

“Immigration” within Japan

Ryoichi Imai

How to stop people moving

- The government recognizes people's move across regions as the largest obstacle to regional revitalization.
- Young people tend to move from local cities to major cities and then to Tokyo.
- The Tokyo urban area is still growing in population, while the total population of Japan is decreasing.

When do you move?

- Young people tend to move at two critical points of their life.
 - When they go to universities.
 - When they go to their job locations
- The government orders prefectures and universities (why?) to figure out their plans to stop young people moving to large urban areas.

Municipalization of private universities

- The traditional function of Japan's national universities is to recruit talented young people of regions, educate and allocate them to jobs in large urban areas.
- Population decline makes private universities in regions sustainable no longer.
- Prefectures and cities obtain the ownership of local private universities and reboot them as municipal universities.
- Sometimes regional private universities request local municipals to buy their ownership, otherwise the universities would close.

Nagano University

- The Shinshu University is a prestigious national university, located in Nagano prefecture.
- However, its capacity is limited, and there are not so many private universities in the prefecture.
- The Nagano University, originally a private university sponsored by local business, was municipalized by the Ueda city in 2017.
- Local leaders now increasingly recognize the importance of the availability of higher education institutions for local young people.
- Today, there are more than 100 municipal universities all over Japan.

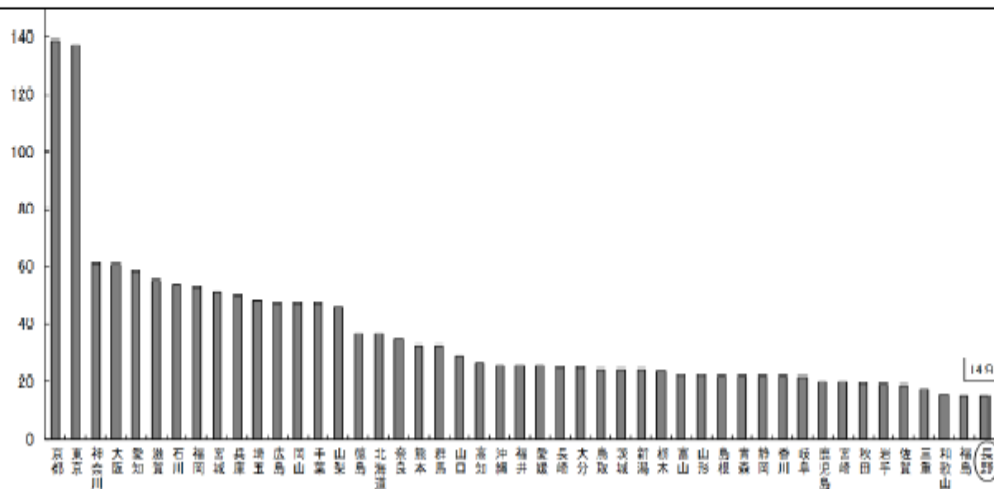
University Capacity

○ 大学収容力の全国格差

長野県の大学収容力は14.9% (H25 速報値) と全国最低であり、8割以上が県外大学に進学しています。

長野県の大学の収容力は全国最低水準

収容力…県内の18歳人口(A:22,303人)に占める 県内大学入学者数(B:3,323人)の割合(B/A)は、
14.9% 全国第47位(全国平均49.9%)



※出典 H25 学校基本調査 (文部科学省)

- The university enrollment capacity of the Nagano prefecture is the lowest in Japan.
- More than 80% of high school graduates seeking for higher education go to other prefectures (mainly to Tokyo).

