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NAKATA Hiroyuki
RIETI

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Attitudes towards Immigration in an Ageing Society: Evidence from Japan[1]

NAKATA Hiroyuki

University of Leicester and Research Institute of Economy, Trade and Industry

Abstract

This paper studies the impacts of heterogeneity such as age, gender, and education on the attitude towards immigration and the effectiveness of information campaigns based on a large-scale experiment conducted in Japan. The experiment randomly exposes a large national sample of citizens to information pertaining to potential social and economic benefits from immigration embedded in a comprehension study. The results complement the companion paper (Facchini, Margalit and Nakata, 2016), which shows that the overall effectiveness of such campaigns does not vary much across different groups, while there is a substantial generational gap in the level of support towards immigration. Also, tertiary education has a positive impact amongst female respondents, which is missing amongst the male counterparts.

Keywords: Experiment, Generational conflict, Heterogeneity, Immigration, Information

JEL classification: D83, F16, F22

[1]This study is conducted as a part of the Project "Attitudes toward Immigration in an Aging Society: Evidence from Japan" undertaken at the Research Institute of Economy, Trade and Industry (RIETI), which collected the dataset "A Web Survey on Attitudes toward Immigration Policy." We appreciate Tomohiro Hara and Kensuke Maeba for their excellent research assistantship. We are also grateful for helpful comments from the Discussion Paper seminar participants at RIETI – in particular, Makoto Yano and Masayuki Morikawa. Usual disclaimers apply, however.

1 Introduction

Immigration has been one of the most politically controversial issues, and is increasingly met with public oppositions in may advanced economies as can be confirmed by the rise of far right parties that take strong positions against immigrants and immigration in countries such as Austria, France, the Netherlands and Switzreland that have seen a large increase in the number of immigrants in recent years (Rydgren, 2008), or by the result of the Brexit referendum in the United Kingdom or the American presidential election in 2016. Meanwhile, Japan is one of the countries with the lowest share of immigrants in the OECD, currently estimated at about 1.8 percent of the population OECD (2015).[1] This state of affairs is often attributed to a broad public opposition to immigration. In fact, despite the country's acute demographic and attendant economic problems — low birth rates, a rapidly aging society, a shrinking population and growing labor shortages — proposals to ease the entry of foreigners have faced strong political opposition.[2]

Research on the determinants of people's attitudes towards immigration has largely focused on two main strands of explanations. The first emphasises the importance of socio-cultural factors. Namely, individuals are against immigration because foreigners represent different values and traditions, and pose a threat to the 'national identity' or the traditional 'way of life'. Much of the emphasis in this literature is placed on prejudice and stereotyping as the source of hostility to immigration (Citrin, Green, Muste and Wong, 1997; Sides and Citrin, 2007). The second strand of explanations is rooted in economic considerations. Its focus is on how attitudes are shaped by individuals' concerns about competition for scarce resources and the consequent distributional effects of immigration (Dancygier and Donnely, 2013; Dustmann and Preston, 2006; Hanson, Scheve and Slaughter, 2007; Facchini and Mayda, 2009; Malhotra, Margalit and Mo, 2013).

[1] Only Mexico has a lower share of immigrants in the population, and it is not classified as an 'advanced economy' by either the IMF or the World Bank.

[2] As Yasutoshi Nishimura, deputy minister in the Cabinet Office, explained in an interview with the *Financial Times*, 'We don't use the word "immigration." There is still a strong insular mentality'. 2nd June 2014.

Much of the evidence pertaining to the role of economic considerations provides only limited support for explanations centered on self-interest as a determinant of attitudes among the population at large. Such concerns tend to be contained within narrow and concentrated segments of the public, as most citizens do not face economic competition with migrants (Hainmuller, Hiscox and Margalit, 2015). Thus, it is mostly sociotropic concerns about the broader impact of immigration on the country and its economy that underlie opposition to it (Citrin, Green, Muste and Wong, 1997; Hainmuller and Hopkins, 2014).

This paper and the companion paper (Facchini, Margalit and Nakata, 2016) study the factors that influence attitudes towards immigration by carrying out a large-scale experiment in Japan, where the share of immigrants is much lower than in other advanced countries and its demographic problem is deepening rapidly. The experiment exposed native citizens to information about various benefits of immigration as part of an assessment of school curricula, in which subjects were asked to assess the suitability of the texts for first-year high school students. Different texts are randomly assigned to the respondents, totalling 10,000, of which 1,000 were for the pilot study, 6,000 answered questions asking their views about immigration immediately after reading the texts, and 3,000 answered the same questions 10 - 12 days after reading the texts. The study builds on a key insight from the literature, namely that opposition to immigration often stems from individuals' sociotropic concerns about the broader social and economic impacts of immigration, rather than from worries that reflect narrow self-interest (Citrin, Green, Muste and Wong, 1997; Hainmuller and Hopkins, 2014). While Facchini, Margalit and Nakata (2016) examine whether informational treatments that speak to those sociotropic concerns and that highlight potential *benefits* from immigration in dealing with key social and economic problems, can sway people's attitudes on the issue, this paper examines if attributes such as age, education or gender that affect both attitudes towards immigration and the effectiveness of informational treatments. Thus, the current paper complements Facchini, Margalit and Nakata (2016). To summarise, the key questions the current paper and the companion paper are addressing are as follows:

- *Can information campaigns reduce public oppositions to immigration*?

- *If so, is the effectiveness of such campaigns depend on socio-economic backgrounds*?

In the literature of Bayesian statistics, the *Expert Problem* studies how to model the Bayesian decision maker's updating process due to the opinions of the experts. For instance, Genest and Schervish (1985) shows that the Bayesian decision maker's updating process is expressed as a linear function if the decision maker does not form a belief about the joint distribution of the opinions of the experts and the event of interest fully. Namely, the decision maker's posterior belief of the event p_1 is a function of the prior p_0, y_i the opinion of expert i, and Ey_i the decision maker's expectation of the opinion of expert i such that $p_1 = p_0 + \sum_i \lambda_i \cdot (y_i - Ey_i)$, where λ_i describes the reaction to y_i, the opinion of expert i, relative to Ey_i, the prior expectation about the opinion of expert i.

In our context, $\lambda_i \cdot (y_i - Ey_i)$ measures the effectiveness of informational treatment i.[3] The prior knowledge of benefits of immigration described in the informational treatment is reflected in Ey_i, and $Ey_i = y_i$ means that the respondent knew the benefits described in the text. Thus, the first question above is a test of a null hypothesis such that $\lambda_i \cdot (y_i - Ey_i) = 0$, and the second question corresponds to a null hypothesis such that $\lambda_i \cdot (y_i - Ey_i)$ is a function of socio-economic backgrounds. The benefits described in the texts of the experiments are economic benefits; thus, if $\lambda_i > 0$, then attitudes towards immigration may be altered by information campaigns even though p_0 may be predominantly determined by sociotropic concerns about the broader social and economic impacts of immigration as suggested by the existing studies. Also, larger treatment effects take place if either λ_i or $(y_i - Ey_i)$ is large or both, where a large $(y_i - Ey_i)$ means less knowledgeable about facts, which may be affected by the education level.[4]

To preview our results, none of age, gender and tertiary education has significant impacts on

[3]We cannot directly apply the result to our experiment, since the informational treatments are not probabilistic opinions in our experiment. The result nevertheless provides us with the insights explained.

