Comparison on Monetary and Non-monetary Benefits Brought about by Studying for an Undergraduate or Graduate Degree in Japan and Abroad

22nd Japan Association for International Student Education
Annual Conference 2017
August 19, 2017 at Toyo University

Yukiko Shimmi, Ph.D., Hiotsubashi University

This study is a part of JSPS Grants-in-Aid for Scientific Research, Scientific Research (A), Research Project Number 25245078, Principal Investigator: Prof. Masahiro Yokota, Meiji University.

This presentation is based on Shimmi, Y. & Akiba, H. (2016). Monetary and non-monetary benefits brought about by study abroad for a degree: a comparative study between study for a degree in Japan and abroad. *Japan International Education Society, 22*, 83-104.

The Dataset:
Large-scale Retrospective Online Survey:

Survey period and respondents

People **with** SA experience

Period: January-May, 2015

Number of respondents: 4,489

People **without** SA experience

Period: August-September, 2015

Number of respondents: 1,298

Selection Criteria

People **with** SA experience

At minimum, lived primarily in Japan during elementary and junior high school; **studied abroad for three months or more** after graduation from a Japanese senior high school

The aim of study abroad was to learn a language, obtain a degree, or earn academic credits

People **without** SA experience

No experiences of studying or living abroad for longer than three months, did not live overseas as a child

Had not acquired foreign language proficiency, did not use a foreign language at home, had not studied at an international school in Japan prior to entering a Japanese university

Graduated from a Japanese university

Working for a company located in Japan, housewife or unemployed

Objective

- This study examined the monetary and non-monetary benefits brought about by studying abroad for an undergraduate or a graduate degree by comparing the people with such experiences with graduates of undergraduate and graduate programs (non-study abroad groups) at universities in Japan.

Research Questions

- (1) How much degree people who experienced to study for an undergraduate or a graduate degree abroad perceive the monetary and non-monetary benefits brought about by studying abroad (by comparing with people without studying abroad experiences)?

- (2) How different are the monetary and non-monetary benefits brought about by studying abroad for undergraduate or graduate degrees?

Survey Questions

Type of benefits		Online survey question items
Monetary benefits（3 items）		● Annual income
		● Study abroad experience helped to increase annual income ● Satisfaction with annual income
Non-monetary benefits (11 items)	**Career-related aspects (7 items)**	● Study abroad experience helped to plan career ● Study abroad experience helped to find the current job ● Study abroad experience was positively recognized when job-hunting ● Foreign language competency acquired through study abroad experience was positively recognized when job-hunting ● Knowledge and skills acquired through study abroad experience was positively recognized when job-hunting ● Communication experience with foreign people gained through study abroad experience was positively recognized when job-hunting ● Satisfaction with current job
	Non-career-related aspects (4 items)	● Satisfaction with study abroad experience ● Satisfaction with private life other than professional life ● Satisfaction with friendship ● Satisfaction with life

Respondents' Profiles

Respondent Groups: Four Modes

	Academic level and type	Length of study abroad	Number of responses
People **with** study abroad experience **(SA Group) (*1)**	**Undergraduate degree abroad (blue)**	**Longer than 3 years**	**416**
	Masters/Doctorate degree abroad (green)	**Longer than 1 year**	**353**
People **without** study abroad experience **(Non-SA Group) (*2)**	**Undergraduate degree in Japan (red)**	**-**	**710**
	Masters/Doctorate degree in Japan (orange)	**-**	**528**

*1: Classified by the type of institution which they responded was their most important study abroad destination
*2: Classified by the highest level of institution they attended

Respondent Groups: Gender and Age

		Gender		Age			
		Male	**Female**	**20's or younger**	**30's**	**40's**	**50's or older**
SA Group	**Undergraduate degree abroad**	52.4%	47.6%	9.6%	34.9%	42.1%	13.5%
	Masters/Doctorate degree abroad	58.9%	41.1%	6.2%	28.3%	37.7%	27.8%
Non-SA Group	**Undergraduate degree in Japan**	47.0%	53.0%	13.4%	32.0%	34.4%	20.3%
	Masters/Doctorate degree in Japan	54.5%	45.5%	15.7%	37.3%	34.5%	12.5%

