Immigration Policy
: Impacts of Immigration on the Japanese Economy

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Demographic Change: Shrinking Population（9th → 15th）

- The only large developed countries in 2050 will be only U.S.A and JPN.

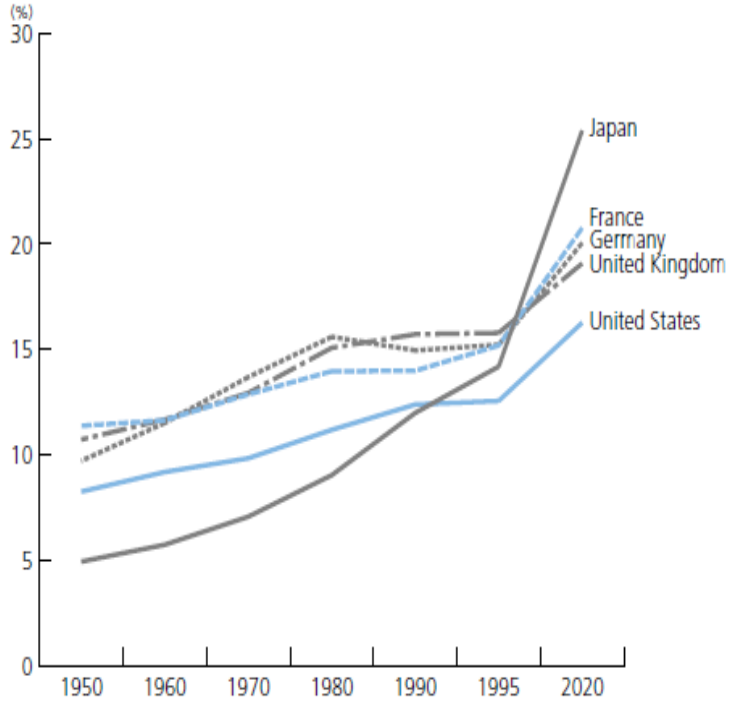
TABLE 5. TWENTY LARGEST COUNTRIES AND THEIR POPULATIONS, SELECTED YEARS
(*millions*)

Rank	*1950*		*2000*		*2050*	
1	China	554.8	China	1 275.2	India	1 531.4
2	India	357.6	India	1 016.9	China	1 395.2
3	U.S.A.	157.8	U.S.A.	285.0	U.S.A.	408.7
4	Russian Federation	102.7	Indonesia	211.6	Pakistan	348.7
5	Japan	83.6	Brazil	171.8	Indonesia	293.8
6	Indonesia	79.5	Russian Federation	145.6	Nigeria	258.5
7	Germany	68.4	Pakistan	142.7	Bangladesh	254.6
8	Brazil	54.0	Bangladesh	138.0	Brazil	233.1
9	United Kingdom	49.8	Japan	127.0	Ethiopia	171.0
10	Italy	47.1	Nigeria	114.7	Congo, DR	151.6
11	France	41.8	Mexico	98.9	Mexico	140.2
12	Bangladesh	41.8	Germany	82.3	Egypt	127.4
13	Pakistan	39.7	Viet Nam	78.1	Philippines	127.0
14	Ukraine	37.3	Philippines	75.7	Viet Nam	117.7
15	Nigeria	29.8	Turkey	68.3	Japan	109.7
16	Spain	28.0	Egypt	67.8	Iran	105.5
17	Mexico	27.7	Iran	66.4	Uganda	103.2
18	Viet Nam	27.4	Ethiopia	65.6	Russian Federation	101.5
19	Poland	24.8	Thailand	60.9	Turkey	97.8
20	Egypt	21.8	France	59.3	Yemen	84.4

Source) UN(2004)

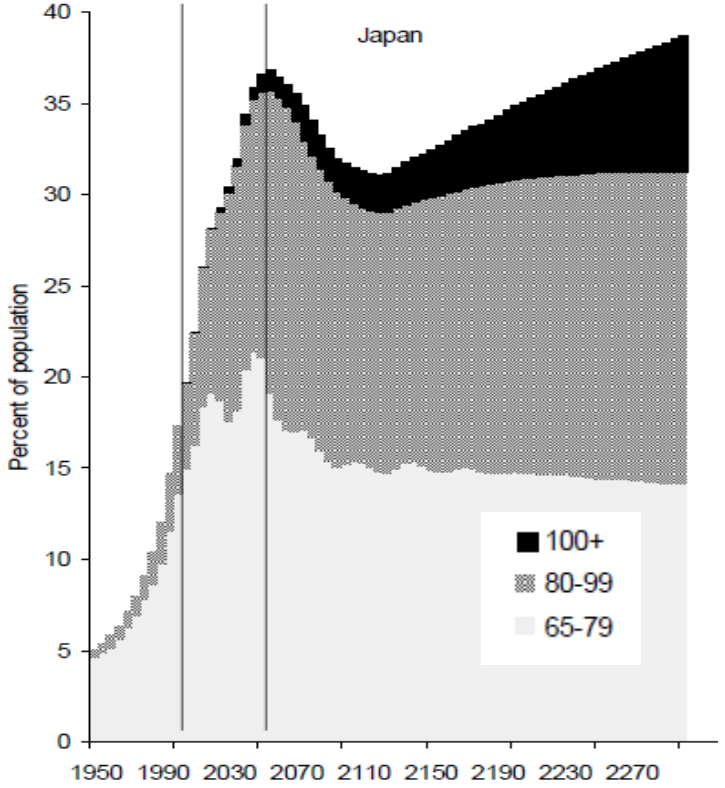
Demographic Change: "Super Aging"

- The people aged 65 years and above will be 36.5 % of the total population in 2050.



Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, Director-General's Secretariat, ***Trendsand Forecasts of Measures for a Geriatric Society, June 1992***.

Note: Ratio of elderly to population was calculated by dividing population 65 years old and over by the total population.