[4]Facchini, Margalit and Nakata (2016) indeed show that respondents with tertiary education tend to have better knowledge.

the effectiveness of treatments. However, the dominant factors determining the level of support for immigration are different between the two genders – there is a significant generational gap for male, while treatment effects are dominant for female respondents in most cases. Tertiary education is significant only for female respondents. Thus, information campaigns would have impacts on the attitudes towards immigration especially for women, while the generational conflicts appear to be a major issue amongst men.

The rest of the paper proceeds as follows. Section 2 describes the data and the experiment, and also explains the econometric strategy. Section 3 reports the results and dicuss the implications, and Section 4 concludes the paper.

2 Empirical strategy

2.1 Data

We use the data collected by Cross Marketing Inc., one of the leading marketing research companies in Japan, which is an online experiment/survey commissioned by Research Institute of Economy, Trade and Industry (REITI). The respondents totalling 10,000 are part of the 1.8 million-strong panelists of Cross Marketing Inc. The survey was conducted in three rounds – 1,000 in the first round in October 2015, which was used a pilot survey, and 9,000 in the second round during the week starting on 27 November 2015. Amongst the 9,000 respondents, 6,000 of them answered all questions in this round, while the other 3,000 only answered socio-demographic questions and were contacted 10 – 12 days later (8 – 15 December 2015) as the third round to answer the policy related questions. The third round was conducted to measure the medium-run effects of information provision, or in other words, to what extent the effects of information decay or last as time passes, which are analysed in the companion paper Facchini, Margalit and Nakata (2016). Further details of the survey are provided in the appendix.

This paper uses the 6,000 samples collected in the second round of the survey, and inves-

tigates the impacts of heterogeneous attributes of the respondents such as age, gender and education.[5] The respondents were randomly divided into eight treatment groups and the control group – those in the treatment groups received information that provide some justification for accepting more immigrants, while those in the control group received information that is irrelevant to immigration. The actual texts each group received (translated into English) are in the appendix. In what follows we label the nine groups as follows:

- *Pension*: The group that received information about the impacts of ageing on the pension system. Figure 1 in the appendix is the text (English translation).
- *Elderly Care (stats)*: The group that received hard information about the impacts of ageing on long-term care provision for the elderly people. Figure 2 in the appendix is the text (English translation).
- *Elderly Care (personal)*: The group that received a personal story about the impacts of ageing on long-term care provision for the elderly. Figure 3 in the appendix is the text (English translation).
- *Healthcare*: The group that received information about the impacts of ageing on the healthcare system. Figure 4 in the appendix is the text (English translation).
- *Population Shrinking*: The group that received information about the impacts of ageing on population shrinking. Figure 5 in the appendix is the text (English translation).
- *Labour Shortage (stats)*: The group that received hard information about the impacts of ageing on labour shortage. Figure 6 in the appendix is the text (English translation).
- *Labour Shortage (personal)*: The group that received anecdotes about the impacts of ageing on labour shortage. Figure 6 in the appendix is the text (English translation).

[5]The effects of information provision including the medium-run effects are studied in the companion paper Facchini, Margalit and Nakata (2016).

- *Comparative*: The group that received information that Japan is one of the OECD countries with the lowest share of immigrants in the total population. Figure 8 in the appendix is the text (English translation).

- *Control*: The group that received information about a spacecraft, i.e. irrelevant to immigration. Figure 9 in the appendix is the text (English translation).

To avoid eliciting social desirability bias or 'demand effects', the respondents were not informed about the study's focus on immigration attitudes, but were informed that the questionnaire is on life in general and were asked to evaluate the appropriateness of the two short texts for reading comprehenision at the high school entry level (each participant read another short text that is irrelevant to immigration in addition to the one specified above).

The questionnaire involved approximately 45 questions, and to insure that the respondent carefully read the informational treatments, respondents were told that they will be asked a set of factual questions regarding the text. Indeed, examination of the responses reveals that, on average, 69% correctly answered the substantive questions about the topic of discussion and about 82% of the respondents correctly answered questions about the figures cited in the text.

To measure the support for immigration the survey included the following questions. First, to elicit general preferences on immigration policy, we asked:

> '*Overall, do you think that the number of immigrants allowed into Japan should be increased, decreased, or kept at the current level?*'

Answers were on a five-point scale ranged from 1 ('Increase greatly') to 3 ('Keep the current level'), and to 5 ('Decrease greatly'). The second question focused instead on temporary immigration, and was phrased as

> '*Some have proposed increasing the number of visas for temporary workers (including ginou jisshuusei). Overall, do you think that the number of immigrants*

allowed to Japan temporarily should be increased, decreased, or kept at the current level?'[6]

The possible answers were the same as in the previous question. In addition to the attitudinal items, we also sought to assess respondents' willingness to actively engage in lobbying their elected officials in support of their preferred immigration policy. To this end, we included an item offering the respondent the option of signing a petition to the government on this matter. The question read

'*Finally, please select one of the three options below concerning a petition to the government stating your position on immigration (The petition will contain your name, city and opinion on the issue):*

- *"I would like to join a petition to the government stating* ***my support*** *for increasing the number of immigrants allowed in Japan";*[7]
- *"I would like to join a petition to the government stating* ***my opposition*** *to increasing the number of immigrants allowed in Japan";*
- *"No, I do not wish to sign up a petition" .'*

On top of the questions on immigration, the survey asked questions on age, gender, current address (up to the municipality level), the address at the age of fifteen (up to the municipality level), occupation and education level.

2.2 Econometric models

All of the econometric analyses are based on linear probability models, in which the dependent variable is dichotomous. There are three dependent variables, correspoding to the questions on immigration above:

[6]The Japanese term ginou jisshuusei refers to a visa status known as 'practical trainees'.
[7]Emphases as in the original text in Japanese.

- *More Immigrants*: A dummy variable indicating if the respondent chose one of the two answers indicating support for either 'increased' or 'greatly increased' immigration into the country;

- *More Temp Visas*: A dummy variable indicating if the respondent chose one of the two answers indicating support for either 'increased' or 'greatly increased' temporary visas giving entry to the country;

- *Sign Pro Petition*: A dummy variable indicating if the respondent chose the one indicating his/her support for increasing the number of immigrants.

As for the explanatory variables apart from the treatment dummies, we introduce the following variables:

- *Over X*: A dummy variable indicating if the respondent is over the age of X, with X $(= 30, 40, 50, 60, 70)$;

- *Tertiary education*: A dummy variable if the respondent has received tertiary education (junior college or above).

The age dummies are introduced to evaluate if there is a generational conflict on the issue of immigration, and if so, at which age the gap exists. As a hypothesis, younger people who are at work and are far from the pension age would regard the immigrants as their potential competitors; thus, they would be more against immigration. Pension age people or those near the pension age would see immigrants more positively, since they would make positive contributions to the pension or the heathcare system as well as filling the labour shortages. The tertiary education dummy is intended to reflect the possible impacts of socio-economic backgrounds on the attitude towards immigration.

