Frequency of contact with foreigners in a homogenous society: perceived consequences of foreigner increases in Japan

Yamamura, Eiji

3 March 2010

Frequency of contact with foreigners in a homogenous society: perceived consequences of foreigner increases

Eiji Yamamura*

Department of Economics, Seinan Gakuin University, 6-2-92 Sawaraku Nishijin Fukuoka 814-8511, Japan

Abstract

Using individual data of Japan, this paper investigates how frequency of contact with foreigners is associated with the perceived outcomes of foreigner increases. Results showed that frequency of contact has a critical effect on perceptions and that its influence varies according to household income level.

Keywords: Immigration, perceived consequence, homogenous society

JEL classification: F1; F22; J15.

* Tel: 81-92-823-4543, Fax: 81-92-823-2506
E-mail address: yamaei@seinan-gu.ac.jp

1. Introduction

There is a growing number of works examining people's attitudes towards immigrants. Considering the competition among labor markets, the education of a people is considered one of the most critical determinants of their attitude (Sheve and Slaughter 2001; Mayda 2006). In addition to education, it has also been argued that social and cultural prejudices are crucial components of attitude (Dustmann and Preston 2007).

Immigrants are considered to be a minority in the host country. The ethnic composition of a locality seems to play an important role in determining the attitude of its people. For example, the concentration of ethnic minorities leads to the exacerbation of hostility between minorities and the majority (Dustmann and Preston 2001). On the other hand, according to the contact hypothesis, frequency of contact with a minority is thought to alleviate the tension between the minority and majority (Rothbart and John 1993). As shown in Fig. 1, although Japan can be thought of as a racially homogenous society, the rate of immigrants living in the country has risen consistently for the past 20 years. Thus, an examination of individual attitudes and perceptions toward foreigners will be increasingly important for the design of immigration policy in Japan. Nevertheless, few studies have attempted to investigate this issue.

This paper uses individual level data of Japan to investigate how the frequency of contact with foreigners is associated with perceived outcomes of foreigner increases in a homogenous society.

2. Data and Methods

Results from the Japanese General Social Surveys (JGSS) conducted throughout

Japan in 2003 were used for the individual level data used in this paper[1]. This data covers information related to the perceived consequences of foreigner increases, the frequency of contact with foreigners, political orientation, household income, and marital and demographic (age and sex) status[2]. The survey collected data on 3663 adults, who ranged between 20 and 89 years old[3]. Further, according to the population size of geographical areas, sample points were divided into the three groups of large cities, other cities, and suburban districts.

The variables used for regression estimations are shown in Table 1, which includes variable definitions and the mean values and standard deviations. With respect to dependent variables, the respondents were all asked separately about their perceived consequences of foreigner increases in area of residence. The possible answers to this question were “a decrease in employment opportunities,” “the filling of jobs where there are worker shortages,” and “the elimination of prejudice against foreigners”[4]. Respondents could select multiple answers. From these questions three dummy variables, FDEMP, FWORK and FELPRJ, were constructed, and they took a value of 1 if respondents agreed with the statement. FDEMP can be considered a negative effect caused by foreigner increases, whereas FWORK and FELPRJ are considered positive effects. I attempted to ascertain their determinants, and because they are dummy variables Probit estimation was employed[5]. The degree of frequency of contact with

---

[1] Although the surveys were conducted from 2000 to 2006, data related to the perceived consequences of foreigner increases were collected only in 2003.

[2] Data for this secondary analysis, "Japanese General Social Surveys (JGSS), Ichiro Tanioka," was provided by the Social Science Japan Data Archive, Information Center for Social Science Research on Japan, Institute of Social Science, University of Tokyo.

[3] Respondents did not completely respond to all questions, and therefore the number of samples used for the regression estimations was 1305.

[4] In addition to the 3 answers given here, there were 16 additional answers, for a total of 19 answers to the question.

[5] There are respondents who agree with FDEMP, FWORK and FELPRJ at the same

foreigners, regarded as a key independent variable, ranged from 1 (not at all) to 4 (frequently); this was denoted as FQFORE. The degree of education, also a key variable, was denoted as EDU.

To compare individuals with high income to those with low income, in addition to estimations using full samples, samples were split into two groups depending on whether the respondent reported having a high or low household income; estimations were then conducted[6].

Following the estimation functions used by the existing literature on attitudes toward immigrants (e.g., Dustmann and Preston 2007; Facchini and Mayda 2006; Mayda 2006), other independent variables, including unemployment, household income, political orientation, and demographic characteristics, were included in the estimation function.

3. Estimation Results

Table 2 shows the estimation results. Columns (1)–(3), (4)–(6), and (7)–(9) show the FDEMP, FWORK, and FELPRJ results, respectively. Columns (1), (4), and (7) show the results using all samples. Columns (2), (5), and (8) show the results using the low income group samples. Columns (3), (6), and (9) show the results from the high income group.

