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# Individual Preferences Toward Inward Foreign Direct Investment: A Conjoint Survey Experiment

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### Individual preferences toward inward foreign direct investment: A conjoint survey experiment\*

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#### Abstract

In this study, we conduct a conjoint survey experiment in Japan to analyze the determinants of preferences toward the acquisitions by foreign firms. Conjoint survey experiments allow us to simultaneously estimate the effects of various attributes of foreign acquisitions, enabling us to analyze the complex causal relationships between various attributes of an acquisition project and people's antipathy toward it. The results of the experiment demonstrate that the nationality of the foreign firm, reciprocity, and the economic conditions of the location of the firm being acquired are important factors. Specifically, our respondents' approval rates for acquisitions by US firms are higher and those for acquisitions by Chinese, Korean, and Russian firms are lower compared to those for the acquisitions by the baseline "foreign firms." Moreover, their approval rates are higher for acquisitions by firms from countries that have been receptive to Japanese investment and for the foreign takeover of firms in areas with a high unemployment rate.

Keywords: foreign direct investment, M&A, conjoint survey experiment

JEL classification: F10, F23, F52

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#### 1. Introduction

Many studies have explored why people oppose trade and immigration. The pioneering works of Scheve & Slaughter (2001b) and Mayda & Rodrik (2005) indicate that factor endowment theory accounts for some of the individual trade-policy preferences. Similarly, several studies, such as Scheve & Slaughter (2001a) and Mayda (2006), illustrate that the predictions of factor endowment theory are consistent with individuals' preferences for immigration policy.

Although research on people's attitudes toward trade and immigration has progressed significantly over the past two decades, research on people's attitudes toward foreign direct investment (FDI) is scarce. One of the few exceptions is a study by Harms & Schwab (2019) who analyze data from a large international survey and reveal that both individual socioeconomic characteristics and macroeconomic and institutional factors shape people's attitudes toward multinational corporations.

However, as their study is based on a non-experimental method, they were unable to identify causal relationships between people's preferences for inward FDI and various factors responsible for those attitudes. Recent studies, such as Di Tella & Rodrik (2020) and Chatruc et al. (2021), use experimental methods to explore the factors that influence people's preferences for trade policies. Naoi (2020) reviews the literature and documents that non-experimental observational studies' findings on the backlash against globalization are inconsistent with those of survey experiments. The overwhelming majority of observational studies, such as Dorn et al. (2020), support the economic interest hypothesis that the economic plight of voters is the driving force behind support for protectionism. However, most of the findings from survey experiments (e.g., Naoi & Kume, 2011) demonstrate that non-economic factors, such as nationalism and ethnocentrism, result in protectionism. Survey experiments can address problems that have plagued observational studies on the backlash against globalization, such as the multicollinearity and reverse causality problems, by randomly assigning the stimuli embedded in a survey.

Therefore, we use an experimental approach to analyze the factors that influence people's preferences toward inward FDI. In particular, we use a conjoint survey experiment to assess the multidimensional preferences of respondents. Employing a conjoint design can help not only quantify the causal effects of different attributes of an FDI project but also examine various hypotheses regarding respondents' preferences toward different attributes (Bansak et al., 2021). Although the conjoint design has not yet been applied in the field of international economics, Chilton et al. (2020) use a conjoint survey experiment to analyze preferences toward inward FDI policy in the field of international political economy. They reveal that reciprocity is an important determinant of public opinion against FDI restrictions. Hence, we also examine whether reciprocity is at work in people's inward FDI preferences.

We conduct a questionnaire survey of Japanese citizens to investigate their psychological resistance to inward FDI in the form of acquisitions of domestic firms and provide quantitative analysis. Acquisitions by foreign firms can differ in several dimensions, including foreign nationality and characteristics of the acquired Japanese firm. Our survey asked each respondent whether they agreed or disagreed with various acquisitions of Japanese firms by foreign firms.