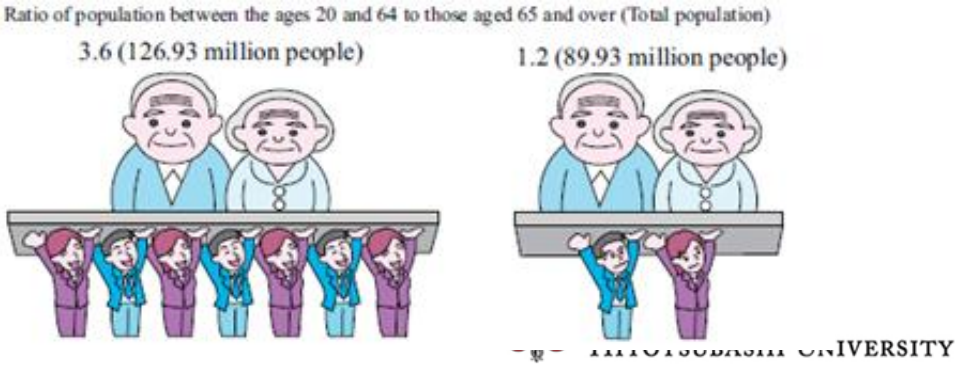


Source) UN(2004)

Demographic Change: Baby boom cohort

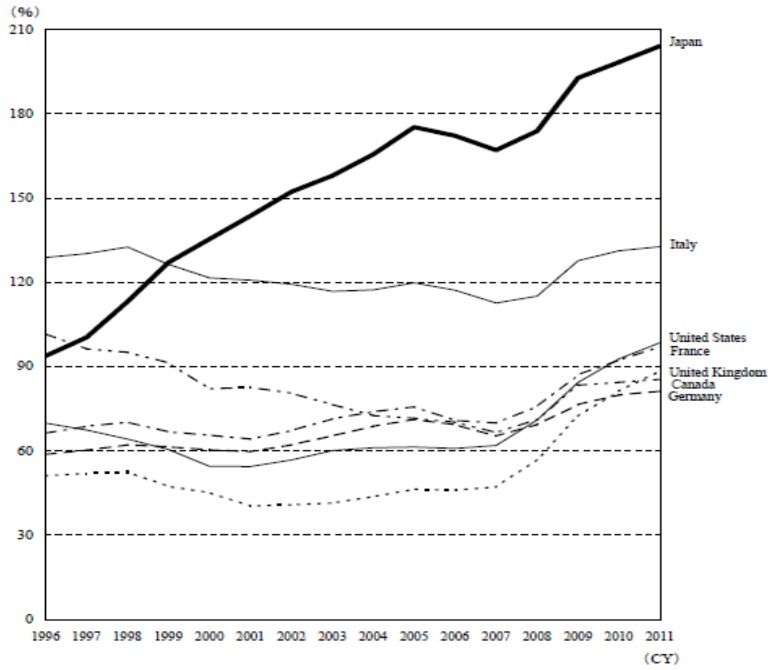
- The impact of Aging will become clearer in 2012, when the first members of the 1947-49 baby-boom generation hit 65 years.

Source) The Economist(2010)



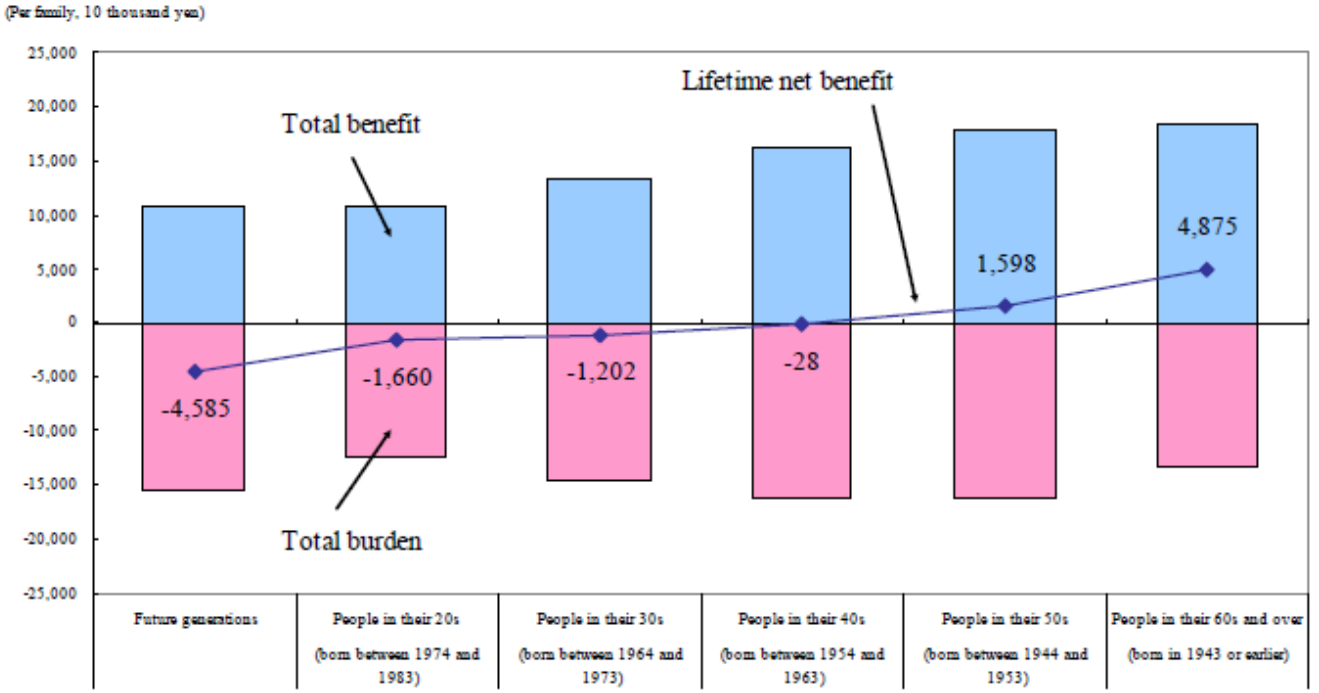
Huge Public Debt
Total Debt may be 430 % of GDP.

- Explicit Debt : the outstanding public debt to GDP reaches 200%.
- Implicit Debt : the debt held by social security (e.g., public pension) is estimated to be 230%.



Huge Intergenerational Gap
Intergenerational Accounting

- Under the current system, younger generations will face an increased excessive net burden.



(Source) Cabinet Office / Annual Report on The Japanese Economy and Public Finance 2005

Three Possible Solutions for “Super Aging”

- Option 1) Fiscal and Social Security reform

  → The government has the option of reducing the benefits to the elderly or increasing the burden on the working generation. However, due to conflicting interests between younger and older generations, reform may be restricted.

