ー橋大学グローバルCOEプログラム 社会科学の高度統計・実証分析拠点構築

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Open Forum: A Re-examination of the Government's New Growth Strategy

Daiji Kawaguchi

Micro Analysis (Households/Corporations) Group Associate Professor, Faculty of Economics, Hitotsubashi University

On December 15, 2010, Hitotsubashi University's Global COE program "Research Unit for Statistical and Empirical Analysis in Social Sciences" held an open forum at Josui Lecture Hall in Tokyo's Chiyoda Ward titled "Re-examination of the Government's New Growth Strategy." The fourth in the series of open forums aimed at presenting the research results of the program to a broader audience, the event focused on the government's New Growth Strategy decided by the cabinet in June 2010, with experts in the fields of macroeconomics, taxation, and labor economics assessing the policies laid out in the New Growth Strategy, followed by a discussion of desirable policies with the audience. It was a successful event which allowed researchers with an independent perspective to assess policies and the audience to engage in discussion with them through a question and answer session.

The open forum started with an outline of the aims of the open forum by Prof. Yukinobu Kitamura. Prof. Kitamura provided a broad overview of the objectives of the government's New Growth Strategy and pointed out that in all areas it showed a lack of political decisiveness. Various speakers then examined specific aspects of the New Growth Strategy. Prof. Kyoji Fukao considered ways to raise labor productivity, Prof. Tsutomu Miyagawa assessed the growth policies from a macroeconomic perspective, Prof. Eiji Tajika focused on the debate on lowering the effective corporate tax rate and related issues, and Prof. Daiji Kawaguchi considered ways to respond to the problem of the working poor.

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То start with. Prof. Fukao summarized the government's New Growth Strategy, describing it as "a set of policies that aim to promote growth through the creation of new demand and jobs in order to overcome the problems facing Japan's economy." Moreover, given the large output gap in the economy, Prof. Fukao showed some understanding for the general policy direction, with its focus on boosting demand in the short-term. However, he then pointed out that when considering the underlying causes of the long-term stagnation of the Japanese economy, the New Growth Strategy is short on concrete policies to create demand in the medium-term. According to Prof. Fukao, the cause of Japan's long-term economic stagnation is not impediments to private investment as a result of the non-performing loan problem; rather, the cause is that capital accumulation, which - with the exception of investment information and communication in technology (ICT) - had been buoyant, did not sufficiently raise productivity and profitability in the economy. Therefore, he argued, what is important is to implement policies to promote productivity-increasing ICT-related investment and investment in intangible assets such as research and development and organizational structure, and to attract foreign firms and nurture employment-creating start-up firms through regulatory reforms and greater labor market flexibility in order to raise long-term productivity growth and, ultimately, demand and employment.

Following the presentation by Prof. Fukao, Prof. Miyagawa argued that the collapse of the bubble represented the end of one particular pattern of growth for the Japanese economy and that in order to put Japan's economy on a new growth trajectory, necessary structural change was in which low-productivity firms were replaced bv high-productivity firms. However, because Japan was slow to undertake this structural transformation, it was the country affected the hardest among advanced economies by the recession following the collapse of Lehman Brothers. Prof. Miyagawa suggested that such structural change involves the move from a labor-intensive to a capital-intensive and knowledge-intensive economy. The government therefore needs to develop a blueprint for such a transition to a knowledge-intensive economy with skills at its core, and to spare no effort to support education and skill formation.

A key prerequisite for the acceleration of structural change in the economy is a vibrant business sector. Looking at government policies to support this, Prof. Tajjka focused on the topic of corporate tax reductions. He began by introducing an OECD study on 21 countries including Japan that examines the impact of tax structures on economic growth and suggests that, compared with taxes on fixed investment and income taxes, by far the most damaging to economic growth are personal income taxes, and that, moreover, from the perspective of economic growth, corporate taxes are extremely undesirable. Prof. Tajika then pointed out that a reduction in corporate taxes increases firms' internal funds and therefore raises their ability to take risks, and that, moreover, it would promote investment from overseas. In addition, he argued that different from tax reductions for policy purposes, such as those targeting new investment or specific industries, across-the-board tax reductions lighten the tax burden in all industries and are therefore important from the perspective of tax neutrality. He concluded by highlighting that the current tax reductions at the national and regional levels together amounted to 5 percentage points and were extremely important for Japan's growth strategy.

Next, Prof. Kawaguchi's presentation focused on labor market trends, which also play an important role amid these structural changes. Specifically, he highlighted that over the past 20 years, the Japanese employment system has seen substantial changes and that employment increasingly is on a short-term and/or non-regular basis. Given this situation, he argued that it is necessary to create new labor market structures in which career formation through job changes becomes possible. Government proposals in the New Growth Strategy for an expansion of the job card system and

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the public vocational education system, Prof. Kawaguchi argued, go in the right direction to help this transition. Going forward, a careful assessment of these policies is required. Finally, considering measures to help the working poor, Prof. Kawaguchi pointed out that a slight negative correlation between minimum wage increases and employment can be observed. Therefore, he argued that there was an urgent need to press ahead with the introduction of income tax credits.