Using Japanese citizens as a survey target has an advantage. The inward FDI of Japan, which is the world's third-largest economy, is known to be remarkably low compared to other developed countries. According to the Organisation for Economic Co-operation and Development (OECD) statistics, Japan's inward FDI accounted for only 0.3 percent of its gross domestic product in 2019, well below the OECD average (1.4 percent) and the lowest among G7 countries. However, the reasons for this have not yet been fully clarified (Hoshi & Kiyota, 2019). Strong psychological resistance to foreign capital may inhibit inward FDI. Our study identifies the factors that hinder inward FDI through survey experiments and derives policy implications to promote inward FDI.

The Japanese government has been encouraging inward FDI. However, in response to security concerns, in 2020, it imposed stricter restrictions on foreign firms' acquisition of Japanese firms. Japan has territorial disputes with

neighboring countries such as China, South Korea, and Russia. Consequently, people tend to be very wary of these neighboring countries. Our study finds that the nationality of a foreign firm is an important factor affecting FDI preferences. While Japanese citizens tend to approve takeovers by firms from the United States (US), they are reluctant to approve takeovers by Chinese, Korean, and Russian firms. This result is in line with those in other studies, such as Jensen & Lindstädt (2013), who reveal that US citizens are more negative about inward FDI from China than from Japan or other countries.

Di Tella & Rodrik (2020) illustrate that hypothetical reasons for economic distress affect respondents' attitude toward support for protectionism in the US. By contrast, we find that the causes of economic distress do not change respondents' attitudes toward foreign acquisitions in Japan. We also find that respondents are positive about foreign firms' acquisition of Japanese firms located in areas with high unemployment. Finally, the results demonstrate that respondents are positive about the acquisition of Japanese firms by firms from countries open to Japanese FDI. This finding suggests that reciprocity is important for FDI preferences.

The remainder of this paper is organized as follows. In Section 2, we provide an overview of the conjoint survey experiment. In Section 3, we explain the average marginal component effects (AMCE) and present the estimation results. In Section 4, we summarize our findings and discuss the implications for inward FDI policies.

#### 2. Design of our conjoint survey experiment

#### 2.1. Conjoint Survey Experiment

Inward FDI can vary with respect to various attributes, such as the nationality of the foreign firm and characteristics of the acquired firm. Therefore, whether people agree or disagree with an investment project depends on their assessment of its multidimensional attributes. Traditional causal inference methods, such as difference-in-difference analysis and propensity score match-

ing, cannot reveal the attributes for which people have a strong aversion. This is because they are limited to analyzing the average effect of one or two treatments.

By contrast, conjoint survey experiments allow us to estimate the effects of various attributes simultaneously, thus enabling us to analyze the complex causal relationships between the various attributes of an acquisition project and the antipathy people have toward it. In our conjoint survey experiment, we present respondents with information about a hypothetical project with various attributes. Our conjoint survey experiment asks respondents to approve or disapprove of a hypothetical investment project. Therefore, some readers may wonder about the external validity of our conjoint survey experiment. The composition of the respondents in our conjoint survey experiment followed census composition. In addition, recent studies demonstrate that conjoint survey experiments have external validity (Hainmueller et al., 2015; Auerbach & Thachil, 2018).

The attributes of the investment projects faced by each respondent vary randomly. Randomization was performed independently for each respondent and attribute. Randomization allows us to quantify the attributes that causally increase or decrease the attractiveness of an acquisition project, on average. Specifically, simple statistical methods, such as linear regression, can be employed to estimate causal effects, called the AMCE, to quantify the effects of attributes. Conjoint surveys and experiments have been conducted to identify people's preferences for immigrants and election candidates with multidimensional attributes (Bansak et al., 2021).

One of the advantages of a conjoint survey experiment is that it facilitates the quantification of the causal effects of socially sensitive attributes. Respondents may dislike investment from China, but when asked if they oppose investment from China, they may hesitate to answer honestly. However, by asking about the nationality of the foreign company, along with several other attributes, the burden of answering the question is reduced. Horiuchi et al. (2021) find that a conjoint survey experiment mitigates the bias of respondents to provide socially desirable answers.