To measure the impacts of different attributes to the effectiveness of information, i.e. the impacts on the slope attached to treatment variables, we include interaction terms of these variables with the treatment dummies in some specifications. Also, we estimate the regression

models using the whole 6,000 samples as well as separating male and female samples so as to analyse the difference between the two genders.

3 Results

Table 1 in the Appendix reports the means of the variables for all respondents as well as those for male and female respondents separately. 44.5% of the whole respondents support more immigrants in general, which is slightly lower than the support for more temporary visas (46.2%), while only 17% are willing to join a pro immigration petition. Also, male respondents tend to support immigration more than female respondents.

As for the regression models, the estimation results are reported in the Appendix (Tables 2 – 14). We first look at the impacts of age, and then those of tertiary education below.

Table 2 reports the estimation results of the 'More Immigrants' regressions, and Table 3 those of the 'More Temp Visas' regressions, both with the age dummies and are using the whole 6,000 samples. It is clear from these tables that there is a gap at the age of fifty. However, the support for more immigrants in general is increasing in the age even amongst those over fifty years old, while that for more temporary visas indicates the largest gap at the age of fifty, and its support increases less in accord with age is amongst the over fifties, both in terms of statistical significance and point estimates – the support for more immigrants in general is 6.22 percent point higher for those in the sixties than those in the fifties and is 7.56 percent point higher for those over seventy than those in the sixties, while the support for more temporary visas increases only by 5.18 percent point from the fifties to the sixties and by 3.06 percent point from the sixties to over seventy. One possible explanation for the difference is that the support for more temporary visas depends more on the respondent's career stage than the support for more immigrants in general, since the respondent's career stage may affect the perception of immigrants as competitors in the labour market.

To see this deeper, we estimate the same regressions separately between male and female samples. Tables 5 and 6 report the results for male, and Tables 8 and 9 those for female. While

essentially the same (and stronger) patterns as we saw with the estimation results using the whole 6,000 samples emerge for male, the impacts of age are weaker for female – there seems to be a significant gap only at the age of forty for the support for more immigrants in general and no or much weaker impacts of age on the support for more temporary visas. Considering the difference in career development and/or in the patterns of labour market participation demographics between the two genders, these results are consistent with the explanation based on career stage or the perception of immigrants as competitors in the labour market.

Regarding the willingness to participate in petitions supporting more open immigration policies, the impacts of age are much weaker as Tables 4, 7 and 10 show. Moreover, the treatment effects on 'Sign Pro Petition' are positively significant for female, while they are insignificant for male. These results suggest that age has a larger impact than the treatments for male, and the exact opposite is true for female here. In fact, this applies to the attitudinal questions, too, 'More Immigrants' and 'More Temp Visas', although the contrast between the two genders is starkest for 'Sign Pro Petition'.

Next, we examine the impacts of educational background. Tables 11 and 13 report the impacts of tertiary education on the level of support for immigration, and Tables 12 and 14 on the strength of treatment effects. It is clear that tertiary education has positive impacts on the level of support for immigration for female except for 'Sign Pro Petition', but has no significant impacts for male. Also, there is no significant impact of tertiary education on the strength of treatment effects for both genders. Note that tertiary education has an impact on the level of factual knowledge according to Facchini, Margalit and Nakata (2016); thus, $(y_i - Ey_i)$ tends to be smaller for respondents with a tertiary education background in the framework offered by Genest and Schervish (1985). However, the scale of the impact is not sufficiently large to cause the overall treatment effect $\lambda_i \cdot (y_i - Ey_i)$ to be different in accord with educational backgrounds.

Turning our attention to the comparisons of different factors that determine the level of support for immigration, it is clear that the treatment effects are dominant for female, while

age tends to be the dominant one for male. Also, the baseline level of support for 'More Immigrants' is almost the same between male ($21.5 \sim 21.9\%$) and female (19.4%), and the same can be said for 'More Temp Visas', about 31% for both genders. In contrast, the baseline support for 'Sign Pro Petition' is much higher amongst male ($16.5 \sim 16.8\%$) than amongst female (6.8%). In conjuction with the substantial difference in the size of the treatment effects on 'Sign Pro Petition' between the two genders, it may be that there is a difference between genders regarding the prior realisation of the potential problems ageing is bringing to Japan.

To summarise, the main findings are as follows:

(a) *Age plays a more important role for male than for female in determining the level of support for immigration*;

(b) *Tertiary education has positive impacts on the level of support for immigration for female, but has no impacts for male*;

(c) *Treatment effects are more significant than age or education for female*;

(d) *Age has larger impacts than most treatment effects for male*;

(e) *Age and tertiary education have no impacts on the size of the treatment effects.*

(a) and (d) indicate that there is a significant generational gap amongst male, which confirms the oft-argued generational conflicts for male, but not necessarily for female. (b) suggests that socio-economic characteristic matters more for female than for male, although the latter requires care in interpreting the results since the generational difference in the tertiary education participation rate is much greater for female. (e) may be reflecting a relative success of the primary and secondary education in Japan in restricting the gap in the basic skills level including literacy and numeracy skills.

4 Conclusions

We have examined the impacts of age, education and gender on the attitudes towards immigration and the size of the treatment effects. While there is no difference in the baseline level of support for more immigration in general or more temporary visas between the two genders, the baseline support for pro immigration petitions is higher amongst male than amongst female respondents. Also, generational conflicts seem to be more serious for male – generations older than fifty years old are markedly more supportive of immigration, which may be a reflection of different economic interests, i.e. younger generations may see immigrants as potential competitors, while older generations may see immigrants as net contributors to the economy. Amongst female respondents, there is no significant generational gap, while tertiary education has an impact on the support for immigration, which is absent for male respondents.

Treatment effects are significant for both genders, but are larger for female. In fact, most treatment effects are so large that the level of support for more immigrants in general and that for pro immigration petitions more than double amongst female respondents. Moreover, treatment effects are not significantly different in accord with age, and the same applies to tertiary education.[8] The results therefore suggest that information campaigns may be sufficiently powerful to alter the attitudes towards immigration, at least for female voters.