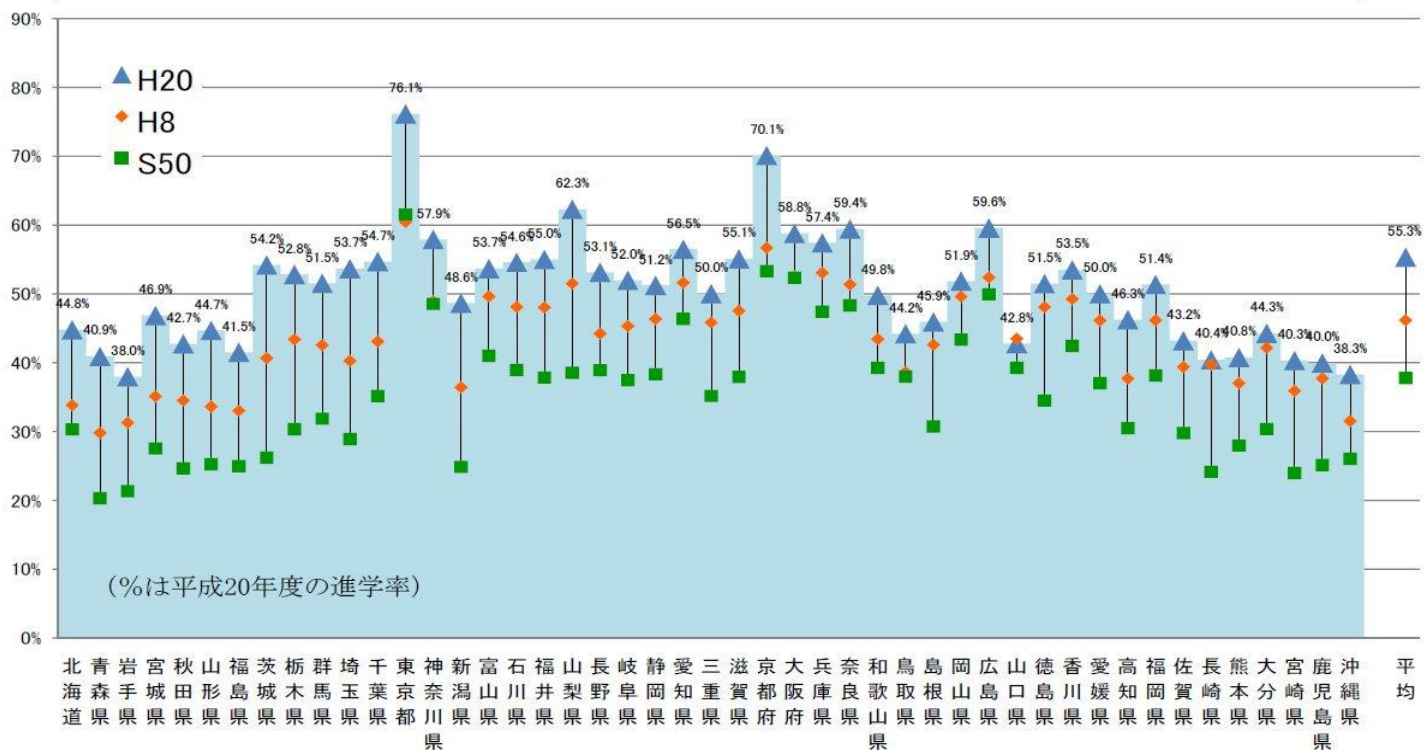
<http://www.nga.gr.jp/ikkrwebBrowse/material/files/group/2/03%20nagano.pdf>

Admission Rates for Higher Education by Prefecture

4(1) 進学率の推移(都道府県別)