#### 2.2. Respondents

We conducted an online survey on inward FDI from June 15–27, 2021, through a research agency, NTT Com Research. The survey targets were opt-in monitors registered with NTT Com Research and its partner companies. We surveyed men and women aged 18–79 years, nationwide and designed the survey to align the gender, age, and residential area of respondents with the population structure of the 2015 Population Census by the Ministry of Internal Affairs and Communications. The total number of respondents to the survey was 2,423. Tables 1–3 list the number of respondents by region, age, and gender.

<TABLE 1>

<TABLE 2>

<TABLE 3>

<sup>&</sup>lt;sup>1</sup>The "Internet Survey on Japan's Foreign Economic Policy" conducted by RIETI includes three types of surveys A to C and the total number of respondents is 7,291. In this study, we use survey A, which has 2,423 respondents.

#### 2.3. Experiment

After asking each respondent about their demographic characteristics, such as age and gender, we asked them whether they agreed or disagreed with the project of a foreign firm acquiring a Japanese firm. More specifically, each respondent was asked to approve or disapprove of five randomly selected projects out of 480 acquisitions with different attributes. Therefore, the number of observations was 12,115 (=5 projects  $\times$  2,423 respondents). On average, 25.2 (=12,115/480) respondents answered about a project.

Respondents had to answer yes or no for each investment project. An example of the questions respondents faced is as follows:

[China] has been [receiving significant investment] from Japanese firms. Would you favor a project in [your area] in which a [Chinese] firm buys a [large firm] that has [advanced technology] and has suffered from [the earthquake]?

Yes or No

The attributes enclosed in brackets are randomly changed. Respondents were asked to respond to five investment projects that varied in terms of acceptance of investment from Japan, source country of investment, reasons for the poor performance of the acquired firm, technology level of the acquired firm, region in which the acquired firm is located, and company size of the acquired firm. Table 4 illustrates the list of all the attributes. The number of projects favored is 3,200, whereas the number of projects opposed is 8,915. Therefore, the overall approval rate for foreign acquisition is 26.4%. Appendix A presents the average approval rate by respondents' demographics. We find the following results. i) Younger respondents are more likely to favor a takeover by a foreign firm. ii) Respondents with higher incomes are more likely to support acquisitions by foreign firms. iii) Men are more likely than women to approve of acquisitions by foreign firms. iv) College graduates are more likely than noncollege graduates to favor acquisitions by foreign firms. v) Respondents in the Kanto region, including Tokyo, are most likely to approve of a takeover by a

foreign firm. By contrast, respondents from Hokkaido and Shikoku regions are the least likely to favor a takeover by a foreign firm.

#### <TABLE 4>

#### 3. Results: AMCEs

In this section, we present the AMCEs obtained from our conjoint survey experiment. AMCEs have been used in many studies in the field of political science, as reviewed in Bansak et al. (2021). AMCEs reveal the relative influence of each attribute value on the resulting choice or rating. Hainmueller et al. (2014) demonstrate that identifying and estimating the AMCE from observed data is possible from a conjoint experiment because of the random assignment of the attributes. In our study, AMCEs represent the expected change in the approval rate of an investment profile when a given attribute value is compared to the baseline. We can identify AMCEs nonparametrically if (1) the attributes are independently randomized, and (2) the outcome of interest is binary (Chilton et al., 2020). Our experimental design satisfies both requirements (1) and (2).