Respondent Group: Field of Study (Masters/Doctoral Degree)

	Academic Fields	
	Science & Technologies	**Humanities and Social Sciences**
SA Group	15.6%	84.4%
Non-SA Group	39.4%	60.6%

SA Group Profiles:
Study Abroad Destination

	United States	United Kingdom	Australia	Canada	Germany	France	China
Undergraduate degree abroad	78.1.%	6.0%	2.2%	4.1%	1.9%	0.5%	2.9%
Masters/ Doctorate degree abroad	57.2%	21.5%	4.5%	2.5%	2.8%	2.3%	0.8%

SA Group Profiles: Period of Studying Abroad

	3-4 years	4-5 years	5 years or longer
Undergraduate degree abroad	41.1%	36.3%	22.6%

	1-2 years	2-3 years	3 years or longer
Masters/Doctorate degree abroad	36.0%	32.0%	32.0%

SA Group Profiles: Others

- **Age when started to study abroad**
  - Undergraduate
    - 20's or younger: 93.8% (18-21 years old: 66.1%)
  - Masters/Docotorate
    - 23-29 years old: 62.6%
    - 30's: 29.5%

- **Study abroad by privately funded**
  - Undergraduate: 95.9%
  - Masters/Doctorate: 72.8%

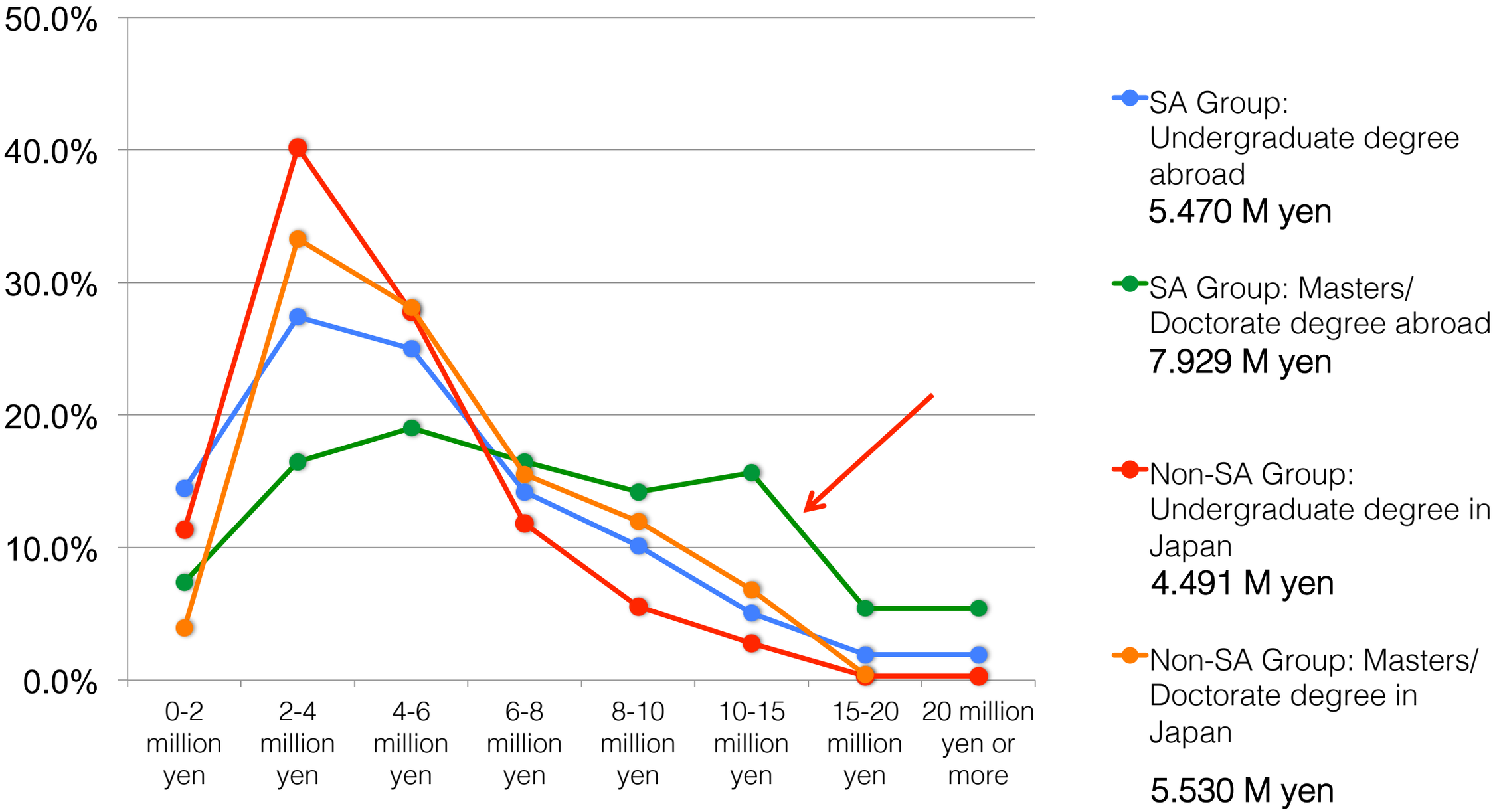
Analysis

- Compared the difference among four different study modes
  - **Average annual income: 8 categories**
    - 0-2 million yen
    - 2-4 million yen
    - 4-6 million yen
    - 6-8 million yen
    - 8-10 million yen
    - 10-15 million yen
    - 15-20 million yen
    - 20 million yen or more
  - **Monetary and non-monetary benefits: 4 point Likert scale**
    - 4 = strongly agree
    - 3 = tend to agree
    - 2 = relatively disagree
    - 1 = strongly disagree
- Comparing the weighted-averages, calculating income gap coefficients, and conducting one-way ANOVA of four groups

Results

Monetary Benefits

Monetary Benefits of Study Abroad Experiences: Average Annual Income of Four Groups