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A Tables and Figures

Table 1: Means of the Variables

VARIABLES	Male	Female	All
'More Immigrants'	0.460	0.431	0.445
'More Temp Visas'	0.472	0.452	0.462
'Sign Pro Petition'	0.199	0.142	0.170
Over 30	0.823	0.827	0.825
Over 40	0.638	0.634	0.636
Over 50	0.452	0.454	0.453
Over 60	0.279	0.281	0.281
Over 70	0.0997	0.0944	0.097
Tertiary education	0.657	0.572	0.614
Observations	2959	3041	6000

Table 2: Impacts of age on support for 'More Immigrants' – All respondents

	(1)	(2)	(3)	(4)	(5)
Pension	0.209***	0.209***	0.208***	0.205***	0.206***
	(0.0262)	(0.0261)	(0.0260)	(0.0260)	(0.0260)
Elderly Care (stats)	0.192***	0.192***	0.193***	0.191***	0.190***
	(0.0264)	(0.0263)	(0.0262)	(0.0262)	(0.0261)
Elderly Care (personal)	0.209***	0.208***	0.207***	0.207***	0.207***
	(0.0262)	(0.0261)	(0.0259)	(0.0258)	(0.0258)
Healthcare	0.179***	0.181***	0.183***	0.181***	0.180***
	(0.0261)	(0.0259)	(0.0258)	(0.0258)	(0.0258)
Population Shrinking	0.154***	0.154***	0.155***	0.154***	0.154***
	(0.0262)	(0.0260)	(0.0260)	(0.0259)	(0.0260)
Labour Shortage (stats)	0.168***	0.168***	0.169***	0.166***	0.166***
	(0.0260)	(0.0259)	(0.0258)	(0.0258)	(0.0258)
Labour Shortage (personal)	0.125***	0.127***	0.130***	0.129***	0.130***
	(0.0262)	(0.0261)	(0.0261)	(0.0260)	(0.0260)
Comparative	0.152***	0.152***	0.153***	0.151***	0.150***
	(0.0262)	(0.0260)	(0.0259)	(0.0258)	(0.0258)
over 30	0.106***	0.0241	0.0241	0.0240	0.0240
	(0.0164)	(0.0206)	(0.0206)	(0.0206)	(0.0206)
over 40		0.106***	0.0350^{+}	0.0350^{+}	0.0350^{+}
		(0.0164)	(0.0206)	(0.0206)	(0.0206)
over 50			0.0994***	0.0448*	0.0447*
			(0.0176)	(0.0213)	(0.0214)
over 60				0.0883***	0.0622**
				(0.0196)	(0.0215)
over 70					0.0756**
					(0.0250)
Constant	0.204***	0.203***	0.202***	0.204***	0.204***
	(0.0224)	(0.0223)	(0.0223)	(0.0222)	(0.0223)
Observations	6000	6000	6000	6000	6000

Standard errors in parentheses
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Impacts of age on support for 'More Temp Visas' – All respondents

	(1)	(2)	(3)	(4)	(5)
Pension	0.118***	0.118***	0.117***	0.115***	0.115***
	(0.0270)	(0.0269)	(0.0268)	(0.0267)	(0.0267)
Elderly Care (stats)	0.155***	0.155***	0.156***	0.154***	0.154***
	(0.0271)	(0.0270)	(0.0268)	(0.0268)	(0.0268)
Elderly Care (personal)	0.121***	0.121***	0.119***	0.120***	0.120***
	(0.0269)	(0.0268)	(0.0267)	(0.0266)	(0.0266)
Healthcare	0.124***	0.125***	0.127***	0.126***	0.125***
	(0.0269)	(0.0268)	(0.0267)	(0.0267)	(0.0267)
Population Shrinking	0.0731**	0.0733**	0.0740**	0.0733**	0.0732**
	(0.0269)	(0.0269)	(0.0268)	(0.0268)	(0.0268)
Labour Shortage (stats)	0.129***	0.128***	0.130***	0.127***	0.127***
	(0.0268)	(0.0268)	(0.0266)	(0.0266)	(0.0266)
Labour Shortage (personal)	0.0668*	0.0687*	0.0717**	0.0712**	0.0714**
	(0.0270)	(0.0269)	(0.0268)	(0.0267)	(0.0267)
Comparative	0.0757**	0.0755**	0.0763**	0.0749**	0.0746**
	(0.0269)	(0.0268)	(0.0266)	(0.0266)	(0.0266)
over 30	0.0667***	0.00743	0.00745	0.00742	0.00741
	(0.0167)	(0.0210)	(0.0210)	(0.0210)	(0.0210)
over 40		0.0768***	-0.00307	-0.00304	-0.00304
		(0.0166)	(0.0208)	(0.0208)	(0.0208)
over 50			0.112***	0.0736***	0.0736***
			(0.0176)	(0.0214)	(0.0214)
over 60				0.0624**	0.0518*
				(0.0197)	(0.0216)
over 70					0.0306
					(0.0254)
Constant	0.311***	0.310***	0.309***	0.311***	0.311***
	(0.0234)	(0.0234)	(0.0233)	(0.0232)	(0.0232)
Observations	6000	6000	6000	6000	6000

Standard errors in parentheses
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4: Impacts of age on 'Sign Pro Petition' – All respondents

	(1)	(2)	(3)	(4)	(5)
Pension	0.0705***	0.0706***	0.0701***	0.0686***	0.0690***
	(0.0205)	(0.0205)	(0.0205)	(0.0204)	(0.0205)
Elderly Care (stats)	0.0521**	0.0522**	0.0526**	0.0509*	0.0507*
	(0.0201)	(0.0201)	(0.0201)	(0.0201)	(0.0201)
Elderly Care (personal)	0.0594**	0.0594**	0.0588**	0.0591**	0.0593**
	(0.0202)	(0.0202)	(0.0201)	(0.0201)	(0.0201)
Healthcare	0.0355+	0.0358+	0.0365+	0.0352+	0.0344+
	(0.0195)	(0.0195)	(0.0195)	(0.0195)	(0.0195)
Population Shrinking	0.0585**	0.0585**	0.0587**	0.0581**	0.0579**
	(0.0202)	(0.0202)	(0.0202)	(0.0201)	(0.0201)
Labour Shortage (stats)	0.0156	0.0156	0.0159	0.0138	0.0138
	(0.0190)	(0.0190)	(0.0190)	(0.0190)	(0.0190)
Labour Shortage (personal)	0.0247	0.0251	0.0261	0.0256	0.0259
	(0.0194)	(0.0194)	(0.0194)	(0.0194)	(0.0194)
Comparative	0.0237	0.0236	0.0238	0.0227	0.0221
	(0.0194)	(0.0194)	(0.0194)	(0.0193)	(0.0193)
over 30	0.0222+	0.00965	0.00965	0.00963	0.00962
	(0.0123)	(0.0155)	(0.0155)	(0.0155)	(0.0155)
over 40		0.0163	-0.00867	-0.00864	-0.00863
		(0.0126)	(0.0154)	(0.0154)	(0.0154)
over 50			0.0350**	0.00211	0.00209
			(0.0132)	(0.0157)	(0.0157)
over 60				0.0531***	0.0369*
				(0.0150)	(0.0164)
over 70					0.0470*
					(0.0213)
Constant	0.114***	0.114***	0.114***	0.115***	0.115***
	(0.0165)	(0.0164)	(0.0164)	(0.0164)	(0.0164)
Observations	6000	6000	6000	6000	6000

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Impacts of age on support for 'More Immigrants' – Male