These presentations were followed by a coffee

break, during which written questions and comments from the audience were collected. The ensuing discussion, conducted with great enthusiasm, focused on desirable forms of job training and school education, the importance of basing policy debates on empirical evidence using micro-data, the importance of improving the quality of asset markets, challenges to realizing a further reduction in corporate taxes, and other issues. Finally, Prof. Fukao, the leader of the Global COE program, closed the forum, remarking that program members would continue to examine a wide range of policy issues on the basis of empirical analyses and in doing so hoped for the continued encouragement from the audience.

Handouts and video clips (in Japanese) of the open forum can be accessed at the following website: http://www.hit-u.ac.jp/function/outside/news/2010/1224_2.html

Activities of the Micro-Data Analysis Section

Yukinobu Kitamura

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The Research Centre for Information and Statistics of Social Science (RCISSS) attached to the Institute of Economic Research at Hitotsubashi University concluded a partnership and cooperation agreement with the National Statistics Center (NSTAC) at the end of March 2009. Since then, the RCISSS has been engaged in research, development, promotion, and education concerning the secondary use of official statistics jointly with the NSTAC. In addition, the RCISSS has been serving as the satellite institute for the data archives operated by the NSTAC, providing researchers and others conducting academic studies with anonymized data (data from official statistics, where information on survey slips has been processed so as to ensure that the individuals and companies surveyed cannot be identified). The Micro-Data Analysis Section of the RCISSS plays a leading role in these services and provided anonymized data to 32 researchers involved in 10 projects in the academic year 2009, and to 30 researchers engaged in 15 projects so far in the current year (April – December 2010). In May and August of 2010, the Micro-Data Analysis Section held briefing sessions for researchers who were planning to use anonymized data and provided them with explanations regarding how to create documents to submit in the procedure for obtaining permission to use the data and precautions regarding making entries in the documents.

Research using anonymized data is steadily being promoted, and some of the members of the Global COE program have utilized such data, including Associate Professor Hiroyuki Okamuro (Program Member/Graduate School of Economics, Hitotsubashi University) who investigates "Determinants of the Transfer to and the Success of Self-employment," and Associate Professor Daiji Kawaguchi (Program Member/Graduate School of Economics, Hitotsubashi University), who used data from the "Employment Status Survey" for a course on labor economics at the Graduate School of Economics at Hitotsubashi University in the 2010 academic year. In addition, Assistant Professor Ken Yamada (COE Visiting Young Scholar/Singapore Management University) has been proceeding with a study on "Consumption, Income, and Wealth Inequality in Japan" using data from the "National Survey of Family Income and Expenditure." Furthermore, jointly with Dr. Takeshi Miyazaki (COE Visiting Young Scholar/Meikai University), the author of these lines used anonymized data for research published in August 2010 as a Global COE Hi-Stat Discussion Paper published under the title "The Elasticity of Taxable Income and the Optimal Income Tax Rate in Japan: Evidence from Japanese Household Microdata." We have undertaken further research since then.

In December 2010, the RCISSS opened a facility at the Kodaira International Campus of Hitotsubashi University for onsite data access providing advanced information security. This is the first facility in Japan established by an academic research institute in collaboration with the NSTAC. This facility is available for use by external researchers as well as those from within our university. Researchers are encouraged to make full use of the survey data available after obtaining the approval of government agencies or other organizations that hold jurisdiction over the individual surveys.

This form of cooperation between an academic

research institution and the NSTAC, which aims at enhancing the system for the secondary use of official statistics and supporting academic research, has accelerated since April 2009 when the new Statistics Act came into full force and systems for promoting the effective use of statistical data were developed. The Graduate School of Economics in the Faculty of Economics at Kobe University, the Japan Statistics Research Institute at Hosei University (Machida City), and the Institute of Statistical Mathematics (Tachikawa City), which is part of the Research Organization of Information and Systems, also became satellite institutes and have been cooperating with the NSTAC. Other institutes are expected to become satellite institutes in the future. There is concern that too many satellite institutes will reduce the uniqueness of Hitotsubashi University and may cause some new satellite institutes to have extremely small numbers of users. However, the number of users of a satellite institute likely depends on the number of researchers in the area. As a result, the current situation does not pose a significant problem for our university, which is located in an area with a relatively large number of researchers.

Custom tabulations (including statistical tabulations commissioned by the public and undertaken by using survey information from official statistics) are undertaken by the NSTAC, and the RCISSS will also conduct these tabulations if there is demand. Moreover, the RCISSS, in conjunction with the Global COE program, conducts and makes available to the public its own tabulations in areas which appear important from a research point of view but which are not covered by the departments and agencies undertaking the surveys. The number of these tabulations conducted to date is still small, and the RCISSS intends to increase them.

The RCISSS is also strengthening its cooperation with the NSTAC and the Ministry of Internal Affairs and Communications (MIC), to which the NSTAC belongs, as well as the Ministry of Health, Labour and Welfare. One person has been seconded from MIC and one,

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Associate Professor Yoshiyuki Kobayashi, from the NSTAC, who is participating in the Global COE program as a Program Member. The RCISSS has also concluded a consignment contract with the Ministry of Health, Labour and Welfare concerning the creation of anonymized data from the "Comprehensive Survey of Living Conditions," so personnel exchanges with the statistics and information department have been furthered.

