of sovereign equality could adequately reflect the nature of Sino-Myanmar relations. This chapter studies the importance of China
factor in Myanmar foreign policy and highlights the Myanmar governments attempts to constantly negotiate its place in asymmetric nature of Sino-Myanmar bilateral relations. It argues that neither the Sino-centric world order of tributary relations nor the Westphalian world order of sovereign equality could adequately reflect the nature of Sino-Myanmar relations.

[50] M. A. Myoe, “Diplomacy and war: Myanmar’s relations with China in 17th and 18th centuries,” in *The changes in China-centered world order*, Inha university press, 2010. This chapter analyzes the state of Sino-Myanmar relations in the context of pre-modern China-centered world order. It argues that Myanmars relationship with China in the 17th and 18th century was based on the concept of equality between the two sovereigns and that it was the transformation within the Myanmar Mandala or pre-colonial state system that led to military confrontation with China and contributed to both sustaining the nations war effort and to its success on the battlefield in the Sino-Myanmar clashes of the 1760s.

[51] M. A. Myoe, “Myanmar’s maritime challenges and priorities,” in *Maritime challenges and priority in Asia* (S. Bateman and J. Ho, eds.), Routledge, 2011. This chapter examines the Myanmar governments perspective on the countrys maritime challenges and priorities. It argues that the Myanmar governments maritime strategy largely remains traditional in outlook, while it pays little attention to other forms of maritime challenges, and its most obvious priority is the defence of the sovereignty and territorial integrity of the state.

[52] M. A. Myoe, “Overhand or hangover: Historical memory in Myanmar-Thai relations,” in *Bilateral overhangs in East Asia* (N. Ganesan, ed.), Routledge, 2012. This chapter argues that historical overhangs do exist in Myanmar-Thai bilateral relations and that they play an important role in setting foreign and security policy agendas, especially on the part of Thailand. The History of Thailand was rewritten to present Myanmar as a historical enemy of the Thai nation. For Myanmar, it is the Thai hangover from their historical past, and the fact that Thai political elites tend to consciously cultivate and embellish the historically overhangs, that constitutes the core of the problem.

[53] J. Oh and J. Ryu, “Study on Chinese impact on economic sanctions against North Korea,” *Korean journal of defense analysis*, vol. 23, no. 1, pp. 1–20, 2011. As the U.S. and South Korea expressed solidarity in blaming North Korea for its attack on the South Korean warship Cheonan and in imposing further sanctions on North Korea, global attention is now focused on China with regard to whether it will cooperate in inflicting punitive measures on its ally. Despite the worsening cleavages between China and North Korea since October 2006 when the latter tested its nuclear weapons, this study shows that their relations has remained robust in the economic context although it has experienced a political transition. This paper begins with the Sino-DPRK relations by exploring the status of the alliance in transition in the political and military context. Further, it considers the economic context between the two nations by reviewing Chinese aid to North Korea and North Korea’s trade data, using the “flow of goods” as a proxy for “flow of money.” Then, this paper applies North Korea’s strategic interaction with the U.S. in the game theoretic methods in order to illustrate the Chinese impact on the efficiency of economic sanctions on North Korea. The study found that China’s role remains consequential as the strategies of North Korea and the U.S. depend on China’s position in their strategy interaction.

[54] G. F. Sanico and M. Kakinaka, “Terrorism and deterrence policy with transnational support,” *Defence and peace economics*, vol. 19, no. 2, pp. 153–167, 2008. This study provides an explanation of terrorism by examining interactions between the terrorist group with a minority as a potential pool of recruits and the government supported by a majority. A hawkish deterrence policy makes it more risky for terrorists to launch attacks, but heightens the anti-government feeling of the terrorist group. In addition, the payoff for the government depends not only on the payoff loss associated with the level of terrorism, but also on the political payoff from the action itself of adopting a hawk policy due to its politicians’ vested interests. We first show that whether the deterrence policy should be ‘hawk to ‘dove is closely dependent on the relationships among the risk associated with terrorism, the anti-government feeling of the terrorist group, and the political payoff for the government.
This study then introduces transnational support enhancing the capability of a terrorist group to intensify its activity and shows that the emergence of transnational support may cause the government to reform its deterrence policy from 'dove' toward 'hawk,' with terrorism intensified in the society.