- Option 2) Increasing the Labor-force participation rate of Females and Elderlies

  → It seems to have only a limited effect. Can we get over the world, in which the ratio of population aged 24-64 to those aged 65+ is 1.2, without immigration?

- Option 3) Immigration Policy

Replacement Migration: A Solution to Shrinking and Aging Population

- In scenario IV, that is in order to keep constant the size of the working-age population (15 to 64 years), the numbers of migrants for the period 2000-2050 is 32 million in Japan.

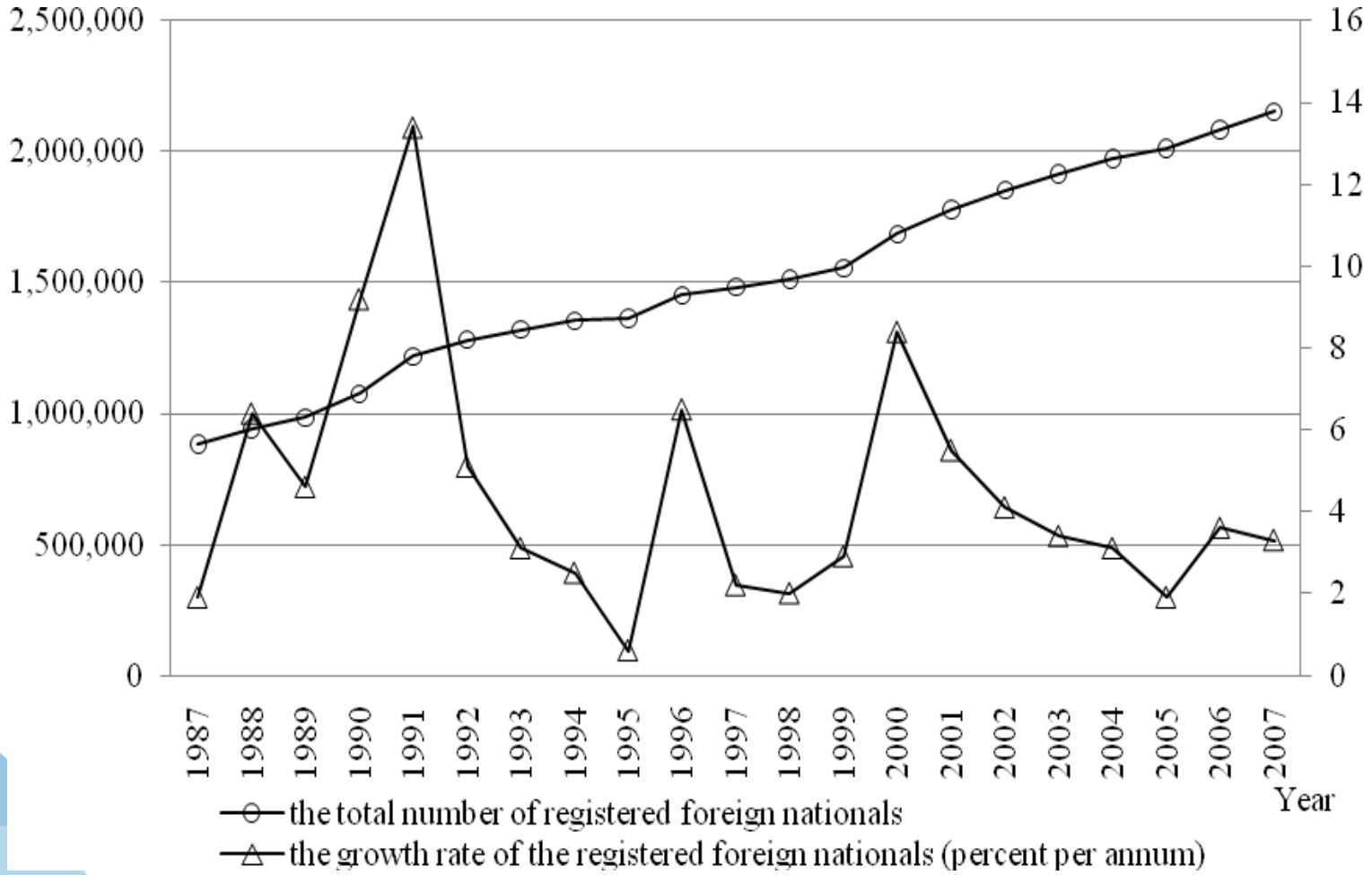
- Japan's LDP and Nippon Keidanren recently proposed that Japan introduce an immigration policy as fast as possible and receive 10 million immigrants in the next 50 years (a net inflow of 200,000 annual immigrants per year).

TABLE 1. NET NUMBER OF MIGRANTS BY COUNTRY OR REGION AND SCENARIO, 2000-2050
(*Thousands*)

