

**A Study Concerning the Promotion of Migration to Regions outside  
the Three Major Metropolitan Areas and the Activation of  
Endogenous Employment Creation by Using Migrants  
Summary**

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**1. Research Period**

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**2. Awareness of Issues in Research**

Economic disparity between Japan's three major metropolitan areas and 'other regions'<sup>1</sup> has widened in recent years, and there appears to be no end to the population exodus from 'other regions' into the three major metropolitan areas. This economic disparity has in fact existed for a long time, and the situation of excessive population outflow from 'other regions' has continued for more than ten years.

Why has this situation occurred? According to standard economic theory, economic disparity ought to be resolved by the migration of people and companies, and relieving

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<sup>1</sup> Hereinafter, 'other regions' is used to refer to areas of Japan other than the three major metropolitan areas of Tokyo, Osaka and Nagoya.

disparity should control the outward flow of population from certain areas.

Factors that cause this situation include the fact that the population exodus is accompanied by external diseconomy of worsening employment conditions resulting from reduced regional consumption, and the fact that expansion of companies into 'other regions' has not progressed sufficiently. If the economic disparity between the three metropolitan areas and 'other regions' and the population exodus behind the disparity cannot be resolved smoothly through market mechanisms, then some sort of policy measures will be required.

Measures that have been adopted to deal with this sort of situation include promoting government-financed employment creation, and attracting companies to set up in regional locations. These methods are typical regional development strategies that have been used in the past. Considering the need for financial restructuring, however, and the developments in globalization, it appears there will be difficulties with continuing to use such methods in the future, and therefore, it will be important to consider alternative measures in the future.

This report addresses the following two issues from the viewpoint that the promotion of migration/remigration to 'other regions' may contribute to improving economic disparity and population decline. Firstly, it examines measures to promote migration/remigration (hereinafter merely referred to as 'migration') to 'other regions', and secondly, it examines strategies to stimulate the endogenous employment creation in 'other regions', utilizing migrants/remigrants (hereinafter merely referred to as 'migrants').

If migration to 'other regions' can be promoted, not only will the problems associated with reduced populations be solved, but the increase in local consumption may also contribute to improving employment conditions. If returners or new residents can be utilized to stimulate endogenous employment creation in 'other regions', then migration to such regions will carry further significance.

This research was therefore implemented based on an awareness of these issues.

### **3. Data used**

The data used for analysis was acquired from three surveys: (A) a survey of people who wish to migrate from the three major metropolitan areas to 'other regions' and have already achieved this migration, (B) a survey of people who had not yet achieved this migration (C) a survey of companies.

(A) and (B) were both web-based surveys of individuals. The data obtained from these was compiled and integrated in such a way as to make comparison possible, and used in

order to consider how to promote migration from the three major metropolises to 'other regions'. In order to overcome the limitations of using both surveys in analysis, however, analysis based on (A) only was also implemented. The survey period for both questionnaires was 21st to 25th January 2010. The valid response rate was 73% and 78% respectively for the two surveys.

(C) (the company survey) was a postal questionnaire aimed at companies. The survey was used to consider the potential for utilizing migrants – people returning or moving – to 'other regions' to stimulate the endogenous employment creation. The survey was implemented between 22nd January and 5th February 2010, and the valid response rate was approximately 20%.

#### **4. Summary of each chapter**

##### **4-1. Chapter 1: The population exodus from 'other regions', and economic disparity between these metropolises and 'other regions' – the importance of a policy-based response**

Chapter 1 initially considers the reduction in population in 'other regions', and economic disparity between these metropolises and 'other regions'. Subsequently, the chapter points out that a particular factor behind this population decline in 'other regions' is a reduction in social mobility (in other words, the population exodus), that the major factor regulating this population exodus is the economic disparity between these regions and the three major metropolises, and furthermore, that both population exodus and economic disparity have remained unsolved over a long period of time, contrary to the expectations of established economic theory (see Figure 1 and 2).

Next, the chapter provides an overview of previous studies, and from this concludes that the causes of population exodus and economic disparity, which have continued over a long period of time, include the external diseconomy of the decline in local consumption caused by the population exodus, leading to worsening employment conditions, and the insufficient business expansion of companies into 'other regions'.