In our experiment, the outcome is a binary variable,  $approve_{ijk}$ , which takes the value of one if respondent i approves an investment project j with various attributes in the kth question, and zero otherwise. We can estimate AMCEs by regressing the outcome variable on indicator variables for each attribute value. For example, we can obtain AMCEs for the nationality of foreign firms by running the following regression:

$$approve_{ijk} = \beta_0 + \beta_1 China_{ijk} + \beta_1 Korea_{ijk} + \beta_1 Russia_{ijk} + \beta_1 US_{ijk} + \epsilon_{ijk}$$
 (1)

where  $China_{ijk}$ ,  $Korea_{ijk}$ ,  $Russia_{ijk}$ , and  $US_{ijk}$  are indicator variables for source country of foreign firms. We set "foreign country" as the reference cat-

egory. Hainmueller et al. (2014) illustrate that we can obtain the equivalent estimates of AMCEs by running a single regression of  $approve_{ijk}$  on the combined sets of dummies for all investment attributes. We adopt this estimation approach and cluster the standard errors by a respondent to address the possible non-independence of the evaluation from the same respondent.

Figure 1 depicts the estimated AMCEs and 95% confidence intervals for each attribute value.<sup>2</sup> Figure 1 illustrates how the approval rate for acquisitions by foreign firms varies with the attributes of the investment project. First, Figure 1 shows that respondents change their attitudes toward acquisition projects depending on the location of the firm being acquired by the foreign firm. The respondents tend to be positive about foreign acquisitions of firms located in areas with high unemployment. The approval rate for foreign firms to acquire firms in regions with high unemployment rates is approximately 8% higher than that in Japan as a whole. Whether the acquired company is located in the region where the respondent lives has little effect on the rate of approval for the acquisition project.

#### <FIGURE 1>

As evident from Figure 1, the country of origin matters significantly for FDI preferences. Respondents are more likely to oppose Chinese, Korean, and Russian firms acquiring Japanese firms. Compared with the approval rate for acquisitions by foreign firms in general, the approval rates for acquisitions by Chinese, Korean, and Russian firms are 17%, 13%, and 12% lower, respectively. On the contrary, respondents are positive about acquisitions by US firms. The

<sup>&</sup>lt;sup>2</sup>Table B.5 shows estimation results for Figure 1. The AMCE is interpreted as the average change in the probability that an investment project will be approved when it includes the listed attribute value instead of the baseline attribute value.

percentage in favor of acquisitions by US firms is 5.6% higher than that in favor of acquisitions by foreign firms in general.

Respondents are more likely to favor acquisitions by firms from countries that have been open to Japanese investment. The approval rate for acquisitions by firms from countries that have actively accepted investments from Japan is 3.6% higher than that for acquisitions by firms from countries that have not received much investment from Japan. This result suggests that reciprocity is important and is consistent with the existing research in the US (Chilton et al., 2020).

We also find that respondents tend to be more opposed to foreign acquisitions of firms with advanced technology than of firms with general-purpose technology. The approval rate for foreign acquisitions of firms with advanced technology was 1.7% lower than that for foreign acquisitions of firms with general-purpose technology.

The reason for the deterioration in the acquired firm's performance does not change the respondents' approval rate for foreign acquisitions. More specifically, we set "earthquake" as our baseline because a geological natural disaster is an exogenous and unpredictable one-shot event for a firm, and compare the AMCEs for each reason. The results indicate that respondents' attitudes toward foreign acquisitions do not significantly change, regardless of whether the cause of the acquired firm's poor performance is an "earthquake," "coronavirus disease 2019 (COVID-19)," "increased imports," or "management failure." This result contrasts with the findings of Di Tella & Rodrik (2020) that trade shocks increase support for protectionism in the US.

Differences in the size of the acquired company also had no significant effect on respondents' approval rate for foreign acquisitions. In recent years, according to media reports, the Japanese government has been reluctant to allow foreign firms to acquire giant manufacturing firms, such as Sharp and Toshiba. However, the hypothesis that respondents are more negative toward foreign acquisitions of large firms than toward foreign acquisitions of small firms has no statistically significant evidence.

#### 4. Conditional AMCEs

In conjoint analysis, conditional AMCEs, that is, AMCEs of specific subgroups defined based on the characteristics of respondents before the treatment, are also used (Hainmueller et al., 2014). Bansak et al. (2021) estimate conditional AMCEs for different subgroups of respondents according to their partisanship to examine whether preferences for hypothetical Democratic candidates differ by respondents' partisanship.