=大学・短大への進学者数/18歳人口

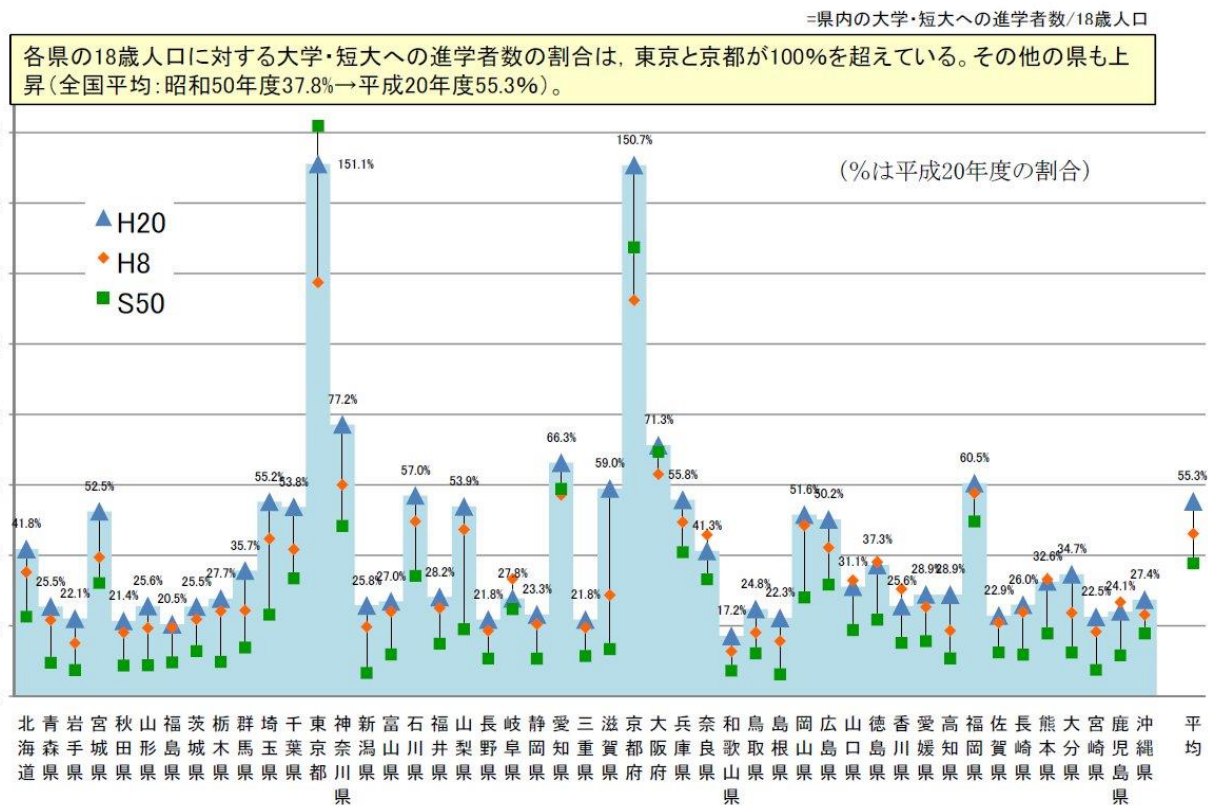
県ごとに違いはあるものの、進学率は各県とも一貫して上昇(全国平均:昭和50年度37.8%→平成20年度55.3%)。



Admission rates of high school graduates are high in urban area, and low in rural area.

Capacity of Colleges and Universities by Prefecture

4(2) 県内の18歳人口に対する進学者数の割合の推移(都道府県別)



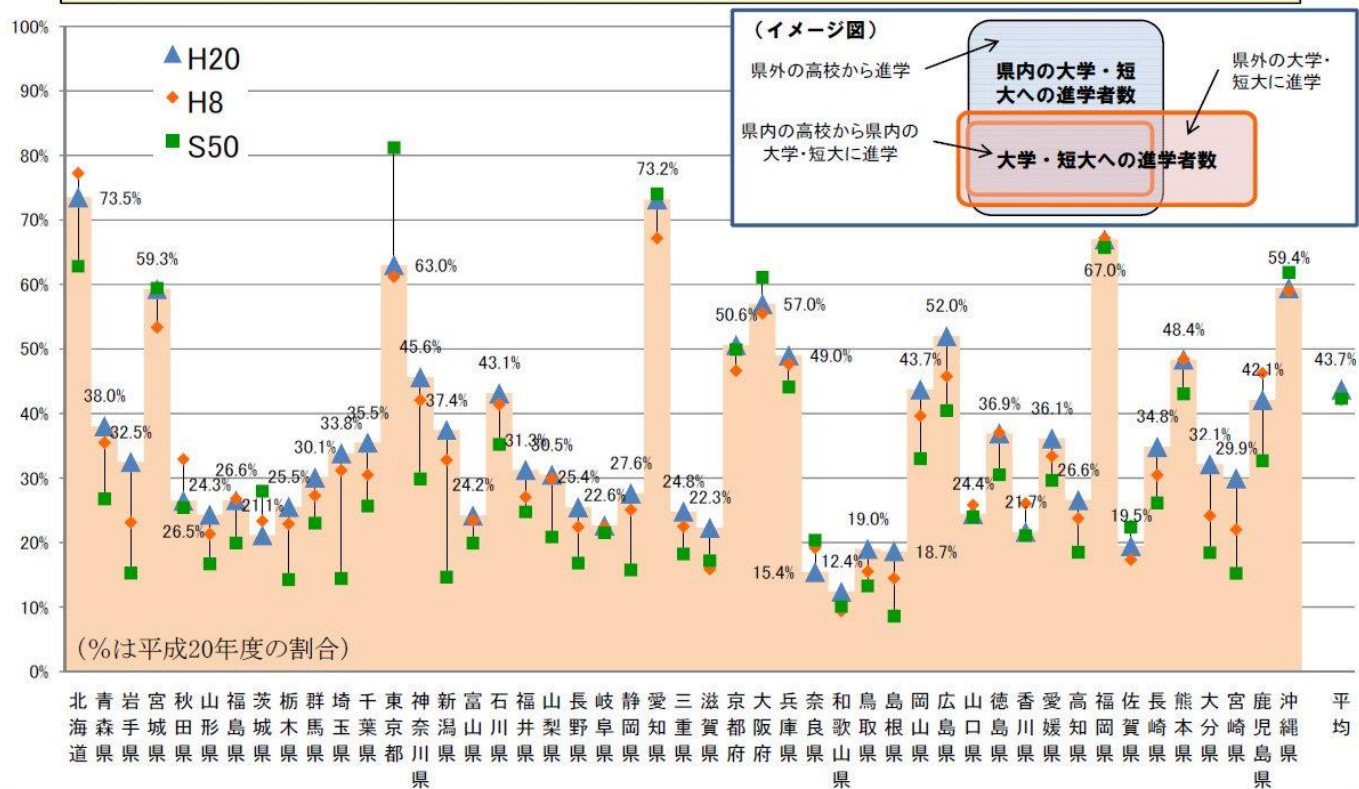
- Tokyo and Kyoto have huge capacity of higher education, relative to the population of age of 18.