For policy implementation, it is important and indispensable that not only specific researchers, but all researchers in Japan, have access to government statistical data and make policy recommendations based on empirical research. Universities need organizations that enable them to use official statistics, and it is important for universities to serve as liaison offices that coordinate with ministries and agencies that hold jurisdiction over statistical surveys, listen to requests from researchers, and convey the requests to the relevant ministries and agencies. In addition, if data are made available only to those who always use them, it becomes more likely that new viewpoints will not come to the fore. The use of such data by young people and researchers from other fields will broaden perspectives and make new discoveries possible. Accordingly, the main purpose of promoting the use of micro-data in an organizational manner is to disclose statistical data to a broader range of people, which is consistent with the objectives of the RCISSS and the Global COE program. It is strongly hoped that the use of official statistics will be further promoted through cooperation between government and academia, and that vigorous policy discussions will be held based on empirical evidence.

Information on the use of government statistical micro-data for academic research and higher education (in Japanese) is available on the RCISSS's website:

http://rcisss.ier.hit-u.ac.jp/Japanese/micro/index.html

Global COE Seminar with Professor Daniel Hamermesh

The G-COE Hi-Stat Program invited Professor Daniel Hamermesh from the University of Texas at Austin to the Global COE Seminar on November 24, 2010. In the first part of this seminar, he lectured on "How to Publish in a Good Journal" and in the second part, he presented the paper, "Strike Three: Discrimination, Incentives and Evaluation" (with Christopher A. Parsons, Johan Sulaeman, and Michael C. Yates, forthcoming in American Economic Review). Here, we report on the second part of this seminar. (For the tables and figures, please refer to pp. 27-39 of the paper [https://webspace.utexas.edu/hamermes/www/Baseball4Authors.pdf].)

Introduction

The strike zone in baseball is subject to the judgment of the home-plate umpire. In particular, the *edge* of the strike zone allows the umpire the greatest discretion. This raises a simple question. "Is there discrimination in umpires' decisions to call a ball or strike?" The novelty of this paper lies in the following: First, it attempts to demonstrate that this kind of discrimination exists and that discrimination decreases as its price increases. Second, if there is discrimination in the market, the people who are discriminated against will change their behavior. This changing behavior will alter what they do and alter the nature of evaluations as well. This paper shows how this works in baseball. Third, these effects lead to biased measures of productivity, which in turn lead to an underestimate of the extent of wage discrimination. In other words, if the productivity measure itself is biased as a result of discrimination,

people will underestimate the effects of minority status on outcomes. This paper demonstrates explicitly how this process works and what impact it has.

A number of studies have examined racial match preferences. The most relevant one is the one by Joseph Price and Justin Wolfers (2010), who look at the racial makeup of referees and players of the National Basketball Association and assess whether referees treat players differently depending on their race. The first part of our analysis is similar to theirs but we differ in some respects. For example, the cost of discrimination is involved. More importantly, we discuss all the behaviors that will change.



Professor Hamermesh presenting his paper

Data

Our data set contains information on every pitch thrown in every regular season game in American Major League Baseball (MLB) for the five years 2004-2008. The data set consists of information on about 3,500,000 pitches in total. For each pitch, we identify the pitcher, batter, catcher, pitch count, state of the game (score), inning, and pitch outcome. The data set also includes other relevant information: in which ballpark each pitch was thrown, what team was playing, the game's outcome, and the identities and positions of all four umpires.

We classify pitchers, batters, and umpires by race/ethnicity into four categories: White, Hispanic,

Black, or Asian. As Table 1 indicates, approximately 90 percent of umpires are White, while only 70 percent of pitchers are White. Therefore, we are mostly discussing the possibility of greater discrimination by White umpires against minority pitchers. Our analysis first focuses on pitches that were called strikes or balls, which account for 54 percent of all pitches, and then looks at the rest of pitches as well in analyzing changed behavior. Of the called pitches, about 32 percent are called strikes and 68 percent are called balls.

Called Pitches and Umpire-Pitcher Matches

Table 2 presents the number of umpires' called pitches by umpire-pitcher racial/ethnic match. However, these statistics do not reveal anything about discrimination, partly because they ignore possible differences inherent in the quality of pitchers by race/ethnicity. The productivity concept is lacking here. Identification is made by changing the match of individual umpires and pitchers by race/ethnicity.

We estimate the probability that a pitch is called a strike against a large number of controls. The equation is:

I(Strike Called Pitch)_i = $\gamma_0 + \gamma_1 UPM_i + \gamma_2 Controls_i + \varepsilon_i$, From Panel A of Table 3, we can see that umpires judge pitchers of the same race/ethnicity more favorably. The results in Column (9) suggest that if the pitcher and umpire match race/ethnicity, pitches are 0.16 percentage points more likely to be called a strike. Accordingly, an extra one out of 200 pitches is likely to be called a strike if the pitcher and umpire match. Given the fact that during a typical game each team's pitchers throw 150 pitches, this effect is not large.