We conduct an analysis using subsamples based on respondents' demographics (e.g., a sample of women) to estimate the conditional AMCE and find that the preference for inward FDI does not vary considerably by education, gender, or job status. By contrast, we find that income level and age are associated with people's preferences for inward investment.

As foreign firms tend to pay higher wages, workers with higher incomes can be more susceptible to foreign acquisitions. Our results demonstrate that the AMCE varies greatly depending on whether the respondent has low income or middle-to-high income. Figure 2 depicts the conditional AMCEs of low- and high-income individuals. The number of respondents with low income (less than 4 million yen) is 1,363, and those with middle and high income (over 4 million yen) is 638. We exclude respondents with no income from the analysis.

Figure 2 shows that low-income individuals are more likely to agree to an acquisition by a US firm than by a foreign firm in the baseline. By contrast, Figure 2 illustrates that middle- and high-income individuals are not more likely to agree to an acquisition by a US firm than by a baseline foreign firm. Low-income respondents are, on average, 6 percentage points more likely to support an investment project when the country of origin changes from "foreign country" to "the US." No such effect is observed for middle- and high-income respondents.

In addition, middle- and high-income earners are more negative about acquiring poorly performing firms because of COVID-19. When the cause of the target company's poor performance changes from "earthquake" to "COVID-19," the probability of middle- and high-income respondents' support for the

investment project falls by 7 percentage points on average, while the probability of low-income respondents' support for the investment project does not change.

As previously mentioned, the average wage in foreign-owned firms is relatively high, and the higher is the income, the greater is the probability of being employed by a foreign firm. High-income respondents may be apprehensive about their firms being acquired by foreign capital. However, our current research cannot reveal why respondents with relatively higher income levels are less reluctant to accept inward FDI.

#### <FIGURE 2>

We also estimate the AMCE by age group. Younger generations are more likely to favor foreign acquisition, as illustrated in Figure A.6. However, Figure 3 indicates that the younger generation aged 18–39 is not necessarily more positive about acquisitions by US firms than those by foreign firms in the baseline. By contrast, middle-aged and older generations (aged 40–59 and 60 and above) are generally more likely to favor a takeover by a US firm than that by a foreign firm. Respondents aged 60 and above are most likely to reduce their approval rate for projects in which Chinese, Korean, or Russian firms acquire Japanese firms compared with projects in which "foreign firms" acquire Japanese firms. Younger generations are also less likely to be aware of reciprocity. Figure 3 also shows that the older generation is more concerned about foreign firms taking over Japanese firms with advanced technology. Younger generations do not display a statistically significant change in their attitudes toward foreign acquisitions of Japanese firms with advanced technology compared with foreign acquisitions of Japanese firms with advanced technology.

<FIGURE 3>

We explore regional differences in inward investment preferences. The number of foreign firms in Japan is small. Therefore, most people have limited experience in encountering foreign firms. A lack of experience may have created resistance to foreign firms. We test this hypothesis using the fact that foreign firms are concentrated in certain regions, such as Tokyo and Osaka. We define prefectures with more employees in foreign-affiliated firms per population than the national average as those with high foreign investment exposure. These prefectures are Tochigi, Tokyo, Kanagawa, Shizuoka, Mie, and Osaka. The number of employees of foreign-affiliated firms is based on a survey conducted by the Ministry of Economy, Trade and Industry.

#### <FIGURE 4>

Figures 4 presents the AMCEs separately for regions with many foreign firms ("high foreign exposure") and regions with few foreign firms ("low foreign exposure"). We find little difference in AMCEs between the two types of regions. In regions with high foreign investment, opposition to acquisitions is stronger when the reasons for the acquired company's poor performance change from disaster to management failure. In other respects, AMCEs in the two types of regions do not differ notably. Therefore, the results suggest that differences in experience with foreign firms are not a major factor affecting AMCEs.

