

Kim, Byung-Yeon; Choi, Syngjoo; Lee, Jungmin; Lee, Sokbae; Choi, Kyunghui

**Working Paper**

## Do institutions affect social preferences? Evidence from divided Korea

cemmap working paper, No. CWP35/13

**Provided in Cooperation with:**

Institute for Fiscal Studies (IFS), London

*Suggested Citation:* Kim, Byung-Yeon; Choi, Syngjoo; Lee, Jungmin; Lee, Sokbae; Choi, Kyunghui (2013) : Do institutions affect social preferences? Evidence from divided Korea, cemmap working paper, No. CWP35/13, Centre for Microdata Methods and Practice (cemmap), London, <https://doi.org/10.1920/wp.cem.2013.3513>

This Version is available at:

<https://hdl.handle.net/10419/79527>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

Online Appendices

for

Do Institutions Affect Social Preferences?  
Evidence from Divided Korea

Byung-Yeon Kim, Syngjoo Choi, Jungmin Lee,  
Sokbae Lee, Kyunghui Choi

Not for publication

Online Appendix I provides the English-translated version of documents used in the experiment and survey. Online Appendix II presents summary information specific to North Korean refugees in the study. Online Appendix III discusses the type classification of individual behavior in the self-other dictator game. Online Appendix IV provides the full details of regression analyses in Section 4.2.

# **Online Appendix I**

## **Experimental Instructions**

(Study 1)

Hello. Thank you for participating to an experiment in the economics of decision-making and survey. This research has been financially supported by the World Class University team in the Department of Economics at Seoul National University. This will continue until mid September 2011 with North Korean refugees who have arrived in South Korea since 2010 and South Korean who were born in South Korea and are currently enrolled at a university in Seoul.

This study consists largely of three parts of the experiment and the survey. You will be asked to make decisions in each of three parts of the experiment. Your earnings will depend on your decisions, on the decisions of the other participants in this study, and partly on chance. Your earnings will be the sum of earnings from three parts of the experiment, in addition to the 50,000 KRW show-up fee. The determination of your earnings will be made at the end of this study, mid September. Soon after, you will be informed of the earnings via mail or phone call. The amount of your earnings will then be transferred to a bank account you have provided to us.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Please do not talk with anyone during the experiment. If you have any questions regarding the experiment, please raise your hand. We will approach you to answer your questions.

In order to guarantee your anonymity and privacy, please write the ID number you have assigned to each decision sheet you will receive. You should make sure that your ID number has been recorded correctly because we will later match your ID number and your decisions to pay your earnings.

## Part 1

Let us begin Part 1 of the experiment. Please write your ID number at the top of the decision sheets you have received.

The decision sheets consist of three different situations of decision-making. In each situation you will be asked to allocate 10,000 KRW between two anonymous participants in this study who will be randomly selected. Note that you will not be any of two anonymous participants for your decision and it is likely that they will not be participants in this room.

Three decision-making situations are as follows:

- Both anonymous participants are North Korean refugees who have arrived in South Korea since 2010;
- Both anonymous participants are South Korean who were born in South Korea and are currently enrolled in a university in Seoul;
- One participant is a North Korean refugee who has arrived in South Korea since 2010 and a South Korean who was born in South Korea and is currently enrolled in a university in Seoul.

You will be asked to allocate 10,000 KRW between two anonymous participants in each of these situations. In order to facilitate your decisions, you will need to choose one out of 11 options as can be seen below.

Participant 1	10,000	9,000	8,000	7,000	6,000	5,000	4,000	3,000	2,000	1,000	0
Participant 2	0	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
Your choice											

Let us illustrate this table. For example, the first column from the left means such an allocation that Participant 1 will receive 10,000 KRW and Participant 2 receives nothing. Similarly, the sixth column represents the allocation in which each participant receives 5,000 KRW. The last column

means the allocation in which Participant 1 receives nothing, while Participant 2 gets 10,000 KRW. Other columns can be explained accordingly.

You will simply need to make a tick (✓) in the column of the allocation you wish to choose. Please bear in mind that there are 11 options in each decision-making situation and you can choose only one of 11 options in each of the three situations: (i) North Korean refugee vs. North Korean refugee, (ii) South Korean student vs. South Korean student, and (iii) North Korean refugee vs. South Korean student.

After making all decisions, please fold decision sheets in half and put them in an envelope that we will carry around.

Aforementioned, your decisions in this part will determine earnings of two randomly chosen anonymous participants at the end of this study. Similarly, your earnings in this part will be determined by the decisions of some participant in this study.

## Part 2

We start Part 2 of the experiment. Please write your ID number at the top of the decision sheets you have received.

Your decisions in Part 2 are, like those in Part 1, to allocate some amount of money between two participants. Unlike in Part 1, you will be one of two participants and the other participant (your partner) will be randomly drawn from all participants in this study. The other participant will be likely someone that is not in this room.

In determining your earnings in this part, we will decide with equal probability who will be the decision maker between you and your partner. The decision sheets you received represent your decisions in case you are selected as the decision maker. If your partner is selected as the decision maker, your earnings in this part will be determined by decisions made by your partner.

Suppose that you be selected as the decision maker. Your partner will be either a North Korean refugee who has arrived at South Korea since 2010 or a South Korean who was born in South Korea and is currently enrolled in a university in Seoul. Therefore, you will need to make decisions in each of the following matching situations:

- Your partner is a North Korean refugee who has arrived in South Korea since 2010;
- Your partner is a South Korean who was born in South Korea and is currently enrolled in a university in Seoul.

In each matching situation, you will make allocation decisions in 8 different problems. Each decision problem is characterized by the amount of money available and the factor with which the amount of money allocated to your partner increases or decreases. What follows is one such example.

Decision problem: **You receive 10,000 KRW. Each 100 KRW allocated to your partner will be tripled.**

[illegible]

In this decision problem you receive 10,000 KRW. You will be asked to decide how to allocate 10,000 KRW between yourself and your partner. Eleven choice options are presented in column.

For instance, the second column from the left (allocation percentage: 10%) represents such a choice that you allocate 9,000 KRW to your self and 1,000 KRW (10% of 10,000 KRW) to your partner. Please bear in mind the information “**Each 100 KRW allocated to your partner will be tripled.**” Hence, 1,000 KRW allocated to your partner will be tripled to become 3,000 KRW. This amount of 3,000 KRW will be delivered to your partner.

As another example, the eighth column from the left (allocation percentage: 70%) presents the decision that you allocate 3,000 KRW to your self and 7,000 KRW (70% of 10,000 KRW) to your partner. Bear in mind again that 7,000 KRW allocated to your partner will be tripled to become 21,000 KRW. This amount of 21,000 KRW will be delivered to your partner.

In order to facilitate your decision, the table presents the final amounts of money you and your partner will receive as a result of each allocation decision. You will need to select one allocation you wish to choose, using the information of the table. Let us emphasize again that you can choose only one allocation (that is, one column) in each decision problem.

Let us take another decision problem.

Decision problem: You receive 30,000 KRW. Each 100 KRW allocated to your partner will be reduced by half.

Allocation percentage	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Money for yourself	30,000	27,000	24,000	21,000	18,000	15,000	12,000	9,000	6,000	3,000	0
Money for your partner	0	1,500	3,000	4,500	6,000	7,500	9,000	10,500	12,000	13,500	15,000
Your choice											

In this decision problem you receive 30,000 KRW. You will be asked to decide how to allocate 30,000 KRW between yourself and your partner. Eleven choice options are again presented in column.

For instance, the second column from the left (allocation percentage: 10%) represents such a choice that you allocate 27,000 KRW to your self and 3,000 KRW (10% of 10,000 KRW) to your partner. Please bear in mind the information “**Each 100 KRW allocated to your partner will be reduced by half.**” Hence, 3,000 KRW allocated to your partner will be reduced by half to become 1,500

KRW. This amount of 1,500 KRW will be delivered to your partner.

As another example, the eighth column from the left (allocation percentage: 70%) presents the decision that you allocate 9,000 KRW to your self and 21,000 KRW (70% of 30,000 KRW) to your partner. Bear in mind again that 21,000 KRW allocated to your partner will be reduced by half to become 10,500 KRW. This amount of 10,500 KRW will be delivered to your partner.

If you do not have any further questions, please make choices in 8 decision problems in each decision sheet when your partner is an NK refugee and when your partner is an SK student.

After making all decisions, please fold decision sheets in half and put them in an envelope that we will carry around.

Finally, your earnings in this part will be determined as follows. First, we randomly determine whether your partner is an NK refugee or an SK student, and then determine with equal probability whether you or your partner is a decision-maker. If you are selected as the decision-maker, we will select the decision sheet you submitted, corresponding to the identity of your partner. We will then draw randomly one out of 8 decision problems in the selected decision sheet with equal probability. The earnings for you and your partner will then be determined by the decision you made in the selected decision problem. If your partner is selected as the decision-maker, the earnings for you and your partner will be determined analogously by your partner's decision in a selected decision problem from his decision sheet.



### Part 3

We start Part 3 of the experiment. Please write your ID number at the top of the decision sheets you have received.

Like in Part 2, you will make decisions against a randomly selected, anonymous opponent. Again, you will need to make decisions in each of the following matching situations:

- Your partner is a North Korean refugee who has arrived in South Korea since 2010;
- Your partner is a South Korean who was born in South Korea and is currently enrolled in a university in Seoul.

Both you and your partner will participate in this part as a decision maker: one person will take the role of Participant A and the other will take the role of Participant B.

When the earnings are determined, we will randomly select with equal probability that either you are Participant A and your partner is Participant B, or your partner is Participant A and you are Participant B.

We now illustrate the decision-making of Participant A and B. First, Participant A will receive 10,000 KRW and decide how much to transfer to Participant B from 10,000 KRW. The amount transferred to Participant B will then be tripled and be delivered to Participant B. Next, Participant B will decide how much to return to Participant A from the tripled amount he or she received from Participant A. The amount Participant B returns will be delivered to Participant A as it is.

We shall explain the earnings Participant A and B receive after they made decisions. The earnings for Participant B are the amount of money left to him-/herself, following his or her decision of how much to return to Participant A. The earnings for Participant A are the amount of money Participant B returns *plus* the amount of money Participant A has kept from the initial amount of 10,000 KRW.

Because you can be selected as Participant A or Participant B with equal probability, you will need to make decisions by assuming the role of each Participant. For instance, if you are selected as Participant A and your partner as Participant B, you will make the following decision.