*The answers of “housewives or unemployed” are not included in the study abroad groups. The answers of those who “did not want to answer” are not included in the non-study abroad groups.

Average Annual Income by Gender

	Undergraduate degree abroad (1)	Undergraduate degree in Japan (2)	Masters/ Doctorate degree abroad (3)	Masters/ Doctorate degree in Japan (4)	Income gap coefficients: Undergraduate degree (1) / (2)	Income gap coefficients: Masters/ Doctorate degree (3) / (4)	Income gap coefficients: Academic level (3) / (1)
Total	5.470 M yen	4.491 M yen	7.929 M yen	5.530 M yen	1.22	1.43	1.45
Male	6.450 M yen	5.757 M yen	9.546 M yen	6.697 M yen	1.12	1.43	1.48
Female	4.391 M yen	3.307 M yen	5.621 M yen	4.106 M yen	1.33	1.37	1.28

*The answers of “housewives or unemployed” are not included in the study abroad groups.
The answers of those who “did not want to answer” are not included in the non-study abroad groups.

Average Annual Income by Age

	Undergraduate degree abroad (1)	Undergraduate degree in Japan (2)	Masters/ Doctorate degree abroad (3)	Masters/ Doctorate degree in Japan (4)	Income gap coefficients: Undergraduate degree (1) / (2)	Income gap coefficients: Masters/ Doctorate degree (3) / (4)	Income gap coefficients: Academic level (3) / (1)
Total	5.470 M yen	4.491 M yen	7.929 M yen	5.530 M yen	1.22	1.43	1.45
50's or older	6.536 M yen	6.083 M yen	9.939 M yen	8.060 M yen	1.07	1.23	1.52
40's	5.640 M yen	4.708 M yen	8.259 M yen	6.546 M yen	1.20	1.26	1.46
30's	5.397 M yen	3.893 M yen	6.429 M yen	4.676 M yen	1.39	1.38	1.19
20's or younger	3.500 M yen	2.908 M yen	3.727 M yen	3.507 M yen	1.20	1.06	1.07

*The answers of "housewives or unemployed" are not included in the study abroad groups.
The answers of those who "did not want to answer" are not included in the non-study abroad groups.

