## **Instructions to Applicants for the Oral and Poster Presentations**

## The Agricultural Economics Society of Japan Annual Meeting 2019

(The University of Tokyo)

This is the submission instruction for the oral and poster presentations to be presented in English during the Meeting at the University of Tokyo. Applicants are required to submit their documents in accordance with the instructions below. <u>And documents</u> "A step-by-step guide for application for oral presentation at the AESJ Annual Meeting 2019", and "A step-by-step guide for application for poster presentation at the AESJ Annual Meeting 2019" are available.

#### 1. Notes

- (1) An applicant must not be the first author of more than one presentation including both oral and poster sessions.
- (2) Three documents have to be included in the application; 1) Presentation application form, 2) Abstract of the presentation, and 3) Manuscript. The application form and the templates for abstract and manuscript can be downloaded from the website of AESJ. The manuscript must be qualified to be submitted to the journal. A manuscript written incompletely is not acceptable for submission. Only the manuscript should be submitted as a PDF file and other formats do not have to be converted.
- (3) Because the space and time are limited at the Meeting, some applicants might be requested to move to a different category from originally submitted.

## 2. Submission of your documents

(1) Documents to be submitted

This is a follow-up for the above mentioned in 1-(2) for the documents to be submitted. Please make three separate files for each one of the three documents such as:

- a) Presentation application form: Fill up Sheet 1. A sample is shown in Sheet 2.
- b) Abstract of the presentation: See Sheets 3, 4, and 5. Use the template for 'Abstract of the presentation.'
- c) Manuscript: See Sheets 6 and 7. Use the template for 'Manuscript.'The formats and templates of these documents are available on the website of our society.
- (2) How to submit

Please send the three files by e-mail to k\_aesj2019@aesjapan.sakura.ne.jp (for oral presentation) or p\_aesj2019@aesjapan.sakura.ne.jp (for poster presentation)

- (3) Notifications
- 1) The file-names for the Sheet 1, 4, and 7 should be as "2 The file names of the documents" of "A Step-by-Step Guide of Application for Oral Presentation at the AESJ Annual Meeting 2019"
- 2) The subject of the e-mail should be as "3.2 Subject/title of e-mail for application" of "A Step-by-Step Guide of Application for Oral Presentation at the AESJ Annual Meeting 2019"
- 3) Make sure that all the three documents listed above are attached to the mail. Applications with incomplete documents may not be accepted.
- 4) The secretariat will send an e-mail to confirm receiving your application by December 21st (Friday), 2018. If you do not receive it, please ask the secretariat at office@aesjapan.sakura.ne.jp.

## 3. Application period

Saturday, December 1st, 2018 to Friday, December 14th, 2018 (17:00 Japan time)

Application must be send using e-mail.

#### 4. The schedule table

The schedule for the oral and poster presentations (venue and time) will be posted on the website of the Agricultural Economics Society of Japan by the middle of February, 2019.

## 5. Preparing the presentation application form

#### (1) Entering the membership number

The first author and the corresponding author must be member(s) of the Agricultural Economics Society of Japan for the FY2018 at the time of presentation. Non-members are required to become members immediately at least by January, 2019.

## (2) First and corresponding authors

The first and corresponding authors are requested to put their membership numbers on the application form. Put a marker \* after the name of the corresponding author. The corresponding author should be responsible for the inquiries from the readers.

## (3) Choosing an appropriate category for your presentation

Choose an appropriate category from the list in application form. You can select up to 2 categories by showing your 1st choice and the second. The category allotted finally by the secretariat may be different from the one initially chosen by the applicant due to balancing the overall schedule.

#### 6. The outline for presentation

#### (1) Oral presentation

Each presentation will be allocated for 25 minutes; 17 minutes for speech and 8 minutes for Q/A session. However, there is a possibility that the presentation time period can be changed according to the number of overall presentations. Presentations using projectors are allowed only in the form of PDF files. If you plan to do so, send your PDF file by e-mail. The e-mail address will be posted on the website of our society in the middle of February, 2019. The deadline for the PDF files to submit is 17:00 on March 15<sup>th</sup>, 2019. Please check "Guide for Oral and Poster Presentations" on our website for information about the file-name of your PDF file and the subject of the email.