	(1)	(2)	(3)	(4)	(5)
Pension	0.173***	0.174***	0.170***	0.166***	0.165***
	(0.0387)	(0.0384)	(0.0383)	(0.0382)	(0.0383)
Elderly Care (stats)	0.148***	0.152***	0.153***	0.149***	0.147***
	(0.0390)	(0.0388)	(0.0386)	(0.0384)	(0.0385)
Elderly Care (personal)	0.177***	0.177***	0.172***	0.169***	0.169***
	(0.0386)	(0.0383)	(0.0379)	(0.0375)	(0.0376)
Healthcare	0.124***	0.126***	0.131***	0.127***	0.126***
	(0.0375)	(0.0372)	(0.0371)	(0.0370)	(0.0370)
Population Shrinking	0.102**	0.104**	0.103**	0.0983**	0.0977**
	(0.0378)	(0.0376)	(0.0375)	(0.0373)	(0.0374)
Labour Shortage (stats)	0.125**	0.124**	0.128***	0.122**	0.123**
	(0.0385)	(0.0383)	(0.0382)	(0.0380)	(0.0381)
Labour Shortage (personal)	0.0771*	0.0824*	0.0852*	0.0843*	0.0827*
	(0.0391)	(0.0390)	(0.0387)	(0.0386)	(0.0386)
Comparative	0.140***	0.140***	0.140***	0.136***	0.135***
	(0.0375)	(0.0373)	(0.0369)	(0.0368)	(0.0368)
over 30	0.151***	0.0624*	0.0625*	0.0624*	0.0624*
	(0.0230)	(0.0294)	(0.0294)	(0.0294)	(0.0294)
over 40		0.114***	0.00234	0.00239	0.00236
		(0.0238)	(0.0295)	(0.0295)	(0.0295)
over 50			0.158***	0.0683*	0.0683*
			(0.0249)	(0.0303)	(0.0304)
over 60				0.144***	0.122***
				(0.0277)	(0.0306)
over 70					0.0636+
					(0.0347)
Constant	0.217***	0.215***	0.215***	0.218***	0.219***
	(0.0331)	(0.0330)	(0.0329)	(0.0328)	(0.0328)
Observations	2959	2959	2959	2959	2959

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Impacts of age on support for 'More Temp Visas' – Male

	(1)	(2)	(3)	(4)	(5)
Pension	0.119**	0.120**	0.116**	0.113**	0.113**
	(0.0392)	(0.0389)	(0.0386)	(0.0384)	(0.0384)
Elderly Care (stats)	0.156***	0.159***	0.160***	0.157***	0.157***
	(0.0394)	(0.0393)	(0.0390)	(0.0388)	(0.0389)
Elderly Care (personal)	0.124**	0.124**	0.118**	0.117**	0.117**
	(0.0390)	(0.0388)	(0.0385)	(0.0383)	(0.0383)
Healthcare	0.0869*	0.0886*	0.0933*	0.0906*	0.0905*
	(0.0380)	(0.0379)	(0.0375)	(0.0374)	(0.0374)
Population Shrinking	0.0685+	0.0705+	0.0687+	0.0657+	0.0657+
	(0.0385)	(0.0384)	(0.0383)	(0.0382)	(0.0382)
Labour Shortage (stats)	0.0938*	0.0938*	0.0970*	0.0932*	0.0932*
	(0.0392)	(0.0390)	(0.0387)	(0.0385)	(0.0386)
Labour Shortage (personal)	0.0367	0.0410	0.0437	0.0431	0.0430
	(0.0395)	(0.0394)	(0.0389)	(0.0387)	(0.0387)
Comparative	0.0804*	0.0806*	0.0805*	0.0777*	0.0777*
	(0.0381)	(0.0379)	(0.0375)	(0.0375)	(0.0375)
over 30	0.0914***	0.0199	0.0200	0.0199	0.0199
	(0.0236)	(0.0300)	(0.0300)	(0.0300)	(0.0300)
over 40		0.0923***	-0.0163	-0.0162	-0.0162
		(0.0240)	(0.0296)	(0.0296)	(0.0296)
over 50			0.153***	0.0907**	0.0907**
			(0.0249)	(0.0304)	(0.0304)
over 60				0.102***	0.101**
				(0.0279)	(0.0307)
over 70					0.00167
					(0.0357)
Constant	0.311***	0.310***	0.310***	0.312***	0.312***
	(0.0339)	(0.0338)	(0.0335)	(0.0335)	(0.0335)
Observations	2959	2959	2959	2959	2959

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Impacts of age on 'Sign Pro Petition' – Male

	(1)	(2)	(3)	(4)	(5)
Pension	0.0409	0.0410	0.0396	0.0364	0.0361
	(0.0327)	(0.0327)	(0.0327)	(0.0326)	(0.0327)
Elderly Care (stats)	0.0185	0.0192	0.0197	0.0168	0.0154
	(0.0324)	(0.0324)	(0.0323)	(0.0324)	(0.0324)
Elderly Care (personal)	0.0154	0.0155	0.0130	0.0115	0.0114
	(0.0320)	(0.0320)	(0.0318)	(0.0316)	(0.0316)
Healthcare	-0.00671	-0.00633	-0.00438	-0.00712	-0.00816
	(0.0305)	(0.0305)	(0.0305)	(0.0303)	(0.0304)
Population Shrinking	0.00844	0.00888	0.00813	0.00502	0.00466
	(0.0314)	(0.0314)	(0.0314)	(0.0312)	(0.0312)
Labour Shortage (stats)	-0.0396	-0.0396	-0.0382	-0.0420	-0.0418
	(0.0302)	(0.0302)	(0.0302)	(0.0301)	(0.0301)
Labour Shortage (personal)	-0.00966	-0.00874	-0.00758	-0.00822	-0.00921
	(0.0317)	(0.0317)	(0.0316)	(0.0315)	(0.0315)
Comparative	-0.00135	-0.00132	-0.00134	-0.00416	-0.00493
	(0.0309)	(0.0309)	(0.0308)	(0.0307)	(0.0307)
over 30	0.0379*	0.0224	0.0224	0.0223	0.0223
	(0.0183)	(0.0234)	(0.0234)	(0.0234)	(0.0234)
over 40		0.0200	-0.0259	-0.0259	-0.0259
		(0.0193)	(0.0230)	(0.0231)	(0.0231)
over 50			0.0649***	0.000882	0.000847
			(0.0195)	(0.0228)	(0.0228)
over 60				0.103***	0.0898***
				(0.0226)	(0.0251)
over 70					0.0384
					(0.0327)
Constant	0.165***	0.165***	0.165***	0.167***	0.168***
	(0.0272)	(0.0272)	(0.0271)	(0.0271)	(0.0271)
Observations	2959	2959	2959	2959	2959

Standard errors in parentheses
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: Impacts of age on support for 'More Immigrants' – Female