This article examines Kant’s discussion of the division between reason and unreason in his Anthropology from a Pragmatic Point of View. On the one hand, Kant says that there is a normative, clear, and definite division between reason and unreason. On the other hand, Kant offers three arguments showing that we cannot draw such a division. First, we cannot explain the normative grounds for the division. Second, both reason and unreason are present in everyone to varying degrees in different ways. Third, Kant invalidates the division as such by characterizing what should be more incomprehensible than an extreme case of unreason as also being a rational way of life.


This article attempts to reconstruct Kant’s view on the self-opacity of the empirical subject by exploring three aspects of his work: the unconscious, moral incentives and moral genealogy, and rule-following practice. ‘Self-opacity’ means that one is unable to give an account of one’s everyday activity, of why in one’s everyday life one thinks and acts in the way one does. Kant’s view thus recast gives us a sobering insight into our ordinary way of life. The insight is that we are confronted with such self-opacity concerning that area of our activity to which the aforesaid three things apply. That is, a large part of our everyday activity is at bottom opaque to ourselves. This reading of Kant has two implications. First, it enriches our interpretation of Kant. Second, the aforesaid sobering insight is potentially an encouraging message because it may help us cultivate our self-understanding for our everyday life.


The concept of an East Asian community has emerged and been discussed in recent years. There are three pillars that support such a community: a politico-security pillar, an economic pillar, and a socio-cultural pillar. The last one, which has been the least discussed and developed among these three pillars, concerns a sense of an East Asian identity that people of East Asia may have. Such an identity may be fostered through growing interactions among the people and civil society organizations in the region and through ideas, values, and norms thereby promoted and shared. An East Asian community may thus be recognized, supported, and developed by people of East Asia. This article attempts to cast light on such a socio-cultural pillar through a close reading of Kants argument on cosmopolitan right in his “Perpetual Peace and The Metaphysics of Morals. The article concludes by suggesting implications my reading of Kant has for thinking about an East Asian community.


In the fall 2007 Diet session, the largest opposition Democratic Party of Japan (DPJ) showed strong opposition against the government’s proposal to continue the Self-Defense Forces (SDF) refueling operations to support maritime inspections in the Indian Ocean. In order to evaluate this parliamentary confrontation, the article compares the handling of this issue with the six past major post-Cold War national security policies. The DPJ constantly presented its own legislative proposals in order to participate in Diet deliberation. DPJ’s counter proposals, however, were not always cooperative with the government. This different attitude by the DPJ could not be explained by the public and media opinions or the position of the supporting organization but by DPJ’s political calculation.


This chapter first explains the traditional merits and demerits of the U.S.-Japan alliance during the Cold War era, and then analyzes the changing nature of
the alliance and the new merits and demerits for Japan. It argues that the Japanese government has transformed the nature of the U.S.-Japan alliance from the asymmetrical one of the Cold War era into a more balanced situation.

[60] T. Shinoda, “The prime ministerial leadership,” in Handbook of Japanese politics (Gaunter, ed.), pp. 48–59, Routledge, 2011. This chapter first explains the political difficulty of factions within the government and the ruling party which have eroded the central role of the prime minister interagency sectionalism and factionalism. Then, it identifies the sources of power available to Japanese prime ministers, some from legal authorities and others from informal sources. Finally, it analyzes the ways how the effective prime minister tackled with the factions within the government and the ruling parties.

[61] T. Shinoda, “Stronger political leadership and the shift in policy-making boundaries in Japan,” in Decoding boundaries in contemporary Japan: The Koizumi administration and beyond (G. D. Hook, ed.), Routledge, 2011. This chapter first explains the traditional boundary between the bureaucracy and political leadership which made it difficult for the prime minister to exercise top-down leadership. Then, it explores what institutional changes were brought about by administrative reform under the leadership of Hashimoto Ryutaro (1996-8) which helped set the playing field for Koizumi. In order to examine how Koizumi exercised top-down decision making, concrete examples are introduced in the area of fiscal and foreign policies. Finally, it discusses the development in the post-Koizumi era.

