# How Much Economic Security Can We Afford? Evidence from a Nationwide Conjoint Survey in Japan \*

Arata Kuno, a, b Banri Ito c, d, †

July 30, 2025

<sup>a</sup> Faculty of International Relations, Asia University, 5-8 Sakai, Musashino-shi, Tokyo 180-8629, Japan

b Dentsu Soken Center for Economic Security Research (DCER), 2-17-1, Konan, Minato-ku, Tokyo 108-0075, Japan

<sup>C</sup> College of Economics, Aoyama Gakuin University, 4-4-25 Shibuya, Shibuya-ku, Tokyo 150-8366, Japan <sup>d</sup> Research Institute of Economy, Trade and Industry (RIETI), 1-3-1, Kasumigaseki, Chiyodaku, Tokyo 100-8901, Japan

#### **Abstract**

This study examines Japanese public support for two economic-security measures—(i) domestic supply-chain restructuring and (ii) economic decoupling from China—through nationally representative conjoint experiments (N = 10,000). We test four hypotheses regarding cost sensitivity, educational and generational differences, and behavioral dispositions. In the restructuring experiment, support declines steeply as consumer price increases: a 10 % hike already erodes approval, a 20 % hike cuts support by roughly 15 points, whereas reducing the burden to 2 % modestly raises backing. In the decoupling experiment, support falls with losses in business opportunities, while security-risk frames (e.g., dual-use tech leakage, critical supply dependence on China) have limited and inconsistent effects. Across both experiments, education and age show no systematic differences; college-educated vs. non-college-educated and working-age vs. senior respondents react in largely parallel ways. By contrast, behavioral dispositions matter: lossaverse individuals, in particular, show heightened sensitivity to policy-induced costs and are less responsive to abstract geopolitical threats. Present bias plays a less consistent role but may moderate reactions under specific conditions. While descriptive results suggest broad support for economic-security policies, conjoint results reveal that such support is highly fragile and conditional in the face of costs. The findings underscore the importance of accounting for psychological heterogeneity—especially loss aversion—when designing and communicating costly national security measures. Effective policy design will require credible assurances that private costs remain modest and proportionate to long-term resilience gains.

Keywords: Economic Security, Conjoint Analysis, Behavioral Bias, Policy Preference

JEL classification: C83, F13, F52, D72, D91

Declarations of Interest: none

<sup>\*</sup> This study was conducted as part of the *DCER National Survey on Economic Security*, a project undertaken and funded by the Dentsu Soken Center for Economic Security Research (DCER). This paper is part of the author's ongoing research and has not been peer-reviewed. Comments welcome.

<sup>†</sup> Corresponding author. ORCID:0000-0003-3912-9947, E-mail: bito@aoyamagakuin.jp (Ito).

#### 1. Introduction

What kind of preferences do Japanese individuals hold toward economic security policies, and how are these preferences shaped by their goals, instruments, and associated costs? Using a large-scale survey and conjoint experiments, this paper examines how Japanese citizens assess two key economic security policies: supply chain restructuring and economic decoupling from countries of concern, with a particular emphasis on China in recent Japanese policy discourse.

Understanding these preferences is particularly important given Japan's recent and proactive institutionalization and expansion of economic security policies (Armstrong, 2021; Armstrong et al., 2025). Since the late 2010s, Japan has been among the most active countries in promoting economic security, with its policy objectives broadly categorized into two major goals (Liberal Democratic Party of Japan, 2020; Japan, 2022). The first is to enhance strategic autonomy—for instance, by building more resilient supply chains for critical goods such as semiconductors and medical supplies in response to external shocks such as geoeconomic shocks, pandemics, and natural disasters. Notable disruptions—such as China's restriction of rare earth exports in 2010 and the COVID-19 pandemic's global impact in 2020—have highlighted the vulnerability of existing supply chains and the need to promote reshoring and "friend-shoring" of critical industries.

The second goal is to enhance strategic indispensability. This refers to strengthening Japan's competitiveness in key technological areas by employing various measures—one of which is to prevent the outflow of sensitive technologies—especially advanced and dual-use technologies. Since the mid-2010s, as strategic competition between the United States and China intensified, the U.S. government has increasingly voiced concern about the risk of critical technologies flowing to China via exports, forced technology transfer, inward direct investment, academic collaboration, cyberattacks, and industrial espionage (e.g., U.S.-China Economic and

Security Review Commission, 2015). These concerns have gradually come to be shared by U.S. allies such as Japan.

In this context, the Japanese government has introduced a series of institutional measures, such as amendments to the Foreign Exchange and Foreign Trade Act (FEFTA) since 2017, the enactment of the Economic Security Promotion Act in 2022, the expansion of export controls to include advanced semiconductor manufacturing equipment in 2023, and the establishment of a security clearance system in 2024. Although such measures are often justified by governments on the grounds of reducing technology leakage or enhancing supply chain resilience, they may impose considerable economic costs on firms, consumers, and taxpayers. Restructuring supply chains that were originally structured based on market principles for maximum efficiency, or restricting trade and investment with strategically sensitive countries that are nonetheless key economic partners for Japan, can lead to economic inefficiencies and lost business opportunities. These burdens may ultimately be passed on to consumers or taxpayers. These trade-offs make it crucial to understand how the public evaluates different policy tools, what levels of economic burden are considered acceptable, and how citizens weigh national security against economic interdependence.

A large body of existing research has examined the determinants of individual preferences over economic policies using survey data. In the field of trade policy, prior studies have investigated how preferences are shaped by economic factors such as individuals' skill levels or industrial affiliations (e.g., Balistreri, 1997; Beaulieu, 2002; Scheve and Slaughter, 2001; Mayda and Rodrik, 2005; Jäkel and Smolka, 2017), as well as by non-economic or behavioral factors such as nationalism or status quo bias (Blonigen, 2011; Tomiura et al., 2016; Ito et al., 2019; Yamamura and Tsutsui, 2019; Felbermayr and Okubo, 2022). Related research has also examined immigration policy (Mayda, 2006; Facchini and Mayda, 2008; Tomiura et al., 2019)

and foreign direct investment (FDI) (Pandya, 2010; Tanaka et al., 2023; Ito et al., 2023). Despite the growing policy relevance of economic security, empirical research on individual-level preferences—especially concerning policy trade-offs and public tolerance for costs—remains limited.

This paper addresses these questions using a nationwide survey of 10,000 Japanese individuals and a conjoint analysis of their preferences. We analyze how support changes depending on policy purposes and instruments, and what trade-offs exist between policy support and implementation costs. To structure our empirical analysis, we test four hypotheses: (1) that support decreases with economic costs (cost sensitivity), (2) that preferences vary by educational attainment, (3) that generational differences influence sensitivity to different types of costs, and (4) that behavioral dispositions such as present bias affect willingness to bear short-term burdens for long-term security gains.

Rather than examining firm-level responses, our analysis focuses on individual preferences. While supply chain reforms and technology control measures primarily affect firms, their economic costs and consequences are ultimately passed on to citizens as consumers or taxpayers. Understanding individual preferences is therefore crucial for evaluating the legitimacy of such policies. Political leaders also appear to recognize this point: during the 2024 leadership election of the Liberal Democratic Party of Japan, several candidates explicitly pledged to expand economic security policies (Liberal Democratic Party of Japan, 2024), suggesting that they view economic security as a key agenda item for voters. Clarifying the extent of democratic support for such policies can therefore provide valuable insights for future policy design.

Analyzing Japanese individuals' preferences also offers important analytical advantages in the context of economic security policy. First, Japan has moved relatively early and proactively in institutionalizing economic security policies, and the Japanese public has been exposed to

government messaging on this issue. Therefore, a non-negligible portion of respondents is likely to have at least some awareness of the issue. Second, Japan faces a strategic dilemma: while it is a close ally of the United States, it is also heavily economically dependent on China, Washington's main strategic rival. As a result, any economic decoupling or political deterioration with China would likely impose substantial economic costs on Japan's economy, affecting both businesses and the general public. This makes Japan a compelling case for analyzing how individuals navigate trade-offs between national security and economic interests—findings that may also offer insights for other countries.