Decision problem 1: Your role is Participant A and your partner's role is Participant B

Transfer percentage	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Money you keep	10,000	9,000	8,000	7,000	6,000	5,000	4,000	3,000	2,000	1,000	0
Money your partner receive	0	3,000	6,000	9,000	12,000	15,000	18,000	21,000	24,000	27,000	30,000
Your choice											

You, as Participant A, will be asked to choose how much of 10,000 KRW to transfer to your partner taking the role of Participant B. You will need to choose one out of 11 options.

In case you are selected as Participant B and your partner as Participant A, you will need to consider all possible situations of your partner's decision and make a choice of how much to return in each of these possible situations of your partner's decision. This is presented below.

Decision problem 2: Your role is Participant B and your partner's role is Participant A.

- Please write down the amount you want to return in each column. You need to make a choice in each of 10 columns. In each column the amount you choose to return should lie between 0 and the amount you received, and cannot exceed the amount you received.

Transfer percentage by your partner as Participant A	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Money your partner currently keeps	10,000	9,000	8,000	7,000	6,000	5,000	4,000	3,000	2,000	1,000	0
Money you received	0	3,000	6,000	9,000	12,000	15,000	18,000	21,000	24,000	27,000	30,000
Your choice	0										

The first column from the left (after the far left-hand column) represents a situation that your partner as Participant A kept 10,000 KRW for him-/herself and transferred nothing to you. In this case, you have no money available for the decision of how much to return. (Therefore, your choice is set to be zero.)

The second column (Transfer percentage by your partner: 10%) presents a situation that your partner transferred 1,000 KRW (10% of 10,000 KRW) to you. As mentioned before, this transferred amount is tripled and thus 3,000 KRW is delivered to you. Therefore, you receive 3,000 KRW as Participant B. In this case, you will be asked to choose how much to return to your partner out of 3,000 KRW. You will need to write down the exact amount of money you want to return at the bottom of this column. In order to illustrate the determination of final earnings, let us consider an example in which you return to your partner 1,000 KRW out of 3,000 KRW. The final earnings you will receive are 2,000 KRW and your partner will receive 10,000 KRW as the sum of 1,000 KRW (you returned) and 9,000 KRW (your partner has kept).

Let us consider the eighth column (Transfer percentage by your partner: 70%) as another example. In this case, your partner decided to keep 3,000 KRW for him-/herself and transfer 7,000 KRW (70% of 10,000 KRW) to you. Again, you receive 21,000 KRW because this transferred amount of 7,000 KRW is tripled. You will be asked to decide how much to return to your partner out of 21,000 KRW. To illustrate the determination of final earnings, suppose that you decide to return 6,000 KRW out of 21,000 KRW. In this case, the final earnings for you are 15,000 KRW (21,000 KRW minus 6,000 KRW). Your partner will receive 9,000 KRW as the sum of 6,000 KRW (you returned) and 3,000 KRW (your partner has kept).

As Participant B, you will need to fill in the amount of money you want to return in each of all available columns.

If you do not have any question, please make decisions in each decision sheet when your partner is an NK refugee or an SK student. You will need to make decisions in each case of yourself being Participant A and Participant B.

After making all decisions, please fold decision sheets in half and put them in an envelope that we will carry around.

Finally, your earnings in this part will be determined as follows. First, we randomly determine whether your partner is an NK refugee or an SK student, and then determine with equal probability whether you or your partner is Participant A (and the other one is Participant B). After the roles of you and your partner have been selected, the final earnings are determined according to the decisions made by you and your partner in each selected role.

## Decision Sheet: Part 1

Write down your ID number: \_\_\_\_\_

**In each of the following three decision problems, you will receive KRW 10,000. In each problem, you are asked to allocate the money between two other participants. Please tick only one choice in each problem.**

Decision Problem 1: Two other participants are North Korean (NK) refugees who have arrived in South Korea since 2010.

[illegible]

Decision Problem 2: Two other participants are South Korean (SK) who were born in South Korea and are currently enrolled in a university in Seoul.

[illegible]

Decision Problem 3: One other participant is an NK refugee who has arrived in South Korea since 2010 and the other participant is a South Korean who was born in South Korea and is currently enrolled in a university in Seoul.

[illegible]

## Decision Sheet: part 2

**Write down your ID number:** \_\_\_\_\_

**Your partner is a North Korean (NK) refugee who has arrived in South Korea since 2010.** Please make allocation decisions in the following 8 decision problems.

Decision problem 1: You receive 10,000 KRW. Each 100 KRW allocated to your partner will be tripled.

[illegible]

Decision problem 2: You receive 15,000 KRW. Each 100 KRW allocated to your partner will be given as it is.

[illegible]

Decision problem 3: You receive 15,000 KRW. Each 100 KRW allocated to your partner will be doubled.

[illegible]

Decision problem 4: You receive 18,000 KRW. Each 100 KRW allocated to your partner will be doubled.

[illegible]

Decision problem 5: You receive 25,000 KRW. Each 100 KRW allocated to your partner will be given as it is.

[illegible]

Decision problem 6: You receive 30,000 KRW. Each 100 KRW allocated to your partner will be reduced by half.

[illegible]

Decision problem 7: You receive 30,000 KRW. Each 100 KRW allocated to your partner will be reduced by one third.

[illegible]

Decision problem 8: You receive 36,000 KRW. Each 100 KRW allocated to your partner will be reduced by half.

[illegible]

## Decision Sheet: part 2

**Write down your ID number:** \_\_\_\_\_

**Your partner is a South Korean (SK) who was born in South Korea and is currently enrolled in a university in Seoul.** Please make allocation decisions in the following 8 decision problems.

Decision problem 1: You receive 10,000 KRW. Each 100 KRW allocated to your partner will be tripled.

[illegible]

Decision problem 2: You receive 15,000 KRW. Each 100 KRW allocated to your partner will be given as it is.

[illegible]



Decision problem 3: You receive 15,000 KRW. Each 100 KRW allocated to your partner will be doubled.

[illegible]

Decision problem 4: You receive 18,000 KRW. Each 100 KRW allocated to your partner will be doubled.

[illegible]

Decision problem 5: You receive 25,000 KRW. Each 100 KRW allocated to your partner will be given as it is.

[illegible]

Decision problem 6: You receive 30,000 KRW. Each 100 KRW allocated to your partner will be reduced by half.

[illegible]

Decision problem 7: You receive 30,000 KRW. Each 100 KRW allocated to your partner will be reduced by one third.

[illegible]

Decision problem 8: You receive 36,000 KRW. Each 100 KRW allocated to your partner will be reduced by half.

[illegible]

## Decision Sheet: Part 3

Write down your ID number: \_\_\_\_\_

**Your partner is a North Korean refugee who has arrived in South Korea since 2010.** Please make decisions in the following 2 decision problems.

Decision problem 1: Your role is Participant A and your partner's role is Participant B.

[illegible]

Decision problem 2: Your role is Participant B and your partner's role is Participant A.

- Please write down the amount you want to return in each column. You need to make a choice in each of 10 columns. In each column the amount you choose to return should lie between 0 and the amount you received, and cannot exceed the amount you received.

[illegible]

### Decision Sheet: Part 3

Write down your ID number: \_\_\_\_\_

**Your partner is a South Korean who was born in South Korea and is currently enrolled in a university in Seoul.** Please make decisions in the following 2 decision problems.

Decision problem 1: Your role is Participant A and your partner's role is Participant B.

[illegible]

Decision problem 2: Your role is Participant B and your partner's role is Participant A.

- Please write down the amount you want to return in each column. You need to make a choice in each of 10 columns. In each column the amount you choose to return should lie between 0 and the amount you received, and cannot exceed the amount you received.

[illegible]

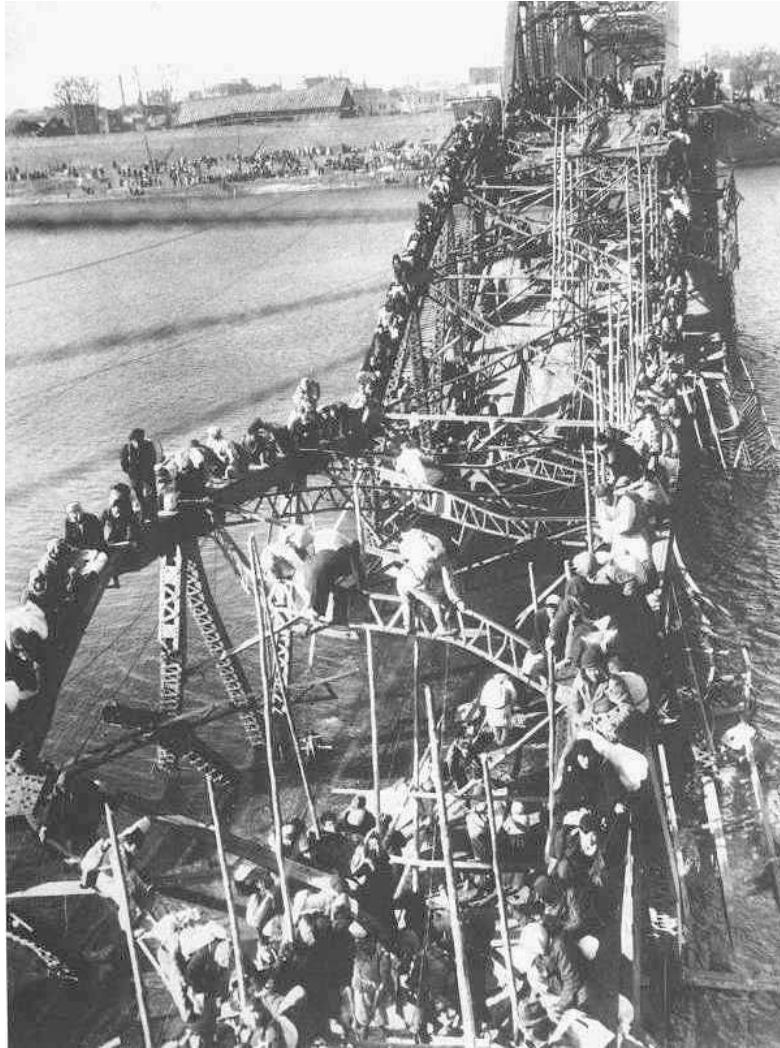
### Confrontation priming questionnaire

Following are the descriptions and the photos of inter-Korean historical events. We would like to know your general knowledge about historical relations between North Korea and South Korea. Please write down the historical event in the blank in case you know the event.

- A. \_\_\_\_\_ is an event that the forces of the Democratic People's Republic of Korea (North Korea) fired around 170 artillery shells and rockets at Yeonpyeong Island belonging to the Republic of Korea (South Korea). South Korean forces fired 80 shells in response to the attack. This event caused tens of casualties of South Korean soldiers. The number of casualties of North Koreans has not been precisely known.