We further examine whether responses to the country of origin differ by region. We estimate the conditional AMCEs separately for respondents in eight regions: Hokkaido, Tohoku, Kanto, Chubu, Kinki, Chugoku, Shikoku, and Kyushu. Figure 5 illustrates the conditional AMCE and its 95% confidence interval. When the country of origin changes from "foreign country" to "China," "Korea," or "Russia," respondents in Hokkaido reduce their approval rate for acquisition to a greater extent than those in other regions. This might reflect Hokkaido's high exposure to these countries as it has more tourists per capita

from China and Korea than the national average and is geographically close to Russia.

#### <FIGURE 5>

#### 5. Conclusion and policy discussion

Although several studies have explored the factors that determine people's attitudes toward trade and immigration, little is known about the factors that determine people's attitudes toward inward FDI. In this study, we conducted a conjoint survey experiment to determine whether people agree or disagree with inward FDI projects with different attributes. We asked about the pros and cons of inward FDI, particularly regarding the acquisition of Japanese firms by foreign firms.

In our conjoint survey design, the attributes of the investment projects were randomly assigned. Hence, we could estimate the AMCE of the determinants of people's preferences for foreign acquisitions and compare the relative importance of one attribute with that of another.

We found that our respondents' approval rates for takeovers by US firms are higher than those for the takeovers by the baseline "foreign firms" and that those for takeovers by Chinese, Korean, and Russian firms are lower. Historically, Japan's relations with those neighboring countries have sometimes been strained, and nationalism is thought to be a barrier to inward investment from these neighboring countries. Japan's level of inward FDI is very low and the Japanese government has been aiming to increase inward FDI. Our findings in this study suggested that it may be easier to gain the Japanese public's understanding about inviting FDI from the US or countries that have been accepting investment from Japan.

Our results also suggest that reciprocity and the employment situation in the region where the acquired firm is located affect people's acquisition preferences. People are more likely to favor inward FDI from countries that have accepted significant Japanese investment. In other words, reciprocity occurs at the work-place. People are also more likely to support foreign firms taking over firms in areas with high unemployment. Surprisingly, the size of the acquired firm does not affect people's attitudes toward the acquisition project. By contrast, their high level of technology slightly increases opposition to takeovers, as expected.

Our findings demonstrated a positive attitude toward inward FDI in regions with high unemployment. Therefore, converting specific regions with high unemployment rates into special economic zones for inward M&A, and relaxing inward FDI restrictions may be worth considering.

Finally, our study has several limitations. Our study did not analyze the reasons behind why respondents' approval rates toward investments from China, Korea, and Russia are lower. Our survey design does not allow us to distinguish whether respondents perceive a security threat to these countries or whether, as workers, they have concerns about investment from these countries. Our survey was conducted for the general public, that is, voters who influence foreign investment policies. Further analysis using a survey for business executives will complement our findings in this study.

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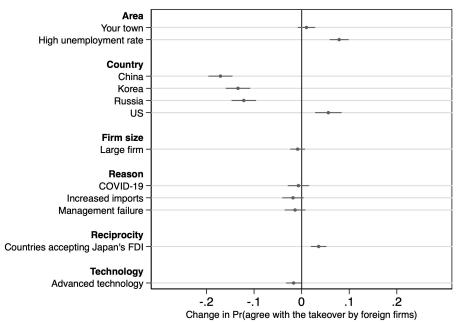


Figure 1: Average Marginal Component Effects of Inward FDI Project Attributes in the Conjoint Experiment (Forced Choice Outcome).

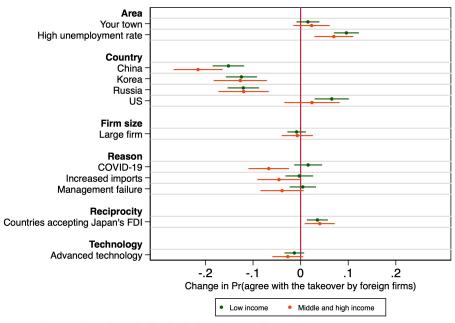


Figure 2: Average Marginal Component Effects of Inward FDI Project Attributes in the Conjoint Experiment (Low-income Respondents).