Figure 1: Population growth rates in 'other regions', and factors behind them

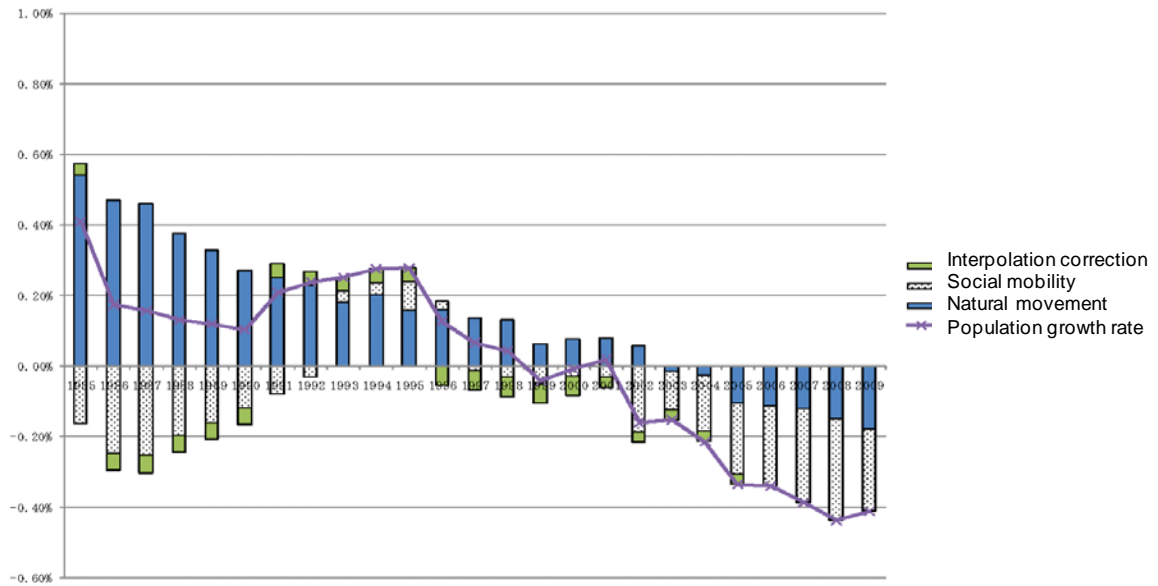
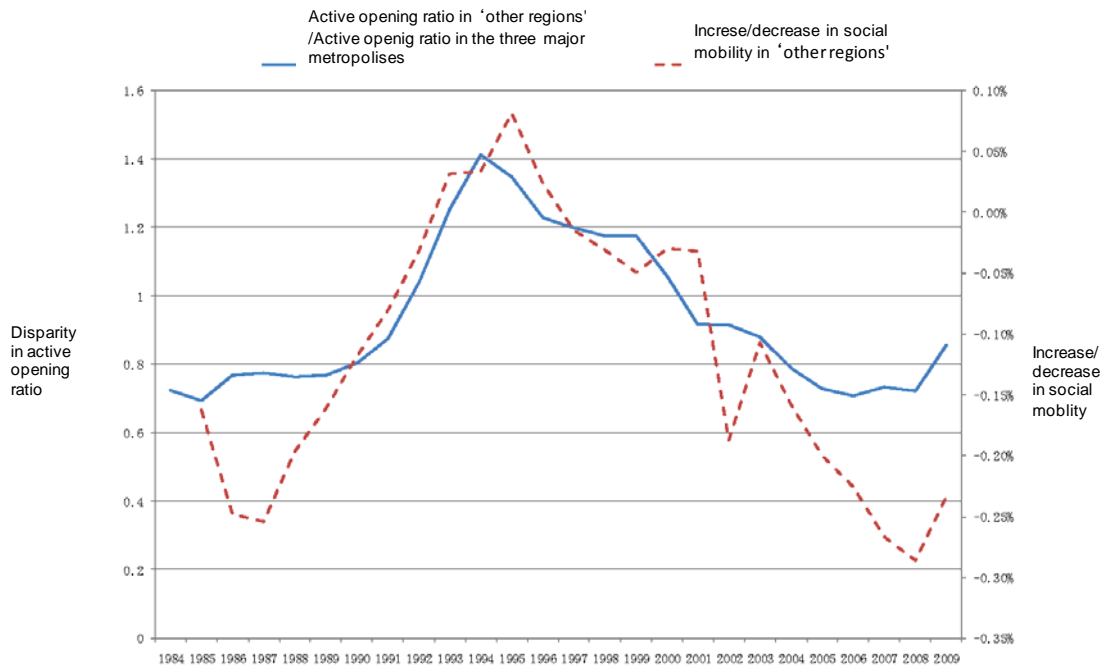


Figure 2: Relationship between disparity in active opening ratio, and the change in rate of social mobility in 'other regions'



If population exodus and economic disparity cannot be appropriately solved through market mechanisms, then some sort of policy measures is required. Responses to these situations have, in the past, included government investment in creating employment, and strategies for exogenous employment creation. Given, however, the need for financial restructuring, and developments in globalization, it would appear difficult to continue using such methods.