- B. \_\_\_\_\_ is a full-scale war between South Korea and North Korea, lasting for about 3 years and 1 month. This war caused millions of casualties and destroyed the entire peninsula of Korea. In addition, it damaged industries heavily and resulted in the subsequent dark ages of economy and society.



- C. \_\_\_\_\_ is a joint military training exercise of the military of South Korea and United States Forces Korea that took place annually in order to prepare for an unexpected military situation in the Korean peninsula. It started first in 1969 in response to the possibility that North Korea attacks South Korea due to the withdrawal of United States Forces Korea. North Korea denounced the joint military exercise as a war game aimed at a northward invasion and requested persistently South Korea and USA to stop the military exercise.



### Peace-making priming questionnaire

Following are the descriptions and the photos of inter-Korean historical events. We would like to know your general knowledge about historical relations between North Korea and South Korea. Please write down the historical event in the blank in case you know the event.

- A. \_\_\_\_\_ is an inter-Korean summit that South Korean president Kim Dae-jung and North Korean leader Kim Jung-il held in Pyongyang. This summit was the first one held between two Korean leaders after the division of Korea. As a result of the summit, the June 15 Joint Declaration was announced. After the summit, non-government exchange and cooperation projects between South Korea and North Korea, including the reunions of separated families, Mount Keumgang Tourism, North Koreans' participation in sporting events in South Korea, were implemented in earnest.





- B. \_\_\_\_\_ is a special administrative industrial region of North Korea, located in the city of Gaesung, that has been built and operated in cooperation of North Korea and South Korea. Tens of thousands of North Korean workers have been working in this region. Since dishware and apparel companies started operations, tens of thousands of North Korean workers have been working in this region.



- C. \_\_\_\_\_ is referred to a unified team of South Korea and North Korea to compete in international sporting events. It represents all of Korea and uses the Korean Unification Flag. Both Koreas collaborated for the first time to make a unified team in 1991 in the 41<sup>st</sup> World Table Tennis Championships in Chiba, Japan. The two countries' teams marched together with the Korean Unification Flag under the name of 'Korea' in the opening ceremonies of the 2000 Summer Olympics in Sydney, Australia.



## Invitation letter to NK refugees

Hello. This is Professor Byung-Yeon Kim. I am the director of World Class University (WCU) project team in the Department of Economics at Seoul National University. As one assistant in the WCU team contacted and informed you, the WCU team will conduct with North Korean refugees and South Korean residents a survey and an economics experiment that intend to enhance our understanding of political, economic, and cultural differences between South Korea and North Korea, and to investigate policies for social integration.

We thank you for expressing your willingness to take part in this study on a specified date. This will be conducted in the Department of Economics at Seoul National University. Please refer to the address and how to arrive at this building in the enclosed document.

You will earn 50,000 KRW as a participation fee (simply for showing up on time). In addition, you will earn extra money (the minimum is zero, the maximum is around 60,000 KRW, and the average amount around 30,000 KRW), depending on the results of the economics experiment. The exact amount you will earn will depend on the decisions of you and other participants in this study. 50,000 KRW will be first transferred to your bank account within a week after the completion of your participation into the study. The amount of money you earn in the experiment will be transferred to your bank account after the end of this entire study (about 2 or 3 weeks after the completion of your participation).

Your participation in this study is voluntary. If you decide to participate, all your responses will be anonymized, be used only for academic purpose, and never be used for any other purposes. Your private information will be kept strictly confidential.

If you have any question about this study, please feel free to contact the assistant in the WCU team (email information) or use the contact information of the WCU team (phone number: 02-880-6393; email: [sajeon@snu.ac.kr](mailto:sajeon@snu.ac.kr)).

**Please bring your personal ID – the residence card or the driving license – with the information about your bank account for money transfer.**

We look forward to your participation.

Professor Byeon-Yeon Kim  
Director of World Class University team  
Phone) 02-880-6370  
Seoul Gwan-Ak Gu Gwan-Ak Ro 1  
Seoul National University  
School of Social Sciences  
Department of Economics  
16 Dong 457 Ho WCU Admin Team

## Sample Invitation letter to SK students

Hello. This is Professor Byung-Yeon Kim. I am the director of World Class University (WCU) project team in the Department of Economics at Seoul National University (SNU). The WCU team will conduct with undergraduate students at SNU a survey and an economics experiment. Each session of the study is expected to last for about 2 hours. Below is the information about sessions.

Place: 16 Dong (Division of Social Sciences) 107 Ho

1. Session 1: between 9 am and 11 am on August 31, 2009
2. Session 2: between 12 pm and 2 pm on August 31, 2009
3. Session 3: between 9 am and 11 am on September 1, 2009
4. Session 4: between 12 pm and 2 pm on September 1, 2009
5. Session 5: between 9 am and 11 am on September 2, 2009
6. Session 6: between 12 pm and 2 pm on September 2, 2009

If you want to participate in one of the sessions, please sign up for the session you wish to participate by sending an email at [snusurvey@gmail.com](mailto:snusurvey@gmail.com) with the information about your full name, student registration number, birth place, and school of study. (We plan to recruit around 150 participants on a first-come first-served basis. In case we already had enough participants, we would notify this by email.)

You will earn 10,000 KRW as a participation fee (simply for showing up on time). In addition, you will earn extra money (the minimum is zero, the maximum is around 60,000 KRW, and the average amount around 30,000 KRW), depending on the results of the economics experiment. The exact amount you will earn will depend on the decisions of you and other participants in this study. The amount of money you earn in the experiment will be transferred to your bank account after the end of this entire study (about 2 or 3 weeks after the completion of your participation).

Your participation in this study is voluntary. If you decide to participate, all your responses will be anonymized, be used only for academic purpose, and never be used for any other purposes. Your private information will be kept strictly confidential.

If you have any question about this study, please feel free to contact the assistant in the WCU team (email information) or use the contact information of the WCU team (phone number: 02-880-6393; email: [sajeon@snu.ac.kr](mailto:sajeon@snu.ac.kr)).

Please bring **your student ID with the information about your bank account for money transfer**.

We look forward to your participation.

Professor Byeon-Yeon Kim  
Director of World Class University team  
Phone) 02-880-6370  
Seoul Gwan-Ak Gu Gwan-Ak Ro 1  
Seoul National University  
School of Social Sciences  
Department of Economics  
16 Dong 457 Ho WCU Admin Team

## **Survey Questionnaire for North Korean Refugees (Study 1)**

August 2011

Dear Sir/Madam,

This survey is conducted by World Class University (WCU) Project in the Department of Economics at Seoul National University.

All of your responses will be anonymously processed and will be used only for statistical analyses. Your answers will not be used for any other purposes. Please answer honestly as you read through each question.

Your participation in this survey will not produce any disadvantages or adverse consequences, and your private information will be kept strictly confidential. Therefore, please answer according to your experiences and thoughts.

Thank you very much for taking time despite your busy schedule.

Kim Byung-Yeon,

Project Director of WCU in the Department of Economics at Seoul National University

## I. Economics Activities while in North Korea

- Please provide your answer as of **one year before your defection** from North Korea. (Example: If you defected in July 2010, then please answer as of July 2009. If the questions require answers on an annual basis, please provide your answers based on the period from August 2008 to July 2009.)  
- For currency answers in North Korean Won, please write the value before the Currency Reform.

A1) Did you have an official job?

1. Yes → Please go to A2)

2. No → Please go to A17)

A2) What was the name of your work place?

Name: \_\_\_\_\_

A3) Which industry did your workplace belong to?

Industries	
1. Agriculture & Forestry	11. Finance & Insurance
2. Fishing	12. Real Estate & Leasing
3. Mining	13. Business Services
4. Manufacturing	14. Public Administration, National Defense & Social Security Administration
5. Electricity, Gas, and Water Services	15. Educational Services
6. Construction	16. Public Health & Social Welfare
7. Wholesale & Retail	17. Entertainment, Culture & Sports Services
8. Hotels & Restaurants	18. Other Public, Repair, & Private Services
9. Freight	19. Home Care
10. Communications	20. International/Foreign Organizations

A4) What was your main task at your workplace? Please specify and circle the best response from the table below.



Your task (please specify): \_\_\_\_\_

International Standard Classification of Occupations	
1. Chief executives, senior officials, and legislators	6. Skilled agricultural, forestry, and fishery workers
2. Professionals	7. Craft and related trades workers
3. Technicians and associate professionals	8. Plant and machine operators and assemblers
4. Clerical support workers	9. Elementary occupations
5. Service and sales workers	0. Armed forces occupations

A5) What was your position at the workplace?

1. Chief executive
2. High-level manager
3. Middle hierarchy
4. Lower-level manager
5. Low-level employee

A6) How many employees belonged to your workplace?

Approximately \_\_\_\_\_

A7) How many employees did you supervise?

1. I was not at the managing level.
2. 1-5 employee(s)
3. 6-10 employees
4. 10-50 employees
5. Over 50 employees

A8) What were the official number of working hours per week at your workplace?

1. 60 hours or more
2. 50-59 hours
3. 40-49 hours
4. 30-39 hours
5. Less than 30 hours

A9) Then, how many hours did you actually work per week at your workplace?

1. 60 hours or more
2. 50-59 hours
3. 40-49 hours
4. 30-39 hours
5. Less than 30 hours

A10) What was the reason that your actual working hours were less than the official working hours?

1. I did not have enough work to do although I worked according to the hours specified.
2. I did other work after finishing early.
3. I did other work by offering 8.3 money
4. I did not go to work nor offer 8.3 money
5. I used sick leave or vacation
6. My actual working hours were not less than the official hours.
7. Other (Specify: \_\_\_\_\_ )

A11) What was the reason that your actual working hours exceeded the official working hours?

1. I worked more voluntarily because I had a lot of work.
2. I had to work more because of the command from higher positions.
3. I additionally managed tasks of other employees.
4. My actual hours did not exceed my official hours.
5. Other (Specify: \_\_\_\_\_ )

A12) What was your monthly wage at the workplace?

\_\_\_\_\_ North Korean Won

A13) Did you receive anything other than wage or bonuses? Please circle all that apply.

1. Grains
2. Food excluding grains
3. Consumer goods other than food
4. Other (Specify: \_\_\_\_\_ )
5. None



A14) Did your workplace employ 8.3 workers?

1. Yes → Please go to A15)
2. No → Please go to A17)
3. Don't know → Please go to A17)

A15) (Please answer only if you answered "1. Yes" in A14)

If yes, what was the ratio of 8.3 workers to the entire work force?