High school graduates of large urban area tend to go to universities within the area

4(3) 進学者のうち県内に進学する割合の推移(都道府県別)

=大学・短大進学者のうち県内への進学者数/大学・短大への進学者数

各県の大学・短大進学者のうち、地元の県に進学する学生が半数以上なのは、北海道・宮城・東京・愛知・京都・大阪・広島・福岡・沖縄(全国平均:昭和50年度42.3%→平成20年度43.7%)。一部を除き、地元への進学率は上昇。



Tokyo Prefecture

- In 2008, 100 young people graduate from high schools in Tokyo.
- 26 go to the labor market.
- 45 go to universities in Tokyo.
- 29 go to universities out of Tokyo.

Fukuoka Prefecture

- In 2008, 100 young people graduate from high schools in Fukuoka.
- 49 go to the labor market.
- 34 go to universities in Fukuoka.
- 17 go to universities out of Fukuoka.

Regional Gap in higher education

- Large urban area (Tokyo) has enough capacity of higher education, while rural area does not.
- If you live in urban area, you can go to universities in the same area.
- If you live in rural area, you need to move alone to urban area.
- It is very costly to live alone, separated from your parents. Going to private universities is out of your choice due to your budget constraint.

Commuting university from your parents' home

- The ratio of university students who commute to universities from their parents' home:
 - Private university: 60%
 - Municipal University: 40%
 - National University: 30%
 - <http://www.garbage news.net/archives/1989690.html>
- If you live in rural area and your parents are poor, your chance for higher education is quite limited.

Average cost for universities

- In Tokyo area, the average annual cost to go to university is
 - National university: 1.16m yen with / 2.03m yen without parents.
 - Municipal university: 1.16m yen with / 1.77m yen without parents.
 - Private university: 1.83m yen with / 2.61m yen without parents.
 - http://www.jasso.go.jp/about/statistics/gakusei_chosa/__icsFiles/afieldfile/2016/03/14/data-14_all.pdf