As for FQFORE, in all estimations its coefficients yielded positive signs. In addition, the estimations were statistically significant at the 1 % level when all samples were used. This indicates that contact with foreigners caused respondent's perceptions to become more elastic to foreigner increases. With respect to the negative economic effects of foreigners, captured by FDEMP, it was surprising to observe that the magnitude of

---

time. This is why the Multinominal Probit estimation was not employed.

[6] High and low household incomes are defined higher and lower than 6 million yens.

FDEMP for respondents with low incomes was 0.03, which is 15 times larger than that for those with high incomes (0.002). Furthermore, the t-statistics for respondents with low incomes was 2.80, statistically significant at the 1 % level, whereas that for those with high incomes was 0.20, which was not significant. This indicates FQFORE tends to lead people to perceive decreases in employment opportunities only among those with low income.

With respect to the determinants of FWORK, FQFORE produced positive signs not only for the low income group but also the high income group. FQFORE, however, was statistically significant only for the high income group. As for the results related to the positive effect of foreigners on non-economic-related negative attitudes toward foreigners, captured by FELPRJ, FQFORE showed a significant positive sign for both the high and low income groups. Furthermore, the value of FQFORE for the high income group (0.06) was 6 times larger than that for the low income group (0.01). Considering these dual effects of FQFORE, it can be concluded that while increased contact with foreigners has a negative influence on low income individuals' perceived outcomes of foreigner increases, contact has a positive impact on the perceived outcomes of those with high incomes.

As for FDEMP, as shown in column (2) of Table 2, EDU was not statistically significant for the low income group although it took a positive sign. On the other hand, EDU for the high income group, shown in column (3), yielded a significant negative sign. Such data indicates that EDU reduced FDEMP only for the high income group. That is, only those with higher incomes holds the belief that more educated Japanese workers are less likely to suffer from competition with immigrants in the labor market[7].

[7] It has been asserted that highly skilled and educated immigrants increased over time

4. Conclusion

The major conclusions of this study on the perceived consequences of foreigner increases based on individual data are as follows. (1) In general, frequency of contact with foreigners makes people's perceptions more elastic to the effects of foreigner increases. (2) Frequency of contact leads those with lower incomes to predict negative economic outcomes of foreigner increases, but this is not the case among those with higher incomes. (3) Those with more education are less likely to predict a reduction in employment opportunities, but this true for only higher income individuals and not those of lower incomes. Taken together, the results of this study suggest that in a homogenous society in which foreigners are relatively rare, not only education but also experience of contact with foreigners play a critical role in forming perceptions about the outcomes of foreigner increases. Furthermore, the effects of contact with foreigners vary according to individual income level.

---

in Japan (Fuess 2003). This alone, however, does not lead skilled labor markets to become more competitive.

References

Dustman, C., Preston, I., 2001. Attitudes to ethnic minorities, ethnic context and location decisions. Economic Journal 111, 353-373.

Dustman, C., Preston, I., 2007. Racial and economic factors in attitudes to immigration. B.E. Journal of Economic Analysis and Policy 7, Article 62.

Facchini, G., Mayda, A.M., 2006. Individual attitudes towards immigrants: Welfare-state determinants across countries. IZA Discussion Paper 2127.

Fuess, Jr, S.M., 2003. Immigration policy and highly skilled workers: The case of Japan. Contemporary Economic Policy 21, 243-257.

Malchow-Møller, N., Munch, J.R., Schroll, S., Skaksen, J.R., 2008. Attitudes towards immigration- Perceived consequences and economic self-interest. Economics Letters 100, 254-257.

Mayda, A.M., 2006. Who against immigration? A cross-country investigation of individual attitudes towards immigrants. Review of Economics and Statistics 88, 510-533.

Rothbart, M., John, O.P. 1993. Immigration and race; recent trends. In: Edmondston, B., Passel, J. S. (Eds.), Immigration and ethnicity: The integration of America's newest immigrants. Urban Institute Press, Washington D.C.

Scheve, K.F., Slaughter, M.J. 2001. Labor market competition and individual preferences over immigration policy. Review of Economics and Statistics 83, 133-145.