1. Almost none or less than 5%
2. 5-10%
3. 10-20%
4. 20-30%
5. 30-40%
6. 40-50%
7. 50-60%
8. 60% or more

A16) Approximately how much money did a 8.3 worker pay at your workplace?

\_\_\_\_\_ % of monthly salary

A17) Did you do other work as your second job?

1. Yes → Please go to A18)      2. No → Please go to A32)

A18) Then, what did you do for your second job? Please circle all that apply.

	Small-patch farming	Livestock farming	Sale	Home/hand-made products	Smuggling	Repair	Other
Second job							

A19) How much did you make per month on average?

\_\_\_\_\_ North Korean Won

A20) What was the most important reason that you had a second job?

1. It was difficult to live with the money only from my first job.
2. In order to start a business
3. In order to help family/relatives
4. In order to purchase necessary goods
5. In order to save for the future
6. Other (Specify: \_\_\_\_\_ )

A21) How long did you have your second job?

\_\_\_\_\_ years

A22) How many hours per week did you spend for your second job?

1. 60 hours or more
2. 50-59 hours
3. 40-49 hours
4. 30-39 hours
5. less than 30 hours

A23) How many second jobs did you have, excluding small-patch farming and livestock farming, during the 1-year period before your defection?

1. One
2. Two
3. Three
4. Four or more

**A24) (Please answer A24 only if you answered that you have a second job other than small-patch farming and livestock farming in A18. Otherwise, please go to A32.)**

What did you do as your most important second job? What kind of products did you sell, and what kind of tasks did you do? Please answer as specifically as possible. (Example: Doe-gu-ri (되거리) selling, smuggling, three-wheel taxi, usury, selling food, TV repair, etc.)

A25) (Please answer only if you indicated that you did home production as your second job in A18. Otherwise, please go to A32.)

What kind of products did you produce by yourself? Please circle all that apply.

Products	
1. Food and/or processing food	8. Medicines
2. Clothes	9. Cigarettes
3. Shoes	10. Drugs
4. Soap	11. Frozen sweets (icecream)
5. Toothpaste	12. Candies
6. Pencils	13. Other (Specify: )
7. Alcoholic beverages	

**A26) (Please answer only if you answered that you did sales as your second job in A18. Otherwise, please go to A32.)**

How many people did you work together if you did sales as your second job?

1. By myself
2. 1-2 people
3. 3-4 people
4. 5 or more

**A27) Did you pay taxes (market tax, etc.) to the government if you did sales as your second job?**

1. Yes → **Go to A29)**      2. No → **Go to A28)**

**A28) What was your reason for not paying taxes to the government?**

1. Because it was difficult for get permission for sales
2. Because I did not know how to get permission for sales
3. Because selling was illegal
4. Because I intentionally avoided taxes in order to save money
5. Other (specify: )

**A29) Did you offer bribes when you engaged in sales?**

1. Yes, regularly → **Go to A31)**
2. Yes, irregularly → **Go to A31)**
3. Yes, once → **Go to A31)**

4. No, never. ➔ Go to A32)

A30) If you offered bribes when you engaged in sales, to whom did you offer bribes?  
Please circle all that apply.

- 1. Manager of factory or cooperative farm
- 2. Security agency officers
- 3. Policemen
- 4. Chief of Iminban
- 5. High government officials
- 6. Other (specify: )

A31) To whom did you pay the biggest amount of bribe when you did sales?

- 1. Manager of factory or cooperative farm
- 2. Security agency officers
- 3. Policemen
- 4. Chief of Iminban
- 5. High government officials
- 6. Other (specify: )

A32) **(Starting from this question, all respondents have to answer.)** How much bribe did your household pay? Please convert to monetary value if in-kind bribery.

Annually \_\_\_\_\_ (North Korean Won)

A33) Did you think that bribery was wide-spread at the time of your defection?

- 1. Strongly disagree
- 2. Disagree
- 3. Agree
- 4. Strongly agree
- 5. I don't know

A34) Who were the main recipients of bribes? Please choose two who received the most.

First		Second	
-------	--	--------	--

- 1. Manager of factory or cooperative farm
- 2. Security agency officers
- 3. Policemen
- 4. Chief of Iminban
- 5. High government officials
- 6. Other (specify: )

A35) Then, who was the most frequent bribe payer?

1. Factory worker or cooperative farmer
2. Domestic seller
3. Foreign trader
4. Home production seller
5. Other (specify: \_\_\_\_\_ )

A36) What do you think is the best reason for people's offering bribes?

1. To get promoted
2. To continue illegal business/sales
3. To start new business/sales
4. Not to get punished
5. Not to go to work
6. Other (Specify: \_\_\_\_\_ )

A37) What was your monthly average salary at your workplace?

Please indicate the actual amount that you received, not the official salary if different.

\_\_\_\_\_ North Korean Won 9. I did not work

A38) What was your/your household's monthly average government subsidy or pensions?

(Example: merit pensions, disability pensions, maternity subsidies, Inmin veterans subsidies, temporary subsidies, etc.)

\_\_\_\_\_ North Korean Won 9. Never received anything

A39) Have you ever been financially supported by other people for the purpose of living or starting sales business?

1. Yes → **Please go to A40)**      2. No → **Please go to A41)**

A40) Then how much did you receive annually? Please answer in North Korean currency.

\_\_\_\_\_ North Korean Won

A41) What was the total amount of your household income during the 1-year period prior to your defection?

Income Source			Amount
1. Income from workplace	1. Yes	2. No	(NKW)/year
2. Income from secondary source	1. Yes	2. No	(NKW)/year
3. Government subsidy	1. Yes	2. No	(NKW)/year
4. Financial support	1. Yes	2. No	(NKW)/year
5. Other household members' income	1. Yes	2. No	(NKW)/year
6. Other income	1. Yes	2. No	(NKW)/year
7. Total income	1. Yes	2. No	(NKW)/year

A42) What was your household's monthly average expense for basic living (clothing, eating, housing)?

\_\_\_\_\_ North Korean Won per month

A43) What was your household's income level (or quality of life level) in your city (town) **one year prior to defection**?

1. Very poor (below 80%)
2. Fairly poor (60-80%)
3. Average (40-60%)
4. Fairly rich (20-40%)

5. Very rich (top 20%)

A44) How was your household's balance when you compare income and expenditure during the **1-year period before your defection**?

1. We had more income than expenditure (Income > Expenditure)
2. We broke even (income = expenditure)
3. We had less income than expenditure (income < expenditure)

A45) **One year before your defection**, how much monthly income did you think was enough to cover basic living expenses for households in North Korea?

\_\_\_\_\_ North Korean Won

A46) Below are the questions about North Korea's currency reform (the act of exchanging 100 old Won with 1 new Won) in December 2009. Please circle one for each question by recalling **the situations right before your defection**.

Perception on the currency reform	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
<b>1. Currency reform is a failed policy</b>	1	2	3	4	5
<b>2. People's dissatisfaction on the government increased because of the reform</b>	1	2	3	4	5
<b>3. North Korean government will have more difficulties in maintaining power because of the reform.</b>	1	2	3	4	5
<b>4. The number of markets decreased because of the reform.</b>	1	2	3	4	5
<b>5. The economy worsened because of the reform.</b>	1	2	3	4	5
<b>6. The reform was the main reason for my defection</b>	1	2	3	4	5



A47) How did your income change after the currency reform?

1. My income decreased by more than 50%
2. My income decreased by more than 25%
3. My income decreased by 0-25%
4. No influence
5. My income increased by 0-25%
6. My income increased by over 25%
7. My income increased by over 50%

A48) Did you lose money because you had not been able to exchange all of your money during the currency reform?

1. Yes → Please go to A49)
2. No → Please go to B1)

A49) How much money did you lose because you had not been able to exchange all of your money during the currency reform?

\_\_\_\_\_ North Korean Won (old currency)

## II. Perspectives while in North Korea

Please answer as if this is the time before your defection, that is, when you lived in North Korea.

B1) How necessary did you think reunification was at the time you lived in North Korea?

1. Extremely necessary
2. Somewhat necessary
3. Half-half/So-so
4. Somewhat not necessary
5. Not at all necessary

B2) How much do you think that North Koreans want reunification between North and South Korea?

1. Extremely
2. Somewhat
3. Not so much
4. Not at all

B3) When did you think that reunification was possible at the time you lived in North Korea?

1. Within 5 years
2. Within 10 years
3. Within 20 years
4. Within 30 years
5. 30 +years later
6. Impossible

B4) How much did you think that reunification would benefit North Korea?

1. Extremely
2. Somewhat
3. Not so much
4. Not at all

B5) Then how much did you think that reunification would benefit yourself?

1. Extremely

3. Somewhat
4. Not so much
5. Not at all

B6) How did you think that North and South Koreans would get along after reunification?

1. Very well
2. Somewhat well
3. Somewhat awkwardly
4. Not at all

B7) From North Korea's perspective, what did you think of South Korea when you lived in North Korea?

1. A country in need of North Korea's help.
2. A country to cooperate with.
3. A good competitor
4. Suspicious
5. An adversary that threatens security

B8) Have you been exposed to South Korean broadcasting, movies, dramas, songs(music), etc. while you lived in North Korea?

1. Occasionally → Please go to B9)
2. Once or twice → Please go to B9)
3. Not at all → Please go to B10)

B9) What was your impression when you were exposed to South Korean broadcasting, movies, dramas, songs(music), etc.?

1. Very familiar
2. A little familiar
3. Somewhat not familiar
4. Not at all familiar

B10) How much do you think that North Koreans are proud of Jucheism?

1. Extremely

2. A little
3. Not very much
4. Not at all

B11) At present, how much do you think is North Koreans' support rate for Kim Jong-il?

1. below 10%
2. 20%
3. 30%
4. 40%
5. 50%
6. 60%
7. 70%
8. 80%
9. 90%+

B12) At present, how much do you think is North Koreans' support rate for Kim Jong-un, Kim Jong-il's son?

1. below 10%
2. 20%
3. 30%
4. 40%
5. 50%
6. 60%
7. 70%
8. 80%
9. 90%+

B13) How many hours per week did you participate in ideological education (Labor organization, Iminban)?

1. I did not participate
2. 1-2 hours
3. 3-4 hours
4. 5-6 hours
5. 7-8 hours
6. 9+ hours

B14) How do you think of North Koreans' attitude on ideological education?

1. Extremely negative
2. Somewhat negative
3. So-so (neither negative nor positive)
4. Somewhat positive
5. Extremely positive

### III. Current Economic Activities (in South Korea)

The following are the questions on your current life in South Korea. Please answer based on your present life in South Korea.

C1) How was your working capability during the past week? Regardless of your current economic activities or conditions, please indicate your level of capacity.