Macroeconomics


[63] H. Miyamoto, “R&D unemployment and labor market policies,” Japan and the world economy, vol. 22, no. 3, pp. 198–205, 2010. This paper studies the effects of labor market policies on R&D activities and unemployment. I develop a search and matching model in which firms’ R&D decisions are endogenously determined. The model demonstrates that more intensive labor market policies that protect workers reduce the levels of R&D activities. This study offers a theoretical framework to understand the relationship between R&D activities, labor market policies, and unemployment which is discussed in empirical studies

[64] H. Miyamoto, “Cyclical behavior of unemployment and job vacancies in Japan,” Japan and the world economy, Forthcoming. This paper studies whether the Mortensen and Pissarides (MP) search and matching model can explain the observed labor market fluctuations in Japan. Although the MP model correctly predicts the observed regularities in the cyclical fluctuations of unemployment and job vacancies, it cannot generate the observed unemployment and vacancy fluctuations in response to productivity shock of reasonable size. I incorporate separation shocks and training costs into the MP model, finding that their inclusions do not significantly improve the ability of the model to explain the cyclical volatility of unemployment and vacancies observed in the Japanese labor market. This paper also provides the business-cycle properties of the Japanese labor market.

[65] H. Miyamoto, “Efficiency in a search and matching model with training costs,” Economic modelling, Forthcoming. This paper studies the efficiency of the search and matching model with training costs. I incorporate productivity enhancing firm-specific skill training into the search and matching model of Pissarides (2000). I demonstrate that while the decentralized economy can be efficient if training costs are not sunk at the time of wage determination, the decentralized economy is not efficient due to a hold-up problem if training costs are sunk.

[66] H. Miyamoto, “Cyclical behavior of a matching model with capital investment,” The B.E. journal of macroeconomics, vol. 11,
This paper studies the role of capital investment in a search and matching model. I develop an endogenous job separation matching model in which a firm’s irreversible capital investment is endogenously determined. The incorporation of capital investment provides an additional channel for firms to respond to productivity shocks, significantly magnifying labor market fluctuations. The numerical results demonstrate that the incorporation of irreversible capital investment improves the ability of the standard search and matching model to generate cyclical fluctuations of unemployment and vacancies in response to productivity shocks. Moreover, my model can generate the pro-cyclicality of vacancies, which the standard endogenous separation models often fail to generate.

Poverty, health and development


Estimating household vulnerability to poverty using the method developed by Chaudhuri (2000) with cross-sectional data on households in 2004, this paper assesses poverty issues in Cambodia. In particular, we classify the poor into two main groups, the chronic poor and the transient poor, based on two measures, poverty incidence and vulnerability. The results suggest that, at the national level, among currently poor households (which comprise 24.8% of all households), the chronic poor and the transient poor amount to 6.3 percent and 18.5 percent, respectively. Additionally, 3.4 percent of all households appear to be subject to high risk of falling into poverty, although their current rate of consumption is above the poverty line. This study further measures the ratios of the chronic and transient poor and discusses poverty-related issues and policy implications at the provincial level and with reference to various household characteristics.


Using a dynamic panel model of child anthropometrics from China, the effect of an in-yard water source on child health was measured. Changes in within-community averages of household access to in-yard water were used as the instrument for changes in access to in-yard water sources. Further, to address the concern of non-random placements of water projects, correlations between changes in disease symptoms and community-level changes in access to in-yard water sources were examined. It was found that access to in-yard water sources improved child health only when mothers were relatively well educated.


Previous studies find that human capital investments in boys are less income elastic than investments in girls, attributing this result to favoritism toward boys. I show theoretically that it is plausible for more productive or favored household members to have higher income elasticities. I then investigate this question empirically, utilizing panel data on individual nutrient intake from the China Health and Nutrition Survey (CHNS) to analyze how changes in household per-capita nutrient intake affect the intra-household allocation of nutrients. To deal with potential biases due to omitted variables and simultaneity, I use measures of rainfall variation as instruments. I find that nutritional intakes are more elastic for males (especially prime-age men) than for females, and significantly less elastic for the elderly.