	(1)	(2)	(3)	(4)	(5)
Pension	0.242***	0.242***	0.242***	0.241***	0.243***
	(0.0355)	(0.0354)	(0.0354)	(0.0354)	(0.0354)
Elderly Care (stats)	0.233***	0.232***	0.232***	0.231***	0.233***
	(0.0356)	(0.0355)	(0.0354)	(0.0355)	(0.0355)
Elderly Care (personal)	0.239***	0.239***	0.239***	0.240***	0.241***
	(0.0355)	(0.0353)	(0.0353)	(0.0353)	(0.0351)
Healthcare	0.232***	0.234***	0.235***	0.234***	0.233***
	(0.0365)	(0.0361)	(0.0361)	(0.0361)	(0.0360)
Population Shrinking	0.204***	0.202***	0.203***	0.203***	0.203***
	(0.0362)	(0.0360)	(0.0359)	(0.0359)	(0.0359)
Labour Shortage (stats)	0.210***	0.210***	0.210***	0.208***	0.208***
	(0.0351)	(0.0350)	(0.0349)	(0.0350)	(0.0350)
Labour Shortage (personal)	0.172***	0.173***	0.174***	0.174***	0.177***
	(0.0351)	(0.0350)	(0.0350)	(0.0350)	(0.0350)
Comparative	0.155***	0.155***	0.155***	0.155***	0.154***
	(0.0363)	(0.0361)	(0.0361)	(0.0361)	(0.0362)
over 30	0.0597*	-0.0141	-0.0141	-0.0141	-0.0142
	(0.0233)	(0.0288)	(0.0288)	(0.0288)	(0.0289)
over 40		0.0962***	0.0657*	0.0657*	0.0657*
		(0.0226)	(0.0287)	(0.0287)	(0.0287)
over 50			0.0425+	0.0212	0.0212
			(0.0248)	(0.0300)	(0.0300)
over 60				0.0343	0.00612
				(0.0274)	(0.0300)
over 70					0.0840*
					(0.0357)
Constant	0.194***	0.194***	0.194***	0.194***	0.194***
	(0.0303)	(0.0302)	(0.0301)	(0.0301)	(0.0301)
Observations	3041	3041	3041	3041	3041

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9: Impacts of age on support for 'More Temp Visas' – Female

	(1)	(2)	(3)	(4)	(5)
Pension	0.117**	0.117**	0.116**	0.116**	0.117**
	(0.0372)	(0.0372)	(0.0371)	(0.0371)	(0.0371)
Elderly Care (stats)	0.155***	0.153***	0.155***	0.154***	0.155***
	(0.0373)	(0.0372)	(0.0370)	(0.0370)	(0.0371)
Elderly Care (personal)	0.120**	0.120**	0.120**	0.121**	0.121**
	(0.0371)	(0.0370)	(0.0369)	(0.0369)	(0.0369)
Healthcare	0.162***	0.163***	0.164***	0.163***	0.163***
	(0.0383)	(0.0382)	(0.0382)	(0.0382)	(0.0382)
Population Shrinking	0.0760*	0.0751*	0.0768*	0.0769*	0.0770*
	(0.0377)	(0.0376)	(0.0376)	(0.0376)	(0.0376)
Labour Shortage (stats)	0.162***	0.161***	0.161***	0.160***	0.160***
	(0.0369)	(0.0368)	(0.0368)	(0.0368)	(0.0368)
Labour Shortage (personal)	0.0958**	0.0961**	0.0986**	0.0983**	0.100**
	(0.0370)	(0.0369)	(0.0368)	(0.0368)	(0.0369)
Comparative	0.0656+	0.0654+	0.0663+	0.0659+	0.0656+
	(0.0381)	(0.0380)	(0.0379)	(0.0378)	(0.0379)
over 30	0.0411+	-0.00630	-0.00628	-0.00629	-0.00634
	(0.0238)	(0.0295)	(0.0295)	(0.0295)	(0.0296)
over 40		0.0618**	0.0112	0.0112	0.0112
		(0.0231)	(0.0291)	(0.0291)	(0.0291)
over 50			0.0705**	0.0559+	0.0559+
			(0.0249)	(0.0302)	(0.0302)
over 60				0.0236	0.00520
				(0.0277)	(0.0303)
over 70					0.0549
					(0.0360)
Constant	0.312***	0.312***	0.311***	0.311***	0.311***
	(0.0324)	(0.0324)	(0.0323)	(0.0323)	(0.0323)
Observations	3041	3041	3041	3041	3041

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 10: Impacts of age on 'Sign Pro Petition' – Female

	(1)	(2)	(3)	(4)	(5)
Pension	0.0974***	0.0973***	0.0973***	0.0972***	0.0984***
	(0.0247)	(0.0247)	(0.0247)	(0.0247)	(0.0247)
Elderly Care (stats)	0.0838***	0.0836***	0.0837***	0.0836***	0.0848***
	(0.0242)	(0.0242)	(0.0242)	(0.0242)	(0.0242)
Elderly Care (personal)	0.100***	0.100***	0.100***	0.101***	0.101***
	(0.0248)	(0.0248)	(0.0248)	(0.0248)	(0.0247)
Healthcare	0.0696**	0.0699**	0.0699**	0.0698**	0.0695**
	(0.0242)	(0.0242)	(0.0242)	(0.0242)	(0.0242)
Population Shrinking	0.103***	0.103***	0.103***	0.103***	0.103***
	(0.0254)	(0.0254)	(0.0254)	(0.0254)	(0.0254)
Labour Shortage (stats)	0.0669**	0.0668**	0.0668**	0.0666**	0.0664**
	(0.0232)	(0.0232)	(0.0232)	(0.0232)	(0.0232)
Labour Shortage (personal)	0.0591**	0.0591**	0.0594**	0.0593**	0.0610**
	(0.0229)	(0.0229)	(0.0229)	(0.0230)	(0.0230)
Comparative	0.0377+	0.0376+	0.0377+	0.0377+	0.0374
	(0.0228)	(0.0228)	(0.0228)	(0.0228)	(0.0228)
over 30	0.00607	-0.00209	-0.00209	-0.00209	-0.00213
	(0.0164)	(0.0204)	(0.0204)	(0.0204)	(0.0204)
over 40		0.0106	0.00580	0.00580	0.00577
		(0.0162)	(0.0205)	(0.0206)	(0.0206)
over 50			0.00676	0.00357	0.00360
			(0.0177)	(0.0214)	(0.0214)
over 60				0.00514	-0.0117
				(0.0196)	(0.0210)
over 70					0.0501+
					(0.0269)
Constant	0.0681***	0.0682***	0.0681***	0.0682***	0.0678***
	(0.0188)	(0.0188)	(0.0188)	(0.0188)	(0.0188)
Observations	3041	3041	3041	3041	3041

Standard errors in parentheses
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11: Impacts of tertiary education on the level of support for immigration – Female

VARIABLES	(1) 'More Immigrants'	(2) 'More Temp Visas'	(3) 'Sign Pro Petition'
Pension	0.248***	0.122**	0.0986***
	(0.0354)	(0.0371)	(0.0247)
Elderly Care (stats)	0.232***	0.154***	0.0835***
	(0.0354)	(0.0371)	(0.0241)
Elderly Care (personal)	0.240***	0.121**	0.100***
	(0.0355)	(0.0372)	(0.0247)
Healthcare	0.232***	0.161***	0.0693**
	(0.0365)	(0.0380)	(0.0242)
Population Shrinking	0.200***	0.0732+	0.102***
	(0.0359)	(0.0375)	(0.0254)
Labour Shortage (stats)	0.213***	0.164***	0.0675**
	(0.0351)	(0.0369)	(0.0232)
Labour Shortage (personal)	0.176***	0.0989**	0.0598**
	(0.0348)	(0.0367)	(0.0229)
Comparative	0.157***	0.0673+	0.0382+
	(0.0363)	(0.0381)	(0.0228)
Tertiary education	0.0792***	0.0682***	0.0195
	(0.0179)	(0.0181)	(0.0127)
Constant	0.197***	0.306***	0.0618***
	(0.0251)	(0.0276)	(0.0156)
Observations	3,041	3,041	3,041
R-squared	0.028	0.015	0.009