1. Able to work → Please go to C3)
2. Able to do simple tasks (second job at home) → Please go to C3)
3. Not able to work due to serious illness/disability/old-age → Please go to C2)

C2) Why are you unable to work?

If not applicable, ask C1) again and indicate '1' or '2'

1. Serious disability
  2. Disease/injury
  3. No motivation due to old age
- Please go to C11) after answering

C3) What was your main economic activity for the past week?

1. Regular worker (permanent job) : Contract period 1+ years, or permanent. → Please go to C4)
2. Temporary worker (contract job) : Contract period 1 month – 1year  
→ Please go to C4)
3. One day temporary worker (one day job) : Contract period less than 1 month, frequently changing workplace  
→ Please go to C4)
4. Self-reliance (job for low-income individuals) : Temporary work offered for low-income individuals at district office, etc.  
→ Please go to C4)
5. Employer : Business person that employs paid workers  
→ Please go to C4)
6. Self-employed : Business person that employs oneself or family members  
→ Please go to C4)
7. Helping out family business : Unpaid work at family business

8. Unemployed (looking for job) : Actively sought for jobs for the past 4 weeks
9. Inactive : Domestic chores, Raising children, Student, Military duty, Gave up employment, no desire for employment, etc.

C3-1) What is your reason for not working?

If not applicable, go back to C3)

1. Domestic chores
2. Raising children
3. Student
4. Military duty
5. Gave up employment
6. No desire for employment
7. Temporary health problems
8. Other (specify: )

➔ Please go to C15) after answering

### [Economic Activities]

C4) What kind of job do you have now? Please tell us your occupation and choose the appropriate job classification.

Occupation: ( ), Position: ( )

- |  |  |
|--|--|
| 1. Chief executives, senior officials, and legislators | 6. Skilled agricultural, forestry, and fishery workers |
| 2. Professionals                                       | 7. Craft and related trades workers                    |
| 3. Technicians and associate professionals             | 8. Plant and machine operators and assemblers          |
| 4. Clerical support workers                            | 9. Elementary occupations                              |
| 5. Service and sales workers                           |  |

C5) How many employees belong to your company?

1. 1-4
2. 5-9
3. 10-29

4. 30-99
5. 100-299
6. 300+

C6) What is your monthly average wage? Please indicate your average monthly income from work. If irregular, you can divide the annual income by 12.

\_\_\_\_\_ ( in 10 thousand Korean Won)

C7) Please indicate your monthly average working days and weekly average working hours.

C7-1) Monthly average working days (                      )

C7-2) Weekly average working hours (                      )

C8) How did you find out about the vacancy for your current job?

1. Through local community paper/notice (벼룩시장)
2. Recommendation from other North Korean defector
3. Recommendation from a South Korean
4. Through public employment service center
5. From online employment bulletin
6. Recommendation from church or private organization
7. Through personal protection officer
8. Other (specify:                      )

C9) When did you start your current job?

Year (              ) month (              )

C10) Did you previously have a job?

1. Yes              → Please go to C10-1

2. No → Please go to

**C11**



C10-1) Why did you quit your previous job?

1. Health problems
2. To receive a higher salary
3. To learn new things
4. Closing down/employment squeeze of the company
5. Child delivery/raising
6. Bad relationships with coworkers or bosses
7. Long-term visit abroad due to personal affairs
8. To be guaranteed a higher position
9. For better working conditions
10. End of the contract period
11. Fired
12. Other (Specify: \_\_\_\_\_ )

C11) What is **your household's** monthly income as of May 2011? Please divide the annual income by 12. If not applicable, please indicate "0." **7.**  
**The total monthly income** has to equal the sum of each income source (from 1 to 6).

Category	Details	Amount							
From labor	1. Monthly Salary (Permanent job, temporary job, second job, etc.) (→ has to be bigger than C6)	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won
From assets	2. Income from assets (interests, monthly rent, etc.)	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won
From the government	3. Income Support	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won
	4. Subsidies (housing, employment, etc.)	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won
From private sector	5. Relatives, church, NGO, company, etc.	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won
Other	6. Other (specify: _____ )	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousand	tens of thousand	Won

7. Total monthly income	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	tens of thousa nd	Won
-------------------------	--------------------	------	----------------------	--------------------	----------	---------------------------------	-------------------------	-----

C12) What is **your household's** monthly expenditure as of May 2011?  
Please divide the annual expenditure by 12 and indicate "0" if not applicable.

Category	Details	Amount						
Housing	1. Rent and utility costs	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
Basic living	2. Food & transportation costs, internet & phone bills, allowances, taxes, etc.	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
Education	3. Education costs for yourself or your children	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
Leisure	4. Movies, travel, gym, hobbies, etc.	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
Family not living together	5. Transfers to family living in Korea	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
	6. Transfers to family living abroad (in North Korea)							
Other	7. Other (specify: )	tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won
8. Total monthly expenditure		tens of bil.	bil.	hundred s of mil.	tens of mil.	mil .	hundre ds of thousan d	Won

C13) Are you satisfied with your current job?

1. Extremely satisfied
2. Somewhat satisfied
3. Neither satisfied nor dissatisfied
4. Somewhat dissatisfied
5. Extremely dissatisfied

C14) What is **your household's** total asset as of May 31<sup>st</sup>, 2011? If not applicable, please indicate "0" and write in the amount of housing deposits (jeonse) in "2. Occupied real estate."

Category	Details	Amount							
Possessed real estate	1. Market price of owned apartments, land, buildings, etc.	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousands	tens of thousands	Won
Occupied real estate	2. Security deposits, key money paid in exchange for using the real estate possessed by others	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousands	tens of thousands	Won
Financial asset	3. Returnable money (savings, insurance, stocks, etc.)	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousands	tens of thousands	Won
Other asset	4. Cars, jewelry, etc.	tens of bil.	bil.	hundreds of mil.	tens of mil.	mil.	hundreds of thousands	tens of thousands	Won

[Subjective Economic level]

C15) What do you think is the appropriate amount of money to cover basic living expenses for your household to live in South Korea?

\_\_\_\_\_ (ten thousand Won)

C16) What do you think is your standard of living in South Korea?

1. High
2. Middle high
3. Middle
4. Middle low
5. Low

C17) What was your standard of living in North Korea?

1. High
2. Middle high

3. Middle
4. Middle low
5. Low

C18) Do you think that you can improve your living standards by working hard in South Korea?

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

C19) How you faced discrimination at your workplace because you are a defector from North Korea?

Reasons	1. Very	2. A little	3. Not so much	4. Not at all
1. Being rejected for job	1	2	3	4
2. Discrimination in wages and salaries	1	2	3	4
3. Discrimination in promotion and positions	1	2	3	4
4. Discrimination in work assignment (assignment to difficult tasks, etc.)	1	2	3	4
5. Being shunned by coworkers	1	2	3	4
6. Being forced to resign or fired	1	2	3	4

#### IV. Current Perspectives (in South Korea)

The following questions concern your present life in South Korea. Please answer based on your current life in South Korea.

D1) Have you enrolled in general education institutions (elementary, middle, high schools, university, online university, etc.) or taken General Equivalency Diploma (GED)?

1. Yes → Go to D1-1) 2. No

D1-1) Please indicate all schools or GED levels that you have enrolled or taken.

1. Elementary school
2. Middle school
3. High school
4. Elementary school equivalent diploma
5. Middle school equivalent diploma
6. High school equivalent diploma
7. College (2 or 4 year)
8. Online University
9. Graduate School

D2) What is your religion?

1. Protestant → Answer D2-1) and D2-2)
2. Catholic → Answer D2-1) and D2-2)
3. Buddhist → Answer D2-1) and D2-2)
4. Other religion (specify: ) → Answer D2-1) and D2-2)
5. None

D2-1) (If religious) When did you start believing your religion?

1. While in North Korea
2. After defection, before entering South Korea
3. After entering South Korea

D2-2) (If religious) Please indicate two main reasons for continuing your religious life.

Reason 1: ( ) Reason 2: ( )

1. To have peace of mind

	1. Strongly Agree	2. Somewhat Agree	3. Neutral	4. Somewhat Disagree	5. Strongly Disagree
<b>National and ethnic identity</b>					
<b>1. I'm proud of being a part of Korea (both South and North)</b>	1	2	3	4	5
<b>2. I'm proud of having Korean nationality</b>	1	2	3	4	5
<b>3. I want to contribute to Korea's development</b>	1	2	3	4	5
<b>4. I want to live abroad if I have a chance to immigrate</b>	1	2	3	4	5
<b>Market Economy</b>					
<b>5. I will borrow from bank if I want to start a business</b>	1	2	3	4	5

<b>but do not have money</b>					
<b>6. I will save more for the future even if I don't have enough for basic living</b>	1	2	3	4	5
<b>7. Studying is more important for the future than making money now</b>	1	2	3	4	5
<b>8. People need to be paid more if they perform well even if they work at the same place and position, and even if they are of the same age.</b>	1	2	3	4	5
<b>9. Capitalism is a ruthless system that does whatever it takes to make money.</b>	1	2	3	4	5
<b>10. It is better for the government than individuals to possess enterprises, land, residences, etc.</b>	1	2	3	4	5
<b>11. It is more comfortable to live in collectivist society without competition.</b>	1	2	3	4	5
<b>12. Competitions between individuals are necessary for economic development.</b>	1	2	3	4	5
<b>13. One's income should be rewarded for one's work.</b>	1	2	3	4	5
<b>Democracy</b>					
<b>14. A strong leader is necessary for national development.</b>	1	2	3	4	5
<b>15. A nation's leader should be chosen among several candidates by people's free will.</b>	1	2	3	4	5
<b>16. Multiparty system is necessary for collecting various opinions.</b>	1	2	3	4	5
<b>17. I make my own voting decision rather than relying on others' opinion.</b>	1	2	3	4	5
<b>18. One's liberty can be sacrificed for the benefit of</b>	1	2	3	4	5

<b>the whole.</b>					
<b>19. Human beings should be treated equally regardless of income, region, education, ethnicity, nationality, etc.</b>	1	2	3	4	5

D5) The following questions ask about your opinion and thoughts. Please answer honestly and comfortably.