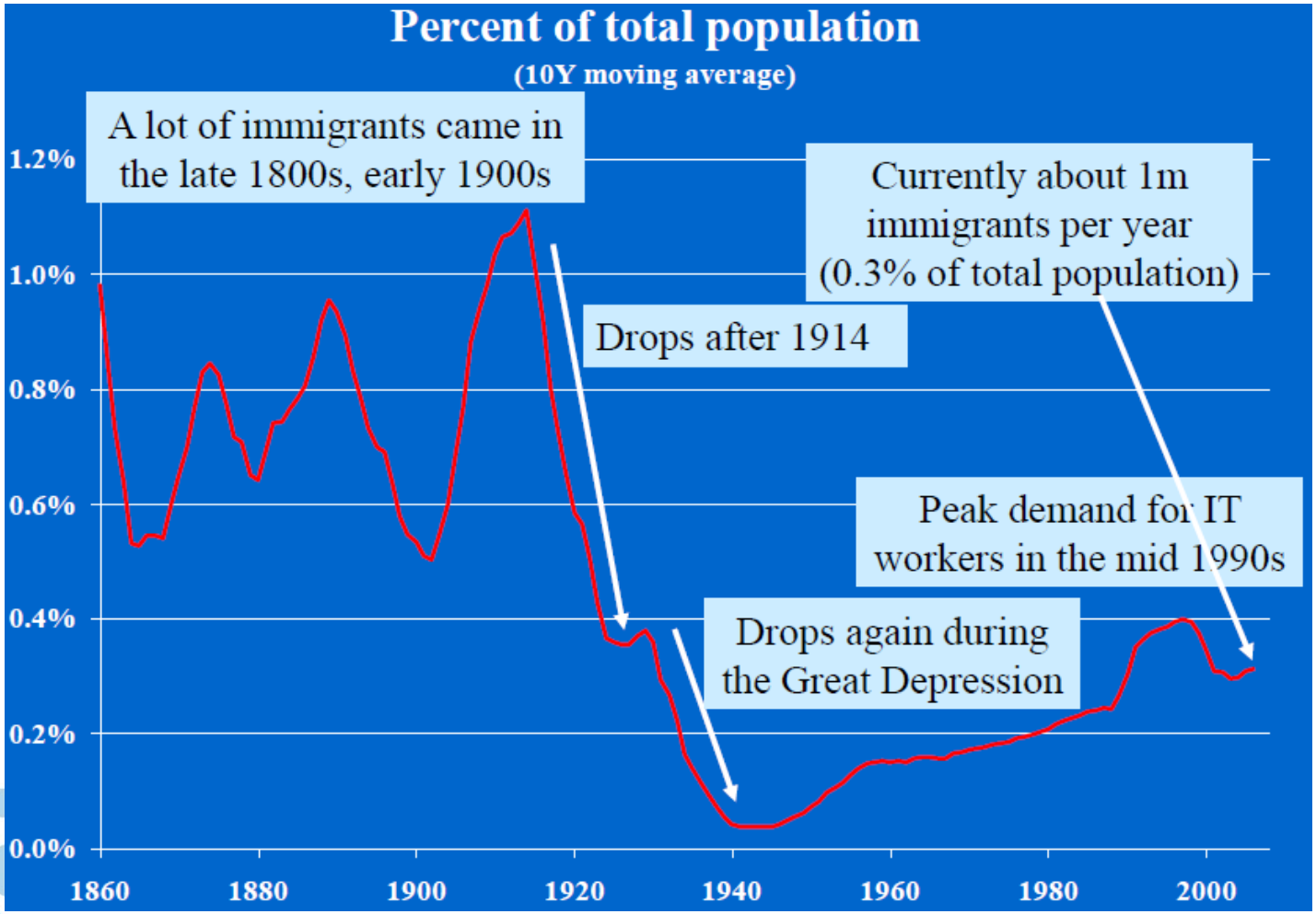
Scenario	*I*	*II*	*III*	*IV*	*V*
Country or region	*Medium variant*	*Medium variant with zero migration*	*Constant total population*	*Constant age group 15-64*	*Constant ratio 15-64/65 years or older*
		A. Total number			
France	325	0	1 473	5 459	89 584
Germany	10 200	0	17 187	24 330	181 508
Italy	310	0	12 569	18 596	113 381
Japan	0	0	17 141	32 332	523 543
Republic of Korea	-350	0	1 509	6 426	5 128 147
Russian Federation	5 448	0	24 896	35 756	253 379
United Kingdom	1 000	0	2 634	6 247	59 722
United States	38 000	0	6 384	17 967	592 572
Europe	18 779	0	95 869	161 346	1 356 932
European Union	13 489	0	47 456	79 375	673 999
		B. Average annual number			
France	7	0	29	109	1 792
Germany	204	0	344	487	3 630
Italy	6	0	251	372	2 268
Japan	0	0	343	647	10 471
Republic of Korea	-7	0	30	129	102 563
Russian Federation	109	0	498	715	5 068
United Kingdom	20	0	53	125	1 194
United States	760	0	128	359	11 851
Europe	376	0	1 917	3 227	27 139
European Union	270	0	949	1 588	13 480

Source) United Nations

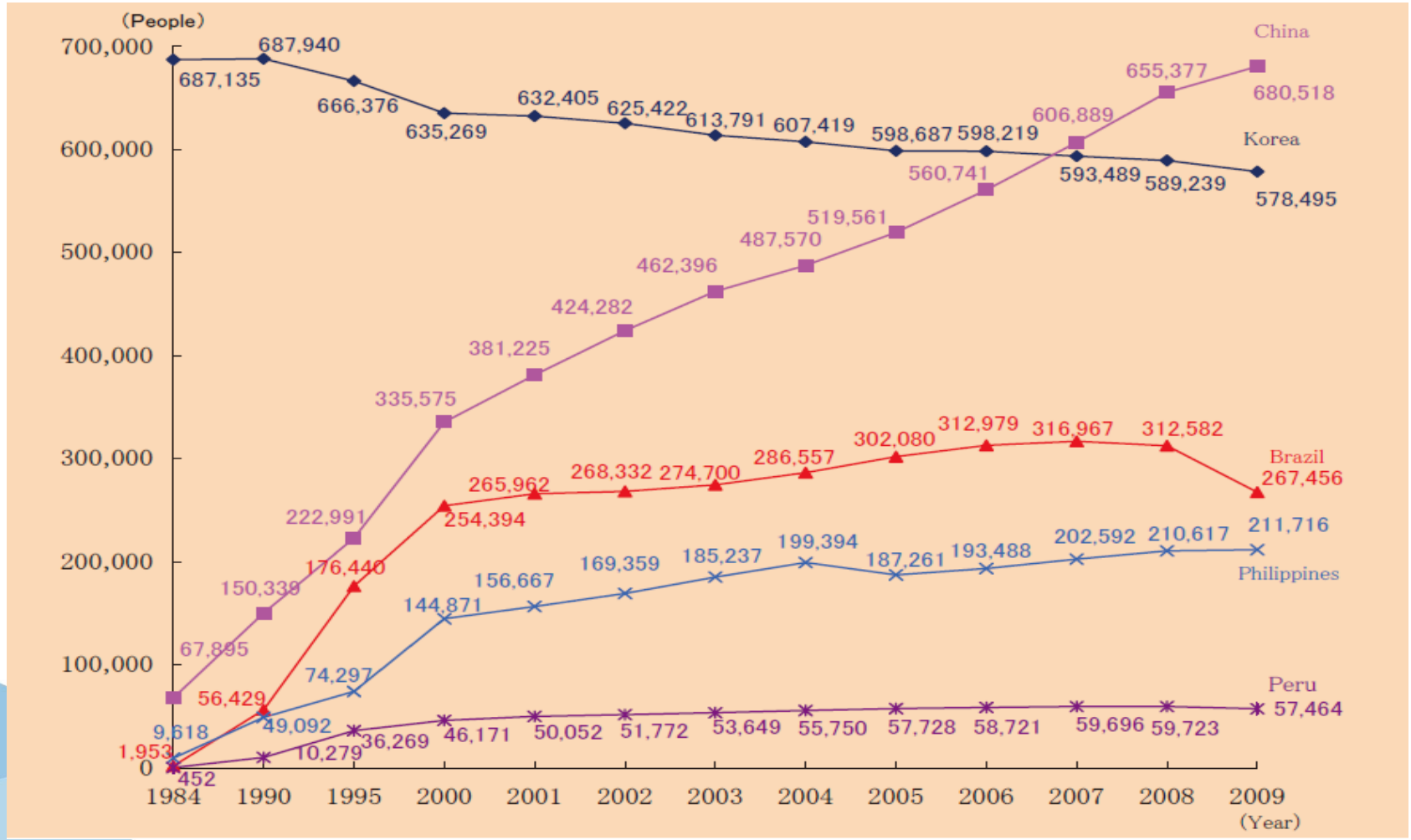
(Note) The total number of registered foreign nationals (1987-2007), Japan