We examine the effect of illness and injury shocks on work hours and household consumption in Indonesia. Using indices of activities of daily living to measure health shocks, we find that both labour hours and household consumption are influenced by health shocks to household heads. Further, farm households seem to be more seriously affected than non-farm households by health shocks. However, the magnitude of the health effect on household consumption is small, implying that even farm households are well protected on average by the presence of formal and informal risk-coping mechanisms.

We examine the extent to which self-reported health and psycho-social health are affected by relative economic status in China, for the first time examining the importance of reference groups not defined by geographic location or demographic characteristics. We propose a methodology to address potential bias from subjective reporting biases and control for unobserved community characteristics. Analyzing a nationally representative dataset from China, our findings support the relative deprivation hypothesis and suggest that relatives and classmates are salient reference groups for urban residents and neighbors are important for rural residents.

Public budgeting and finance


This paper evaluates one of the most drastic reforms of the Japanese public health insurance started in year 2006, by numerically examining the reform in an aging Japan in a dynamic context with overlapping generations within a computable general equilibrium framework. Our simulation results are as follows. First of all, an increase in the co-payment rate, which is one of the most prominent changes in the reform, would result in higher economic growth as well as higher welfare since it stimulates private savings. Secondly, an increasing trend of the future national medical expenditure can mainly be explained by an aging population, and an increase in the co-payment rate has little effect to squeeze the national medical expenditure in the future. Thirdly, the effect of a decrease in the national medical expenditure, which can possibly be induced by the improvement in efficiency in the public provision of medical services, the promotion of preventative medical services, or technological progress in the medical field, on the future burdens of medical expenditures is very small. Finally, if the government implements a policy to keep the ratio of the national medical expenditure to GDP constant, then the government has to keep reducing the national medical expenditure over time, and the reduction rate should be 45 percent in year 2050. Such a policy also eventuates in lower economic growth until around year 2035. Our simulation results thus indicate that the reform is not so effective to reduce the future national medical expenditure, but it can achieve higher economic growth by stimulating private savings.


We develop a model of voluntary contributions to a public good in a large economy where peoples’ preferences consist of extrinsic and intrinsic payoffs. The model considers (i) the interplay between the two payoffs and (ii) the possibility that public provision discourages moral motivation in the intrinsic payoff (motivational shift). We show that a wide variety of crowd-out/in occurs due to public provision within a single framework, and its occurrence depends on the magnitude of motivational shift and the characteristics of the public good in relation to private goods in the extrinsic payoff.


We numerically examine the impact of the global economic crisis on the Cambodian garment exports as well as its economy by using the conventional CGE model. A seminal aspect of the paper is that we have successfully estimated the curvature of the CET and CES production functions for the Cambodian economy, by using the time series regression method. One of our most striking results indicates that the welfare cost of the impact of the crisis at least reaches 281 million US dollars, thus resulting in a 0.3 percent decrease in GDP with 20.8 thousand direct job losses in the garment industry. Our simulation results also show that the currently ongoing policy in Cambodia only reduces the negative impact of the crisis by 32 million US dollars, and we propose an expansion of the government budget of 304 million US dollars, in order to neutralize the negative impact of the global economic crisis on the Cambodian economy.
While research and development (R&D) expenditure is crucial in a nation’s competitive advantage, factors determining levels of public investment in R&D have yet to be examined. This paper seeks to fill this void, focusing on different democratic institutions such as presidential versus parliamentary systems, majoritarian versus proportional electoral systems, federal versus unitary systems, bicameral versus unicameral legislatures, and the effective number of parties. Using public R&D appropriations data from 18 OECD countries between 1981 and 2007, this article reports that democratic institutions do matter in the levels of public R&D spending. However, the effect is more complicated across the different types and performers of research than expected. Additionally, the effect of one institutional dimension is found to be moderated by the existence of the other dimensions, which makes it clearly more challenging to sort out different degrees and directions of the relationships between R&D expenditures and political institutions.

This article examines political cost factors that affect a state’s propensity to adopt a corporate income tax credit to encourage research and development R&D activities in the United States. Assuming state elected officials are vote-maximizers, this article hypothesizes that politicians’ consideration of potential revenue losses and influence from organized interests are critical in a state’s decision to provide a R&D tax credit. To test the hypothesis, two statistical models are specified. With a dichotomous dependent variable of whether or not a R&D tax credit is offered, a Logit regression model is utilized. For the interval level dependent variable of effective R&D credit rates, this article specifies a Tobit model. The results show that politicians’ concerns about revenue losses loom much larger than private organized interests.