The remainder of this paper is organized as follows. Section 2 describes the data collection process and descriptive analyses. Section 3 describes the empirical strategy for performing conjoint analyses. Section 4 presents the estimation results from the conjoint analyses. Section 5 concludes the paper.

## 2. Research Design

## 2.1 Data and Survey Overview

This study uses original data from the *DCER National Survey on Economic Security*, conducted by the Dentsu Soken Center for Economic Security Research in collaboration with the authors. The survey instrument was designed by the authors and administered online by Dentsu Macromill Insight, Inc. between December 20 and 25, 2024.

The target population comprised Japanese voters aged 18 to 79. A total of 10,000 respondents were sampled using demographic quotas based on gender, age (seven categories), and region (ten blocks) to reflect the demographic composition of the 2020 national census. The survey was administered via a web-based panel, and respondents received point-based incentives upon completion. Further details on sampling procedures, respondent screening, informed

consent, and data quality management are provided in Appendix A.

## 2.2 Testable Hypotheses

Based on existing economic theories—including rational choice models, trade theory, the life-cycle framework, and behavioral economics—we develop the following testable hypotheses regarding public support for economic security policies.

# H1 (Cost Sensitivity Hypothesis):

Support for economic security policies decreases as the associated economic costs increase. Higher consumer prices or forgone business opportunities are expected to reduce public support, consistent with rational-choice models emphasizing cost-benefit considerations.

This hypothesis builds on the basic insight of rational choice theory, which posits that individuals form policy preferences based on the evaluation of personal costs and benefits. While this logic is widely assumed in public opinion research, empirical studies have also suggested that individuals are sensitive to the price effects and opportunity costs associated with economic policies. In the context of economic security, rising consumer prices due to protectionist measures or losses in employment or investment opportunities are likely to reduce support, even when such measures are justified on national security grounds. Although few studies have directly examined this trade-off in the economic security domain, this hypothesis provides a baseline expectation grounded in standard economic reasoning.

# **H2** (Education-based Heterogeneity Hypothesis):

Public responses to economic security policy attributes are likely to vary by educational attainment. According to standard trade theory—particularly the Stolper–Samuelson theorem—

skilled workers in advanced economies, typically those with higher educational attainment, tend to benefit more from free trade and globalization. Prior research has shown that highly educated individuals are generally more supportive of open economic policies. In this context, we expect that individuals with higher levels of education are less likely to support protectionist measures justified on national security grounds—such as supply chain restructuring or economic decoupling from China—because they face greater opportunity costs from departing from liberal trade.

This expectation is empirically supported by numerous studies linking education to trade policy preferences. For example, Scheve and Slaughter (2001) and Mayda and Rodrik (2005) find that individuals with higher education levels are more likely to support globalization and less inclined to favor protectionism. Similarly, Beaulieu (2002) and Balistreri (1997) demonstrate that education is positively correlated with support for liberal economic policies, even when facing potential adjustment costs. More recently, Jäkel and Smolka (2017) provide theoretical and empirical evidence that individual support for trade liberalization depends not merely on education or skill level per se, but on whether the individual's labor market skills are relatively abundant within their country. Consistent with Heckscher–Ohlin trade theory, they show that workers whose skills are more abundant domestically tend to hold more favorable views toward free trade. We therefore extend this literature by examining how educational differences shape public attitudes toward economic security policies, which often involve trade-offs between liberal trade principles and strategic national objectives.

## H3 (Generation-based Heterogeneity Hypothesis):

Support for economic security policies is likely to vary across generations. Specifically, workingage individuals are expected to be more sensitive to opportunity costs such as losses in employment and business, but may be more willing to accept minor costs if these contribute to enhancing economic resilience. In contrast, older respondents—who are primarily consumers with relatively fixed incomes—are expected to be more sensitive to increases in consumer prices, but less sensitive to losses in business opportunities. This expectation is informed by an applied interpretation of the life-cycle hypothesis—not in its original form as a model of intertemporal consumption smoothing, but rather as a heuristic for understanding how individuals' economic sensitivities may differ across life stages depending on income sources and spending constraints.

Empirical support for this expectation comes from studies on age-based variation in trade policy attitudes. Tomiura et al. (2016), using Japanese survey data, find that retired individuals are generally less supportive of protectionist trade policies, contrary to the conventional view that older generations are inherently more risk-averse or more inclined toward economic nationalism. Similarly, Ito et al. (2019) show a negative correlation between age and protectionist preferences in the Japanese context. These findings suggest that older respondents, while more price-sensitive, may not necessarily endorse aggressive nationalistic economic measures. Our hypothesis refines these insights by exploring how sensitivity to specific types of economic costs (e.g., prices vs. business opportunities) differs by age group in the context of economic security policies. These findings suggest that older respondents, while more sensitive to price increases, may not necessarily support economic security measures framed in nationalistic or protectionist terms. Building on this insight, our hypothesis distinguishes between different types of economic costs—such as consumer price increases versus business opportunity losses—and proposes that sensitivity to these costs varies systematically by age group in the context of economic security policy preferences.

## **H4** (Behavioral Dispositions Hypothesis):

## **H4a (Present Bias Hypothesis):**

Individual behavioral dispositions may influence preferences over economic security policies. In particular, individuals with present bias—who tend to prioritize immediate costs over future benefits—are expected to be less supportive of policies that entail short-term burdens. As a result, even when policies such as supply chain restructuring or economic decoupling from China aim to enhance long-term economic resilience, present-biased individuals may focus more on immediate costs than long-term strategic objectives, resulting in lower support.

This hypothesis is grounded in behavioral economics, which emphasizes systematic deviations from forward-looking rationality. Present bias has been shown to influence policy preferences in domains such as climate change mitigation and preventive health behavior (DellaVigna and Malmendier, 2006), yet its role in economic security policymaking remains underexplored. In the context of foreign direct investment, Ito et al. (2023) find that individuals with higher time preference are less supportive of inward M&A, even when such investment may yield long-term societal benefits. However, empirical research directly linking time preferences to public attitudes toward foreign economic policy more broadly—such as trade and supply chain restructuring—remains scarce. In this study, we aim to fill this gap by examining whether individuals with stronger present bias are systematically less supportive of strategic economic security measures that involve immediate costs but promise long-term benefits.

# **H4b** (Loss Aversion Hypothesis):

In addition to present bias, loss aversion may also shape public attitudes toward economic security policy. Individuals with strong loss aversion exhibit heightened sensitivity to potential losses relative to equivalent gains. Because economic security measures often entail perceived economic

risks—such as price increases, reduced business opportunities, or trade disruptions—loss-averse individuals may be more reluctant to support such policies.

Loss aversion is a widely studied behavioral trait in decision-making under risk and uncertainty (Kahneman and Tversky, 1979). While Tomiura et al. (2016) empirically examined the role of loss aversion in shaping trade policy preferences, their study did not find statistically significant effects. However, it is important to note that their research relied on standard survey methods and did not present respondents with explicit trade-offs or cost implications. In contrast, our conjoint experimental design directly confronts respondents with clearly specified policy costs—such as price increases or business losses—allowing for a more precise evaluation of how loss-averse individuals respond to economic security measures. We hypothesize that loss-averse individuals will be less supportive of such policies when they involve even moderate short-term costs, due to heightened sensitivity to perceived losses.

## 3. Methodology

## 3.1 Conjoint analysis

Conjoint analysis is a survey-based experimental method widely used in economics and political science to assess how individuals evaluate complex policy decisions involving multiple trade-offs. By systematically randomizing the levels of different attributes in hypothetical scenarios, researchers can estimate the causal effects of each attribute on respondents' preferences—commonly referred to as *Average Marginal Component Effects* (AMCEs).