Therefore, from the perspective that other alternatives need to be considered, this report considers strategies for promoting migration to 'other regions', as well as stimulating endogenous employment creation within 'other regions' by utilizing those migrants.

If migration to 'other regions' can be promoted, it will not only contribute to resolving the problem of population decline, it will also expand regional consumption and may therefore assist in improving employment conditions. If these migrants can be utilized to stimulate the endogenous employment creation, then promoting migration will gain further significance.

Subsequent to detailing these debates, the chapter deals with the structure of the report.

#### **4-2. Chapter 2: Research relating to the promotion of migration from the three major metropolises into 'other regions'**

Chapter 2 considers the sort of measures required in order to promote migration from the three major metropolises into 'other regions'. It should be remembered that promoting migration involves two aspects – the aspect of work, and the aspect of relocation. For this reason, analyses of factors in finding a job, and factors in realizing relocation, were taken as the two major issues for consideration. Analysis of the latter, however, was limited by the fact that it was not possible to utilize some of the variables that require control, which resulted in supplementary analysis being done to overcome this issue.

Furthermore, prior to implementing the research above, simple consideration was given to the reasons why people looking to migrate (return or move) reach such conclusions.

The results can be compiled as follows. Firstly, we looked at the reasons why people looking to migrate reach such conclusions. The report indicates that in order to increase the number of people who are looking to migrate, it is important to promote the attractions of the prefecture, region or local natural attributes, as well as the creation of

a positive work-life balance.

Next, the following results were obtained from analysis of the factors in finding a job, and the factors in realizing relocation. In order to raise the probability of finding a job, it appears necessary to guide people's desired annual income lower (see Table 1), but in order to do this, measures to create and disseminate a good living environment, as well as measures to encourage people living in the three major metropolises to make friends or acquaintances with people living in 'other regions', are likely to be important.

In order to raise the probability that people will actually realize relocation, it is vital that detailed and diverse information regarding the new location is available. Furthermore, existing homeowners are less likely to actually realize relocation, so for this reason, there is a need to simplify the process of homeowners selling their homes in order to smooth the process of relocation (see Table 2).

Table 1: Analysis of factors in finding a job

	( I ) ⑥VS ⑦			( II ) ⑥AVS ⑦		
	Coef.	z	P>z	Coef.	z	P>z
Desired annual income (estimated value)	-1.60	-2.79	0.005	-1.34	-2.06	0.039
"Regular employee before relocation" dummy	0.66	2.10	0.036	0.62	1.74	0.083
"Self-employed before relocation" dummy	1.29	3.32	0.001	1.01	2.31	0.021
"Non-regular employee before relocation" dummy	-0.20	-0.73	0.467	-0.19	-0.61	0.542
"Student before relocation" dummy	0.86	2.68	0.007	0.87	2.44	0.015
Age before relocation	0.02	2.28	0.023	0.00	0.40	0.691
"Male" dummy	0.40	2.03	0.042	0.29	1.31	0.190
"Graduated from vocational college/junior college/technical college" dummy	0.17	0.73	0.468	0.20	0.75	0.452
"Graduated from university" dummy	0.59	2.96	0.003	0.56	2.42	0.015
"Graduated from graduate school" dummy	1.18	4.17	0.000	1.30	4.11	0.000
Active opening ratio at the relocation destination	0.01	1.27	0.203	0.02	1.86	0.063
Constant term	0.13	0.22	0.828	0.15	0.23	0.817
Number of obs	446			392		
LR chi2	42.49			43.25		
Prob > chi2	0.00			0.00		
Pseudo R2	0.07			0.09		

