

Conference on the Frontiers of Statistical Analysis  
and Formal Theory of Political Science

January 6-7, 2012  
Gakushuin University

Abstracts

相田真彦 (Greenberg Quinlan Rosner)

Finding Persuadable Voters: Analysis from Multi-mode Survey Experiments

Most political campaigns in the USA try to identify persuadable voters and seek issues or messages that appeal to those voters. The task of finding persuadable voter is a holy grail of political campaign researches. As it turns out, the way campaigns define persuadable voters today is rarely informed by evidences. The definition of persuadable voters is made by (un-)educated guesses without any empirical backings. Moreover, most research designs that are employed by campaign pollsters are inapt to measure persuadable voters. Author will review pros and cons of research designs to measure the attitude changes such as within-subject design and between subject designs. Then author will show results from multi-mode multi method studies (survey experiments and series of cross sectional surveys) to identify persuadable voters. Analysis found political and demographic covariates (knowledge and partisanship) and psychological mediating variable (response latency) that predict attitude change across different research designs.

福元健太郎 (学習院大学) ・ 吉田あつし (筑波大学)

Boundary that Matters: Causal Inference of the School Quality Effect on Land Prices

This paper examines two items: first, if the quality of elementary schools is capitalized into land prices; and second, if the introduction of a school choice program decreases the magnitude of the capitalization. We match literally the nearest two land lots in the same census block to make a pair. If the two lots belong to different school-attendance areas, the pair is a treatment pair. Otherwise, the pair is a control pair. If school quality matters for land price, the variance of pairwise land price gap of the treatment group

should be larger than that of the control group. When applying the method to data collected from the Tokyo 23 special wards, we find that the null hypothesis is not rejected. In general, when scholars examine the effect of policy contents that are different across geographical borders, they can use our method.

堀内勇作 (Australian National University), Benjamin E. Goldsmith (University of Sydney), and Terence Wood (Australian National University)

#### Doing Well by Doing Good: the Impact of PEPFAR On Global Public Opinion

Can foreign aid extended by one country improve its image among the populations of receiving countries? Positive perceptions amongst foreign publics are considered important for achieving a range of objectives in foreign relations (e.g., Bustamante and Sweig 2008; Koteska and Poposki 2010; Nye 2004) and aid is often claimed as a potentially potent tool for enhancing opinion (Nye and APSA report). Yet to date there has been little systematic study of aid's impact on public opinion. And any existing evidence suggests that there is no such effect for economic or military aid (e.g., Goldsmith, Horiuchi, and Inoguchi 2005). We show that, unlike other forms of aid, a humanitarian aid program targeted specifically to address HIV and AIDS in developing countries -- the President's Emergency Plan For AIDS Relief (PEPFAR) provided by the United States Government -- improved perceptions of the United States, even as the U.S. image was severely damaged in non-recipient countries due to its foreign policy behavior (APSA US Standing Report). Importantly, our findings suggest that PEPFAR aid was most effective in improving opinions of the United States when it was targeted to need. By doing good, a country can do well, improving its image and contributing to its broader international objectives.

井手弘子 (筑波大学) ・ 境家史郎 (東京大学)

#### The Effect of Discussion Rule on Group Deliberation: An Experimental Study

While previous empirical studies of group deliberation on public policies have found effects of group composition or decision-making rules (i.e. majority or unanimity), few studies have addressed the effects of how discussions are conducted. Our experimental study examines whether and how rules of discussion have impacts on the contents and the consequences of the discussion. Half of the discussion groups started their

discussion by examining facts and the other half started their discussion with each discussant expressing his/her opinion about the issue. We found that the groups that started the discussion by examining facts tended to have more equality in the amount of statements made by each discussant and the discussants of these groups tended to be more satisfied with the discussion. We consider that these findings suggest the importance of investigating how deliberations are conducted and how discussion rules could affect the content and the consequences of policy deliberations.

今井耕介(Princeton University) • In Song Kim (Princeton University)

Understanding and Improving Linear Fixed Effects Regression Models for Causal Inference

Linear fixed effects regression models are a primary workhorse for causal inference among applied researchers. And yet, it has been shown that even when the treatment is exogenous given unobserved unit-specific effects these models do not consistently estimate the average treatment effect in the presence of heterogeneous treatment effects and treatment assignment probabilities across units. In this paper, we offer a simple solution to this problem. Specifically, we show that weighted fixed effects regression models can yield a consistent estimate of the average treatment effect under various identification strategies such as propensity score weighting, first differencing, and difference-in-differences. We prove the results by establishing various algebraic equivalence relationships between fixed effects and matching estimators. At the most basic level, the results suggest that these estimators do not fundamentally differ in their ability to cope with unobserved heterogeneity. More importantly, our analysis identifies the information implicitly used by fixed effects models to estimate counterfactual outcomes necessary for causal inference, highlighting the potential sources of bias and inefficiency. Finally, we illustrate the proposed methodology by revisiting the controversy concerning the effects of the General Agreement on Tariffs and Trade (GATT) membership on international trade. (Last revised, November 2011)

石原章史 (RWTH Aachen University)

Strategic Candidacy via Endogenous Commitment

This paper studies repeated political competition with policy-motivated citizen

candidates. The dynamic relationship can guarantee an ability to implement a policy that is different from the ideal policy and cause strategic candidacy in two-candidate competition, such as in circumstances where two candidates stand for election and one of them has no chance to win. The candidate can choose her implementing policy depending on the set of the rivals in the election and the rival candidate actually has an incentive to stand even with no chance to win since it can induce policy compromises from the winning candidate. We furthermore show that in some situations, a political compromise is induced with strategic candidacy which would be impossible without the strategic candidacy.