Using the nationally representative sample of 10,000 Japanese respondents described in Section 2.1, we conducted two conjoint experiments designed to elicit public preferences regarding economic security policies—specifically, (1) supply chain restructuring and (2)

economic decoupling from China. We estimate AMCEs using ordinary least squares (OLS) regressions on binary outcome variables derived from respondents' choices.

## 3.2 Question Wording and Attribute Design

To reduce respondent burden and maintain data quality, the full sample of 10,000 individuals was randomly divided into two demographically balanced groups based on gender, age, and region. The first group (N=4,996) was assigned to the supply chain restructuring experiment, while the second group (N=5,004) participated in the experiment on economic decoupling from China. Each respondent completed three randomly assigned choice tasks, resulting in 14,988 and 15,012 total observations for the two experiments, respectively. The combinations of attribute levels were fully randomized across tasks, allowing for unbiased estimation of AMCEs.

## **Conjoint Experiment 1: Supply Chain Restructuring**

The first experiment investigates how respondents evaluate different policy options for restructuring Japan's supply chains in the face of hypothetical disruptions. Respondents were presented with three randomly assigned policy profiles, each defined by the following three attributes:

- $X_1$ : Cause of disruption (e.g., pandemic, natural disaster, escalating military tensions, export restrictions)
- X<sub>2</sub>: Government response (e.g., promote domestic production, diversify supply chain among like-minded countries)
- $X_3$ : Cost implication (e.g., 2%, 5%, 10%, or 20% price increase in essential goods)

Respondents were asked to indicate their support for each policy using a four-point Likert scale:

Strongly Agree, Somewhat Agree, Somewhat Disagree, or Strongly Disagree. The question was as follows:

In the future, due to  $X_1$  (Reason)—Pandemic and subsequent economic shutdown; Large-scale natural disaster; Escalating diplomatic and military tensions; or Sudden export restrictions by foreign governments—there are concerns about disruptions in the supply of essential goods from overseas (such as medical supplies, semiconductors, energy, and food). Some argue that the government should take the lead in  $X_2$  (Solution)—Promoting domestic production and expansion; or Establishing a diversified supply chain among like-minded countries. However, such supply chain restructuring entails costs, leading to an  $X_3$  (Cost) increase in essential goods' prices by—2%; 5%; 10%; or 20%. Considering these factors comprehensively, do you think Japan should restructure its supply chain for essential goods? (Select one).

We coded the binary dependent variable  $Y_{ij}$  as 1 if the respondent i selected *Strongly Agree* or *Somewhat Agree* for policy profile j, and 0 otherwise. This binary outcome is used in the estimation of AMCEs, as outlined in Section 3.1.

Descriptive statistics on respondents' choices indicate strong support for supply chain restructuring. About 16.4% of responses were "Strongly Agree" and 58.1% were "Somewhat Agree," meaning that a combined 74.5% of respondents expressed some level of agreement. Meanwhile, 21.9% selected "Somewhat Disagree" and 3.5% chose "Strongly Disagree." Overall,

et al., 2014; Bansak et al., 2016).

<sup>&</sup>lt;sup>1</sup> We deliberately excluded a neutral option (e.g., "Neither agree nor disagree" or "Don't know") in order to encourage respondents to make a meaningful trade-off judgment among competing policy profiles. This approach is consistent with standard practice in conjoint survey designs, which aim to reveal latent preferences by reducing satisficing and avoiding non-committal responses (Hainmueller

the results suggest broad support for restructuring essential supply chains in Japan.

## **Conjoint Experiment 2: Economic Decoupling from China**

The second experiment explores public attitudes toward Japan's economic relationship with China, focusing on trade-offs between economic security risks and potential economic losses. Policy profiles in this experiment were defined by two attributes:

- $X_1$ : Type of risk or concern (e.g., dual-use tech outflow, competitiveness loss via advanced tech leakage, increased dependence on China for essential goods)
- $X_2$ : Magnitude of economic cost (e.g., 5%, 30%, or 50% loss of business opportunities) Respondents were asked to choose one of the following three policy stances:
  - 1. Fully restrict trade and investment with China (Full-decoupling)
  - Restrict only certain sensitive products while promoting trade in others (commonly known as the "Small yard, high fence" approach)
  - 3. Promote unrestricted trade with China (Free trade)

The question prompt was as follows:

As Japan's economic relationship with China deepens,  $X_1$  (Concern/Risk)—Japanese technology with potential military applications may flow to China; Advanced technology may leak to China, undermining Japan's industrial competitiveness; Japan may become increasingly dependent on China for essential supplies such as medical products and mineral resources; or Japan may import products manufactured under weak labor and environmental standards. On the other hand, if Japan imposes trade and investment restrictions on China, Japanese businesses face an estimated  $X_2$  (Loss of Business Opportunities) —A halving of opportunities; A 30% loss; or A 5% loss. Considering these factors comprehensively, what do you think Japan should do regarding its economic relationship with China? (Select one)."

We coded the dependent variable as 1 if the respondent selected the most protectionist stance (Full-decoupling), and 0 otherwise.

Descriptive results show that 24.6% of respondents supported Full-decoupling, while 64.4% preferred the middle option of targeted restrictions ("Small yard, high fence"), and 11.1% supported Free trade. These findings suggest that while only a minority of respondents favor complete decoupling, a majority accept partial restrictions aimed at balancing security concerns with economic engagement.

## 3.3 Econometric Specification

In both experiments, we estimate the causal effects of attribute levels using a linear probability model (LPM) via Ordinary Least Squares (OLS). The empirical specification is given as follows:

$$Y_{ij} = \alpha + \sum_{k=1}^{K} \sum_{l=1}^{L_k - 1} \beta_{kl} D_{ijkl} + \varepsilon_{ij}$$

where  $Y_{ij}$  is the binary indicator of support for a protectionist policy by respondent i for profile j,  $D_{ijkl}$  is a dummy variable indicating whether attribute k takes level l,  $\beta_{kl}$  denotes the AMCE for attribute k, level l, relative to the omitted base category,  $\varepsilon_{ij}$  is the error term, where standard errors are clustered at the respondent level.

The following baseline categories are used for identification:

## Experiment 1

 $X_1$  = Pandemic and Economic Shutdown

 $X_2$  = Promote Domestic Production

 $X_3 = 5\%$  Cost Increase

# Experiment 2

 $X_1$  = Dual-Use Technology Leakage

# $X_2 = 30\%$ Loss of Business Opportunities

Given the randomized design of attribute levels, the estimated  $\beta_{kl}$  coefficients can be interpreted as causal effects of those attributes on the probability of supporting restrictive economic policies. This modeling strategy enables us to assess how specific combinations of geopolitical threats and economic trade-offs shape public opinion on economic security issues in Japan.

# 4. Empirical Results

Before turning to the causal estimates from the conjoint analysis, it is worth noting that the descriptive results in Section 3.2 already show widespread support for economic security policies in general terms. A large majority of respondents agreed with supply chain restructuring, and a significant proportion favored some form of trade restriction vis-à-vis China. However, as the following sections will demonstrate, this support proves to be sensitive to specific policy attributes—especially the level of economic cost—highlighting the conditional and potentially fragile nature of public backing.

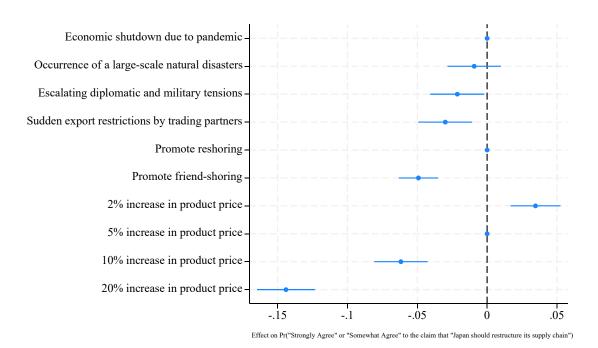
## 4.1 Baseline Results

Figure 1 presents the Average Marginal Component Effects (AMCEs) from the first conjoint experiment on support for supply chain restructuring. The binary outcome variable equals 1 if the respondent selected *Strongly Agree* or *Somewhat Agree* to the proposal that "*Japan should restructure its supply chain for essential goods*," and 0 otherwise. The horizontal axis shows the estimated change in the probability of support relative to the baseline category. Baseline categories are defined as described in Section 3.2.