Table 2: Analysis of factors in realizing relocation

	( I ) ⑤ VS ⑥			( II ) ⑤A VS ⑥		
	Coef.	z	P>z	Coef.	z	P>z
Remigration dummy	0.39	2.17	0.030	0.50	2.54	0.011
"Homeowner before relocation" dummy	-0.69	-2.29	0.022	-1.03	-3.06	0.002
"In employment before relocation" dummy	0.39	1.39	0.163	0.44	1.42	0.155
"Regular employee before relocation" dummy	0.00	-0.02	0.985	-0.08	-0.29	0.772
"Self-employed before relocation" dummy	-0.45	-1.25	0.211	-0.57	-1.35	0.176
"Student before relocation" dummy	0.50	0.90	0.367	0.56	0.96	0.337
Age before relocation	-0.04	-4.18	0.000	-0.02	-1.71	0.087
"Male" dummy	0.49	2.89	0.004	0.53	2.91	0.004
"Cohabiting with spouse before relocation" dummy	0.08	0.35	0.730	0.24	0.92	0.358
"Cohabiting with child(ren) before relocation" dummy	-0.03	-0.12	0.902	-0.31	-1.03	0.302
"Cohabiting with parent(s) before relocation" dummy	0.39	1.46	0.145	0.58	1.93	0.054
Migration distance	0.00	-0.39	0.694	0.00	-0.48	0.632
Importance of environment/lifestyle factor	0.30	3.17	0.002	0.45	4.09	0.000
Child rearing factor	0.11	0.95	0.343	0.04	0.37	0.711
"Because I found a job that satisfied my requirements" dummy	0.38	2.32	0.020	0.29	1.66	0.098
"Because it is suitable for starting a business" dummy	-0.52	-1.74	0.081	-0.22	-0.56	0.578
"To take over the family business" dummy	0.42	1.54	0.123	0.66	2.04	0.041
"To care for a parent/parent-in-law" dummy	-0.26	-0.53	0.593	-0.48	-0.87	0.384
"To cohabit with or live near a parent/parent-in-law" dummy	0.70	3.50	0.000	0.68	3.05	0.002
"Because I was asked to by a family member with whom I cohabit" dummy	-0.45	-0.33	0.745	-0.46	-0.34	0.736
"For health reasons relating to myself or a family member with whom I cohabit" dummy	0.31	0.69	0.491	0.10	0.22	0.829
Constant term	0.48	1.46	0.144	-0.06	-0.14	0.885
Number of obs	379			331		
LR chi2	102.64			79.64		
Prob > chi2	0.00			0.00		
Pseudo R2	0.20			0.18		

Considering results obtained from analyses of the both factors involved in finding a job and the factors involved in realizing relocation together shows indications that migration promotion measures that target people who, prior to the relocation, were regular employees, self-employed or students, or who are looking for regular employment or self-employment in the new location, are highly likely to be effective. In addition, it is indicated that the migration promotion measures that target people looking to move into self-employment can contribute to an effective solution to the problem of empty shops in traditional shopping areas (see Table 1 and 2).

The supplementary analysis implemented to overcome the limitations of the analysis of factors involved in realizing relocation gained similar results to those obtained from the analysis of factors involved in realizing relocation.

Finally, a broad look at the overall results obtained in Chapter 2 shows the importance of interaction between the three major metropolises and ‘other regions’ in the promotion of migration –returning and moving–, through the use of examples.

#### **4-3. Chapter 3: Research into stimulating the endogenous employment creation in Regions outside the Three Major Metropolitan Areas by Using Migrants**

In Chapter 3, consideration is given to the potential for stimulating the endogenous employment creation through utilizing migrants to ‘other regions’. Specifically, analysis was performed on what sort of migrants companies value or want to employ in the future, and what sort of companies in these ‘other regions’ value such migrants and want to employ them in the future.

If the attributes of migrants that are valued by companies located in these areas can be identified, then it may be possible for endogenous employment creation to be stimulated by encouraging migrants with such attributes to the area in question. If the type of company located in other cities that gives positive evaluations to such people and would like to hire them in the future, can be understood, then there is the possibility of stimulating the endogenous employment creation through matching these companies to migrants to the area.

Specific analysis utilized questionnaires implemented in regard to companies, and was done from two main perspectives: the aspect of whether or not there are any migrants who have useful skills, qualities or experience only found amongst migrants, and the aspect of whether companies were looking to hire migrants rather than non-migrants. The results were as shown below.

Analysis focusing on the former perspective showed that migrants in managerial posts, people in their 30s and 50s, and people who had graduated from vocational



schools were considered particularly useful. When focusing on the type of companies who evaluated those migrants highly, companies who hire a high proportion of mid-career employees, and companies with an emphasis on prioritizing or expanding their business, or adding value to their products or services, appear to value the role of migrants to the area (see Table 3).

As a result, promoting migration of people with the attributes shown here, or matching companies with the attributes shown here to those migrants, may contribute to the stimulation of endogenous employment creation.