Percentages of Those Who Are Working for Foreign Company or at a Managerial Position

	Working for a foreign company	Managerial position
Undergraduate degree abroad	24.6%	32.5%
Undergraduate degree in Japan	2.1%	17.2%
Masters/Doctorate degree abroad	22.4%	41.1%
Masters/Doctorate degree in Japan	2.1%	18.6%

*1) The answers of “housewives or unemployed” are not included in the study abroad groups.
*2) The answers of those who “did not want to answer” are not included in the non-study abroad groups.
*3) Answers were selected from “Executives,” “Managers,” “General workers,” “Part-time workers/ contract workers,” and “Others.” Percentages of “Managerial position” are the total of “Executives” and “Managers”.

Current Type of Job

	Office Worker	Sales	Technician	Researcher	Professional	Others
Undergraduate degree abroad	35.5%	14.5%	8.1%	2.5%	24.6%	14.7%
Undergraduate degree in Japan	47.0%	18.2%	18.4%	1.9%	10.6%	3.9%
Masters/Doctorate degree abroad	19.0%	11.2%	5.7%	25.3%	28.4%	10.3%
Masters/Doctorate degree in Japan	28.1%	6.3%	35.0%	14.8%	14.4%	1.3%

*The answers of “housewives or unemployed” are not included in the study abroad groups.
The answers of those who “did not want to answer” are not included in the non-study abroad groups.

Average Income by Academic Fields: Graduate Level

Science & Technologies abroad (1)	Science & Technologies in Japan (2)	Humanities & Social Sciences abroad (3)	Humanities & Social Sciences in Japan (4)	Income gap coefficient: Science & Technologies (1) / (2)	Income gap coefficient: Humanities & Social Sciences (3) / (4)
7.222 M yen	5.776 M yen	8.057 M yen	5.146 M yen	1.25	1.57

*The answers of “housewives or unemployed” are not included in the study abroad groups.
The answers of those who “did not want to answer” are not included in the non-study abroad groups.

Self-evaluation of Monetary benefits: Results of One-way ANOVA

	Undergraduate degree abroad (1)		Masters or doctoral degree abroad (2)		Undergraduate degree in Japan (3)		Masters or doctoral degree in Japan (4)		F value	Multiple comparison
	M	SD	M	SD	M	SD	M	SD		
Study abroad experience helped to increase annual income	2.48	1.01	2.76	1.03	2.00	0.80	2.27	0.90	60.98***	2 > 1 > 4 > 3
Satisfaction with annual income	2.08	0.89	2.44	0.91	2.03	0.78	2.17	0.88	19.42***	2 > 1 2 > 3 2 > 4 4 > 3

*1) F value: ***p <.001, **p <.01, *p <.05
*2) The type of Post Hoc Test was Games-Howell (p <.05). The differences are shown by the inequality sign.
*4) Multiplicity issues in the analysis were not considered.

Non-monetary Benefits

Non-monetary benefits of study abroad experiences: Results of One-way ANOVA

	Undergraduate degree abroad (1)		Masters or doctoral degree abroad (2)		Undergraduate degree in Japan (3)		Masters or doctoral degree in Japan (4)			
	M	SD	M	SD	M	SD	M	SD	F value	Multiple Comparison
Study abroad experience helped to plan career	3.24	0.85	3.47	0.72	2.23	0.82	2.66	0.90	230.74***	2 > 1 > 4 > 3
Study abroad experience helped to find current job	3.06	0.99	3.38	0.86	2.28	0.90	2.74	0.99	127.68***	2 > 1 > 4 > 3
Study abroad experience was positively recognized in job-hunting	2.91	0.96	3.14	0.89	2.32	0.83	2.48	0.92	86.29***	2 > 1 > 4 > 3
Foreign language competency acquired through study abroad experience was positively recognized when job-hunting	2.95	0.97	3.08	0.88	1.54	0.61	1.63	0.70	554.29***	2, 1 > 4, 3
Knowledge and skills acquired through study abroad experience was positively recognized when job-hunting	2.79	0.97	3.11	0.86	2.15	0.80	2.51	0.94	104.91***	2 > 1 > 4 > 3
Communication experience with foreign people gained through study abroad experience was positively recognized when job-hunting	2.84	0.98	3.00	0.89	1.52	0.61	1.59	0.65	510.12***	2, 1 > 4, 3
Satisfaction with current job	2.56	0.95	2.84	0.85	2.41	0.81	2.48	0.82	21.18***	2 > 1 2 > 3 2 > 4 1 > 3
Satisfaction with study abroad experience	3.17	0.82	3.23	0.77	2.57	0.80	2.83	0.80	76.66***	2, 1 > 4 > 3
Satisfaction with private life other than professional life	2.85	0.81	2.97	0.80	2.63	0.76	2.74	0.82	15.72***	2 > 3 2 > 4 1 > 3
Satisfaction with friendship	2.87	0.79	3.00	0.75	2.56	0.71	2.66	0.78	33.56***	2, 1 > 4, 3
Satisfaction with life	2.78	0.81	2.98	0.81	2.50	0.76	2.57	0.78	34.68***	2 > 1 > 4, 3