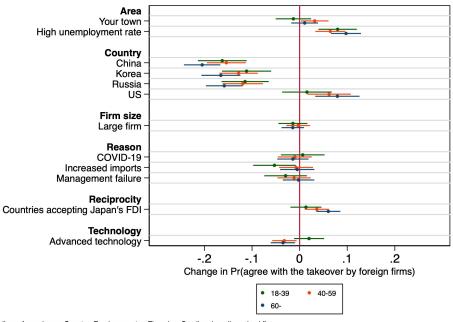


Figure 3: Average Marginal Component Effects of Inward FDI Project Attributes in the Conjoint Experiment (Age Group).

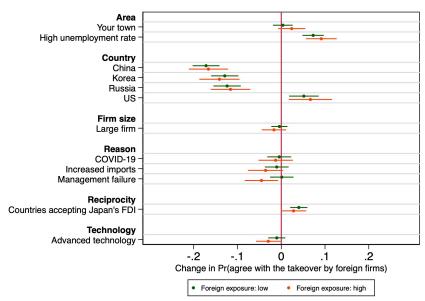


Figure 4: Average Marginal Component Effects of Inward FDI Project Attributes in the Conjoint Experiment (Foreign Exposure).

Notes: Prefectures with more employees in foreign-affiliated firms per population than the national average are defined as those with high foreign investment exposure. These prefectures are Tochigi, Tokyo, Kanagawa, Shizuoka, Mie, and Osaka. The number of employees of foreign-affiliated firms is based on a survey conducted by the Ministry of Economy, Trade and Industry (Survey of Trends in Business Activities of Foreign Affiliates).

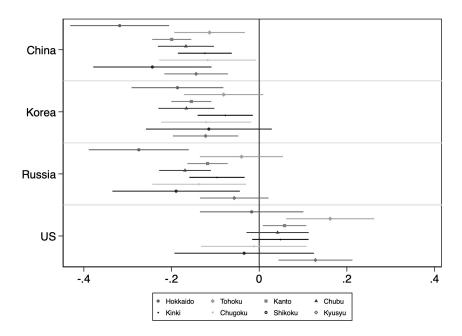


Figure 5: Average Marginal Component Effects of Inward FDI Project Attributes in the Conjoint Experiment (Regional Difference).

Table 1: Number of respondents by region

| Region   | Freq. | Percent |  |
|----------|-------|---------|--|
| Hokkaido | 124   | 5.1     |  |
| Tohoku   | 173   | 7.1     |  |
| Kanto    | 797   | 32.9    |  |
| Chubu    | 411   | 17.0    |  |
| Kinki    | 427   | 17.6    |  |
| Chugoku  | 141   | 5.8     |  |
| Shikoku  | 80    | 3.3     |  |
| Kyusyu   | 270   | 11.1    |  |
|          |       |         |  |
| Total    | 2,423 | 100     |  |

Note: Each region is composed of the following prefectures.

Hokkaido: Hokkaido

Tohoku: Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima

Kanto: Ibaraki, Tochigi, Gumma, Saitama, Chiba, Tokyo, Kanagawa Chubu: Niigata, Toyama, Ishikawa, Fukui, Yamanashi, Nagano, Gifu,

Shizuoka, Aichi, and Mie

Kinki: Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama

Chugoku: Tottori, Shimane, Okayama, Hiroshima, Yamaguchi

Shikoku: Tokushima, Kagawa, Ehime, Kochi

Kyusyu: Fukuoka, Saga, Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima,

Okinawa

Table 2: Number of respondents by age group

| Age   | Freq. | Percent |
|-------|-------|---------|
| 18-24 | 244   | 10.1    |
| 25-34 | 349   | 14.4    |
| 35-44 | 438   | 18.1    |
| 45-54 | 410   | 16.9    |
| 55-64 | 397   | 16.4    |
| 65-79 | 585   | 24.1    |
|       |       |         |
| Total | 2,423 | 100     |