（Note） Immigration Pro-cyclical: From U.S.A's History



(**Note**) The number of registered foreign nationals by nationality

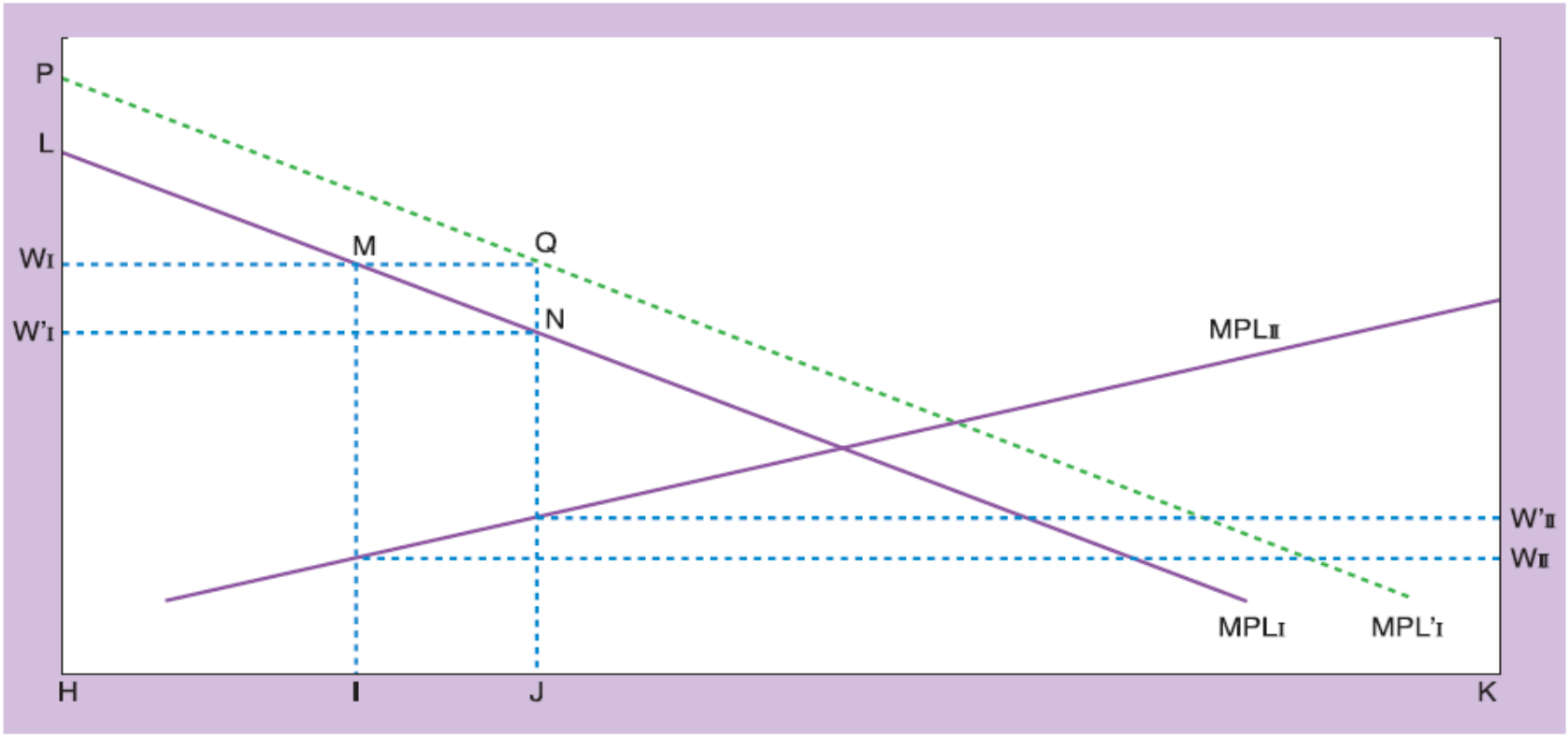


Macroeconomic Benefits of Accepting Unskilled Labor – Employer Viewpoint Neglected

- Grubel's model (1994)

CHART 1

Effects of immigration on developed/developing economies



Source: Author

（Note) Wage Effects of Immigration

- Borjas (2003)
  - Assume perfect substitution between natives and immigrants in labor market.
  - 3% drop in native earnings on average
  - 9% drop for low-skilled natives

- Ottaviano and Peri (2006)
  - Allow imperfect substitution between natives and immigrants in labor market.
  - 2% rise in native earnings on average
  - 1% drop for low-skilled natives
  - Big declines for prior immigrants

(Note) Ottaviano and Peri (2006)

Table 8
Calculated Percentage Changes in Real Wages Due to Immigrant Inflows: 1990-2004.
Short Run Effects, Accounting for Yearly Capital Adjustment.