Table 3: Analysis of whether or not there are useful migrants

Analysis of whether or not there are useful migrants		Coef.	z	P>z	dy/dx
Occupation pursued by the migrant employed					
Specialist or technical post		0.08	0.53	0.595	0.02
Managerial post		0.53	2.91	0.004	0.10
Clerical		0.06	0.40	0.688	0.01
Sales		-0.10	-0.59	0.558	-0.02
Service		-0.17	-0.70	0.482	-0.03
Transport or communications		-0.39	-1.32	0.188	-0.08
Manufacturing process or labor		-0.33	-1.60	0.111	-0.06
Age of the migrant employed at the time of employment					
Under 20		-0.01	-0.02	0.983	0.00
30s		0.52	4.02	0.000	0.10
40s		0.05	0.37	0.708	0.01
50s		0.55	2.86	0.004	0.11
60 or over		0.31	0.73	0.467	0.06
Highest level of education attained by the employed migrant					
High school		0.05	0.34	0.731	0.01
Vocational college		0.23	1.70	0.089	0.04
Junior college or technical college		-0.07	-0.44	0.660	-0.01
University (humanities)		-0.11	-0.80	0.423	-0.02
University (sciences)		-0.07	-0.53	0.595	-0.01
Graduate school		0.21	1.12	0.264	0.04
Employment route					
Migration fair		0.15	0.65	0.516	0.03
Prefectural settlement promotion organization		0.72	1.75	0.080	0.14
Public Employment Security Office		0.12	0.95	0.342	0.02
Private sector employment/outplacement support company		0.06	0.36	0.721	0.01
Company information session/employment seminar, etc.		-0.07	-0.40	0.686	-0.01
Company's website		0.17	1.31	0.189	0.03
Job search/transfer magazine		0.04	0.19	0.847	0.01
Newspaper advertisement/leaflet		-0.53	-1.98	0.047	-0.10
Introduction/recommendation by an educational institution/teacher		0.08	0.47	0.638	0.02
Information introduced by a local person		0.30	1.63	0.104	0.06
Information introduced by an employee of the company		0.23	1.58	0.114	0.04
Information introduced by a client		0.08	0.38	0.705	0.02
Other employment route		-0.04	-0.14	0.885	-0.01
Management strategy (Reference group: "maintaining the status quo," "other," and "do not know")					
Dummy for responding "diversification of business" even just once during the three years		-0.14	-0.97	0.332	-0.03
Dummy for responding "prioritization of business" even just once during the three years		0.23	1.91	0.056	0.05
Dummy for responding "expansion of the scale of existing business" even just once during the three years		0.41	3.35	0.001	0.08
Dummy for responding "reduction of the scale of existing business" even just once during the three years		-0.58	-1.71	0.088	-0.08
Dummy for responding "adding value to products/services" even just once during the three years		0.34	2.89	0.004	0.07
Dummy for responding "reducing personnel costs" even just once during the three years		0.08	0.54	0.592	0.02
Most migrants came from metropolitan areas		0.16	1.39	0.163	0.03
Mid-career hires as a proportion of migrants		0.37	2.14	0.032	0.07
Constant term		-2.42	-8.38	0.000	

Table 3: Analysis of whether or not there are useful migrants (Continued)

Whether or not the company employed a migrant	Coef.	z	P>z
Regular employee deficiency	0.09	0.98	0.326
Core personnel deficiency	0.29	4.70	0.000
<b>Management strategy</b> (Reference group: "maintaining the status quo," "other," and "do not know")			
Dummy for responding "diversification of business" even just once during the three years	0.02	0.20	0.840
Dummy for responding "prioritization of business" even just once during the three years	0.00	0.05	0.962
Dummy for responding "expansion of the scale of existing business" even just once during the three years	0.13	1.92	0.054
Dummy for responding "reduction of the scale of existing business" even just once during the three years	-0.24	-1.84	0.065
Dummy for responding "adding value to products/services" even just once during the three years	0.31	4.88	0.000
Dummy for responding "reducing personnel costs" even just once during the three years	-0.08	-1.03	0.303
<b>Employment policy for regular employees</b> (Reference group: "maintaining the status quo")			
Dummy for responding "policy of increasing them, with a focus on hiring new graduates" consistently throughout the three years (2006-2008)	0.20	2.55	0.011
Dummy for responding "policy of increasing them, with a focus on hiring people mid-career" consistently throughout the three years (2006-2008)	0.19	1.95	0.052
Dummy for responding "policy of reducing them" consistently throughout the three years (2006-2008)	-0.12	-0.75	0.452
Number of regular employees	0.00	9.37	0.000
Number of non-regular employees	0.00	-0.48	0.634
Ordinary profit	0.00	0.35	0.729
Primary industry	0.41	1.47	0.141
Tertiary industry	0.15	2.31	0.021
Constant term	-1.30	-12.99	0.000
Number of obs	1893		
Censored obs	1253		
Uncensored obs	640		
Wald chi2(39)	103.26		
Prob > chi2	0.00		
Log likelihood	-1420.52		