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Table 12: Impacts of tertiary education on the effectiveness of information – Female

VARIABLES	(1) 'More Immigrants'	(2) 'More Temp Visas'	(3) 'Sign Pro Petition'
Pension	0.230***	0.114*	0.0941**
	(0.0510)	(0.0543)	(0.0337)
Elderly Care (stats)	0.197***	0.115*	0.0604+
	(0.0536)	(0.0571)	(0.0334)
Elderly Care (personal)	0.302***	0.205***	0.143***
	(0.0539)	(0.0571)	(0.0388)
Healthcare	0.243***	0.123*	0.0556
	(0.0556)	(0.0586)	(0.0340)
Population Shrinking	0.147**	0.0510	0.0917*
	(0.0538)	(0.0572)	(0.0367)
Labour Shortage (stats)	0.217***	0.188***	0.101**
	(0.0515)	(0.0553)	(0.0346)
Labour Shortage (personal)	0.153**	0.0679	0.0584+
	(0.0508)	(0.0545)	(0.0318)
Comparative	0.168**	0.0930	0.0676*
	(0.0531)	(0.0568)	(0.0340)
Tertiary education (TE)	0.0713	0.0682	0.0303
	(0.0462)	(0.0517)	(0.0277)
TE * Pension	0.0338	0.0154	0.00994
	(0.0708)	(0.0745)	(0.0490)
TE * Elderly Care (stats)	0.0592	0.0649	0.0382
	(0.0714)	(0.0752)	(0.0474)
TE * Elderly Care (personal)	-0.103	-0.141+	-0.0717
	(0.0715)	(0.0751)	(0.0504)
TE * Healthcare	-0.0184	0.0641	0.0226
	(0.0737)	(0.0771)	(0.0478)
TE * Population Shrinking	0.0875	0.0368	0.0173
	(0.0721)	(0.0758)	(0.0505)
TE * Labour Shortage (stats)	-0.00785	-0.0442	-0.0596
	(0.0703)	(0.0743)	(0.0465)
TE * Labour Shortage (personal)	0.0412	0.0559	0.00298
	(0.0697)	(0.0737)	(0.0453)
TE * Comparative	-0.0208	-0.0466	-0.0529
	(0.0727)	(0.0766)	(0.0457)
Constant	0.201***	0.306***	0.0556**
	(0.0335)	(0.0385)	(0.0191)
Observations	3,041	3,041	3,041
R-squared	0.031	0.019	0.012

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Table 13: Impacts of tertiary education on the level of support for immigration – Male

VARIABLES	(1) 'More Immigrants'	(2) 'More Temp Visas'	(3) 'Sign Pro Petition'
Pension	0.172***	0.118**	0.0402
	(0.0387)	(0.0391)	(0.0327)
Elderly Care (stats)	0.143***	0.153***	0.0173
	(0.0391)	(0.0394)	(0.0323)
Elderly Care (personal)	0.178***	0.124**	0.0155
	(0.0386)	(0.0391)	(0.0320)
Healthcare	0.121**	0.0848*	-0.00764
	(0.0375)	(0.0380)	(0.0305)
Population Shrinking	0.0922*	0.0621	0.00570
	(0.0381)	(0.0387)	(0.0314)
Labour Shortage (stats)	0.121**	0.0916*	-0.0405
	(0.0385)	(0.0390)	(0.0302)
Labour Shortage (personal)	0.0710+	0.0329	-0.0113
	(0.0389)	(0.0395)	(0.0317)
Comparative	0.137***	0.0776*	-0.00267
	(0.0378)	(0.0383)	(0.0308)
Tertiary education	0.0259	0.0431*	0.0225
	(0.0192)	(0.0193)	(0.0153)
Constant	0.327***	0.361***	0.183***
	(0.0294)	(0.0302)	(0.0242)
Observations	2,959	2,959	2,959
R-squared	0.011	0.009	0.003

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Table 14: Impacts of tertiary education on the effectiveness of information – Male

VARIABLES	(1) 'More Immigrants'	(2) 'More Temp Visas'	(3) 'Sign Pro Petition'
Pension	0.203**	0.0729	0.0494
	(0.0657)	(0.0671)	(0.0533)
Elderly Care (stats)	0.230***	0.131*	0.0287
	(0.0646)	(0.0663)	(0.0514)
Elderly Care (personal)	0.190**	0.118+	0.0378
	(0.0639)	(0.0656)	(0.0513)
Healthcare	0.146*	0.0500	0.0233
	(0.0624)	(0.0639)	(0.0496)
Population Shrinking	0.159*	0.0955	0.0396
	(0.0639)	(0.0656)	(0.0515)
Labour Shortage (stats)	0.108+	0.0358	-0.0242
	(0.0631)	(0.0648)	(0.0476)
Labour Shortage (personal)	0.0859	0.0325	0.0621
	(0.0642)	(0.0661)	(0.0535)
Comparative	0.185**	0.131*	-0.0130
	(0.0640)	(0.0657)	(0.0485)
Tertiary education (TE)	0.0722	0.0296	0.0546
	(0.0552)	(0.0574)	(0.0455)
TE * Pension	-0.0470	0.0669	-0.0150
	(0.0813)	(0.0826)	(0.0675)
TE * Elderly Care (stats)	-0.134+	0.0347	-0.0178
	(0.0810)	(0.0825)	(0.0660)
TE * Elderly Care (personal)	-0.0184	0.00971	-0.0345
	(0.0802)	(0.0818)	(0.0656)
TE * Healthcare	-0.0387	0.0531	-0.0476
	(0.0781)	(0.0795)	(0.0629)
TE * Population Shrinking	-0.102	-0.0501	-0.0519
	(0.0796)	(0.0812)	(0.0650)
TE * Labour Shortage (stats)	0.0203	0.0867	-0.0251
	(0.0796)	(0.0812)	(0.0614)
TE * Labour Shortage (personal)	-0.0232	0.000646	-0.113+
	(0.0807)	(0.0825)	(0.0664)
TE * Comparative	-0.0734	-0.0778	0.0139
	(0.0794)	(0.0809)	(0.0625)
Constant	0.297***	0.369***	0.162***
	(0.0435)	(0.0459)	(0.0351)
Observations	2,959	2,959	2,959
R-squared	0.013	0.012	0.005

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Figure 1: Pension

July 14, 2015

Debate in Japan over immigration controls grows louder

In a recent television program, senior government officials were asked about the issue of immigration: was it time for the country to open its doors to more migrants?