Several key findings emerge from the figure. First, economic security-related causes—such as "escalating diplomatic and military tensions" and "sudden export restrictions by trading

partners"—have statistically significant negative effects on support relative to the pandemic benchmark. This suggests that Japanese respondents are more responsive to disruptions that appear sudden and unmanageable (like pandemics or natural disasters), rather than to those framed as geopolitical or strategic risks.

Figure 1. AMCEs of attributes in the conjoint experiment on support for supply chain restructuring



Note: These plots show estimates of the randomly assigned attributes with 95% confidence intervals. The reference category of each attribute is "Economic shutdown due to pandemic" for "Reason," "Promote reshoring" for "Solution," "5% increase in product price" for "Cost."

Second, in the context of strengthening supply chain resilience, support for friend-shoring (i.e., diversifying supply chains among like-minded countries) is significantly lower than for reshoring, implying that the public prefers domestic production over international diversification, even among like-minded partners.

Third, as expected, higher cost burdens reduce public support for restructuring. In particular, a 20% increase in prices leads to a statistically significant decline of approximately 15 percentage points in support, while even a 10% increase yields a noticeable negative effect. By contrast, a 2% increase is associated with a modest positive effect, suggesting that small cost burdens may be tolerated, or even viewed as acceptable trade-offs for enhancing economic security.

Overall, the results underscore the sensitivity of public opinion to both the framing of the threat and the economic costs associated with policy responses. Japanese respondents are more supportive of government-led supply chain restructuring when the risks are framed as health-related or natural crises, and when the economic burden is perceived as minimal.

Figure 2 presents the AMCEs from the second conjoint experiment on support for full economic decoupling from China, based on perceived economic security risks and economic costs.

The outcome variable is a binary indicator of whether the respondent supports a complete decoupling from China.

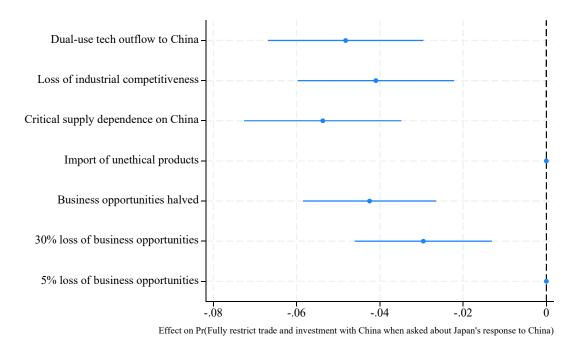
In this analysis, the reference category for the economic security attributes is "import of unethical products.<sup>2</sup>" Compared to this baseline, none of the other security-related risks—namely, "dual-use technology outflow to China," "loss of industrial competitiveness," and "critical supply dependence on China"—are associated with significantly higher support for full trade and investment restriction. Their estimated effects are negative and statistically distinguishable from zero. This pattern suggests that widely discussed military and economic security threats do not

<sup>&</sup>lt;sup>2</sup> In this survey, the "import of unethical products" was included as an economic security risk because, in recent years, some countries have started banning or imposing tariffs on goods produced through forced labor or environmentally harmful practices (e.g., the United States' Uyghur Forced Labor Prevention Act; the European Union's Carbon Border Adjustment Mechanism). Consequently, such imports are increasingly regarded by firms as potential supply chain risks. However, it remains unclear whether the public actually perceives such imports as an economic security risk.

elicit stronger preferences for decoupling than concern over importing unethical products. In other words, the public appears no more responsive to strategic or systemic economic threats than to ethical concerns in trade.

In contrast, attributes highlighting economic costs—such as "halving of business opportunities" or "30% loss"—consistently and significantly reduce support for restrictive measures, underscoring the sensitivity of respondents to economic consequences. These results provide strong empirical support for H1 (Cost Sensitivity Hypothesis), which posits that public support for economic security policies declines as the associated economic costs increase.

Figure 2. AMCEs of attributes in the conjoint experiment on support for decoupling with China



Note: These plots show estimates of the randomly assigned attributes with 95% confidence intervals. The reference category of each attribute is "import of unethical products" for "Risk," "5% loss of business opportunities" for "Cost."

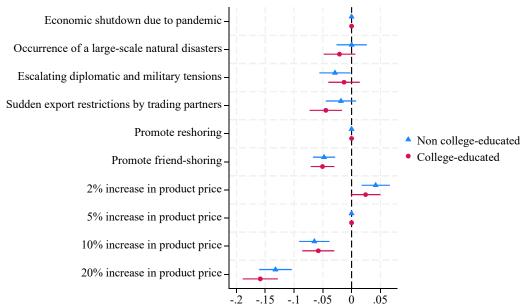
## 4.2 Differences in the effects among individuals by educational attainment

To examine heterogeneity in policy preferences, we explore whether the effects of policy attributes vary by educational attainment. Specifically, we divide respondents into two groups: those with a college degree (college-educated) and those without (non-college-educated). The analysis aims to test the hypothesis that more educated individuals are more supportive of economic openness and more resistant to protectionist or costly measures.

As shown in Figure 3, both college-educated and non-college-educated respondents exhibit a similar pattern in response to consumer price increases associated with supply chain restructuring: support declines steadily as the price burden rises. While the negative effects are somewhat more pronounced among the college-educated—particularly at the 20% price increase level—these differences are not statistically significant across most cost levels. This suggests that, regardless of educational background, individuals are similarly sensitive to the immediate consumer costs of restructuring policies.

With regard to the underlying causes of supply chain disruptions, using "economic shutdown due to pandemic" as the baseline, responses also remain broadly similar across education groups. Among non-college-educated respondents, no statistically significant differences are found across various disruption types—natural disasters, military tensions, or sudden export restrictions. Among college-educated respondents, a statistically significant negative effect is observed only for "sudden export restrictions by trading partners," relative to the pandemic baseline. This may reflect a perception that such restrictions are temporary or politically driven, and therefore insufficient grounds for structural policy shifts. However, given the lack of broader differences across groups, we refrain from drawing strong conclusions about education-based distinctions in perceived threat legitimacy.

Figure 3. Heterogeneous effects of policy attributes on support for supply chain restructuring, by education level.



Effect on Pr("Strongly Agree" or "Somewhat Agree" to the claim that "Japan should restructure its supply chain")

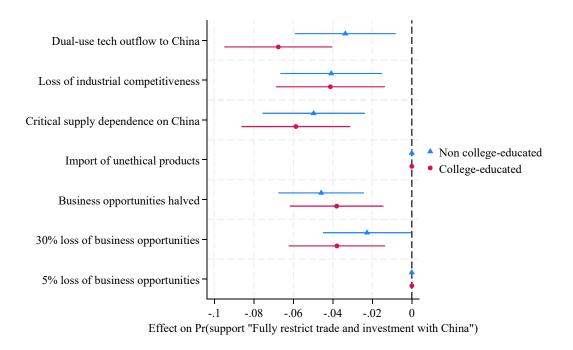
Note: This figure shows average marginal component effects (AMCEs) on the probability of agreeing with the statement "Japan should restructure its supply chain," separately for college-educated (circles) and non-college-educated (triangles) respondents.

Figure 4 presents results from the second conjoint experiment, which evaluates support for fully restricting trade and investment with China. Here too, both groups show reduced support in response to economic costs, and the differences in magnitude between them are modest. For instance, while college-educated respondents appear slightly more sensitive to a "30% loss of business opportunities," non-college-educated respondents show a somewhat stronger negative reaction to "business opportunities halved." These contrasts are not statistically significant and suggest that neither group reacts in a systematically stronger way to economic costs of decoupling.