#### (2) Poster presentation

Each presentation will be allocated for 10 minutes; 7-minutes for speech and 3-minutes for Q/A session in front of the poster. At least one author should be present at the poster and explain/discuss their work with delegates during assigned discussion period ( $9:00\sim16:00$ ). Please check "Guide for Oral and Poster Presentations" on our website for a poster layout (sample) and other information. The Poster Awards will be granted. Only those that the first authors are under 40 years old can be the candidate for the Awards.

## 7. The submission for publication consideration

- (1) After the presentations at the Meeting, the authors may submit their presented papers for publication consideration in the category of the "Research Letters" in *Japanese Journal of Agricultural Economics* (JJAE). The comments and suggestions offered during the presentations have to be incorporated in your manuscripts. The manuscripts will be peer-reviewed and the qualified manuscripts are to be accepted for publication.
- (2) If the authors wish to submit to JJAE, both the first and corresponding authors should be members of our Society in the FY2018.
- (3) The manuscripts are required to be proofread by native speakers prior to submission.
- (4) Send your manuscript by e-mail to The Editorial Office of the Journal of Rural Economics (Nogyo Keizai Kenkyu) in The Center for Academic Publications Japan. More detailed information will be posted on our website soon after the Meeting.
- (5) A submission fee of 5,000 yen must be paid when submitting your manuscript. A submitted manuscript for publication consideration in JJRE is charged as follows:

4 pages 20,000 yen;

5 pages 30,000yen;

6 pages 50,000yen.

## [Sheet 1] Application form for Oral Presentation

日本農業経済学会 2019年度大会 個別報告(口頭報告)申請書 Application form for Oral Presentation at The Agricultural Economics Society of Japan Annual Meeting 2019 (事務局記載:受付ID) 1)申請者(筆頭報告者)Applicant (First Author) 報告には2019年度の会員資格が必要です。Membership for year 2019 is required for presentation 会員資格 Membership 氏名 Name 会員番号 Membership ID 031 -所属 Affiliation E-mail address 2) コレスポンディング・オーサー Corresponding Author 報告には2019年度の会員資格が必要です。Membership for year 2019 is required for presentation □ 筆頭報告者に同じ(Check the box if the first author/applicant is the corresponding author) 会員資格 Membership 氏名 Name 会員番号 Membership ID 所属 Affiliation E-mail address 3) 報告タイトル Presentation Title 4) 報告者·所属 Presenters/Affiliation コレスポンディング・オー サーに\*をつけてください Put '\*' for correspondin 所属 Affiliation (First Name Surname ) ↑コレスポンディング・オーサーに'\*'をつけてください。Put '\*' for the corresponding author 5)使用言語 □日本語 6)個別報告原稿のページ数 English ↑使用する言語を選んでください。 Choose the language you use at presentation 7)プレゼンテーションファイル(PDF)を使用しますか? □ はい,使用します。Yes, I/We use. □ いいえ,使用しません。No, I/We don't use. 8)大会後の『農業経済研究』報告論文としての投稿予定 □ 投稿予定あり Plan to submit □ 投稿予定なし No plan to submit Submission of manuscript for publication in JJAE Research Articles I.. 対象(一つ選択) Subject area/region of the research (choose one) □ 日本国内 Within Japan 海外 Overseas 主な国名 Name of the area/countries □ 国際比較 International Comparison II. 用いている手法にチェックを入れてください(複数可)。Methodology (choose any if it is used) □ 理論 Theoretical
□ 統計・計量 Statistical/Econometric Analysis □ 歴史 Historical □ フィールド調査 Field Investigation III. 分析分野(2つまで選択可。1,2の様に順位を記入) 9) 報告分野選択 Category (Choose one or two. If you choose two, rank them according to their appropriateness to represent your Area of presentation presentation) 需要 Demand 生産・経営 Production / Management 流通・マーケテイング Distribution / Marketing 環境・資源 Environment / Resources 農村社会・文化 Rural Society / Culture 農業・農村開発 Agricultural or Rural Development 食品 Food Industry 地域農業 Regional Agriculture 農業・農村計画 Agricultural or Rural Planning 政策·制度 Policy / Institutions