Analysis from the latter perspective showed that companies with the following characteristics hope to hire migrants in the future as well: companies which responded that “business sense that differs from that of personnel from within the local prefecture” and “management ability” of migrants were particularly useful; companies that employ large numbers of “migrants from metropolitan areas,” and companies that have “insufficient core staff” (see Table 4).

Table 4: Analysis of whether companies wish to employ migrants in the future

Desire to Employ Migrants in the Future	Coef.	z	P>z	dy/dx
Proportion of migrants who are useful	-0.07	-0.86	0.387	-0.02
Actually useful abilities				
Connections or interpersonal networks at companies or groups outside the prefecture	-0.58	-1.46	0.145	-0.13
Business sense that differs from that of personnel from within the local prefecture	0.71	2.59	0.010	0.21
High level of skill	-0.37	-1.23	0.217	-0.11
Actually useful abilities				
Enthusiasm and being proactive	-0.15	-0.53	0.593	-0.04
Originality	-0.14	-0.32	0.748	-0.04
Ability to think logically	0.60	2.00	0.046	0.18
Ability to take action and get things done	-0.08	-0.28	0.776	-0.02
Communication skills	-0.02	-0.05	0.957	0.00
Management ability	0.65	1.91	0.056	0.20
Management strategy for the next three years (Reference group: “maintaining the status quo,” “other,” and “do not know”)				
Diversification of business	0.43	1.15	0.249	0.13
Prioritization of business	0.28	0.84	0.400	0.08
Expansion of the scale of existing business”	0.22	0.59	0.555	0.06
Reduction of the scale of existing business	0.25	0.35	0.723	0.08
Adding value to products/services	0.06	0.19	0.846	0.02
Reducing personnel costs	0.05	0.11	0.912	0.01
Employment policy for the next three years (Reference group: “maintaining the status quo”)				
Increasing employees, with a focus on hiring new graduates	0.26	0.73	0.468	0.07
Increasing employees, with a focus on hiring people mid-career	-0.03	-0.06	0.949	-0.01
Reducing employees	0.81	1.61	0.107	0.27
Human resource development policy for the next three years (Reference group: “emphasizing the development of all personnel in the workplace,” “no particular emphasis on developing one or the other,” and “other”)				
Emphasizing the development of regular employees	0.11	0.30	0.764	0.03
Emphasizing the development of regular employees who are core personnel	0.03	0.09	0.931	0.01
Mid-career hires as a proportion of migrants	0.28	0.70	0.484	0.08
Most migrants came from metropolitan areas	0.65	2.30	0.021	0.17
Regular employee deficiency	-0.15	-0.36	0.721	-0.04
Core personnel deficiency	0.50	1.67	0.094	0.13
Number of regular employees	0.00	0.45	0.655	0.00
Number of non-regular employees	0.00	-0.86	0.389	0.00
Ordinary profit	0.00	-0.62	0.537	0.00
Primary industry	-0.09	-0.08	0.936	-0.02
Tertiary industry	-0.11	-0.39	0.700	-0.03
Constant term	-2.04	-2.67	0.008	
Number of obs	162			
LR chi2(30)	42.67			
Prob > chi2	0.06			
Pseudo R2	0.24			
Log likelihood	-69.21			

Therefore, supplying migrants to companies with these characteristics has the potential to stimulate the endogenous employment creation. Furthermore, if interpretation is done with a focus on the characteristics of the migrants, companies appear to have a need for migrants with business sense different from that of personnel from within the local prefecture, migrants who have experience of working in metropolitan areas, and migrants who have the potential to become core personnel. Therefore, it seems to be important to match such migrants to appropriate companies.

Considering the analysis results above in an integrated way, there is a possibility that promoting migration to cities other than the three major metropolises may contribute to the stimulation of endogenous employment creation in these regions. Promoting migration to 'other regions', therefore, also has significance in this sense.

#### **4-4. Chapter 4: Conclusions**

Chapter 4 gives an integrated explanation of the discussions and results presented in this report, as well as presenting points to be considered.