Governments oftentimes fail to satisfy high demands of public services, leaving room for the nonprofit sector. How can the government deal with this government failure? Must it resort to tax increases or should it engage the nonprofit sector? Using the public polls conducted in the wake of Hurricane Katrina, this study aims to explore an empirical answer to this question. In particular, we contrast the determinants of the willingness of an individual to pay more tax with those of the willingness to make more voluntary donations for the disaster recovery purposes. The results show that attitudes on governments’ roles in disaster recovery are not consistent with charitable giving behavior and are affected more by the survey respondents’ political orientation than voluntary motivation. We discuss this finding’s implication for designing a more effective disaster response system.

Intergovernmental revenue (IGR) is like blood in the federal system, proving lower levels of government with indispensable resources to produce local public services. The extant literature of determinants of IGR rigorously addresses political considerations of elected officials and bureaucrats at the relevant levels of governments, political representations, lobbying efforts, and interest groups. However, while IGR is essentially an asymmetrical mirror image of the jurisdiction’s own source revenue structure, little attention has been paid to tax structural factors at the subnational level. Drawing upon a political cost approach of tax structure, we examine whether IGR is affected by the local tax structure that reflects marginal political cost of raising additional tax dollars. Since sales tax is characterized by regressivity, tax base mobility, and the weak linkage between tax incidence and benefits, it may be more expensive to local elected politicians than property tax. We hypothesize that higher dependency on revenues from sales tax relative to property tax is negatively associated with IGR. We test this hypothesis using an expenditure and revenue dataset of 159 Georgia counties using Census Bureau Data from 2003. Findings from the analysis reveal a dynamic relationship between political costs of raising tax dollars, local tax structures, and IGR.
We investigate whether framing effects of voluntary contributions are significant in a provision point mechanism. Our results show that framing significantly affects individuals of the same type: cooperative individuals appear to be more cooperative in the public goods game than in the public bads game, whereas individualistic subjects appear to be less cooperative in the public bads game than in the public goods game. At the aggregate level of pooling all individuals, the data suggests that framing effects are negligible, which is in contrast with the established result.

Regional and urban development


This article examines the sources of regional economic growth in Japan by using an extended growth-factor decomposition method based on an interregional input-output model. The extended formula avoids some problems of shift-share analyses and measures the roles played by interregional and interindustry linkages in the growth of a regional economy. This method can identify growth factors that originate outside a region as well as those that originate from within. Applying the method to Japanese interregional input-output tables reveals that interregional interdependence has exerted notable effects on regional economic growth in Japan and that regions are becoming more interdependent.


This study examines the sources of output growth in Vietnam during 1996-2000 using the national input-output (I-O) tables. It employs an extended growth-factor decomposition method, which is an extension of the standard growth-factor decomposition method, in which all industries are classified into the primary, secondary and tertiary sectors. It also conducts a comparative analysis of Vietnam, Indonesia and Malaysia. The major source of Vietnam’s output growth was the expansion of exports. The secondary sector played a key role in Vietnam’s output growth, as its demand effects induced more than half of total output growth, contributing not only to the output growth of the sector itself but also of the other two sectors through inter-industry linkages. Malaysia’s growth pattern was similar to Vietnam’s, in which export expansion was the main driver of growth and the secondary sector led output growth. However, heavy industries played a more important role than light industries in Malaysia. Indonesia exhibits a markedly different growth pattern than Vietnam and Malaysia, as its tertiary sector was a more important driver of economic growth.