Specification Estimates of σ	1 As of 2004 (short run)	2 As of 2009	3 Long Run	4 Fixed K (Traditional Short Run)	5 Fixed K and σ, imposed = ∞
% Real Wage Change of US-Born Workers Due to Immigration, 1990-2004					
HS dropouts US-born	-2.2%	-1.7%	-1.1%	-4.8%	-7.9%
HS graduates, US-born	+1.3%	+1.8%	+2.4%	-1.2%	-2.6%
CO dropouts, US-born	+2.3%	+2.8%	+3.4	-0.2%	-1.2%
CO graduates, US-born	-0.4%	+0.1%	+0.7%	-2.9%	-5.2%
Average, US-Born	**+0.7%**	**+1.2%**	**+1.8%**	**-1.9%**	**-3.5%**
% Real Wage Change of Foreign Born Workers Due to Immigration, 1990-2004					
HS dropouts Foreign-born	-17.4%	-16.9%	-16.3%	-19.9%	-8.1%
HS graduates, Foreign-born	-24.6%	-24.1%	-23.5%	-27.1%	-2.6%
CO dropouts, Foreign-born	-13.4%	-12.9%	-12.3%	-15.9%	-1.2%
CO graduates, Foreign-born	-25.3%	-24.8%	-24.2%	-27.8%	-5.3%
Average Foreign-born	**-20.9%**	**-20.4%**	**-19.8%**	**-23.4%**	**-4.7%**
Overall Average: Native and US-Born	**-1.1%**	**-0.6%**	**0%**	**-3.6%**	**-3.6%**

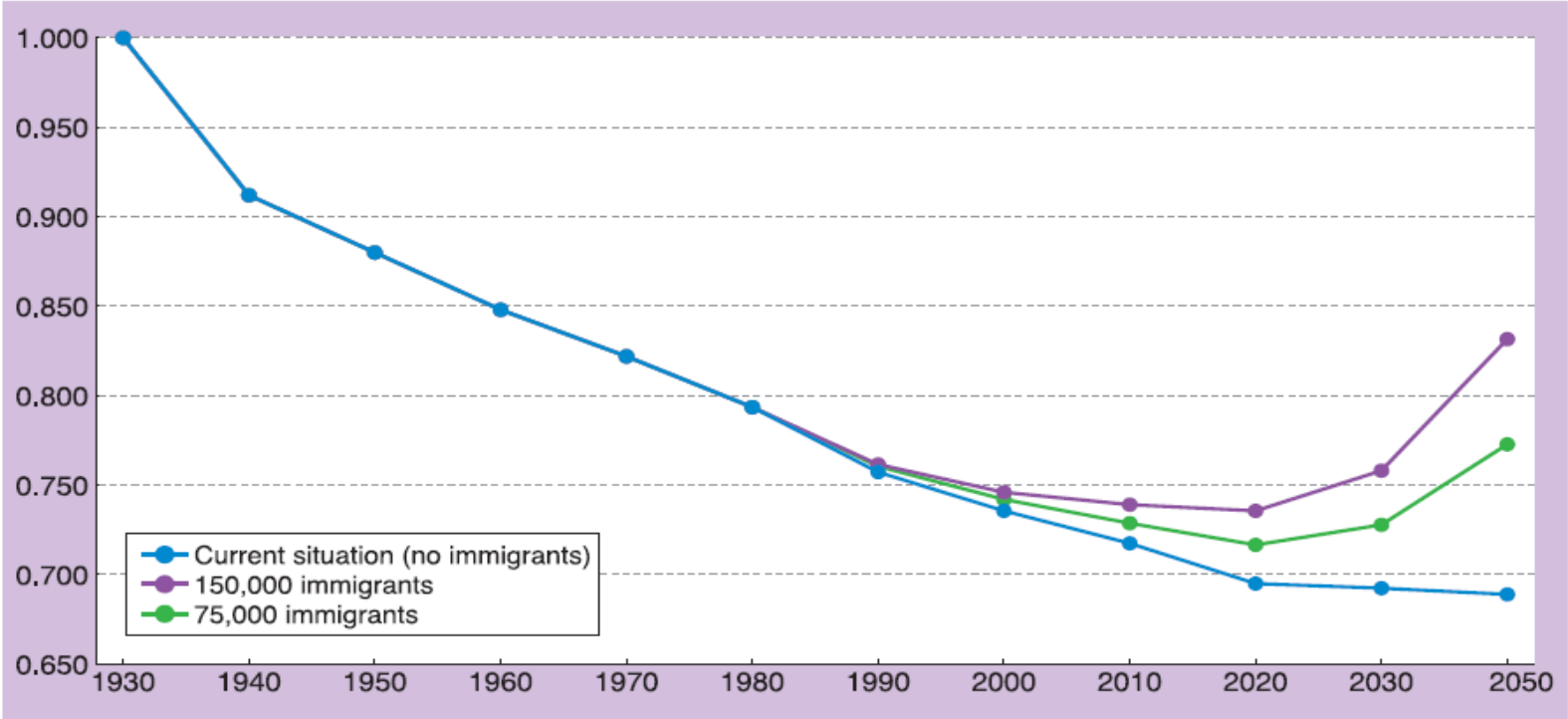
Note: Values of the other parameters used in the estimation of columns 1, 2, 3 and 4: σ=6.6, δ=2, η=4, α=0.66. Column 5 assumes : $\sigma=\infty$, δ=2, η=4, α=0.66. The inflow of immigrants in the period 1990-2004 as a percentage of initial employment in the group were as follows: High School Dropouts: 20%, High School Graduates: 9.9%, College Dropouts: 6.5%, College Graduates: 14.1%, Overall 11.0%. The formulas used to obtain single entries and averages are identical to those used in Table 9. The method used to construct the percentage changes in wages is identical to the one used in Table 9. The change in the capital-labor ratio due to immigration as of 2004 and 2009 is calculated using yearly immigration flows and the recursive formula (26) in the text. The effect of immigration 1990-2004 on the capital-labor ratio as of 2004 (column 1) is -3.4% and it is -2.0% as of 2009 (column 2). To the contrary, the effect assuming fixed capital (column 4 and 5) is -11%.