Table 3: Number of respondents by gender

| Gender | Freq. | Percent |
|--------|-------|---------|
| Female | 1225  | 50.6    |
| Male   | 1198  | 49.4    |
|        |       |         |
| Total  | 2423  | 100.0   |

Table 4: Total number of combinations **Treatment**  $\mathbf{N}$ Options 2 Acceptance of FDI 1) Countries that have not accepted Japan's FDI 2) Countries that have accepted Japan's FDI Country of origin 1) Foreign country 5 2) United States 3) Russia 4) China 5) Korea Cause of slump 1) Failure of the management team 4 2) Earthquake disaster 3) Covid-19 4) Increased imports 2 **Technology** 1) General-purpose technology 2) Advanced technology Region 1) Japan 3 2) Areas with highest unemployment rate 3) The area where you live Firm size 1) Large firm 2 2) Small-and medium-sized firms

480

**Total** 

## Appendix A. Investment approval rate by respondents' demographics

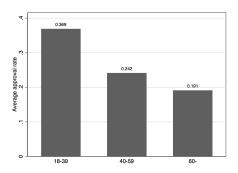


Figure A.6: Average approval rate by age group.

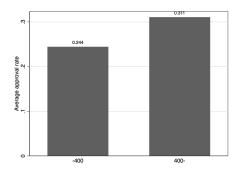


Figure A.7: Average approval rate by income group.

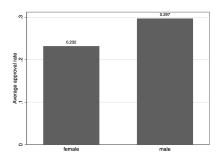


Figure A.8: Average approval rate by gender.

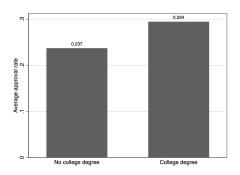


Figure A.9: Average approval rate by college degree.

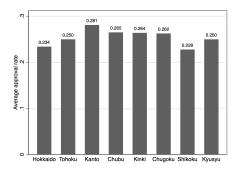


Figure A.10: Average approval rate by region.

#### Appendix B. Estimation results

Table B.5: AMCE for the Change in Probability to Agree with the Takeover by Foreign Firms

| Attribute   | Level   | Estimate  | Std. Err |
|-------------|---|-----------|----------|
| Area        | (Baseline=Japan)  |           |          |
|             | The area where you live                                 | 0.01      | [0.009]  |
|             | The areas with the highest unemployment rates           | 0.079***  | [0.010]  |
| Country     | (Baseline=Foreign country)                              |           |          |
|             | China   | -0.171*** | [0.013]  |
|             | Korea   | -0.134*** | [0.013]  |
|             | Russia  | -0.122*** | [0.013]  |
|             | United States   | 0.056***  | [0.014]  |
| Firm size   | (Baseline=Small and medium-sized firm)                  |           |          |
|             | Large firm  | -0.008    | [0.008]  |
| Reason      | (Baseline=Earthquake disaster)                          |           |          |
|             | COVID-19  | -0.007    | [0.011]  |
|             | Increased imports                                       | -0.018    | [0.011]  |
|             | Management failure                                      | -0.014    | [0.011]  |
| Reciprocity | (Baseline=Countries that have not accepted Japan's FDI) |           |          |
|             | Countries that have accepted Japan's FDI                | 0.036***  | [0.008]  |
| Tech        | $({\it Baseline=General-purpose\ technology})$          |           |          |
|             | Advanced technology                                     | -0.017*   | [0.008]  |
|             | Constant  | 0.313***  | [0.017   |
|             | Number of Obs. $= 12115$                                |           |          |

 $\frac{\text{Number of Respondents}=2423}{\overline{\text{Note: ***, ***, ** indicate significance at the 0.1\%, 1\%, and 5\% levels, respectively.}}$