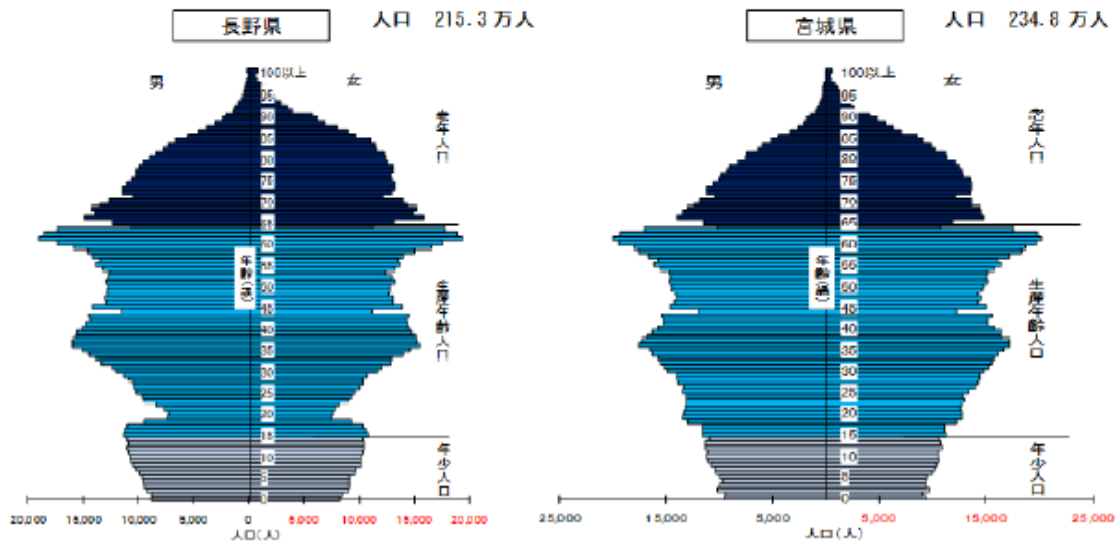
Population Pyramids

○ 大学収容力と年齢別人口構成について

人口ピラミッドを見ると、長野県は、他県に比べて、20歳前後の年齢層の落ち込みが著しい。こうした若者の人材流出は、地域における活力の低下とともに、将来地域を支える人材不足にもつながる問題。

大学収容力指数が低い県ほど人口ピラミッドの19～23歳あたりの落ち込みが著しい。

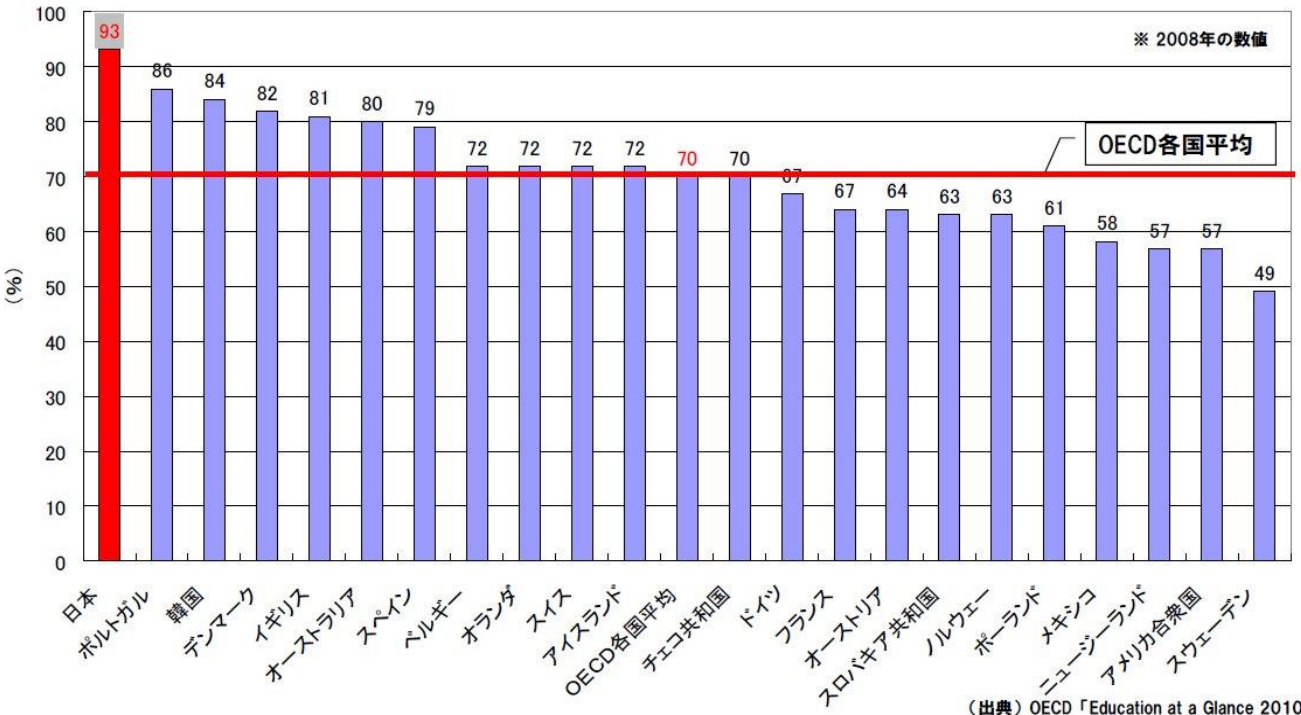
人口ピラミッド (平成22年10月1日現在 国勢調査(外国人を含む))



- In Nagano prefecture, population drops at age 19-23, mainly because young people move to Tokyo for university education.
- In Miyagi prefecture, which has a large urban area (Sendai), and many universities, population does not drop at age 19-23, because young people can go to universities in the same prefecture.