## [Sheet 2] Sample of Application form for Oral Presentation

日本農業経済学会 2019年度大会 個別報告(口頭報告)申請書 Application form for Oral Presentation at The Agricultural Economics Society of Japan Annual Meeting 2019 (事務局記載:受付ID) この申請書のファイル名を K\_031222333(Ueo Aiue)\_a としてください Name this application form file as 'K\_031222333(Ueo Aiue)\_a' 1) 申請者(筆頭報告者) Applicant (First Author) 報告には2019年度の会員資格が必要です。Membership for year 2019 is required for presentation 会員資格 Membership 学生会員 student 氏名 Name Ueo Aiue 会員番号 Membership ID 所属 Affiliation Kakiku University E-mail address aiue@kakiku-u.ac.ip 2) コレスポンディング・オーサー Corresponding Author 報告には2019年度の会員資格が必要です。Membership for year 2019 is required for presentation. ☑ 筆頭報告者に同じ(Check the box if the first author/applicant is the corresponding author) 会員資格 Membership 氏名 Name 会員番号 Membership ID 所属 Affiliation E-mail address 3) 報告タイトル Presentation Title Optimal Behavior of Rice Farmers in the Imperfectly Competitive Land Lease Market in Japan: With a Focus on Transaction Costs and Uncertain Returns on Land Lease Investment 4) 報告者·所属 Presenters/Affiliation コレスポンディング・オー サーに\*をつけてください Put '\*' for corresponding 氏名 Name 所属 Affiliation (First Name Surname ) Ueo Aiue Kakiku University Tsuteto Tach Sashisu Center 3 5 5)使用言語 □□□★語 6)個別報告原稿のページ数 ページ English Pages of manuscript 7)プレゼンテーションファイル(PDF)を使用しますか? ▼ はい,使用します。Yes, I/We use. □ いいえ,使用しません。No, I/We don't use. you use presentation file (PDF only)? 8)大会後の『農業経済研究』報告論文としての投稿予定 ✓ 投稿予定あり Plan to submit

☐ 投稿予定なし No plan to submit I. 対象(一つ選択) Subject area/region of the research (choose one) 日本国内 Within Japan □ 日本国内 Within□ 海外 Overseas 主な国名 Name of the country ▼ 国際比較 International Comparison 主な国名 Name of the area/countries Asia II. 用いている手法にチェックを入れてください(複数可)。Methodology (cho 図 理論 Theoretical図 統計・計量 Statistical/Econometric Analysis歴史 Historical図 フィールド調査 Field Investigation III. 分析分野(2つまで選択可。1,2の様に順位を記入) 9) 報告分野選択 Category (Choose one or two. If you choose two, rank them according to their appropriateness to represent your Area of presentation presentation) 生産・経営 Production / Management 流通・マーケテイング Distribution / Marketing 環境・資源 Environment / Resources 農村社会・文化 Rural Society / Culture 農業・農村開発 Agricultural or Rural Development 食品 Food Industry 地域農業 Regional Agriculture 農業・農村計画 Agricultural or Rural Planning

政策・制度 Policy / Institutions

## [Sheet 3] Instructions for the Abstract of the Presentation (Oral / Poster)

## 1. Writing Style

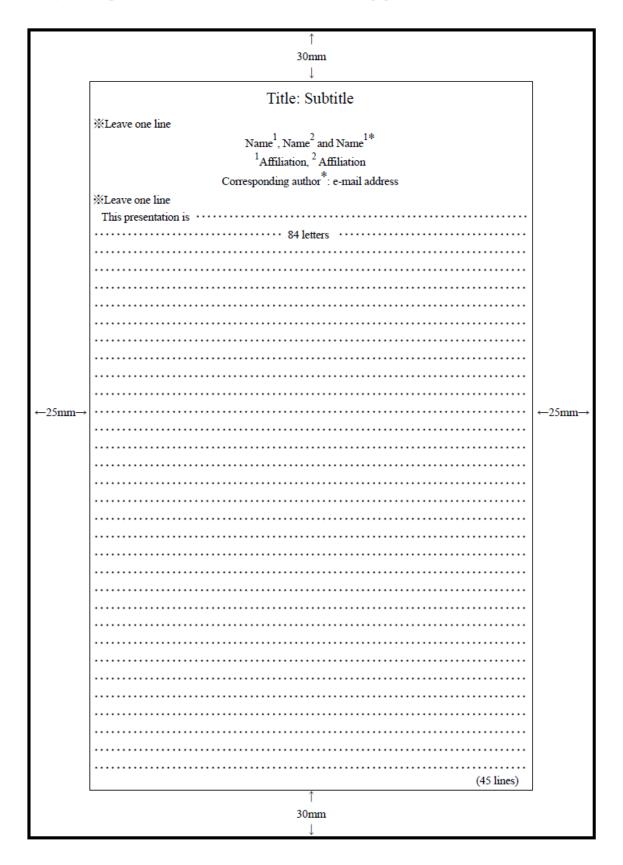
- (a) A4 size horizontal pattern. Horizontal 84 letters x Vertical 45 lines.
- (b) Leave the left and right margins 30mm, top and bottom margins 25mm according to the sample provided.
- (c) Figures/tables must also be included within the same layout.