Rather, both education groups appear similarly responsive to the scale of anticipated economic harm.

Economic security-related justifications for decoupling—such as "dual-use tech outflow to China," "loss of industrial competitiveness," or "critical supply dependence on China"—also yield comparable reactions across both groups. Relative to the baseline category of "import of unethical products," these attributes significantly decrease support for decoupling in either group, indicating that economic security risks alone are not sufficient to override concerns about economic tradeoffs.

Figure 4. Heterogeneous effects of economic security attributes on support for decoupling from China, by education level.



Note: This figure shows AMCEs on the probability of fully supporting trade and investment restrictions with China, separately for college-educated (circles) and non-college-educated (triangles) respondents.

These results provide limited support for H2 (Education-based Heterogeneity

Hypothesis), which expects individuals with higher educational attainment to be less supportive of protectionist measures due to higher opportunity costs from liberal trade. While modest differences emerge under specific conditions, overall, college-educated and non-college-educated respondents exhibit broadly similar patterns in how they assess the tradeoffs involved in restructuring supply chains or decoupling from China. This suggests that attitudes toward such policies may be more uniformly distributed across the population than conventional theories of economic self-interest or trade exposure might predict.

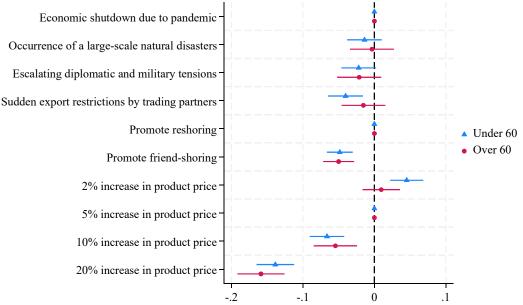
Importantly, these findings indicate that the commonly observed pattern in prior research—where higher-educated individuals are more likely to support trade liberalization—may not consistently extend to public attitudes toward trade restrictions justified on economic security grounds. In the context of national security concerns or perceived geopolitical threats, the role of education in shaping opinion appears to be less pronounced, though not absent. These results suggest the possibility that individuals may distinguish between support for liberalization in peacetime economic contexts and reactions to state-led protectionist measures framed as necessary for safeguarding national interests.

## 4.3 Differences in the effects among individuals by generations

To investigate whether age shapes preferences over economic security policies, we divide the sample into respondents younger than 60 ("working-age") and those aged 60 or older ("senior"). Our ex-ante expectation is two-fold. Working-age individuals, while more likely to oppose policies that entail large opportunity costs in terms of employment and business, may be more willing to accept minor costs if these contribute to enhancing long-term economic security. Second, seniors, who are mainly consumers with relatively fixed incomes, should react more sharply to consumer-price increases while being less concerned about foregone business

opportunities.

Figure 5. Heterogeneous effects of policy attributes on support for supply chain restructuring, by age group



Effect on Pr("Strongly Agree" or "Somewhat Agree" to the claim that "Japan should restructure its supply chain")

Note: This figure shows average marginal component effects (AMCEs) on the probability of agreeing with the statement "Japan should restructure its supply chain," separately for over 60 (circles) and under 60 (triangles) respondents.

Figure 5 shows the generational split for the supply-chain-restructuring experiment. Across both groups, higher consumer prices uniformly depress support. A clear generational pattern emerges only at the 2 % price-increase level: whereas working-age respondents become more supportive relative to the 5 % baseline, seniors already register a negative reaction. This divergence is fully consistent with our hypothesis that younger cohorts are willing to absorb minor costs in exchange for greater long-run resilience, whereas older cohorts are not. At larger cost

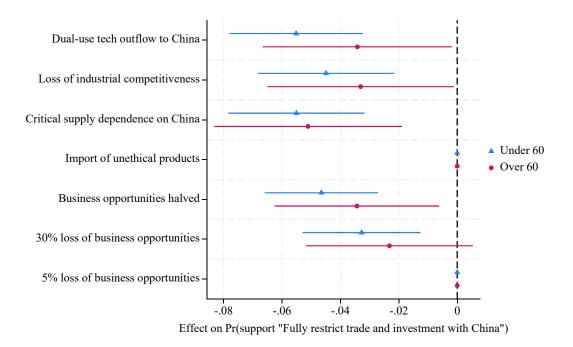
increments (10 % and 20 %), however, the two groups converge; the point estimates differ little and the confidence intervals overlap, indicating broad opposition to substantial price hikes regardless of age.

Turning to the stated causes of supply-chain disruption, most attributes elicit comparable reactions across generations. The only statistically clear difference concerns "sudden export restrictions by trading partners," which reduces support among working-age respondents relative to the pandemic baseline, but has no distinct effect among seniors. For other causes—natural disasters or escalating diplomatic and military tensions—age-specific responses do not differ significantly. Overall, therefore, the generational gap in evaluating disruption causes is limited in scope and magnitude.

When considering the type of policies (reshoring vs. friend-shoring), there are no significant age-based differences in support levels. This suggests that the generational divide is driven more by cost sensitivity than by disagreement over the strategic objectives of economic security.

Figure 6 reports the corresponding results for full decoupling from China. Mean effects are again negative for both age groups when the policy is framed in terms of lost business opportunities or strategic risks. Although the point estimates for under-60s are somewhat more negative—especially as the prospective loss increases from 5 % to 30 %—the gaps are not statistically significant, and both groups move in the same direction. Similarly, risk-based justifications such as "dual-use tech outflow," "loss of industrial competitiveness," or "critical supply dependence on China" yield larger negative point estimates among the working-age group, yet the confidence intervals overlap those of seniors, precluding strong inferences about differential sensitivity.

Figure 6. Heterogeneous effects of economic security attributes on support for decoupling from China, by age group



Note: This figure shows AMCEs on the probability of fully supporting trade and investment restrictions with China, separately for over 60 (circles) and under 60 (triangles) respondents.

These results provide modest support for H3 (Generation-based Heterogeneity Hypothesis), which expects that working-age and senior respondents place different weights on specific economic costs—such as consumer prices versus business opportunities—when evaluating economic security policies. Working-age respondents do appear readier than seniors to accept a small (2%) price increase, and they alone penalize policy responses to export restrictions—patterns that align with the notion of higher opportunity costs among the economically active. Beyond these cases, however, age-based differences rarely attain statistical significance: large consumer-price hikes trigger near-universal opposition, and neither group shows a distinctively stronger reaction to most risk frames or to sizable business-loss scenarios.

In short, while certain point estimates move in the expected directions, the overarching picture is one of broadly uniform policy preferences across generations, with only isolated deviations that reach conventional significance levels.

## 4.4 Differences in the effects among individuals by behavioral bias

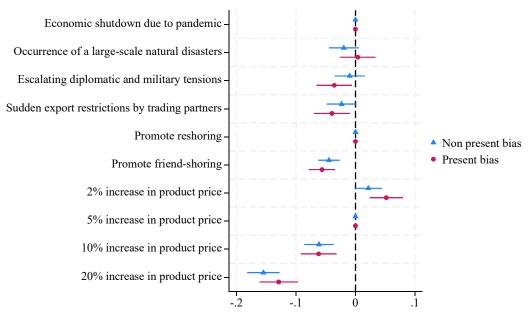
#### 4.4.1 Present bias

To explore whether behavioral traits influence public support for economic security policies, we examine heterogeneity in treatment effects based on respondents' present bias. We define individuals with present bias as those who selected the highest acceptable delayed reward (¥115,000) in response to a time preference question involving a trade-off between an immediate and a delayed monetary gain. We hypothesize that present-biased individuals, who are more likely to discount future gains, may be less supportive of long-term policy measures such as supply chain restructuring or economic decoupling from China.