Direct and Indirect Costs of Discrimination

Next we consider the role of monitoring. During the period from 2004-2008, QuesTec's Umpire Information System, a computerized monitoring system, was installed in 11 out of 30 ballparks. This system was used by MLB to evaluate umpires' fairness. If an umpire, during one regular season, had miscalled

more than 10 percent of the pitches he saw, he was considered to have underperformed, and this would affect his promotion and even retention in MLB. So the question to ask is, "Did umpires' behavior differ depending on where they were calling pitches?

Figure 1 shows that if the umpire and pitcher match in a Non-QuesTec ballpark, more strikes are called. If they do not match, the opposite occurs. If the umpire and pitcher match in a QuesTec ballpark where discrimination has a price, the umpire is less likely to call a strike. Thus, if the price of discrimination is directly imposed, we observe fewer discriminatory outcomes. This contrast can be seen for both White and minority pitchers, but the effects for minority pitchers are much greater.

In Non-QuesTec parks, the coefficient on umpire-pitcher match (UPM) is 0.59 percentage points per pitch, which represents an increase of about two percent (0.0059/0.32). On the other hand, in QuesTec parks, the coefficient is negative, -0.48 percentage points (Table 4). This suggests that discrimination exists in ballparks where it is not costly.

Following this discussion of the direct cost of discrimination, we now think about the indirect cost. We break games down into two categories in terms of crowd attendance, "well-attended," which is above median percentage capacity (70 percent), and "poorly-attended." More attendance means more scrutiny. Therefore, we expect that umpires will behave impartially if more people are watching the game. Figure 2 shows that umpires favor pitchers of matched race/ethnicity at poorly-attended games while matching umpires call fewer strikes in well-attended games. Again, there are greater effects for minority pitchers than for White pitchers.

The next question we ask is, "When does it matter if an umpire discriminates?" It matters when batters might be called out. Specifically, when players face a count with three balls and/or two strikes, the next pitch can be decisive. In this situation, the umpire's judgment is likely to be scrutinized more heavily. We define such a pitch as "terminal" and all other pitches as "non-terminal." From Figure 3, we see the same contrast as before. We expect that the price of discrimination is higher late in the game, when there is more scrutiny, than early in the game. Accordingly, umpires are likely to discriminate less later in the game. In fact, our analysis indicates that the effect of the terminal count is much greater early in the game than late in the game (Table 5B).

We consider all three monitoring proxies simultaneously (Table 5C). If a pitch is thrown in a Non-QuesTec park, in a poorly-attended game, with a non-terminal count, the effect is 0.0089, or an increase of about 3 percent (0.0089/0.32) in the chance of a strike being called when the umpire and pitcher match race/ethnicity. Given 300 pitches a game, that is substantial. In contrast, when the UPM is interacted with any one of three proxies for the scrutiny of umpires, the impact of the match disappears.

Robustness Tests

Umpires might discriminate not against pitchers but against batters or catchers. So we included new matching variables. However, this did not make any difference. Umpires decide how a pitch is thrown by focusing on the pitcher. It is logical, then, that the umpire-pitcher match is what matters.

The umpire's behavior may be affected by his own characteristics. We compiled data on an umpire's state of birth and residence, but found no evidence to support that argument. We might also argue that experienced umpires are likely to discriminate less due to two reasons: 1) experienced umpires may have learned more; 2) selection by the employer, i.e., if an umpire is a serious discriminator, MLB will not retain him. In fact, we do find some evidence to support this argument.

Umpires may discriminate less if a game is played in the city with a greater proportion of minorities. However, there is no evidence to support this.

The effects of umpire-pitcher matches are expected to be smaller in post-season games as there is more scrutiny and the price of discrimination is higher. We

find weak evidence in favor of this, but it is not statistically significant since the sample of such games is too small.

A baseball manager might behave differently depending upon where a game is played. We find that in QuesTec parks 39 percent of home pitchers are minorities and in Non-QuesTec parks 36 percent of pitchers are minorities. Consequently, mangers are more likely to have minority pitchers in ballparks where discrimination is apparently less. However, this does not affect our results because our regression analyses included fixed effects for each pitcher, umpire, and batter, as well as for the presence or absence of QuesTec.

The Effects of Biased Evaluations

How do these effects affect game outcomes? To answer this question, we think about incentives for umpires and players. We supplement pitch-level data with a data set on pitch characteristics. For a year and a half from 2007-2008, computerized technology called PITCHf/x was installed at all major league ballparks. This enables us to identify the type and location of a pitch. First we look at the location of all called strikes (Figure 4). On the "inside" of the strike zone, the probability of a pitch being called a strike is 0.87. On the "outside," 4 percent of chances are called a strike. If a ball is thrown to the edge, however, it has a 44 percent chance of being called a strike. In other words, in the edge area, umpires apparently have tremendous discretion. If a pitcher matches the umpire's race/ethnicity and expects that the umpire will favor him, he will adjust his strategy to capitalize on this advantage; he will throw a ball to the edge where the umpire exercises more discretion. A ball in the edge is, from the pitcher's point of view, very beneficial because it is hard for the batter to hit. Let's think about a minority pitcher. If he does not match the umpire, he will not throw a ball in the edge because the umpire is likely to call a ball. Therefore, he will throw either outside where "ball" is called, or inside where he is more likely to give up a hit. Thus, pitchers anticipating umpires' bias would adjust strategies and change behavior, which in turn can induce changes in the batter's behavior.