*1) F value: ***p <.001, **p <.01, *p <.05
*2) The type of Post Hoc Test was Games-Howell (p <.05). The differences are shown by the inequality sign.
*3) Multiplicity issues in the analysis were not considered.

Summary and Discussion

Impact of study abroad for increasing one's income

- The average annual income of respondents who studied for a graduate degree abroad was higher than that of those who graduated from graduate schools in Japan.

- The average income of respondents who studied abroad for an undergraduate degree was also higher than that of those who obtained a bachelor's degree in Japan.

- The self-perceptions of income-related aspects were significantly more positive among respondents who studied abroad for a graduate degree than among any other group.

=> Study abroad experiences seemed to be helpful for increasing one's income

Monetary Benefits: An issue for those who studying abroad for undergraduate degree

- **Satisfaction with the current income was the same for two undergraduate groups, though the average income was high for those who studied abroad**.

  => Those who studied abroad for an undergraduate degree might be more ambitious about their expectations for their income

  => Those who studied abroad for an undergraduate degree might feel dissatisfied with the traditional Japanese working culture of promotion by seniority, which does not necessarily take one's ability and skills into account when deciding the salary

  => The cost of studying abroad for undergraduate degree (1.6 - 4.4 times higher than that of studying in Japan) might have also affected the results.

  => This is a similar result with previous studies in the West (Janson, Schomburg & Teichler, 2009; Schmidt & Pardo, 2012) that indicated study abroad experience is not necessarily helpful for enhancing monetary benefits.

Non-monetary Benefits

- The self-perceptions of non-monetary benefits were significantly more favorable among respondents in the study abroad groups, at both the undergraduate and graduate levels, than among those in the non-study abroad groups.

- **Non-monetary career-related benefits**:
  study abroad experience was helpful for career planning and job-hunting

- **Non-monetary non-career-related benefits**:
  satisfaction for private life, friendships and life in general

Comparison of the Undergraduate and Graduate Levels (SA Groups)

- **Graduate Level**
- Seems to be more beneficial in both monetary and non-monetary aspects than undergraduate level