	<b>1. Strongly Agree</b>	<b>2. Somewhat Agree</b>	<b>3. Neutral</b>	<b>4. Somewhat Disagree</b>	<b>5. Strongly Disagree</b>
<b>Perception on South Korean society</b>					
<b>19. South Korean society is a society in which one can succeed by trying</b>	1	2	3	4	5
<b>20. South Korean society is a society where law and order are respected.</b>	1	2	3	4	5
<b>21. South Korean society is a society that values diverse cultures.</b>	1	2	3	4	5
<b>22. South Korean society is a society where people can lead humane lives.</b>	1	2	3	4	5
<b>23. Human rights are respected in South Korean society.</b>	1	2	3	4	5
<b>24. South Korean society is a society where money is everything.</b>	1	2	3	4	5
<b>25. Social background (status, personal connections) is more important than efforts to succeed in South Korean society.</b>	1	2	3	4	5
<b>26. South Korean society is crime-racked.</b>	1	2	3	4	5
<b>Perception on acculturation</b>					
<b>27. I have a good understanding of the language used by South</b>	1	2	3	4	5



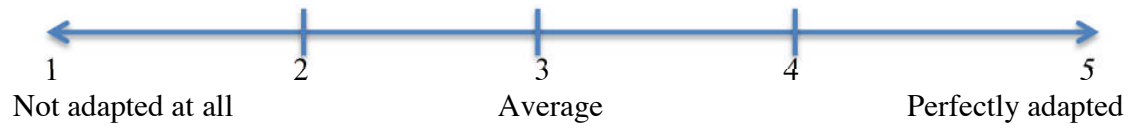
<b>Koreans.</b>					
<b>28. Now South Korean life is more convenient for me.</b>	1	2	3	4	5
<b>29. I trust a South Korean at first encounter.</b>	1	2	3	4	5
<b>30. I want to build relationships with more South Koreans.</b>	1	2	3	4	5
<b>31. I will be financially better-off 5 years later than now.</b>	1	2	3	4	5
<b>32. I'm satisfied with my present economic status.</b>	1	2	3	4	5
<b>33. When South Koreans treat me, they are overly conscious that I'm from North Korea.</b>	1	2	3	4	5
<b>34. South Koreans discriminate against me because I'm from North Korea.</b>	1	2	3	4	5
<b>35. I publicly reveal that I'm from North Korea.</b>	1	2	3	4	5
<b>Identity as North Korean</b>					
<b>36. I want my child to marry someone from North Korea.</b>	1	2	3	4	5
<b>37. I want to return to North Korea after reunification.</b>	1	2	3	4	5

D6) The following questions ask about your thoughts and opinions. There are no right or wrong answers, so please answer comfortably and honestly.

	<b>1. Strongly Agree</b>	<b>2. Somewhat Agree</b>	<b>3. Neutral</b>	<b>4. Somewhat Disagree</b>	<b>5. Strongly Disagree</b>
<b>Perception on North Korean defectors</b>					
<b>41. I trust a defector from North Korea at first encounter.</b>	1	2	3	4	5
<b>42. I want to build relationships with more North Korean defectors</b>	1	2	3	4	5

even if I don't know them well.					
43. Generally speaking, North Korean defectors lack motivation to become independent.	1	2	3	4	5
44. I want to participate in helping new North Korean defectors adapt in South Korea.	1	2	3	4	5
<b>Perception on reunification</b>					
52. Reunification is definitely needed for our people.	1	2	3	4	5
53. It is better for South and North to live separately in peace than reunification.	1	2	3	4	5
54. South and North Koreans will get along well once reunited.	1	2	3	4	5
<b>Perception and behavior</b>					
46. Most people can be trusted.	1	2	3	4	5
47. Most people treat me fairly.	1	2	3	4	5
48. Most people try to be helpful.	1	2	3	4	5
49. I often lend money to friends.	1	2	3	4	5
50. I often lend personal possessions (other than money) to friends.	1	2	3	4	5
51. I easily trust what strangers say.	1	2	3	4	5
52. I am trustworthy.	1	2	3	4	5
<b>Perception on neighboring countries</b>					
60. I have good feelings to U.S.	1	2	3	4	5
61. I have good feelings to China.	1	2	3	4	5
62. I have good feelings to Japan.	1	2	3	4	5
63. I have good feelings to Russia.	1	2	3	4	5

D7) How much do you think that you are adapted to South Korean life? Please indicate your level of adaptation where '1' is "not adapted at all" and '5' is "perfectly adapted."



## Questions about Demographic Information

Lastly, we will ask several questions for the purpose of data analysis. Your answers will be used only for statistical analysis and will not be used for any other purposes.

J1) Sex

1. Male

2. Female

J2) Age: (            )

J3) Number of family members living together : total (        )

Spouse	Children	Parents, grandparents	Grandchildren	Other household members
1. Yes 2. No				

J4) Birthplace in North Korea

1. North Hamgyong
2. South Hamgyong
3. North Pyongan
4. South Pyongan
5. North Hwanghae
6. South Hwanghae
7. Ryanggang
8. Chagang
9. Pyongyang
10. Kaesong
11. Kangwon

J5) Education in North Korea

1. None
2. Inmin dropout
3. Inmin graduate
4. High school dropout
5. High school graduate
6. Technical college dropout
7. Technical college graduate
8. University dropout

- 9. University graduate
- 10. Post graduate or higher

J6) Dates of defection and entry to South Korea

- J5-1. First defection: ( ) year , ( ) month
- J5-2. Entry to South Korea: ( ) year, ( ) month
- J5-3. Duration of stay in the third country: ( ) years ( ) months  
→ It has to equal the difference between J5-2 and J5-1
- J5-4. Final defection from North Korea: ( )year, ( ) month

J7) What were your two biggest reasons to leave North Korea?

First reason: ( ) Second reason: ( )

- 1. Lack of food and economic trials
- 2. Threat to personal security
- 3. Recommendations from neighbors
- 4. Recommendations from North Korean defectors
- 5. Following defecting family members
- 6. To find already defected family members.
- 7. To make more money
- 8. To search for political/social freedom
- 9. Hatred towards North Korean system
- 10. To give better future for my children
- 11. Other (specify: )

J8) What was your main/longest-held job in North Korea? Please choose one.

- 1. laborer
- 2. farmer
- 3. soldier
- 4. waiter/waitress (봉사원)
- 5. fisher
- 6. office worker
- 7. manger
- 8. professional (teacher, doctor, etc.)
- 9. artist/sportsman
- 10. foreign currency dealer
- 11. housewife
- 12. student
- 13. other (specify: )
- 14. no job

J9) What was your main income source during the 1-year period before your defection?

1. Salary
2. Sales
3. Small-patch farming
4. Livestock farming
5. Bribery
6. Support from neighbors/relatives

J10) Then, do you have military experience?

1. Yes → Go to J10-1)                      2. No → Go to J11)

J10-1) How long was your military service period?  
(                      ) years

J11) Where you a Labor Party member when you lived in North Korea?

1. Yes    2. No

## Online Appendix II. Characteristics of North Korean refugees

	Study 1	Study 2
<b>Life in North Korea</b>		
Place of birth		
Provinces in border of China (Hamgyong North, Ryanggang, Chagang, Pyonggan North)	82.58	79.17
Education in North Korea		
Primary	9.02	61.11
Secondary	64.66	27.78
Higher	26.32	11.11
Father's education in North Korea		
Primary	N/A	2.78
Secondary	N/A	45.83
Higher	N/A	51.39
Mother's education in North Korea		
Primary	N/A	1.39
Secondary	N/A	61.11
Higher	N/A	37.50
Occupation in North Korea		
Blue-collar worker	28.36	N/A
Farmer	8.21	N/A
Soldier	14.18	N/A
White-collar worker	8.96	N/A
Professional (teacher, doctor, etc.)	3.73	N/A
Housework	6.72	N/A
Student	8.96	N/A
Others	20.90	N/A
Political affiliation in North Korea		
Membership of Workers' Party of North Korea	13.74	1.39
Parents' membership of Workers' Party of North Korea	N/A	59.72
Number of attendance of indoctrination meetings per week		
1	38.06	13.04
2	44.78	37.68
3	8.96	18.84
4 +	8.21	30.43
Economic activities in North Korea		
Formal sector	52.24	N/A
Sideline	75.19	N/A
Bribery		
Regularly	18.51	N/A
Irregularly	55.56	N/A
None	25.93	N/A
Income and expenditure		
Income > expenditure	30.08	N/A
Income = expenditure	24.81	N/A
Income < expenditure	45.11	N/A
Income change due to currency reform in 2009		
loss	84.21	N/A
no effect	12.03	N/A
gain	3.76	N/A
Loss of old currency due to currency reform in 2009	61.65	N/A

**Defection from North Korea**

Year of entry to SK		
≤ 2005	0.00	26.09
2006	0.00	11.59
2007	0.00	23.19
2008	0.00	15.94
2009	0.00	14.49
2010	76.52	8.70
2011	23.48	0.00
Length of stay in a third country		
0 month	3.79	0.00
1-2 months	62.87	9.37
3-4 months	16.66	12.50
5-12 months	16.69	20.32
longer than 1 year	0.00	57.81
Number of defection		
1	96.99	N/A
2 or 3	3.01	N/A
Reasons of defection*		
Food shortage and economic hardship	33.58	54.29
Threat to own safety	9.70	7.14
Personal persuasion	15.67	12.86
Family member(s) defected	29.85	50.00
Making money	13.43	12.86
Seeking liberty and anti North Korea	61.94	32.86
Better opportunities for children	17.16	4.29

**Life in South Korea**

Household structure		
Partnered	24.81	4.48
Number of household members	2.19	1.12
Formal education in SK	6.06	100.00
Monthly household income (unit: 10,000 KRW)		
below 50	12.71	40
50 ~ 100	33.05	30
100 ~ 150	22.03	21.43
150 ~ 200	17.8	7.14
200 +	14.41	1.43
Monthly expenditure (unit: 10,000 KRW)		
below 50	23.01	N/A
50 ~ 100	38.05	N/A
100 ~ 150	24.78	N/A
150 ~ 200	9.73	N/A
200 +	4.42	N/A
Employment status		
Unemployed	30.89	N/A
Non-labor force	51.22	N/A
Religion		
Having a religion currently	53.38	84.72
Protestant condition on having a religion	84.51	98.36
Time of starting a religion		
After the entry to SK	87.32	55.00



# Online Appendix III

## Individual Types of Preferences for Giving

The self-other dictator game in our experimental design employs eight decision problems against each opponent group of NK and SK. Let  $(\pi_s, \pi_o)$  denote monetary payoff choices by an individual for *self*  $s$  and *other*  $o$ . Each decision problem is characterized by an endowment,  $m$ , and a relative price of giving,  $p$ , and feasible choices satisfy the budget constraint,  $\pi_s + p\pi_o = m$ . Let  $\mathcal{M}$  denote the information about group identities of self and other.