We estimate the effects on the probability of a pitch being in the edge of the strike zone. If the pitcher matches the umpire in a Non-QuesTec park, he is about one percentage point more likely to throw a pitch to the edge. That is quite a significant effect, given that only 20 percent of pitches are thrown in the edge. If the pitcher matches the umpire in a QuesTec park, the effect disappears entirely (Table 6C).

Second, we consider the kind of pitch, which includes a fastball and various off-speed pitches such as curveball, slider, change-up, and knuckleball. A fastball (straight pitch) is easier for the umpire to judge. If the matching pitcher wants to throw a pitch that is difficult for the umpire to judge, he will not throw a fastball. We expect the matching pitcher will throw more breaking pitches, which allow the umpire more discretion.

We estimate the effects on the probability of a curveball. If the pitcher matches the umpire in a Non-QuesTec park, the effect increases by more than one percentage point. Given that curveballs account for about 10 percent of all pitches, that is substantial. If the pitcher matches in a QuesTec park, the effect almost disappears (Table 6D). In Non-QuesTec parks, for all kinds of off-speed pitches, the effects increase if the pitcher and umpire match, and the effects are the opposite if they do not match. In QuesTec parks, the pitcher-umpire match has virtually no effect.

Implications of the Results

Figure 5 shows the outcomes when the pitcher matches the umpire in Non-QuesTec ballparks. If they match, the pitcher is more likely to win the game and allow fewer home runs, fewer earned runs, fewer hits, and fewer walks. Only strikeouts go in a direction opposite to that expected. Table 7 presents the estimated effects on the performance of an umpire-pitcher match. The negative number, -0.046 means that in Non-QuesTec parks, compared to

QuesTec parks, White pitchers win 4.6 percentage points more games if they match umpires. Also, White pitchers allow 0.15 fewer hits and 0.12 fewer runs. For minority pitchers, the effects are even greater. If they do not match umpires in Non-QuesTec parks, they will lose games with an increased frequency of 12.9 percentage points. And they give up extra 0.47 hits and extra 0.44 runs. The match effect on game outcomes is much bigger than the outcome on called pitches.

Our findings have important implications for measuring the extent of discrimination generally. A typical wage equation is as follows:

 $W_i = \alpha' M_i + \beta P_i + u_i,$

a regression of log wage against minority status, and measured productivity. If you assume that majority people are evaluated properly, it does not matter. However, if you assume that the evaluation of minorities is shaded negatively, which we have shown here, and if you estimate the equation with productivity measurement errors biased against minorities, you will understate some of the impacts on minority status. In such cases negative coefficients on minority status would be biased positively.

To derive the size of the effects using the example of baseball, we use the outcome in Figure 5 and simulate the size of the bias from our own data and studies of the impacts of these characteristics on wages. We estimate from these studies how large a bias in the estimated impact of minority status on salary would arise from the misevaluation of productivity. Making reasonable assumptions about the means of outcomes for starting pitchers in 2004-2008, applying the effects in Figure 5, and using parameter estimates of Lawrence M. Kahn (1993, Table A2) yields an estimated bias of $\beta \phi = 0.034$. Mark P. Gius and Timothy Ρ. Hylan (1996,Table 6.2) use strikeouts/inning, walks/inning and winning that are also conformable with our outcome measures. The same method based on their parameter estimates produces an estimate of $\beta \phi = 0.012$. Finally, using the estimates for starting pitchers by Anthony C. Krautmann *et al.* (2003), the estimate of $\beta \phi = 0.074$.

The main point is a general one. You can actually measure the extent of the bias. The question is, "Would it be larger or smaller in the real world?," in other words, "Would there be more misevaluation of people in a factory setting than in baseball?" I would argue that the effects are probably bigger in the real world, since pitchers are evaluated all the time and in the real world evaluations are, in most cases, made quite subjectively once a year.

Some previous studies have already pointed out that bias will affect measures of productivity. Glen Cain's paper (1986) is one example; however, our study is the first that has tried to explain the size of these effects and to simulate them in a real world case. It is also possible to replicate them in a variety of contexts.

Conclusions

We have demonstrated that discrimination by racial/ethnic preferences exists and that this kind of discrimination is price-sensitive. More importantly, we have demonstrated that discriminatory behavior by judges will alter behavior in a number of different ways. Pitchers anticipating biased evaluations adjust their strategies and change their behavior, which in turn will alter batters' behavior. These changes in behavior will ultimately affect the outcomes of games. Finally, in terms of evaluating outcomes, we have shown that ignoring these considerations leads people to miss something very important in the study of discrimination. I would like to encourage people to think about this along these lines, because it is a better way of thinking about discrimination.

This summary report was compiled by COE Researcher Takako Kimura^{*} with contributions from Professor Daniel Hamermesh and Professor Daiji Kawaguchi.

^{*} I would like to express my sincere gratitude to Professor Hamermesh and Professor Kawaguchi.