This paper considers urban-rural location and education as the main causes of expenditure inequality and attempts to examine inequality changes associated with urbanization and educational expansion in Indonesia from 1996 to 2002, using Indonesian monthly household consumption expenditure data. It introduces a hierarchical framework of inequality decomposition by population subgroups, which enables researchers to analyze inequality resulting from differences in educational attainment as well as inequality within each educational group, after the effects on inequality of urban-rural differences in the composition of educational attainments are removed. It finds that the urban sector’s higher educational group contributes significantly to overall inequality. Inequality within the group increased significantly once Indonesia recovered from the financial crisis of 1998. This, together with educational expansion in urban areas, led to a conspicuous rise in urban inequality. Overall expenditure inequality has increased markedly, due not only to the rise in urban inequality but also a widening urban-rural disparity, accompanied by a population shift from the rural to the urban sector. Since more people will obtain higher education as the economy continues to develop, and more jobs requiring specialized skills become available in urban areas, urban inequality is likely to remain high. In order to mitigate urban inequality and thus overall inequality, the government needs to introduce policies that could reduce inequality among households whose heads have a tertiary education.
[83] T. Akita and S. Miyata, “The bi-dimensional decomposition of regional inequality based on the weighted coefficient of variation,” *Letters in spatial and resource sciences*, vol. 3, no. 3, pp. 91–100, 2010. This paper offers the bi-dimensional decomposition of regional inequality by regional groups and income components based on the population weighted coefficient of variation. The method enables us to analyze the contributions of income components to within-region and between-region inequalities, and thus to overall regional inequality in a coherent framework. The method is applied to provincial GDP and population data in Indonesia for the years 1985, 1995 and 2004.

[84] T. Akita, P. A. Kurniawan, and S. Miyata, “Structural changes and regional income inequality in Indonesia: A bi-dimensional decomposition analysis,” *Asian economic journal*, vol. 25, no. 1, pp. 55–77, 2011. Using the bidimensional decomposition method of a population-weighted coefficient of variation, this paper analyzes the changes in the determinants of interprovincial income inequality associated with structural changes in Indonesia from 1983 to 2004. The method unifies two inequality decompositions by regional groups and gross regional product components (industrial sectors) and, therefore, enables us to assess the contributions of gross regional product components to within-region and between-region inequalities, as well as to overall inequality. As the share of mining has decreased, the spatial distribution of manufacturing has played a more important role in the inequality of Sumatra and Kalimantan, while the primacy of Jakarta, with strong urbanization economies, facilitated by globalization and trade and financial liberalization, has determined much of the Java-Bali region’s inequality and, therefore, overall inequality in Indonesia.

[85] A. Kusakabe and J. Oh, “Spatial analysis of the Japanese gas industry,” *Review of urban and regional development studies*, vol. 22, no. 2-3, pp. 143–164, 2010. This study analyzes gas prices, costs, and expenditures in Japan from a spatial perspective. The main findings are as follows: (1) Gas prices, costs, and expenditures exhibit spatially dependent patterns throughout Japan and are related to the service area locations of the gas distributors. (2) Regional conditions, including weather, production shipment, and availability and method of procuring domestic natural gas are the main determinants influencing gas prices and cost levels in Japan. These findings indicate that the Japanese government pays special attention to geographical perspectives in dealing with gas policies.

[86] H. Kusharjant and D. Kim, “Infrastructure and human development: The case to Java, Indonesia,” *Journal of the Asia Pacific economy*, vol. 16, no. 1, pp. 111–124, 2011. This study examines the relationship between infrastructure and human development in Java, Indonesia, using regency-level 2002-2005 panel data. We find that improving infrastructure significantly enhances human development. In particular, electricity infrastructure has a greater influence on human development than other types of infrastructure, such as clean water, roads or the number of classrooms per student. We find that for every 1 with electricity, the human development index (HDI) increases by 0.2. Improvements in other types of infrastructure lead over the long run to lesser increases in the HDI, ranging from 0.01.

[87] J. Oh, “Concentration, congestion and the dynamic: Spatial re-modeling of the Murphy, Shleifer, and Vishny model,” *Letters in spatial and resource sciences*, vol. 1, no. 2, pp. 77–97, 2008. Based on spatial dimension to agglomeration, this paper investigates economic concentration and congestion. Departing from the Murphy, Shleifer, and Vishny model, where the two equilibria of the poverty trap and full industrialization are discussed, this paper suggests the possibility of partial industrialization. Unlike the original model in which fixed cost $F$ and productivity are assumed to be constant, the author argues that both $F$ and are non-monotonic functions of $n$ (number of entering monopolist firms), and that an economy stays in a partial industrialization state when congestion effects and external diseconomies are dominant. However, some situations are dynamic in the sense that they may reach the status of full industrialization as long as an economy overcomes congestion problems.