Foreign Labor Inflow Brings Long-term Benefits to Public Finance & Economic Growth

- Our research (2010, with Simasawa)

CHART 2

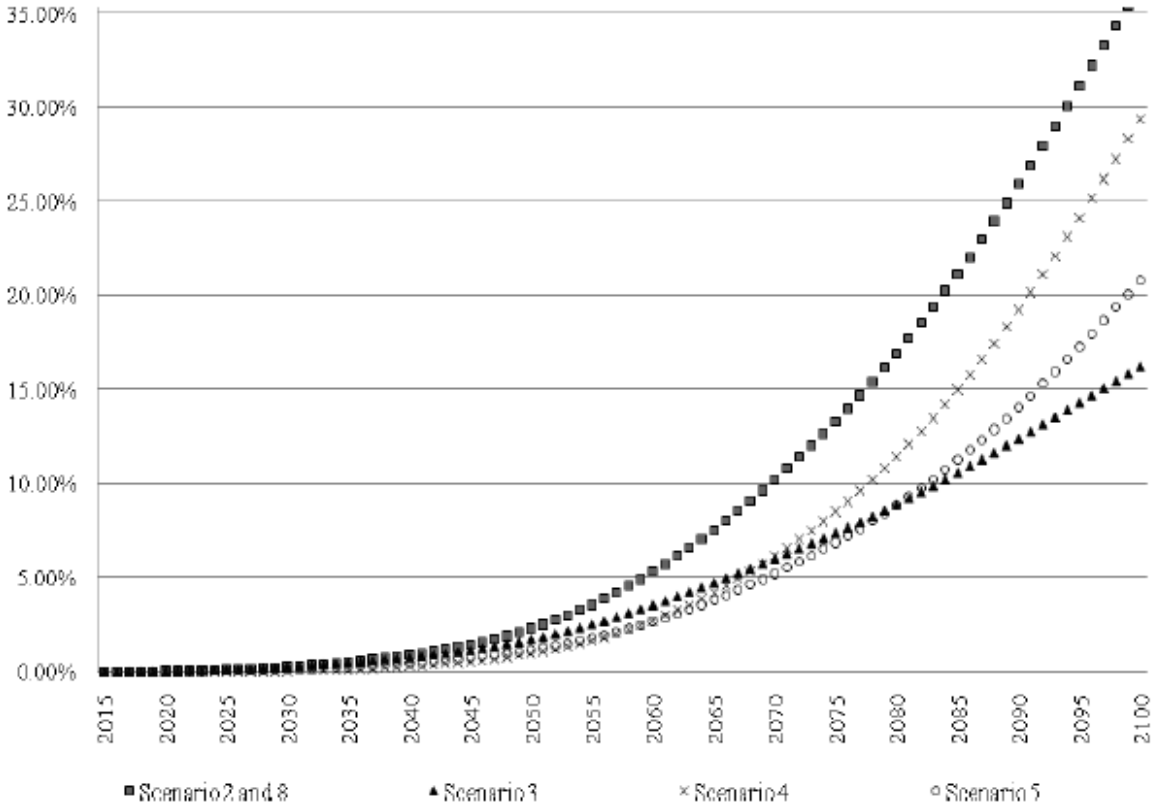
Acceptance of immigrants & benefits for each generation



Source: Compiled by this writer and others. The horizontal axis denotes each generation's year of birth, and the vertical axis indicates the lifetime benefits of each generation in terms of 1.000 for the lifetime benefits of the generation born in 1930.

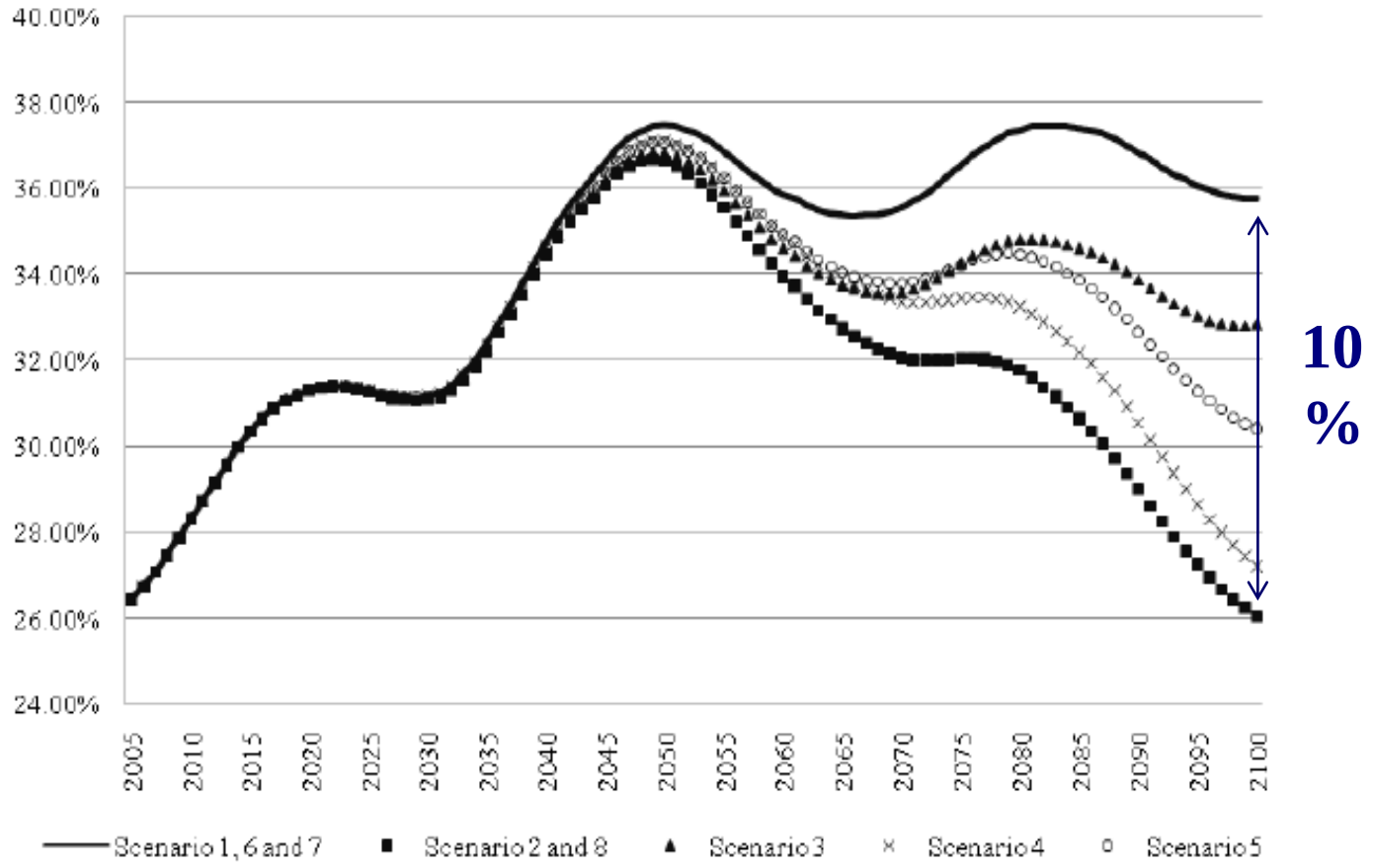
（Note）In 2070, the proportion of immigrants reaches 10% of the total population in Scenario2 (150,000 immigrants)