Global COE Hi-Stat Discussion Papers (July 2010-January 2011)

- No. 146 (July 2010) Kazuya Wada, "Effects of Land Holding on School Enrollment in Rural Kenya" (in Japanese).
- No. 147 (July 2010) Hiromi Hara, "The Incidence and Impact of Firm-Provided Training among Japanese Non-Regular Workers" (in Japanese).
- No. 148 (August 2010) Kiminori Matsuyama, "Endogenous Ranking and Equilibrium Lorenz Curve Across (ex-ante) Identical Countries."
- No. 149 (August 2010) Yukinobu Kitamura and Taisuke Uchino, "The Effect of Academic Background on Household Portfolio Selection: Evidence from Japanese Repeated Cross Section Data" (in Japanese).
- No. 150 (August 2010, Revised: September 2010) Yukinobu Kitamura and Takeshi Miyazaki, "The Elasticity of Taxable Income and the Optimal Income Tax Rate in Japan: Evidence from Japanese Household Microdata" (in Japanese).
- No. 151 (October 2010) Martina Battisti and Hiroyuki Okamuro, "Selling, Passing on or Closing? Determinants of Entrepreneurial Intentions on Exit Modes."
- No. 152 (October 2010) Kazuyasu Sakamoto, "The Effects of Work-Life Balance Systems on Fathers' Housework and Child-rearing Time: An Analysis Using a Labor Union's Survey" (in Japanese).
- No. 153 (October 2010) Eiji Ogawa and Junko Shimizu, "AMU and Monetary Cooperation in Asia."
- No. 154 (November 2010) Hao Feng and Ming Lu, "School Quality and Housing Prices: Empirical Evidence Based on a Natural Experiment in Shanghai, China."
- No. 155 (November 2010) Junichi Nishimura and Yosuke Okada, "R&D Portfolios and Pharmaceutical

Licensing."

- No. 156 (December 2010) Shinya Tanaka and Eiji Kurozumi, "Investigating Finite Sample Properties of Estimators for Approximate Factor Models When N Is Small."
- No. 157 (December 2010) Toshio Honda, "Nonparametric Quantile Regression with Heavy-Tailed and Strongly Dependent Errors."
- No. 158 (December 2010) Koichi Tadenuma and Yongsheng Xu, "The Walrasian Distribution of Opportunity Sets: An Axiomatic Characterization."
- No. 159 (January 2011) Richard Baldwin, "Unilateral Tariff Liberalization."
- No. 160 (January 2011) Kazuya Kikuchi, "Privately Informed Parties and Policy Divergence."
- No. 161 (January 2011) Hun-Chang Lee, "Internal Reasons for the Colonization of Korea in 1910."
- No. 162 (January 2011) Tsutomu Miyagawa, "Economic Slowdown in Japan and the Role of Intangible Assets on the Revitalization of the Japanese Economy."
- No. 163 (January 2011) Osamu Saito, "The Economic History of the Restoration Period, 1853-1885."
- No. 164 (January 2011) Yasuhiro Hara, "Examination of Mining Production Data in Korea under Japanese Occupation" (in Japanese).
- No. 165 (January 2011) Takeshi Nishimura, "Incomplete Procurement Contracting with a Risk-Averse Agent."

Global COE Hi-Stat Discussion Paper Series http://gcoe.ier.hit-u.ac.jp/english/research/discussion/i ndex.html

Seminars and Conferences (July 2010–January 2011)

135th (July 2, 2010)

24th Contemporary Normative Theory Seminar co-organized with the Center for Research on Contemporary Economic Systems Takao Sasaki (Hokkaido University Public Policy School), "The Political Economy of International Public Goods: Crisis, Structural Change, and International Cooperation" (in Japanese) 136th (July 6, 2010) Workshop on International Trade and FDI co-organized with the Center for Research on Contemporary Economic Systems and the Tokyo G-COE Hi-Stat Center for Economic Research (TCER) Seminar Xuan T. Nguyen (University of New South Wales), **Econometrics** "Technology Spillover and Export-Platform FDI" (with Arghya Ghosh and Hodaka Morita) 137th (July 8, 2010) 10th Global COE Research Workshop Tetsushi Murao (Hitotsubashi University), "The Informal Sector Behind the Phillips Curve in Developing Countries" (in Japanese) 143rd (September 3, 2010) 138th (July 13, 2010) Industrial Organization and Labor Economics Workshop co-organized with the TCER Seminar Institutions Serguey Braguinsky (Carnegie Mellon University), "Borrowing for College and Post-Graduation Earnings" 139th (July 22, 2010) van Leeuwen) Workshop on Economic Theory co-organized with the Center for Research on Contemporary Economic Systems and the TCER Seminar co-organized Naoki Masuda (University of Tokyo), "Dynamics of Management Opinion Formation on Networks: Identifying Key Players" (in Japanese) 140th (July 27, 2010) Industrial Organization and Labor Economics Workshop

co-organized with the TCER Seminar

Peter Zeitz (University of California, Los Angeles), "Short-Run Incentives and Myopic Behavior: Evidence from State-Owned Enterprises in China"

141st (July 31-August 1, 2010)

Hitotsubashi Conference on International Trade and Industrial Organization

co-organized with Osaka University Global COE Program, the Center for Research on Contemporary Economic Systems, and the Grant-in-Aid for Scientific Research (A)

142nd (August 23-24, 2010)