This paper examines the influence of Mongolia’s landlocked location between Russia and China on the country’s international trade patterns through the use of an augmented gravity model. The results are basically consistent with the prediction of the gravity model with some unexpected results on per capita GDP and the WTO dummy. Further, this paper discusses relevant policy implications.
Books


Ever since Myanmar regained her independence in January 1948, the Tatmadaw (Myanmar Armed Forces) has been crucial in restoring and maintaining law and order. It is one of the most important institutions in Myanmar politics. Various aspects of the Tatmadaw have been studied. The most notable area of study has been the political role of the military. This study looks at the organizational development of the Myanmar armed forces. It analyses four different aspects of the Tatmadaw: military doctrine and strategy, organization and force structure, armament and force modernization, and military training and officer education. It sets out security perceptions and policies, charting developments in each phase against the situation at the time, and also notes the contributions of the leading actors in the process. Since early 1990s, the Tatmadaw has implemented a force modernization programme. This work studies rationales and strategy behind the force modernization programme and examines the military capabilities of the Tatmadaw. Drawing extensively from archival sources and existing literature, this empirically grounded research argues that, while the internal armed security threat to the state continues to play an important role, it is the external security threat that gives more weight to the expansion and modernization of the Tatmadaw since 1988. It also argues that, despite its imperfections, the Tatmadaw has transformed from a force essentially for counter-insurgency operations into a force capable of fighting in limited conventional warfare.


Since its independence in January 1948, Myanmar has tried to find a way to deal with (at one time) ideologically hostile and traditionally chauvinistic China which has pursued a foreign policy aimed at restoring its perceived influence in Myanmar. To counter China’s attempts to influence Myanmar’s foreign policy options has always been a challenge for the Myanmar government. Since the 1950s, successive Myanmar governments have realized that Myanmar’s bilateral relations with the People’s Republic of China should best be conducted in the context of promoting the Five Principles of Peaceful Coexistence, the Bandung spirit and the Pauk-Phaw (kinsfolk) friendship. The term Pauk-Phaw is exclusively devoted to denote the special nature of the Sino-Myanmar relationship. This work argues that Myanmar’s relationship with China is asymmetric but Myanmar skillfully plays the “China Card” and it enjoys considerable space in its conduct of foreign relations. So long as both sides fulfill the obligations that come under “Pauk-Phaw” friendship, the relationship will remain smooth. Myanmar has constantly repositioned her relations with China to her best advantage. Myanmar’s China policy has always been placed somewhere in between balancing and bandwagoning, and the juxtaposition of accommodating China’s regional strategic interests and resisting Chinese influence and interference in Myanmar’s internal affairs has been a hallmark of Myanmar’s China policy. This is likely to remain unchanged.

This study analyzes Japan’s political institutional changes within the Liberal Democratic Party (LDP) governments and then with the power shift to the Democratic Party of Japan (DPJ) government, and their impact on the decision making process, the power structure within the political party, public expectations and elections. It identifies the slow but steady structural changes, brought by institutional changes such as the 1994 electoral changes, the 1999 government reform and the 2001 administrative reform, which led to the selection of Junichiro Koizumi, an anti-mainstream politician as prime minister and allowed him to exercise strong political leadership, and eventually the political power shift to the DPJ that ended the LDP rule. Further changes in political institutions brought by the DPJ changed Japan’s power structure within the government, and vis-à-vis interest groups, the public and the media.

Japan’s mobile customers enjoyed better mobile devices, more content, and the most advanced functionality and services for the last 10+ years. This book helps cut through the many myths and all of the hype surrounding Japan’s mobile dominance to identify the most important laws that will guide the success of mobile businesses around the world. Based on detailed market analysis and unprecedented access to the major players and pioneers of the Japanese mobile industry, this publication helps you understand the Six Immutable Laws of Mobile Business. These will help you and your business successfully navigate the challenges that the world’s Wireless Revolution brings. From Law 1 through Law 6, authors Philip Sugai, Marco Koeder, and Ludovico Cifferi will help guide you to distinguish mobile myth from mobile fact, micro developments from macro trends, and regional characteristics from universal truths.
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