Figure 2　Ratio of Immigrants to Total Population



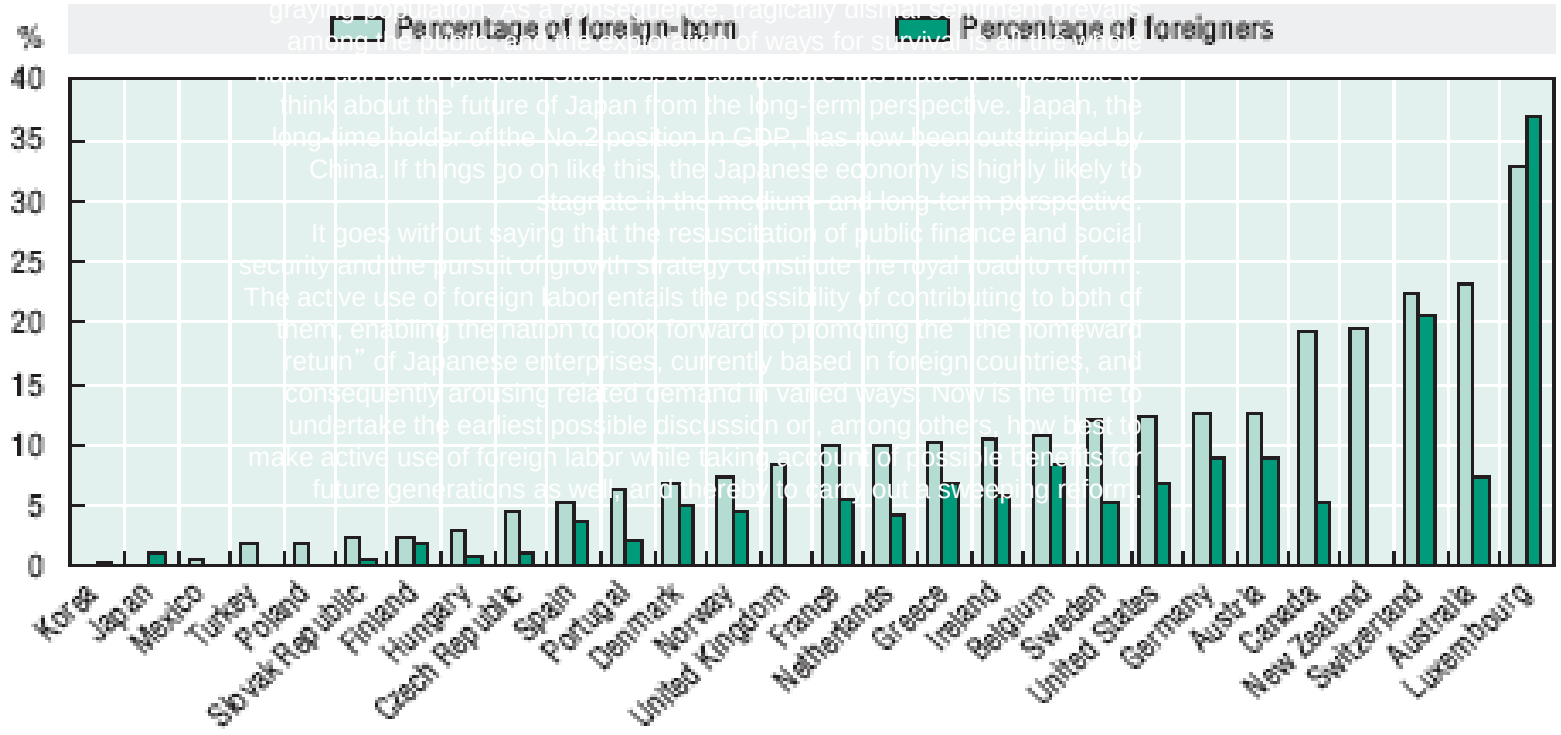
(Note) The retired population ratio differs by 10% points among scenarios in 2100

Figure 3 Retired Population Ratio



Study “Japanese Version of immigration Policy” from the experienced countries

Chart 1. Percentage of foreign-born persons and of foreigners in the total population in OECD countries, 2001



Source: OECD database on immigrants and expatriates

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（Note）Objectives of immigration policy

- 1. Economic
  - achieve demographic balance/population expansion
  - increase supply of labor or particular skills
  - stimulate economic growth
  - reduce future tax burden per capita
- 2. Humanitarian or moral: refugees
- 3. Social: family reunification
- 4. Cultural
  - promote racial and ethnic diversity (→innovation)
- 5. Political goals/national security

フランスの歴史人口学者エマニュエル・トッド

「日本では、戦後歩んできた成功の道のりが終わりを告げていることに、日本人自身も気づいていると感じる。何か新しいことが起こりつつあり、難しい選択を迫られようとしているということだ。象徴的な言い方だが、大きな変化の予兆を国民も一般感覚として持っているだろう。政権交代は、それ自体が変化というより新しい時代の象徴だととらえるべきではないか。
大きな問題は人口減少だ。日本は教育レベルが高く、イノベーションの中心でもある。最も高齢化した国が最も先進的な国になりうることを示している。だから過度に騒ぐことはないが、移民受け入れの議論は避けて通れない。日本は世界でもまれな均一意識を持った島国であり、移民問題の解決は極めて難しいだろう。失われる人口をロボットで補うことはできない。私は2050年の欧州を救うのも移民だと考えている。」（『日本経済新聞』2009年10月21日付夕刊）