Workshop on Financial

Taro Kanatani (Shiga University), "Subsampling Cumulative Covariance Estimator," Peter Hansen (Stanford University), "Realized GARCH: А Complete Model of Returns and Realized Measures of Volatility," and Koichi Maekawa (Hiroshima University of Economics), "Long Memory in Aggregate Squared GARCH (1,1) Process"

Economic Development Workshop

co-organized with the Center for Economic

Stephen Broadberry (University of Warwick), "British (with Economic Growth, 1270-1870" Bruce Campbell, Alexander Klein, Mark Overton, and Bas

144th (September 24-26, 2010)

10th Comparative Analysis of Enterprise Data & COST Conference 2010

Institute with Advanced of Research (AIM), European Cooperation in Science and Technology (COST), Institute for Employment Research (IAB), National Endowment for Science and Technology and the Arts (NESTA), UK Innovation Research Centre (UK-IRC), Ewing Marion Kauffman Foundation, and

151st (October 28, 2010) the Organisation for Economic Co-operation 12th Global COE Research Workshop Development (OECD) 145th (October 5, 2010) Ryota Yabe (Hitotsubashi University), "The Problem Industrial Organization and Labor Economics of the Unit Root Test for Perron's Continuous Time Workshop Model and its Resolution," and "Dickey-Fuller Type co-organized with the TCER Seminar Unit Root Tests for the Fractional Ornstein-Uhlenbeck Process" Tue Gorgens (Australian National University) 152nd (November 2, 2010) "Private School Usage in Australia" 146th (October 7, 2010) Industrial Organization and Labor Economics 11th Global COE Research Workshop Workshop Akiko Nasuda (Hitotsubashi University), "Does Land co-organized with the TCER Seminar Lease Reduce the Effect of the 'Wealth Paradox' for Alexander Ljungqvist (New York University), Child Labor?: Evidence from Time Use Data in Rural "Monitoring Managers: Does It Matter?" 153rd (November 5-6, 2010) Cambodia" (in Japanese) 147th (October 19, 2010) Asian Conference 2010 on Applied Industrial Organization and Labor Economics Micro-Economics/Econometrics Workshop co-organized with the International Exchange co-organized with the TCER Seminar Seminar Fali Huang (Singapore Management University), Gaaitzen J. de Vries (University of Groningen), "Productivity in a Distorted Market: The Case of Kamhon Kan (Academia Sinica), Daiji Kawaguchi Brazil's Retail Sector" (Hitotsubashi University), Ayako Kondo (Osaka 148th (October 22, 2010) University), Chul-In Lee (Seoul National University) RIETI/G-COE Hi-Stat International Workshop on Jungmin Lee (Sogang University), Myoung-jae Lee Establishing Industrial Productivity Databases for (Korea University), Ryo Nakajima (Yokohama China (CIP), India (IIP), Japan (JIP), and Korea National University), Hideo Owan (University of (KIP) Tokyo), Ken Yamada (Singapore Management 149th (October 23-24, 2010) Shintaro University), Yamaguchi (McMaster Hitotsubashi G-COE Lectures and Workshop on University), and Thomas Lemieux (University of British Columbia) Choice, Games, and Welfare 154th (November 9, 2010) co-organized with the Center for Research on Industrial Organization and Labor Economics Contemporary Economic Systems the and International Exchange Seminar Workshop William Thomson (University of Rochester), "On the co-organized with the TCER Seminar Axiomatics of Resource Allocation" Hiroaki Ino (Kwansei Gakuin University), "Fee 150th (October 25, 2010) versus Royalties in General Cost Functions" Workshop on International Trade and FDI 155th (November 11, 2010) 13th Global COE Research Workshop co-organized with the Center for Research on Contemporary Economic Systems and the TCER Maki Michinaka (Hitotsubashi University), Seminar "Multidimensional Poverty Rankings without Aggregation and Their Historical Transitions" Hodaka Morita (University of New South Wales), 156th (November 13-14, 2010) "FDI and Technology Spillover under Vertical 5th Applied Econometrics Conference Product Differentiation"

co-organized with Osaka University Global COE Program, "Human Behavior and Socioeconomic Dynamics" 157th (November 13-14, 2010) Hitotsubashi COE Trade Workshop for Young Researchers co-organized with the Center for Research on **Contemporary Economic Systems** 158th (November 18, 2010) 14th Global COE Research Workshop Satoshi Inomata (Institute of Developing Economies, Japan External Trade Organization), "Asia Beyond the Crisis: Visions from International Input-Output Analyses" 159th (November 18-19, 2010) Hitotsubashi Lecture Series on Statistics and **Econometrics** In Choi (Sogang University), "Almost All about Unit Roots" 160th (November 19, 2010) International Exchange Seminar Hun-Chang Lee (Korea University), "Internal Reasons for the Colonization of Korea in 1910" (in Japanese) 161st (November 20-21, 2010)

Hitotsubashi Conference on Econometrics 2010 co-organized with the Econometrics and Quantitative Finance Section at the Japan Statistical Society and the International Exchange Seminar N. H. Chan (The Chinese University of Hong Kong), In Choi (Sogang University), William Dunsmuir (University of New South Wales), Cheng Hsiao (University of Southern California), and Pentti Saikkonen (University of Helsinki)

162nd (November 24, 2010)