University Graduation Rate

大学型高等教育修了率の国際比較



- Japan's university graduation rate is the highest among OECD countries, much higher than of the USA.
- Parents expects that their sons and daughters will for sure graduate from the universities, once they are admitted.

(注1) 「大学型高等教育 (ISCED 5A)」とは、主として理論中心・研究準備型プログラムで、通年教育年数がフルタイム換算で3年間（一般的には4年以上が中心）のもの（日本では、学士・修士に相当）。

(注2) 大学型高等教育の修了率は、大学型高等教育の卒業生数を、その標準的な入学年（修業年限）の入学者数で除した値である。

Individual and Public Returns of Investment in Higher Education

- OECD publishes their annual reports on the private and social costs and benefits of the tertiary education.
- The costs include direct costs (tuitions) and forgone earnings.
- The benefits include gross earnings benefits, income tax and social security contribution effects, and unemployment benefits.
- Then the net return to invest in tertiary education is the total benefits minus the total costs.

Private Returns for Men and Women

MEN	costs	benefits	Net returns	Internal rate of return
France	-69	375	305	11%
Japan	-115	355	239	8%
United States	-101	569	468	13%
OECD average	-60	313	252	13%

WOMEN	costs	benefits	Net returns	Internal rate of return
France	-59	211	152	9%
Japan	-116	144	28	3%
United States	-88	360	272	11%
OECD average	-55	222	167	11%

Costs, benefits, and net returns are in USD converted using PPP. Source: OECD 2017

Public Returns for Men and Women

MEN	costs	benefits	Net returns	Internal rate of return
France	-66	224	158	8%
Japan	-17	153	136	16%
United States	-73	368	294	12%
OECD average	-54	208	154	10%

WOMEN	costs	benefits	Net returns	Internal rate of return
France	-56	144	88	8%
Japan	-17	145	128	21%
United States	-68	177	108	7%
OECD average	-51	135	83	8%

Costs, benefits, and net returns are in USD converted using PPP. Source: OECD 2017

Gap between Men and Women, Private and Public

- Private return is lower in Japan (8%) than in France (11%) or US (13%).
- Private return is lower for women (3%) than for men (8%) in Japan.
- Public return is higher in Japan (16%) than in France (8%) or US (12%).
- Public return is higher for women (21%) than for men (16%) in Japan.

Discussion

- In Japan, private return is lower than public return, because colleges and universities are heavily financially-dependent on the tuition revenues paid by the students' parents.
- In Japan, public return is higher than in Europe or in US, because public support for tertiary education is weak, while the rise in revenues of tax and social contribution is high.
 - Taxes and social contributions are paid mainly by college and university graduates in Japan.

Identify Economic Roles of Cities

- We can characterize the economic role of each designated city by exploring the Systems of National Account (SNA).
- For each designated city, we can calculate
 - Public/private demand
 - Trade account
 - Income account

Prefecture and Designated City	Public Demand	Trade Account	Income Account	Current Account	Type
Tokyo Prefecture	16	32	-14	18	Center
Osaka	13	48	-28	20	Center
Nagoya	11	25	-14	25	Center
Fukuoka	19	9	-1	7	Weak Center
Kyoto	18	13	1	14	Weak Center
Sapporo	24	-4	3	-1	Regional
Saitama Chiba Yokohama		negative	positive		Satellite

Center, Satellite, Region

- Positive trade account implies that the city sells goods to the outside.
- Negative income account implies that the people commute to the city to work.
- Positive trade and negative income accounts suggest that the city plays a center role of the region.
- Negative trade and positive income accounts suggest that the city plays a satellite role of the region.

Characterizing Cities

- Tokyo, Osaka, Nagoya are the centers of their regions. People commute and shop there.
- Fukuoka and Kyoto have a relatively weak role as a center.
- Sapporo should be a center, while it seems not, probably because Sapporo has a huge suburban area within it, and not many people commute from the outside.
- Saitama, Chiba, and Yokohama are satellites. People live there, commute to Tokyo, and shop at Tokyo.