According to current trends, the future Japanese population will become much older on average (due to longer lives, fewer babies). Today there are three people of working age for each retiree, but by 2050, because of population's aging, there will only be one person of working age for each retiree. This means that there will be too few people to fund the pension system. This is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help address the aging of the population and the challenge of funding the pension system.

"The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?" says Ryusei Sasaki, a researcher from a policy think-tank. "We are at a crossroads."

Figure 2: Elderly Care (stats)

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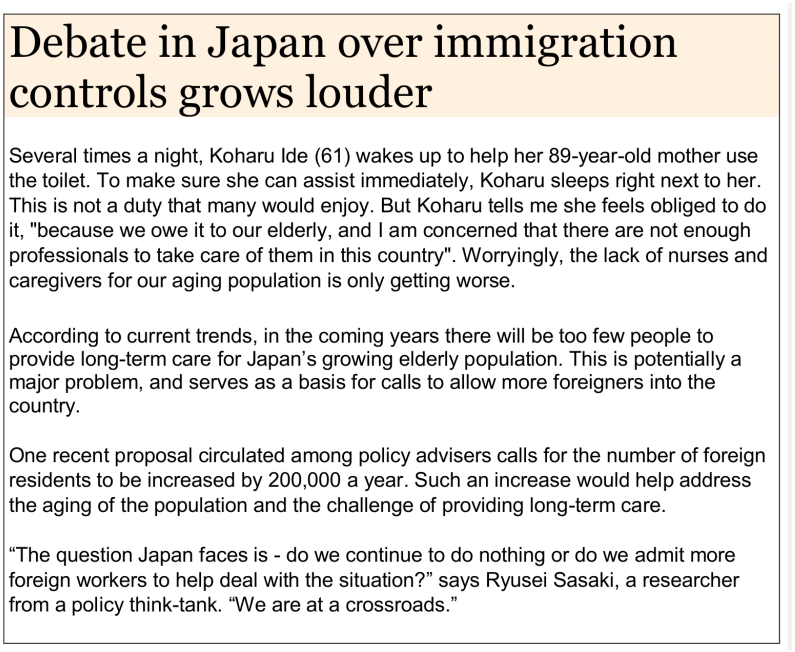
Figure 3: Elderly Care (personal)



Debate in Japan over immigration controls grows louder

Several times a night, Koharu Ide (61) wakes up to help her 89-year-old mother use the toilet. To make sure she can assist immediately, Koharu sleeps right next to her. This is not a duty that many would enjoy. But Koharu tells me she feels obliged to do it, "because we owe it to our elderly, and I am concerned that there are not enough professionals to take care of them in this country". Worryingly, the lack of nurses and caregivers for our aging population is only getting worse.

According to current trends, in the coming years there will be too few people to provide long-term care for Japan's growing elderly population. This is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help address the aging of the population and the challenge of providing long-term care.

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Figure 4: Healthcare

July 14, 2015

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In a recent television program, senior government officials were asked about the issue of immigration: was it time for the country to open its doors to more migrants?

According to current trends, the future Japanese population will become much older on average (due to longer lives, fewer babies). Today there are three people of working age for each retiree, but by 2050, because of its population's aging, there will only be one person of working age for each retiree. This means that there will be too few people to fund the health care system. This is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help address the aging of the population and the challenge of funding the health care system.

"The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?" says Ryusei Sasaki, a researcher from a policy think-tank. "We are at a crossroads."

Figure 5: Population Shrinkage

July 14, 2015

Debate in Japan over immigration controls grows louder

In a recent television program, senior government officials were asked about the issue of immigration: was it time for the country to open its doors to more migrants?

According to current trends, the future Japanese population will become much smaller (due to fewer babies). Since its recent peak of 128 million, the country's population began to shrink. If nothing changes, there will be 30 million fewer Japanese by 2050. This is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help the country address the issue of population shrinkage.

“The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?” says Ryusei Sasaki, a researcher from a policy think-tank. “We are at a crossroads.”

Figure 6: Labour Shortage (stats)

July 14, 2015

Debate in Japan over immigration controls grows louder

In a recent television program, senior government officials were asked about the issue of immigration: was it time for the country to open its doors to more migrants?

According to current trends, some professions in Japan will be in short supply, making it difficult for firms to find workers. Already today this is true for some jobs. For instance, half of the truck driver openings advertised cannot be filled, and this is true also for IT engineers. This is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help the country address labor shortages in different professions.

“The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?” says Ryusei Sasaki, a researcher from a policy think-tank. “We are at a crossroads.”

Figure 7: Labour Shortage (personal)

July 14, 2015

Debate in Japan over immigration controls grows louder

The exasperation on the face of Akio Nakamura, a manager at Taiho Transportation, was evident. "April should have been a great month for our business as the new orders kept on arriving". But instead of filling those orders, Taiho saw how 10% of their 400 truck fleet stood idle. "The problem is that we don't have enough drivers. However hard we try, we can't find enough new workers to recruit".

Labor shortages are not unique to drivers. "The shortage of IT engineers is so deep that we simply cannot put up with the demand and projects are continuously delayed", said Katashi Tanaka, the director of an IT consulting firm in Tokyo. "I see the frustration among potential customers and I feel helpless. We clearly need more engineers here".

The deepening shortage in labor supply is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country. One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would help the country address labor shortages in different professions.

“The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?” says Ryusei Sasaki, a researcher from a policy think-tank. “We are at a crossroads.”

Figure 8: Comparative

July 14, 2015

Debate in Japan over immigration controls grows louder

In a recent television program, senior government officials were asked about the issue of immigration: was it time for the country to open its doors to more migrants?

According to current trends, Japan will have far fewer immigrants than any of the other advanced economies. The average rate of immigration among advanced economies is currently 10%, yet in Japan immigrants represent only 1.6% of the total population. Given the similarity between the socio-economic challenges that Japan and other advanced countries face, this is potentially a major problem, and serves as a basis for calls to allow more foreigners into the country.

One recent proposal circulated among policy advisers calls for the number of foreign residents to be increased by 200,000 a year. Such an increase would put the share of foreigners in Japan much closer to that of other advanced economies.

“The question Japan faces is - do we continue to do nothing or do we admit more foreign workers to help deal with the situation?” says Ryusei Sasaki, a researcher from a policy think-tank. “We are at a crossroads.”

Figure 9: Control

July 14, 2015

Pluto: Slightly larger than previously believed – NASA observed

National Aeronautics and Space Administration (NASA) announced that Pluto is 2,370 km in diameter, slightly larger than previously believed. The announcement followed the observation of the unmanned spacecraft New Horizons, which is approaching Pluto.

In addition to refining Pluto's size, New Horizons also measured three of the dwarf planet's five known moons. Interestingly, Charon, the largest, has a diameter of 1208 km, i.e. about half that of Pluto.

New Horizons plans to closely observe the terrain and the atmosphere of Pluto later this month when it passes it. NASA's team is hoping that "the planet's surface, shrouded in mystery, will be finally be unveiled".

The scientists note that the size of Pluto was difficult to accurately estimate from the distant Earth, because of the materials in Pluto's atmosphere. The previous estimates of the planet were mostly smaller than the new measurement reveals.