Global COE Seminar

Daniel Hamermesh (University of Texas), "How to Publish in a Good Journal" and "Strike Three: Discrimination, Incentives and Evaluation"

163rd (December 11-12, 2010)

Hitotsubashi GCOE Conference on International Trade and FDI 2010

co-organized with the Center for Research on Contemporary Economic Systems and the International Exchange Seminar

Richard Baldwin (Graduate Institute of International and Development Studies), Paola Conconi (Universite Libre de Bruxelles), Arnaud Costinot (Massachusetts Institute of Technology), Taiji Furusawa (Hitotsubashi University), Arghya Ghosh (University of New South Wales), Gene Grossman (Princeton University), Oleg Itskhoki (Princeton University), Ngo Van Long (McGill University), Kiminori Matsuyama (Northwestern University), Kaz Miyagiwa (Emory University), Hiroshi Mukunoki (Gakushuin University), and Ralph Ossa (The University of Chicago Booth School of Business)

164th (December 14, 2010)

Industrial Organization and Labor Economics Workshop

co-organized with the International Exchange Seminar

Erik Stam (Utrecht University), "Intrapreneurship versus Independent Entrepreneurship: A Cross-national Analysis of Individual Entrepreneurial Behavior" (with Niels Bosma and Sander Wennekers)

165th (December 15, 2010)

Open Forum: A Re-examination of the Government's New Growth Strategy

co-organized with Hitotsubashi University Policy Forum

Kyoji Fukao (Hitotsubashi University), Daiji Kawaguchi (Hitotsubashi University), Eiji Tajika (Hitotsubashi University), Tsutomu Miyagawa (Gakushuin University), and Yukinobu Kitamura (Hitotsubashi University)

166th (December 15, 2010)

Hitotsubashi GCOE Lectures on International Trade Gene Grossman (Princeton University)

167th (December 16, 2010)

15th Global COE Research Workshop

Kazuya Kikuchi (Hitotsubashi University), "Political Competition over a Multidimensional Policy Space"

168th (December 17, 2010)

Workshop on Asian Historical Statistics (ASHSTAT) Yasuhiro Hara (Hitotsubashi University),

"Examination of Mining Production Data in Korea under Japanese Occupation" (in Japanese)

169th (December 24, 2010)

10th Panel Survey Conference

co-organized with the Institute for Research on Household Economics, the COE Programs by Keio University and Osaka University, and the Institute of Social Science at the University of Tokyo

170th (January 6, 2011)

16th Global COE Research Workshop

Keiya Eto (Hitotsubashi University), "Long-Term Economic Statistics of China, Agriculture 1949-" (in Japanese)

171st (January 11, 2011)

Industrial Organization and Labor Economics Workshop

Tsuyoshi Tsuru (Hitotsubashi University), "Product Development and Human Resource Management in East Asia: Analyzing Japanese, Korean, and Chinese Firms" (in Japanese)

172nd (January 13, 2011)

Workshop on Asian Historical Statistics (ASHSTAT) / 17th Global COE Research Workshop

Yoonseock Lee (Hitotsubashi University), "The

Statistical System of the Governor-General of Korea (in Japanese)

173rd (January 25, 2011)

Industrial Organization and Labor Economics Workshop

co-organized with the TCER Seminar

Masayuki Morikawa (Research Institute of Economy, Trade and Industry), "Economies of Agglomeration, Productivity, Wages, and Environment" (in Japanese)

174th (January 27, 2011)

19th Global COE Research Workshop

Nuttapon Photchanaprasert (Hitotsubashi University), "Innovation and Production Offshoring: Implications on Welfare"

175th (January 29-30, 2011)

Construction of Longitudinal Network with Middle Eastern Countries: Toward the Mutual Understanding and Development of Joint Research co-organized with the Ministry of Education, Culture, Sports, Science and Technology's Need-Based Program for Area Studies Middle East within Asia

Past Seminars

http://gcoe.ier.hit-u.ac.jp/english/events/past_seminars /index.html

Awards

1st Award for Research Excellence from the Japan Society of Political Economy

Prof. Naoki Yoshihara, Program Member of the Global COE Hi-Stat Program (G-COE Hi-Stat), received the 1st Award for Research Excellence from the Japan Society of Political Economy for his book, *Toward a Welfare Theory of Labor Exploitation* (in Japanese, Iwanami Shoten, 2008).

Excellent Paper Award at the Fifth Applied Econometrics Conference

Ms. Akiko Nasuda, COE Young Researcher of the G-COE Hi-Stat Program, presented a paper titled "Does Land Lease Reduce the Effect of the "Wealth Paradox" for Child Labor?: Evidence from Time Use Data in Rural Cambodia" (in Japanese) at the Fifth Applied Econometrics Conference held on November 13-14, 2010, and won an Excellent Paper Award for

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this paper.

5th Junzo Kashiyama Memorial Prize

Dr. Tangjun Yuan, COE Visiting Scholar of the G-COE Hi-Stat Program (Associate Professor, School of Economics, Fudan University), received the 5th Junzo Kashiyama Memorial Prize for his book, *China's Economic Development – Initial Conditions, Policy Choices and Resource Allocation, 1860-2004* (in Japanese, University of Tokyo Press, 2010).



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