As shown in Figure 7, both present-biased and non-present-biased respondents are significantly less supportive of supply chain restructuring when it entails higher product prices. However, there is no statistically significant difference in the magnitude of the negative effect between the two groups, even at the 20% price increase level. This suggests that, while both groups are sensitive to cost increases, present bias does not systematically amplify the aversion to short-term consumer burdens. Interestingly, for the 2% price increase condition, present-biased individuals are significantly more supportive of restructuring compared to the benchmark 5% condition, whereas non-present-biased individuals do not exhibit a statistically significant change. This divergence may reflect differences in "threshold sensitivity"—that is, the level of cost at which individuals begin to adjust their policy preferences. Present-biased respondents appear

more responsive to small, psychologically salient cost reductions, viewing a 2% increase as a tolerable burden for improved economic security. In contrast, future-oriented individuals may already factor in long-term benefits and thus show little additional support in response to marginal price differences at lower cost levels.

Figure 7. Heterogeneous effects of policy attributes on support for supply chain restructuring, by Present Bias



Effect on Pr("Strongly Agree" or "Somewhat Agree" to the claim that "Japan should restructure its supply chain")

Note: This figure shows average marginal component effects (AMCEs) on the probability of agreeing with the statement "Japan should restructure its supply chain," separately for present bias (circles) and non-present bias (triangles) respondents.

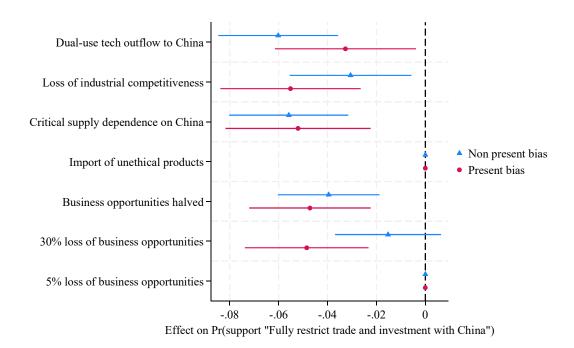
More notable differences emerge when we examine the attributed causes of supply chain disruptions. Compared to the baseline category of "economic shutdown due to pandemic," present-biased individuals are significantly less supportive of restructuring when disruptions are

attributed to "escalating diplomatic and military tensions" or "sudden export restrictions by trading partners." These results suggest that present-biased individuals may be less responsive to geopolitical threats or strategic risks that are temporally or psychologically distant, and more skeptical of policy responses that are not directly tied to immediate and salient events like the pandemic.

Figure 8 presents the results from the second experiment regarding support for fully restricting trade and investment with China. While the treatment effects generally point in the expected direction—present-biased respondents tend to show slightly lower support for decoupling policies—the observed differences between present-biased and non-present-biased groups are not statistically significant. This lack of significance is evident from the substantial overlap in confidence intervals across all attributes. Notably, for attributes involving business opportunity losses—especially the "30% loss of business opportunities" condition—the present-biased group exhibits a more pronounced negative response than the non-present-biased group. However, the confidence intervals still overlap, and the difference does not reach statistical significance.

This suggests a potential tendency for present-biased individuals to weigh immediate economic sacrifices more heavily in forming their policy preferences, even if this effect is not strong enough to yield statistically significant divergence. These findings offer tentative support for H4a (Present Bias Hypothesis), while also indicating that the moderating role of present bias may be limited in contexts involving geopolitical risks.

Figure 8. Heterogeneous effects of economic security attributes on support for decoupling from China, by Present Bias



Note: This figure shows AMCEs on the probability of fully supporting trade and investment restrictions with China, separately for present bias (circles) and non present bias (triangles) respondents.

#### 4.4.2 Loss Aversion

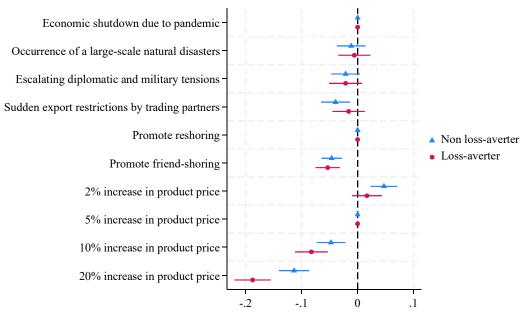
Figure 9 presents the results of the conjoint experiment, disaggregated by whether respondents exhibit loss aversion. <sup>3</sup> Overall, both groups show declining support for supply chain restructuring as the associated cost (i.e., price increase in essential goods) rises. However, the magnitude and statistical significance of this decline differ between the two groups.

Notably, loss-averse respondents exhibit a sharper and significantly stronger decline in

<sup>&</sup>lt;sup>3</sup> Loss aversion is identified based on respondents' answers to two hypothetical scenarios: (1) whether they would purchase a lottery ticket offering a 1-in-100 chance of winning \(\frac{\pmathbf{\frac{4}}}{1}\),000,000 for \(\frac{\pmathbf{\frac{4}}}{3}\),000, and (2) whether they would purchase an insurance policy that fully covers a potential loss of \(\frac{\pmathbf{\frac{4}}}{1}\),000,000 from an unexpected event occurring with a 1-in-100 probability, also for \(\frac{\pmathbf{3}}{3}\),000. Respondents who answered "no" to the lottery and "yes" to the insurance are classified as loss-averse, following standard behavioral definitions.

support when facing higher product price increases, particularly at the 10% and 20% levels. At the 20% increase, the estimated effect for loss-averse individuals is not only substantially more negative but also statistically distinct from that of non–loss-averse individuals, as evidenced by the non-overlapping confidence intervals between the two groups. This indicates that individuals with stronger loss aversion are more acutely sensitive to policy-induced consumer burdens, consistent with predictions from behavioral economics.

Figure 9. Heterogeneous effects of policy attributes on support for supply chain restructuring, by Loss Aversion



Effect on Pr("Strongly Agree" or "Somewhat Agree" to the claim that "Japan should restructure its supply chain")

Note: This figure shows average marginal component effects (AMCEs) on the probability of agreeing with the statement "Japan should restructure its supply chain," separately for loss-averse (circles) and non-loss-averse (triangles) respondents.

At lower price increases (2% and 5%), both groups show more muted reactions, with

non-loss-averse respondents slightly more supportive of restructuring at the 2% level. This suggests that minor cost increases are generally tolerable, but loss-averse individuals become more resistant as the burden intensifies.

Across other policy attributes—such as the cause of disruption (e.g., pandemics, diplomatic tensions) or government response (reshoring, friend-shoring)—the differences between groups are minimal, suggesting that loss aversion primarily shapes reactions to cost attributes rather than to broader policy framing.

These findings underscore that loss aversion significantly moderates public acceptance of economic security measures, particularly when these involve visible short-term costs. Recognizing this behavioral tendency is essential for designing policies that are both effective and politically feasible.

Building on this, Figure 10 examines the same relationship in the context of full decoupling from China. While both groups show reduced support for decoupling when it involves economic costs, the patterns differ from those observed in the supply chain restructuring context. Loss-averse individuals exhibit consistently lower support for decoupling across almost all attributes, including national security threats such as dual-use technology outflows and industrial competitiveness. In contrast, non–loss-averse respondents are more responsive to these strategic concerns, showing relatively stronger support under the same scenarios.

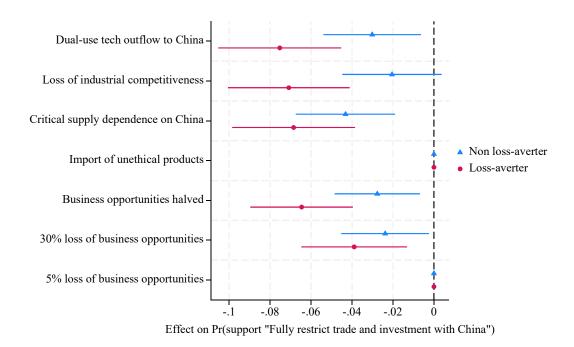
Notably, for economic cost attributes—such as "business opportunities halved" and "30% loss of business opportunities"—loss-averse individuals show significantly more negative responses. This further reinforces the interpretation that loss-averse individuals are particularly sensitive to perceived economic sacrifices, even when policies are justified on national security grounds.