#### 2. Layout

- (1) Title (Centered, Times New Roman, bold, 14 point). In case of using more than two lines, move one line below.
- (2) In case of a subtitle, continue after the title the same way but separated by ":" at the beginning of the subtitle.
- (3) Leave one-line blank.
- (4) Author's name (Centered, Times New Roman, bold, 10.5 point). After the name of author, add superscript number for each different affiliation. If the authors are more than two, divide by comma and continue horizontally. Add \* mark after the number for the corresponding author.
- (5) Affiliation (Centered, Times New Roman, 10.5 point). Add superscript number before affiliation. If the affiliations are more than two, divide by comma and continue horizontally.
- (6) Corresponding author (Times New Roman, 10.5 point). After the corresponding author marker \*, write down the e-mail address of the corresponding author's.
- (7) Leave one-line blank.
- (8) Text (Times New Roman, 10.5 point).

Note: It is required to use the template for 'Abstract of the presentation.'

[Sheet 4]Layout sample for the Abstract (Select flame for A4 size paper)



# Optimal Behavior of Rice Farmers in the Imperfectly Competitive Land Lease Market in Japan: With a Focus on Transaction Costs and Uncertain Returns on Land Lease Investment

Ueo Aiue<sup>1\*</sup> and Tsuteto Tachi<sup>2</sup>

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In the process of drawing up contracts, farmers must pay some transaction costs, including the cost for searching for appropriate farmlands. In addition, farmers tend to postpone making contracts because of their anxiety about uncertain returns on land lease investment in spite of present profitability.

The objective of this study is to judge whether transaction cost and uncertain returns work as restrictions on the number of land lease contracts in Japan. This study assumes that the previous papers associated with this context overestimated the number of the contracts because they ignored the effects of two obstacles as a result of their preconception of the competitive market framework. The originality of this study is to prove the previous overestimation from theoretical and empirical viewpoints, and to estimate the transaction cost and the option value coefficients as an index of uncertain returns by applying real option theory.

The main outcomes of this study are as follows: First, the study makes it clear theoretically that the perfectly competitive land lease market assumption adopted by the previous papers leads to the overvaluation of the number of land lease contracts when market competitiveness is imperfect. Second, the study proves empirically that the land lease markets of rice farming are imperfectly competitive according to the significant estimation results of the transaction costs and the option value coefficients. Third, from the estimation results of the study, the estimate of the transaction costs in the former period from 1981 to 1992 was relatively larger than the estimate in the latter period from 1995 to 2002; on the other hand, the estimate of option value coefficient in the former period was relatively smaller than the estimate in the latter period. These results imply that each of the two obstacles restricts the number of land lease contracts at different periods. The empirical results of this study strongly suggest that government policy to mitigate both transaction costs and a degree of uncertainty of returns on land lease investment is effective in accelerating farmland lease contracts in rice farming in Japan.

## [Sheet 6] Instructions for the Manuscript (Oral / Poster presentation)

#### 1. Writing Style

- (a) A4 size sheet with two columns. Before starting the text of the body, however, keep one wide column across the page with 96 letters per line x 46 lines per page. After stating the text, use two column format with 48 letters per line of a column x 46 lines per page.
- (b) Leave the left and right margins by 25mm, and top and bottom margins by 20mm. Refer to the sample in Sheet 7.
- (c) Figures/tables must also be included within the same layout.