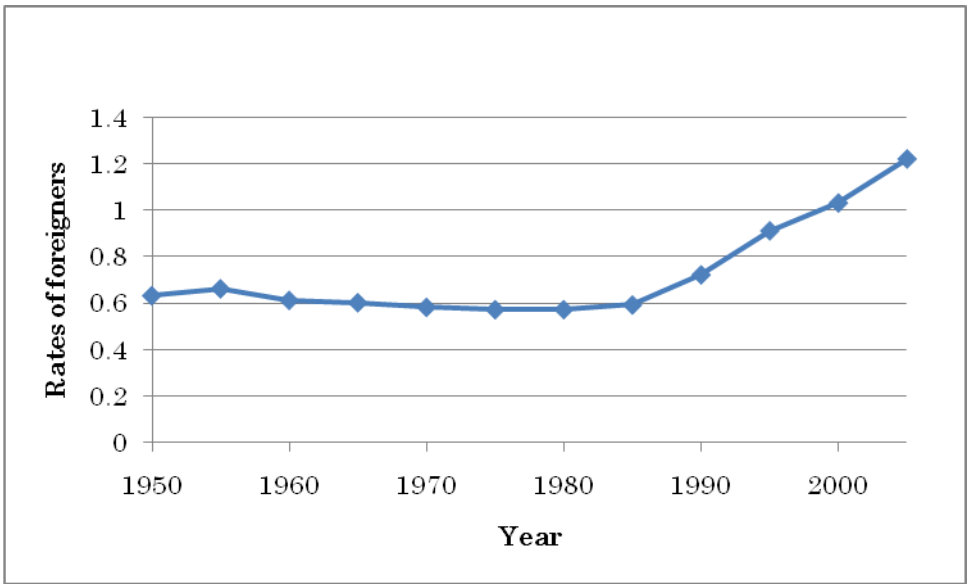

Fig. 1. Changing rates of foreigners in Japan (%).

Source: http://www.stat.go.jp/info/kenkyu/kokusei/kankei/pdf/06sk.pdf (accessed Feb 25, 2009).

Table 1

Variable definitions and descriptive statistics

Variables	Definition	Mean	Standard deviation
FDEMP	Takes 1 if one expects an increase in foreigners to lead to a decrease of employment opportunities, otherwise it takes 0.	0.09	0.28
FWORK	Takes 1 if one expects an increase in foreigners to leads to jobs being filled where there worker shortages, otherwise it takes 0.	0.11	0.31
FELPREJ	Takes 1 if one expects an increase in foreigners to lead to the elimination of prejudice toward foreigners, otherwise it takes 0.	0.21	0.41
FQFORE	Degree of frequency of contact with foreigners in one's neighborhood, ranging from 1 (not at all) to 4 (frequently).	2.34	0.96
EDU	Years of schooling.	11.9	2.70
UNEMP	Takes 1 if one does not have a job, otherwise it takes 0.	0.06	0.25
HINCOM [a]	Household income.	6.23	4.41
POLIT	One's political orientation, ranging from 1 (conservative) to 5 (progressive).	2.88	0.90
AGE	Age.	51.9	16.6
MALE	Takes 1 if male, 0 if female.	0.45	0.49

Note: [a] Millions of yen.

Table 2 Estimation results (Probit model)

Variables	(1) FDEMP All	(2) FDEMP Low income	(3) FDEMP High income	(4) FWORK All	(5) FWORK Low income	(6) FWORK High income	(7) FELPRJ All	(8) FELPRJ Low income	(9) FELPRJ High income
FQFORE	0.02**	0.03**	0.002	0.03**	0.01	0.06**	0.05**	0.04**	0.06**
	(2.45)	(2.80)	(0.20)	(3.56)	(0.84)	(4.02)	(3.72)	(2.83)	(2.67)
EDU	-0.001	0.004	-0.01*	0.02**	0.02**	0.008	0.03**	0.03**	0.04**
	(-0.46)	(1.06)	(-2.31)	(4.32)	(4.63)	(1.28)	(5..53)	(4.16)	(3.87)
UNEMP	0.02	0.05	-0.02	0.004	0.02	-0.03	0.07	0.04	0.15
	(0.76)	(1.29)	(-0.38)	(0.11)	(0.56)	(-0.46)	(1.47)	(0.81)	(1.58)
HINCOM	-0.0003	0.05	-0.02	0.006	0.12	-0.02	0.03	0.19*	0.07
	(0.02)	(0.71)	(-0.63)	(0.30)	(1.49)	(-0.64)	(1.21)	(1.82)	(1.37)
POLIT	0.004	0.01*	-0.01	0.006	0.009	0.004	0.006	-0.002	0.02
	(0.71)	(1.70)	(-0.91)	(0.85)	(1.16)	(0.31)	(0.60)	(-0.19)	(1.16)
AGE	0.001**	0.002**	0.0007	0.001*	0.001*	0.001	-0.001*	-0.001	-0.003
	(2.70)	(3.21)	(0.74)	(1.96)	(2.04)	(1.10)	(-2.23)	(-1.41)	(-1.64)
MALE	0.02	0.02	0.02	0.03*	0.04*	0.01	-0.02	0.05	-0.11**
	(1.37)	(1.02)	(0.87)	(2.10)	(1.90)	(0.60)	(-0.93)	(1.63)	(-3.08)
Pseudo R-square	0.03	0.05	0.04	0.05	0.07	0.04	0.07	0.09	0.07
Sample size	1299	732	567	1299	732	567	1299	732	567

Notes: Reported numbers are marginal effects. Numbers in parentheses are t-statistics. * and ** indicate significance at 5 and 1 per cent levels, respectively (one-sided tests). Constant terms are included with estimations, but these are not reported here to save space.