However, despite the differences in point estimates, confidence intervals overlap in most

cases, indicating that the group differences are not statistically significant. These results suggest that while loss aversion moderates policy preferences, its effect is more subtle in the decoupling context compared to price-based burdens in the domestic restructuring scenario.

Together, the findings from Figures 9 and 10 reveal that the behavioral effect of loss aversion is context-dependent: it plays a more prominent role in shaping attitudes toward consumer cost burdens than in the evaluation of abstract geopolitical threats. This insight has important implications for tailoring public communication around economic security policies.

Figure 10. Heterogeneous effects of economic security attributes on support for decoupling from China, by Loss Aversion

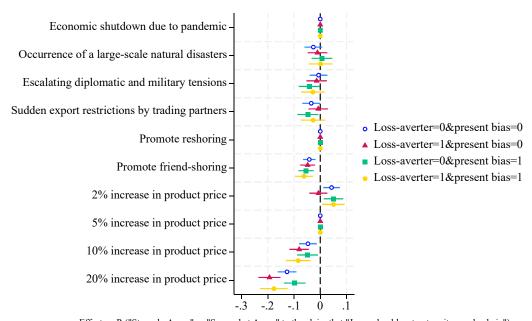


Note: This figure shows AMCEs on the probability of fully supporting trade and investment restrictions with China, separately for loss-averse (circles) and non-loss-averse (triangles) respondents.

## 4.5 Combined effects of Present Bias and Loss Aversion

To further explore the behavioral foundations of support for economic security policies, we examine the interaction effects of present bias and loss aversion. While present-biased individuals disproportionately discount future benefits, loss-averse individuals are more sensitive to potential losses than equivalent gains. The conjoint results allow us to assess how these two traits jointly condition public evaluations of policy costs and risk justifications.

Figure 11. Heterogeneous Effects of Policy Attributes on Support for Supply Chain Restructuring, by Present Bias and Loss Aversion



Effect on Pr("Strongly Agree" or "Somewhat Agree" to the claim that "Japan should restructure its supply chain")

Note: This figure shows average marginal component effects (AMCEs) on the probability of agreeing with the statement "Japan should restructure its supply chain," separately for four groups based on the presence or absence of present bias and loss aversion.

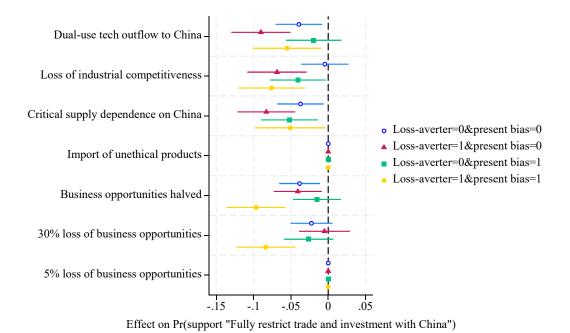
Figure 11 illustrates the effects of supply chain restructuring attributes across four respondent types based on the presence or absence of present bias and loss aversion. While overall support decreases with higher price increases, the expected amplification effect from having both biases is not clearly observed. In fact, respondents with only loss aversion display the strongest and statistically significant opposition to a 20% price increase. The results suggest that while either bias individually may lead to greater cost sensitivity, the interaction of both does not produce a disproportionately stronger aversion in this policy context.

Figure 12 shows the results for attitudes toward decoupling from China, disaggregated by combinations of present bias and loss aversion. Here, the interaction of behavioral traits again proves meaningful. While all groups exhibit declining support in response to greater business opportunity losses, respondents with both biases are particularly averse to decoupling when framed around a "30% loss of business opportunities," or "business opportunities halved, reinforcing the role of short-term loss aversion in policy evaluation. At the 30% loss level, the estimated effect for the respondents with both biases is significantly more negative than that for the group with only loss aversion, with non-overlapping confidence intervals. Similarly, at the "business opportunities halved" level, the effect for both biases is statistically distinct from that of the group with only present bias, again indicating an amplified sensitivity to large-scale short-term losses. These findings reinforce the view that when both biases are present, individuals become disproportionately averse to economic security policies involving substantial and immediate costs—even when these are framed in terms of national interest.

In sum, these findings demonstrate that present bias and loss aversion interact to shape preferences over economic security policy. Respondents with both behavioral traits are systematically less willing to tolerate economic costs and less responsive to strategic justifications for state intervention. This highlights the importance of recognizing psychological heterogeneity

in the electorate and suggests that the political feasibility of economically costly national security policies may depend not only on their objective justification, but also on how they are framed to audiences with different behavioral dispositions.

Figure 12. Heterogeneous Effects of Economic Security Attributes on Support for Decoupling from China, by Present Bias and Loss Aversion



Note: This figure shows AMCEs on the probability of fully supporting trade and investment restrictions with China, separately for four groups based on the presence or absence of present bias and loss aversion.

## 5. Conclusions

This paper has examined Japanese public attitudes toward two core economic-security measures—domestic supply-chain restructuring and economic decoupling from China—using

two nationally representative conjoint experiments (N = 10,000). Our findings reveal that public support for such policies is highly conditional and sharply declines when economic costs are introduced. Even modest increases in consumer prices or moderate losses in business opportunities significantly reduce support, whereas appeals to economic security risks—such as concerns over leakage of dual-use technology or over-reliance of critical products—have limited persuasive power.

Contrary to standard predictions from Stolper–Samuelson-type models, educational attainment does not meaningfully stratify preferences; college-educated and non-college-educated respondents react in largely parallel ways. Generational differences are likewise muted: younger cohorts accept a 2 % price premium more readily but converge with seniors in rejecting larger burdens.

Behavioral traits play a nuanced but asymmetrical role. While present bias alone does not exhibit a consistent or statistically significant effect on support for economic-security policies, loss aversion emerges as a more robust predictor, particularly in response to policy-induced costs. Individuals with stronger loss aversion are systematically more sensitive to consumer price increases and projected business losses. Furthermore, although the combination of present bias and loss aversion does not uniformly amplify opposition—for instance, in the case of domestic supply chain restructuring—it significantly heightens resistance to decoupling from China when framed in terms of substantial economic costs.

Although descriptive results indicate broad support for economic-security policies, the conjoint experiments reveal that this support is conditional and erodes quickly when economic trade-offs are introduced. That is, while public opinion may appear broadly supportive when asked in a direct-choice format, support tends to weaken quickly when confronted with actual trade-offs. These dynamics are difficult to detect using standard survey formats alone,

highlighting the added value of experimental methods for uncovering latent structures of public preferences.

These findings have two policy implications. First, the Japanese public appears willing to tolerate only minimal private costs in pursuit of economic security, suggesting narrow fiscal and political space for ambitious restructuring agendas. Second, rhetorical appeals to economic security risks alone are unlikely to generate sustained support unless accompanied by credible assurances that material burdens will remain modest and evenly distributed. In addition, policymakers should consider the psychological heterogeneity of the electorate and design communication strategies that resonate with the cognitive profiles of different audience segments.