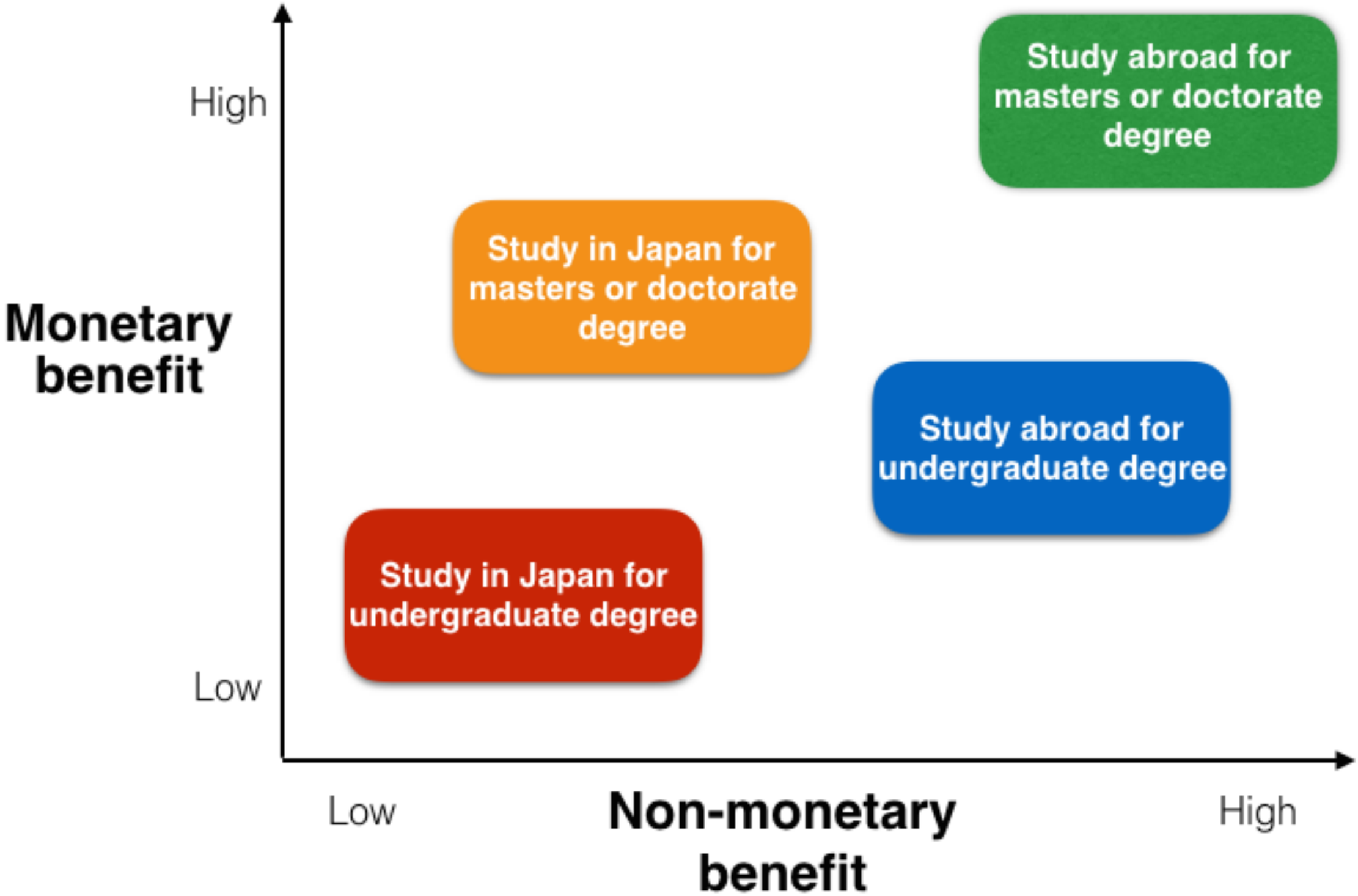
- **=>** Gaining knowledge and skills in professional fields through graduate study might be helpful in finding a professional job that requires those knowledge and skills, which consequently might enhance their annual income (monetary benefits).

Benefits of Studying Abroad by the Academic Level and Other Profiles

- **High monetary benefits**
  - Graduate level, 40's or more, Social sciences and humanities (including MBA)

- **High non-monetary benefits**
  - **Graduate level**: professional and other general skills and knowledge are highly evaluated by employers; high self-evaluated satisfaction with their study abroad experiences and their lives in general including their private lives
  - **Undergraduate Level** (at least same level as the graduate level): Foreign language skills and communication experiences with foreign people are highly evaluated by employers; high self-evaluated satisfaction with their own study abroad experiences and their friendships

Model of Benefit of Study Abroad for Undergraduate and Graduate Degrees and Study in Japan



Future Direction

- This study indicated that, **when comparing programs at the same academic level, studying for a degree abroad is more beneficial, in both monetary and non-monetary aspects**, than studying for a degree solely at a domestic university.

- **Limitations:**
  - The need to consider academic grades or other profiles before studying abroad
  - Possibility that those who had positive study abroad experiences were the persons who answered the questionnaire
  - Possibility that people who studied abroad had already had high skills and ability before studying abroad
  - The need to consider the cost of studying abroad
  - SES and family income might influence the opportunities for studying abroad
  - The need to include other data (academic fields, time period for studying abroad, destination country etc.) in the analysis