## 2. Layout

- (1) Title (Centered, Times New Roman, bold, 14 point). In case of using more than two lines, move one line below.
- (2) In case of a subtitle, continue after the title the same way but separated by ":" at the beginning of the subtitle.
- (3) Leave one-line blank.
- (4) Author's name (Centered, Times New Roman, bold, 14 point). After the name of author, add superscript number for each different affiliation. If the authors are more than two, divide by comma and continue horizontally. Add \* mark after the superscript number for the corresponding author.
- (5) Leave one-line blank.
- (6) Summary up to 100 words (Times New Roman, 10 point).
- (7) Leave one-line blank.
- (8) Key words. Write down Key words: (Arial, 10 point) and after it, write down 3 key words (Times New Roman, 10 point) divided by commas.
- (9) Leave one-line blank.
- (10) Head line of the part (Centered, Times New Roman, bold, 10.5 point).
- (11) Text (Times New Roman, 10 point).

#### 3. Footnote

- (1) Use the font Times New Roman, 9 point. Affiliation and the corresponding author's e-mail address should be written clearly at the footnote. First, write down affiliation and add superscript number in front of the affiliation which corresponds to each author. If there are more than two affiliations, start new lines for the second author and after. Second, write down the e-mail address of corresponding author (after stating "Corresponding author\*:").
- (2) All the notes of the text should be footnoted at the bottom of each page.

Note: It is required to use the template for 'Manuscript.'

# Optimal Behavior of Rice Farmers in the Imperfectly Competitive Land Lease Market in Japan: With a Focus on Transaction Costs and Uncertain Returns on Land Lease Investment

# **Ueo Aiue**<sup>1</sup>\* and Tsuteto Tachi<sup>2</sup>

The objective of this study is to judge whether transaction costs and uncertain returns work as restrictions on the number of land lease contracts in Japan. The main outcomes are as follows. First, the study makes it clear theoretically that the perfectly competitive land lease market assumption adopted by the previous papers leads to the overvaluation of the number of land lease contracts when the market competitiveness is imperfect. Second, the study proved empirically that the land lease markets of rice farming are imperfectly competitive according to the significant estimation results of the transaction costs and the option value coefficients.

Key words: farmland lease contract, transaction cost, uncertain return

#### 1. Introduction

The improvement of the agricultural structure by expanding farm size has been one of the most important issues in agricultural policy in Japan since the enactment of the Agricultural Basic Law in 1961. In the late 1950s, the number of farm households and the population mainly engaged in farming, which had been considered constant since the Meiji Era, excluding a couple of years after World War II, began to decrease. The reduction of heavy population pressure on rural areas suggested that farm size could be expanded. This is the reason why the agricultural policy at the core of the Agricultural Basic Law tried to improve small-scale farming and small farmland holding. Although almost half a century has passed since the establishment of the Agricultural Basic Law, Japanese agriculture has been weakening. Improvement in the agricultural structure has been stagnant and the agricultural labor force has been shrinking due to increases in the number of part-time farmers and the age of farmers. Structural improvement, as yet to be accomplished, is still longed for as an effective measure to stem the deterioration of Japanese agriculture, but the current situation indicates that there is little time left in which to improve. 1) The

concept of farmland mobility, the keystone of structural improvement, has produced many empirical studies. These studies have mainly tested Kaki's hypothesis in the context of farmland lease contracts. This research into farmland mobility in the lease market, has not obtained realistic results because of the overevaluation of the number of farmland lease contracts, resulting from the implicit assumption that the farmland lease market was perfectly competitive.