We assume that individual subjects have well-defined preferences conditional on a pair  $\mathcal{M}$  of social categories of self and other, represented by the utility function  $U(\pi_s, \pi_o; \mathcal{M})$ . An individual subject then chooses  $(\pi_s, \pi_o)$  to maximize his or her utility function  $U(\pi_s, \pi_o; \mathcal{M})$  subject to the budget constraint,  $\pi_s + p\pi_o = m$ .

We focus on the four regular preference types, as below, that dictate distinctive behaviors. The experimental literature reports the presence of these types (e.g., Andreoni and Miller (2002)). In classifying subjects into these regular types, we first check whether an individual's behavior can be classified without noise. If it can, then we call them 'strong' type. For those who cannot be classified without noise, we minimize the Euclidean distance between the observed behavior and the behavior predicted by each preferences type and select the one giving the minimum distance. We call this a 'weak' type.

### Selfish type

$$U(\pi_s, \pi_o; \mathcal{M}) = \pi_s.$$

The selfish preference type allocates all money to self for the entire range of relative prices of giving,  $p$ .

### Altruistic type

$$U(\pi_s, \pi_o; \mathcal{M}) = \pi_o.$$

The pure altruistic type allocates all money to other for the entire range of prices,  $p$ .

### Leontief type

$$U(\pi_s, \pi_o; \mathcal{M}) = \min \{ \alpha \pi_s, \beta \pi_o \},$$

where  $\alpha > 0$  and  $\beta > 0$ . When  $\alpha = \beta$ , the Leontief type chooses an equal split of total money between self and other  $\pi_s = \pi_o$ , regardless of

the relative price of giving. When  $\alpha \neq \beta$ , the optimal choice  $(\pi_s, \pi_o)$  must satisfy the following condition that the money share for self,  $\frac{\pi_s}{\pi_s + \pi_o}$ , is constant.

$$\frac{\pi_s}{\pi_s + \pi_o} = \frac{\beta}{\alpha + \beta}.$$

In the analysis of classified types in Table 5, we focus on the case where  $\alpha = \beta$ .

### **Perfect substitute type**

$$U(\pi_s, \pi_o; \mathcal{M}) = \alpha\pi_s + \beta\pi_o,$$

where  $\alpha > 0$  and  $\beta > 0$ . The optimal demand for this type is determined by

$$\pi_s = \begin{cases} m & \text{if } p > \beta/\alpha \\ [0, m] & \text{if } p = \beta/\alpha \\ 0 & \text{if } p < \beta/\alpha \end{cases}$$

In the data analysis of Table 5, we restrict attention to the case where  $\alpha = \beta$ .

## Online Appendix IV

Appendix of Table 7. Regression analysis of giving behavior in the self-other dictator game

Dependent variable: Fraction of money given to other	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NK</i>	0.194*** (0.033)	0.155*** (0.033)	0.088** (0.044)	0.162*** (0.033)	0.098** (0.044)	0.093** (0.044)
<i>NKr</i>	0.083*** (0.009)	0.083*** (0.009)	0.089*** (0.009)	0.089*** (0.010)	0.094*** (0.011)	0.099*** (0.014)
<i>NK</i> × <i>NKr</i>	-0.073*** (0.013)	-0.069*** (0.013)	-0.075*** (0.015)	-0.078*** (0.015)	-0.088*** (0.017)	-0.089*** (0.018)
<b>Priming on historical events</b>						
Confrontation	-0.004 (0.023)	-0.006 (0.023)	0.004 (0.024)	-0.006 (0.024)	0.004 (0.025)	0.003 (0.025)
Peace-making	0.008 (0.024)	0.009 (0.024)	0.012 (0.025)	0.008 (0.024)	0.011 (0.025)	0.013 (0.025)
<b>Attitudes towards institutions</b>						
Market economy		-0.030*** (0.009)	-0.032*** (0.011)	-0.039*** (0.015)	-0.043*** (0.016)	-0.041** (0.016)
× <i>NK</i>				0.035* (0.020)	0.041** (0.021)	0.039* (0.022)
× <i>NKr</i>				-0.023** (0.011)	-0.021* (0.012)	-0.023* (0.013)
× <i>NK</i> × <i>NKr</i>				0.008 (0.016)	-0.000 (0.017)	0.002 (0.018)
Democracy		-0.007 (0.009)	-0.009 (0.010)	-0.009 (0.013)	-0.011 (0.013)	-0.011 (0.013)
× <i>NK</i>				-0.005 (0.020)	-0.004 (0.021)	-0.006 (0.021)
× <i>NKr</i>				0.007 (0.010)	0.006 (0.010)	0.007 (0.010)
× <i>NK</i> × <i>NKr</i>				0.000 (0.013)	0.001 (0.014)	-0.002 (0.015)
<b>Identity</b>						
Identity: Korean			0.021* (0.012)		0.022* (0.011)	0.034** (0.015)
× <i>NK</i>						-0.021 (0.025)
× <i>NKr</i>						-0.005 (0.011)
× <i>NK</i> × <i>NKr</i>						0.007 (0.015)
Identity: South Korean			-0.005 (0.011)		-0.004 (0.011)	-0.005 (0.013)
× <i>NK</i>						0.006 (0.024)
× <i>NKr</i>						-0.003 (0.012)
× <i>NK</i> × <i>NKr</i>						0.001 (0.016)
Attitudes towards SK society			0.010 (0.013)		0.011 (0.013)	-0.005 (0.017)
× <i>NK</i>						0.037 (0.026)
× <i>NKr</i>						0.012 (0.012)
× <i>NK</i> × <i>NKr</i>						-0.024 (0.018)

Appendix of Table 7 continuing at next page

Appendix of Table 7 continuing

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			0.017 (0.014)		0.016 (0.014)	0.012 (0.013)
× <i>NK</i>			-0.031 (0.023)		-0.029 (0.023)	-0.033 (0.022)
× <i>NKr</i>			0.028*** (0.010)		0.026** (0.010)	0.029*** (0.011)
× <i>NK</i> × <i>NKr</i>			-0.031* (0.017)		-0.030* (0.017)	-0.032* (0.018)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.004 (0.011)		0.004 (0.011)	0.007 (0.016)
× <i>NK</i>						0.003 (0.022)
× <i>NKr</i>						-0.010 (0.014)
× <i>NK</i> × <i>NKr</i>						0.000 (0.017)
Trustworthiness			-0.005 (0.011)		-0.005 (0.011)	0.007 (0.015)
× <i>NK</i>						-0.027 (0.021)
× <i>NKr</i>						-0.004 (0.015)
× <i>NK</i> × <i>NKr</i>						0.015 (0.019)
Fair			-0.000 (0.011)		-0.000 (0.011)	-0.008 (0.016)
× <i>NK</i>						0.036 (0.022)
× <i>NKr</i>						-0.034*** (0.011)
× <i>NK</i> × <i>NKr</i>						0.030* (0.018)
Helped			0.024** (0.011)		0.024** (0.011)	0.024 (0.017)
× <i>NK</i>						0.002 (0.023)
× <i>NKr</i>						0.022** (0.011)
× <i>NK</i> × <i>NKr</i>						-0.042** (0.017)
<b>Other attitudinal responses</b>						
Risk taking			-0.011 (0.010)		-0.012 (0.009)	-0.013 (0.012)
× <i>NK</i>						-0.003 (0.019)
× <i>NKr</i>						0.009 (0.010)
× <i>NK</i> × <i>NKr</i>						-0.008 (0.014)
Discriminated			-0.002 (0.010)		-0.003 (0.010)	0.008 (0.014)
× <i>NK</i>						-0.010 (0.021)
× <i>NKr</i>						-0.012 (0.010)
× <i>NK</i> × <i>NKr</i>						0.003 (0.014)

Appendix of Table 7 continuing at next page

Appendix of Table 7 continuing

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Other experimental controls</b>						
log(endowment)	-0.013** (0.006)	-0.013** (0.006)	-0.013** (0.006)	-0.013** (0.006)	-0.013** (0.006)	-0.013** (0.006)
log(relative price of giving)	-0.112*** (0.007)	-0.112*** (0.008)	-0.111*** (0.008)	-0.112*** (0.008)	-0.111*** (0.008)	-0.111*** (0.008)
Study 1	0.025 (0.020)	0.020 (0.020)	0.006 (0.022)	0.019 (0.020)	0.004 (0.022)	-0.004 (0.023)
Size of session	0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)
<b>Demographic information</b>						
Male	-0.028 (0.027)	-0.024 (0.026)	-0.030 (0.026)	-0.020 (0.026)	-0.027 (0.026)	-0.026 (0.025)
× <i>NK</i>	0.055 (0.037)	0.043 (0.037)	0.064* (0.038)	0.038 (0.037)	0.060 (0.038)	0.060 (0.038)
Age: 23 ~ 28	0.043 (0.030)	0.043 (0.028)	0.038 (0.028)	0.042 (0.028)	0.037 (0.027)	0.034 (0.027)
× <i>NK</i>	-0.061 (0.045)	-0.046 (0.045)	-0.005 (0.049)	-0.045 (0.044)	-0.006 (0.047)	-0.003 (0.049)
Age: 29 ~ 45	0.011 (0.034)	0.038 (0.035)	0.043 (0.039)	0.036 (0.034)	0.039 (0.038)	0.041 (0.039)
Age: 46 or older	0.092* (0.047)	0.123** (0.048)	0.128** (0.053)	0.124*** (0.048)	0.131** (0.053)	0.136*** (0.052)
Constant	0.314*** (0.066)	0.328*** (0.067)	0.373*** (0.074)	0.329*** (0.067)	0.374*** (0.074)	0.388*** (0.076)
Observations	7,184	7,056	6,560	7,056	6,560	6,560
R-squared	0.221	0.236	0.258	0.241	0.264	0.275

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. NK is an indicator of NK subject being a decision maker, while NKr is an indicator of NK subject being a recipient.