#### References

- Armstrong, S. (2021). Economic Diplomacy and Economic Security under Abe. *Asian Economic Policy Review*, 16(2), 283–299. https://doi.org/10.1111/aepr.12335
- Armstrong, S., Solis, M., & Urata, S. (2025). Economic Security and New Industrial Policy. *Asian Economic Policy Review*. Advance online publication. https://doi.org/10.1111/aepr.12502
- Balistreri, E. J., (1997). The Performance of the Heckscher-Ohlin-Vanek Model in Predicting Endogenous Policy Forces at the Individual Level. *The Canadian Journal of Economics / Revue Canadienne d'Economique*, 30(1), 1–17. https://doi.org/10.2307/136357
- Bansak, K., Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2016). The Number of Choice Tasks and Survey Satisficing in Conjoint Experiments. *Political Analysis*, 26(1), 112–119.
- Beaulieu, E. (2002). The Stolper–Samuelson theorem faces Congress. *Review of International Economics*, 10, 343–360. https://doi.org/10.1111/1467-9396.00336
- Blonigen, B. (2011). Revisiting the evidence on trade policy preferences. *Journal of International Economics*. 85, 129–135. https://doi.org/10.1016/j.jinteco.2011.05.010
- DellaVigna, S. and Malmendier, U. (2006). Paying not to go to the gym, *American Economic Review*, 96(3), pages 694-719. https://doi.org/10.1257/aer.96.3.694
- Facchini, G., & Mayda, A. M. (2008). Attitudes and migration policy. *Economic Policy*, 23(56), 652–713. https://doi.org/10.1111/j.1468-0327.2008.00226.x
- Felbermayr, G., Okubo, T. (2022). Individual preferences on trade liberalization: evidence from a Japanese household survey. *Review of World Economics*. 158, 305–330. https://doi.org/10.1007/s10290-021-00432-3
- Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2014). Causal Inference in Conjoint Analysis:

  Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis*,
  22(1), 1–30. https://doi.org/10.1093/pan/mpt024

- Hainmueller, J., & Hopkins, D. J. (2015). The Hidden American Immigration Consensus: A Conjoint Analysis of Attitudes toward Immigrants. *American Journal of Political Science*, 59(3), 529–548. https://doi.org/10.1111/ajps.12138
- Ito, B., Mukunoki, H., Tomiura, E., and Wakasugi, R. (2019). Trade policy preferences and cross-regional differences: Evidence from individual-level data of Japan, *Journal of the Japanese and International Economies*, 51, 99-109. https://doi.org/10.1016/j.jjie.2018.12.003.
- Ito, B., Tanaka, A., and Jinji N. (2023). Why do people oppose foreign acquisitions? Evidence from Japanese individual-level data, *Japan and the World Economy*, 66, 101187, https://doi.org/10.1016/j.japwor.2023.101187.
- Jäkel, I. and Smolka, M. (2017). Trade policy preferences and factor abundance. *Journal of International Economics*. 106, 1–19.
- Japan, Cabinet of. (2022, December 16). *National Security Strategy*. Cabinet Secretariat. https://www.cas.go.jp/jp/siryou/221216anzenhoshou/nss-e.pdf
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. https://doi.org/10.2307/1914185
- Koyu, I., Takahiro, C., Takuto, H., Takayuki, K., Yuta, M., Hiroaki, N., Ryota, S., Shunsuke, S., Isao, T., Ryuta, U., & Taku, Z. (2022). Japan's Economic Security Promotion Act: Background and Overview. *Asia-Pacific Review*, 29(3), 28-55. https://doi.org/10.1080/13439006.2022.2154520
- Liberal Democratic Party of Japan. (2020, December 16). *Recommendations Toward Developing Japan's "Economic Security Strategy"*. https://storage.jimin.jp/pdf/news/policy/201021 5.pdf
- Liberal Democratic Party of Japan. (2024, September). *LDP presidential election 2024 results* [自民 党総裁選 2024]. https://www.jimin.jp/election/results/sousai24/
- Mayda, A. M., & Rodrik, D. (2005). Why are some people (and countries) more protectionist than others? *European Economic Review*, 49(6), 1393–1430.

- https://doi.org/10.1016/j.euroecorev.2004.01.002
- Mayda, A. M. (2006). Who Is Against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants. *The Review of Economics and Statistics*, 88(3), 510–530. https://doi.org/10.1162/rest.88.3.510
- Pandya, S. S. (2010). Labor Markets and the Demand for Foreign Direct Investment. *International Organization*, 64(3), 389–409. https://doi.org/10.1017/S0020818310000160
- Scheve, K. F., & Slaughter, M. J. (2001). What determines individual trade-policy preferences?

  \*\*Journal of International Economics, 54(2), 267–292. https://doi.org/10.1016/S0022-1996(00)00094-5
- Tanaka, A., Ito, B., & Jinji, N. (2023). Individual preferences toward inward foreign direct investment:
  A survey experiment. *Journal of Asian Economics*, 88, Article 101644.
  https://doi.org/10.1016/j.asieco.2023.101644
- Tomiura, E., Ito, B., Mukunoki, H., & Wakasugi, R. (2019). Individual characteristics, behavioral biases, and attitudes toward foreign workers: Evidence from a survey in Japan, *Japan and the World Economy*, 50, 1-13, https://doi.org/10.1016/j.japwor.2019.03.002.
- Tomiura, E., Ito, B., Mukunoki, H., & Wakasugi, R. (2016). Individual Characteristics, Behavioral Biases, and Trade Policy Preferences: Evidence from a Survey in Japan. *Review of International Economics*, 24(5), 1081–1095. https://doi.org/10.1111/roie.12248
- Yamamura E, Tsutsui Y. (2019). Trade policy preference, childhood sporting experience, and informal school curriculum: An examination of views of the TPP from the view-point of behavioral economics. *Review of International Economics*, 27, 61–90. https://doi.org/10.1111/roie.12356.

**Appendix: Survey Methodology** 

**About the Survey** 

This study draws on data from the DCER National Survey on Economic Security, conducted by

the Dentsu Soken Center for Economic Security Research (DCER). Dentsu Soken Inc. is a

private-sector think tank based in Japan.

**Purpose of the Survey** 

The survey aimed to collect data on voters' preferences regarding economic security policies, their

perceptions of geopolitical risks, and personal attributes that may influence these preferences.

**Survery Method and Period** 

The survey was conducted via a web-based questionnaire from December 20 to December 25,

2024. It is worth noting that the survey took place after the U.S. presidential election cycle entered

its final stage (December 2024), but before he implemented aggressive tariff measures targeting

countries around the world, including allies such as Japan, as president.

**Sampling Method** 

The survey targeted individuals who were eligible to vote in Japan, aged 18 and above. However,

to ensure a sufficient response rate, an upper age limit of 79 was set. Respondents were selected

from approximately 1.3 million registered monitors with Dentsu Macromill Insight Inc., the

survey research firm commissioned to conduct the survey. The target sample size was 10,000.

Japan was divided into 10 regional blocks, and quotas for gender, age group, and region

were set to approximate the population composition of the 2020 census. Basic demographic

41

information (gender, age, and prefecture) was based on data provided at the time of monitor registration.

Age groups were divided into the following seven categories:18–19, 20–29, 30–39, 40–49, 50–59, 60–69, and 70–79 years old. Regional blocks were divided into the following 10 categories: Hokkaido; Tohoku; Kanto (excluding Tokyo and the three surrounding prefectures); Tokyo and the three prefectures (Tokyo, Kanagawa, and Chiba); Hokuriku; Tokai; Keihanshin; Chugoku; Shikoku; and Kyushu and Okinawa.

#### **Incentives**

Respondents who completed the questionnaire received incentives in the form of points, which could be exchanged for various rewards, including Amazon points.

## **Screening Survey**

To investigate the influence of educational background and income on policy preferences, a screening survey was conducted in advance. Only monitors who responded to questions about their highest level of education, academic major or field of specialization, household income, and personal income were allowed to proceed to the main survey.

## **Informed Consent**

At the beginning of the questionnaire, respondents were informed that the survey included questions about their preferred political party, that participation was voluntary, and that they could discontinue the survey at any time. They were also told that the purpose of the survey was to collect statistical data for books and academic publications related to economic security, and that

no personal information would be disclosed. Consent to participate was obtained from all respondents.

## **Data Quality Management**

To ensure data quality, responses with unusually short completion times were excluded from the dataset. After applying the above criteria, a final sample of 10,000 respondents was retained.

## Acknowledgements

We would like to thank Aki Tonami, Kousuke Saitou, Hideyuki Miura, Masako Suginohara, and Saori Katada for their helpful comments and suggestions on earlier drafts of this paper. We are also grateful to the participants of our panel at the 28th World Congress of Political Science organized by the International Political Science Association (IPSA) for their valuable feedback.