This paper argues that the assumption that the farmland lease market is perfectly competitive is the cause of the failure of previous research. Two factors omitted by previous studies are focused on. One is transaction costs. Transaction costs include, for example, search cost for the lease in examining land quantity and quality, coordination cost with neighboring farmers and procedural costs in exchanging contracts. The other is uncertainty of future returns. Kaki's hypothesis sees farmland mobility in the lease market as related to present profitability. However, in the case where future returns are uncertain, it is more likely. that a farmer chooses to make no lease contract and to

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 Noringyogyo Kihon Mondai Chosakai Jimukyoku (Head Office of Investigation Committee on Fundamental Problems in Agriculture, Forestry and Fisheries) [3] argued that trying to keep the agricultural population constant by supporting agriculture without structural change seemed superficially to be humane and democratic because agricultural structural policy had to destroy the current structure and had to accelerate a polarization of farmers as a result of raising agricultural productivity. See Aiue [1] for an outline of the agricultural policy at the core of the Agricultural Basic Law, and agricultural structural improvement.

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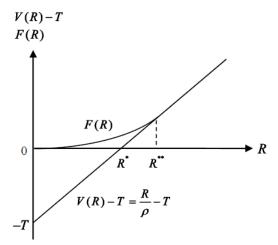


Figure 1. Option value and profits from a farmland lease

#### 2. Analytical Framework

#### 1) Farmland lease behavior and real option theory

Transaction costs and uncertainty are important factors generating an imperfectly competitive market. As mentioned before, Aiue (1998) analyzed the farmland lease market theoretically using a framework explicitly taking account of transaction costs, However, no empirical analyses have estimated the amount of the transaction costs themselves, and no theoretical or empirical studies have analyzed the effect of uncertainty of returns on farmers' behavior in the lease market. Transaction costs and uncertainty are undoubtedly the main points to consider when analyzing the characteristics and functions of the farmland lease market.

#### 2) Specification of the option value

This subsection specifies the option value F(R) and analyzes the effects of transaction costs and uncertainty of returns on F(R). Assuming that the profit R follows a geometric Brownian motion with drift, uncertainty of returns can be represented as follows.

$$dR = \mu R dt + \sigma R dz \tag{1}$$

where  $\mu$  is the drift coefficient,  $\sigma$  is the standard deviation of the returns, and z is the standard Brownian motion.

## 3. Conclusion

The aim at the core of the Agricultural Basic Law was the improvement of the agricultural structure through the expansion of farm size. This has been one of the most

Table 1. The estimation results

	the former period		the lat	the latter period	
	Estimate	Statistic	Estimate	Statistic	
T	67,822 **	(2.902)	34,707	* (2.270)	
$\alpha$	2.1754 **	(7.690)	3.2022	** (3.653)	
$\lambda$	-0.4188	(-0.426)	-0.2990	(-0.503)	
$\sigma_u$	36,961 **	(17,321)	30,065	** (10,466)	
$\sigma_{v}$	37,411 **	(8,710)	30,668	** (7,107)	
Lo	Log likelihood: - 1,184			Log likelihood: - 793	

Note:1) \*\*and \* indicate significant differences from 1% and 5% levels, respectively.

important issues in agricultural policy until now because farmland mobility is not very high. Although many empirical analyses have been conducted with the aim of contributing to the improvement of the agricultural structure, farmland mobility in the lease market remains lower than predicted. This paper has argued that the assumption of a perfectly competitive market has been the cause of the failure of previous studies. In contrast to the previous studies, which assumed a perfectly competitive market, the objective of this study has been to examine farmers' behavior in the farmland lease market by using the framework of imperfect competition. This paper analyzed theoretically and empirically the effects of transaction costs and uncertain returns on rice farmers' behavior through the application of real option theory.

#### References

Aiue, U. (1998) Nihon no Beisaku to Kome-Seisaku no Tenkai (Rice Farming and Rice Policy in Japan), in T. Tachi, ed., Nogyo-Mondai no Keizai-Bunseki (Economic Analysis of Agricultural Problems), Nihon Keizai Shinbunsha, 115-141.

Burns, A. K. (1985) The Minflex-laurent Translog Flexible Functional Forms *Journal of Econometrics* 30(1-2): 33-44. https://doi.org/10.1016/\*\*\*\*\*\*\*.

Dixitee, R. S. and A. K. Pindy (1994) Investment Under Uncertainty, Prince University Press.

Noringyogyo Kihon Mondai Chosakai Jimukyoku (1960) Nogyo no Kihon Mondai to Kihon Taisaku: Kaisetsuban (Fundamental Problems of Japanese Agriculture and Basic Measures: Commentaries), Tokei Norin Kyokai.

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