籠谷公司 (Trinity College Dublin) • 飯田健 (神戸大学)

#### Find Your Weakness: Domestic Turmoil and Deterrence Failure

How can the adversaries detect the opportunities to challenge the target? The belief update in the opponents' side has not been carefully examined in the literature. We explore how political dynamics in the target side can affect the likelihood of deterrence failure. To investigate the detail of security environments, we focus on Northeast Asia and conduct a time-series analysis of Japan's deterrence against its potential adversaries. The results show that Japan is more likely to fail to deter challenges from China, North Korea, Russia, and South Korea when Japanese prime minister changes. In contrast, the movement of public opinions in Japan does not affect the likelihood of deterrence failure. The results provide some implications for the deterrence literature, especially, the selection mechanism behind conflict initiation from the view of the challenger's belief update.

尾野嘉邦 (国際大学) • 有賀賢一 (Ohio State University)

#### Electoral Rules, Parliamentary Career, and Ministerial Appointment

Who gets cabinet posts? This study examines the types of politicians who assumed ministerial posts in government. In parliamentary democracies, cabinet ministers have unparalleled authority to make and implement government policies. Such important ministers have been mostly chosen from among the members of parliament in many countries. Yet, we do not know much about who gets ministerial posts and how the types of politicians appointed to those posts vary across countries. By using data drawn from

five developed parliamentary democracies (Austria, Canada, Finland, Italy, and Norway), this study demonstrates that political systems affect the selection of cabinet ministers. We argue that leaders of a governing party are more likely to assign ministerial posts to experienced senior representatives in representative-centered systems than in party-centered systems because of the need to maintain party unity.

古賀純(Emory University)

When Does a Political Leader Intervene in the Military? Bayesian Analysis of Latent Coup Risk

Why do some political leaders successfully adopt strategies that allow them to prevent their militaries from attempting a coup while others do not? There is a broad consensus in the existing literature that a political leader who faces a high risk of coup tends to intervene in the military to coup-proof his regime. The literature, however, ignores the possibility that the military would attempt a preemptive coup to counteract the leader's behavior. Contrary to the conventional wisdom, I argue that a political leader intervenes in the military only when coup risk is sufficiently low. I test my hypothesis with the data on the size of paramilitary in 201 countries from 1968 to 2003. I develop a Bayesian statistical model which allows us to assess the "noise" in latent coup risk and to incorporate this information when we estimate the impact of latent variable. The evidence strongly supports my argument.

梅田道生（日本学術振興会特別研究員(PD)・東京大学）

The Gender Gap in Political Preference and Voting Behaviors among Japanese Electorates

His abstract is not public.

和田淳一郎（横浜市立大学）・坂口利裕（横浜市立大学）

Panel Analysis of Voting District Data Using a Geographic Information System (GIS)

A voting district with a relatively higher voting ratio always has a higher voting ratio. However, it is difficult to analyze the district factor using typical survey data. The

aggregate data of an electoral constituency are influenced by the candidates in the constituency and the number of data is too small to characterize the voters. The number of the aggregate data of voting districts, on the other hand, is large enough, and we can regress the data using more detailed data of a census or a geographic information system (GIS). In this paper, we built a data set of voting districts for the upper house election in Yokohama City. Though Yokohama is the largest Japanese municipality with a population of over 3.5 million, it falls under an electoral constituency and is ideal for our analysis.

山本鉄平(Massachusetts Institute of Technology)・今井耕介(Princeton University)

#### Identification and Sensitivity Analysis for Multiple Causal Mechanisms: Revisiting Evidence from Framing Experiments

Social scientists are often interested in testing multiple causal mechanisms through which a treatment affects the outcome of interest. In such situations, a predominant approach has been to use linear structural equation models and examine the statistical significance of corresponding path coefficients. However, this approach implicitly assumes that the multiple mechanisms are causally independent of one another. In this paper, we consider a set of alternative assumptions that are sufficient to identify the average causal mediation effects when multiple, causally related mediators exist. We then develop a new sensitivity analysis in order to examine the robustness of empirical findings to the potential violation of a key identification assumption. Finally, we apply the proposed methods to several existing political psychology experiments where the authors examined alternative causal pathways between media framing and public opinion. Our analysis suggests that the validity of original conclusions is highly reliant on the independence assumption.

矢内勇生 (University of California, Los Angeles)・籠谷公司 (Trinity College Dublin)

#### Scramble!: External Threats, the Base Politics, and Voting in Okinawa

Japanese politicians worry about domestic support for the U.S.-Japan security treaty and often address the U.S. bases in Okinawa as an important issue, which can easily become an obstacle to the future of alliance relationships. To avoid unnecessary troubles in the U.S.-Japan relationship, we investigate the Okinawa governor

elections. External threats significantly boost support for the pro-base candidate in the Cold War. Although the support suddenly dropped at the end of the Cold War, the electorates keep strong support for the pro-base candidate without realized threats in the post-Cold War period. In the post-Cold War period, the electorates recognize Japan's potential risks and see the U.S. bases helpful for deterring the potential adversaries' challenge. This result provides political implications for the management of the U.S.-Japan security treaty. As long as electorates in Okinawa are rational, Japanese politicians should not address the base issue blindly from the view of alliance management.

西山奎佑(関西大学)・石山篤志(関西大学)

参院選市区町村別選挙結果データおよび政治・社会・経済諸データの整備状況

本報告では、現在進めている参院選市区町村別選挙結果データの整備状況について詳細に紹介するとともに、衆院選、知事選、都道府県議選といった各種選挙データや国勢調査データ/市町村別財政データなどの社会経済データとの統合環境の整備状況について、その進捗度合を報告する。また、各データを用いた、55年体制に関する分析結果についても報告する。