Appendix of Table 7. Regression analysis of giving behavior in the self-other dictator game: **NK subjects only**

Dependent variable: Fraction of money given to other	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	0.011 (0.010)	0.014 (0.010)	0.014 (0.012)	0.011 (0.011)	0.006 (0.013)	0.011 (0.011)
<b>Priming on historical events</b>						
Confrontation	0.045 (0.032)	0.050 (0.035)	0.055 (0.039)	0.050 (0.035)	0.055 (0.039)	0.055 (0.039)
Peace-making	0.048 (0.034)	0.050 (0.036)	0.040 (0.038)	0.050 (0.036)	0.040 (0.038)	0.040 (0.038)
<b>Attitudes towards institutions</b>						
Market economy		-0.011 (0.011)	-0.015 (0.013)	-0.003 (0.012)	-0.004 (0.015)	-0.004 (0.015)
× <i>NKr</i>				-0.015 (0.011)	-0.021* (0.012)	-0.021* (0.013)
Democracy		-0.007 (0.014)	-0.017 (0.015)	-0.011 (0.015)	-0.020 (0.016)	-0.019 (0.017)
× <i>NKr</i>				0.008 (0.009)	0.006 (0.010)	0.005 (0.011)
<b>Identity</b>						
Identity: Korean			0.018 (0.019)		0.018 (0.019)	0.017 (0.020)
× <i>NKr</i>						0.002 (0.010)
Identity: South Korean			-0.001 (0.019)		-0.001 (0.019)	0.000 (0.021)
× <i>NKr</i>						-0.002 (0.011)
Attitudes towards SK society			0.041** (0.020)		0.041** (0.020)	0.047** (0.022)
× <i>NKr</i>						-0.012 (0.014)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.020 (0.017)		-0.020 (0.017)	-0.021 (0.017)
× <i>NKr</i>			-0.003 (0.013)		-0.004 (0.014)	-0.002 (0.014)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.001 (0.014)		0.001 (0.014)	0.006 (0.016)
× <i>NKr</i>						-0.010 (0.011)
Trustworthiness			-0.016 (0.014)		-0.016 (0.014)	-0.022 (0.015)
× <i>NKr</i>						0.011 (0.011)
Fair			0.025* (0.013)		0.025* (0.013)	0.027* (0.016)
× <i>NKr</i>						-0.004 (0.014)
Helped			0.019 (0.014)		0.019 (0.014)	0.028* (0.016)
× <i>NKr</i>						-0.019 (0.013)
<b>Other attitudinal responses</b>						
Risk taking			-0.016 (0.013)		-0.016 (0.013)	-0.017 (0.014)
× <i>NKr</i>						0.001 (0.009)
Discriminated			-0.007 (0.013)		-0.007 (0.013)	-0.002 (0.015)
× <i>NKr</i>						-0.009 (0.010)
<b>Other experimental controls</b>						
log(endowment)	0.001 (0.009)	0.002 (0.009)	0.003 (0.010)	0.002 (0.009)	0.003 (0.010)	0.003 (0.010)
log(relative price of giving)	-0.113*** (0.012)	-0.113*** (0.013)	-0.109*** (0.013)	-0.113*** (0.013)	-0.109*** (0.013)	-0.109*** (0.013)
Study 1	0.027 (0.031)	0.024 (0.032)	-0.057 (0.042)	0.024 (0.032)	-0.057 (0.042)	-0.057 (0.042)
Size of session	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)
<b>Demographic information</b>						
Male	0.029 (0.026)	0.019 (0.027)	0.042 (0.029)	0.019 (0.027)	0.042 (0.029)	0.042 (0.029)
Age: 23 ~ 28	-0.024 (0.033)	-0.008 (0.034)	0.026 (0.041)	-0.008 (0.034)	0.026 (0.041)	0.026 (0.041)
Age: 29 ~ 45	0.003 (0.034)	0.027 (0.033)	0.047 (0.038)	0.027 (0.033)	0.047 (0.038)	0.047 (0.038)
Age: 46 or older	0.089* (0.046)	0.123*** (0.047)	0.149*** (0.050)	0.123*** (0.047)	0.149*** (0.050)	0.149*** (0.050)
Constant	0.351*** (0.100)	0.322*** (0.102)	0.323*** (0.117)	0.323*** (0.103)	0.326*** (0.118)	0.324*** (0.117)
Observations	3,264	3,136	2,704	3,136	2,704	2,704
R-squared	0.126	0.138	0.184	0.138	0.185	0.188

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NKr* is an indicator of NK subject being a recipient.

Appendix of Table 7. Regression analysis of giving behavior in the self-other dictator game: **SK subjects only**

Dependent variable: Fraction of money given to other	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	0.083*** (0.009)	0.083*** (0.009)	0.089*** (0.009)	0.089*** (0.010)	0.094*** (0.011)	0.099*** (0.014)
<b>Priming on historical events</b>						
Confrontation	-0.046 (0.032)	-0.051 (0.032)	-0.044 (0.033)	-0.051 (0.032)	-0.044 (0.033)	-0.044 (0.033)
Peace-making	-0.027 (0.034)	-0.027 (0.033)	-0.019 (0.035)	-0.027 (0.033)	-0.019 (0.035)	-0.019 (0.035)
<b>Attitudes towards institutions</b>						
Market economy		-0.052*** (0.016)	-0.053*** (0.017)	-0.041*** (0.015)	-0.043*** (0.016)	-0.042*** (0.016)
× <i>NKr</i>				-0.023** (0.011)	-0.021* (0.012)	-0.023* (0.013)
Democracy		-0.003 (0.014)	-0.006 (0.014)	-0.007 (0.013)	-0.009 (0.013)	-0.010 (0.013)
× <i>NKr</i>				0.007 (0.010)	0.006 (0.010)	0.007 (0.010)
<b>Identity</b>						
Identity: Korean			0.029* (0.015)		0.029* (0.015)	0.032** (0.015)
× <i>NKr</i>						-0.005 (0.011)
Identity: South Korean			-0.006 (0.014)		-0.006 (0.014)	-0.005 (0.013)
× <i>NKr</i>						-0.003 (0.012)
Attitudes towards SK society			0.000 (0.018)		0.000 (0.018)	-0.006 (0.018)
× <i>NKr</i>						0.012 (0.012)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			0.010 (0.014)		0.011 (0.014)	0.009 (0.013)
× <i>NKr</i>			0.028*** (0.010)		0.026** (0.010)	0.029*** (0.011)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.005 (0.018)		0.005 (0.018)	0.010 (0.016)
× <i>NKr</i>						-0.010 (0.014)
Trustworthiness			0.007 (0.016)		0.007 (0.016)	0.009 (0.014)
× <i>NKr</i>						-0.004 (0.015)
Fair			-0.022 (0.016)		-0.022 (0.016)	-0.005 (0.016)
× <i>NKr</i>						-0.034*** (0.011)
Helped			0.034* (0.018)		0.034* (0.018)	0.023 (0.017)
× <i>NKr</i>						0.022** (0.011)
<b>Other attitudinal responses</b>						
Risk taking			-0.007 (0.013)		-0.007 (0.013)	-0.011 (0.013)
× <i>NKr</i>						0.009 (0.010)
Discriminated			0.001 (0.015)		0.001 (0.015)	0.007 (0.014)
× <i>NKr</i>						-0.012 (0.010)
<b>Other experimental controls</b>						
log(endowment)	-0.024*** (0.007)	-0.024*** (0.007)	-0.024*** (0.007)	-0.024*** (0.007)	-0.024*** (0.007)	-0.024*** (0.007)
log(relative price of giving)	-0.111*** (0.009)	-0.111*** (0.009)	-0.112*** (0.009)	-0.111*** (0.009)	-0.112*** (0.009)	-0.112*** (0.009)
Study 1	0.031 (0.027)	0.024 (0.027)	0.021 (0.027)	0.024 (0.027)	0.021 (0.027)	0.021 (0.027)
Size of session	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
<b>Demographic information</b>						
Male	-0.032 (0.027)	-0.023 (0.026)	-0.031 (0.025)	-0.023 (0.026)	-0.031 (0.025)	-0.031 (0.025)
Age: 23 ~ 28	0.049* (0.030)	0.047* (0.028)	0.041 (0.027)	0.047* (0.028)	0.041 (0.027)	0.041 (0.027)
Constant	0.411*** (0.105)	0.430*** (0.105)	0.440*** (0.103)	0.428*** (0.105)	0.438*** (0.103)	0.435*** (0.104)
Observations	3,920	3,920	3,856	3,920	3,856	3,856
R-squared	0.152	0.179	0.220	0.180	0.221	0.224

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NKr* is an indicator of NK subject being a recipient.

Online Appendix of Table 8. Regression analysis of trust behavior: the first mover in the trust game

Dependent variable: Fraction of money invested by the first mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NK</i>	0.001 (0.041)	-0.025 (0.042)	-0.022 (0.056)	-0.021 (0.042)	-0.020 (0.057)	-0.011 (0.059)
<i>NKr</i>	0.034* (0.018)	0.034* (0.018)	0.035* (0.018)	0.035* (0.019)	0.035* (0.019)	0.017 (0.021)
<i>NK</i> × <i>NKr</i>	-0.043* (0.022)	-0.039* (0.022)	-0.035 (0.023)	-0.043* (0.023)	-0.036 (0.025)	-0.034 (0.031)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.689*** (0.043)	0.688*** (0.043)	0.676*** (0.047)	0.681*** (0.043)	0.671*** (0.047)	0.665*** (0.047)
<b>Priming on historical events</b>						
Confrontation	-0.020 (0.027)	-0.027 (0.028)	-0.034 (0.030)	-0.032 (0.028)	-0.039 (0.031)	-0.044 (0.032)
Peace-making	-0.020 (0.028)	-0.028 (0.028)	-0.021 (0.029)	-0.033 (0.028)	-0.026 (0.029)	-0.026 (0.031)
<b>Attitudes towards institutions</b>						
Market economy		-0.035*** (0.012)	-0.035*** (0.012)	-0.063*** (0.022)	-0.066*** (0.022)	-0.067*** (0.024)
× <i>NK</i>				0.068** (0.027)	0.070** (0.027)	0.074** (0.029)
× <i>NKr</i>				-0.007 (0.019)	-0.002 (0.019)	0.005 (0.022)
× <i>NK</i> × <i>NKr</i>				-0.014 (0.026)	-0.017 (0.027)	-0.033 (0.030)
Democracy		0.029** (0.012)	0.030** (0.013)	0.045** (0.020)	0.047** (0.021)	0.044** (0.021)
× <i>NK</i>				-0.050* (0.026)	-0.053* (0.027)	-0.047 (0.029)
× <i>NKr</i>				0.007 (0.018)	0.004 (0.019)	-0.002 (0.020)
× <i>NK</i> × <i>NKr</i>				0.012 (0.023)	0.018 (0.025)	0.018 (0.025)
<b>Identity</b>						
Identity: Korean			0.005 (0.015)		0.005 (0.015)	0.014 (0.025)
× <i>NK</i>						-0.012 (0.037)
× <i>NKr</i>						0.008 (0.029)
× <i>NK</i> × <i>NKr</i>						-0.014 (0.032)
Identity: South Korean			-0.002 (0.013)		0.000 (0.014)	-0.009 (0.024)
× <i>NK</i>						0.003 (0.033)
× <i>NKr</i>						0.005 (0.033)
× <i>NK</i> × <i>NKr</i>						0.023 (0.036)
Attitudes towards SK society			0.009 (0.018)		0.012 (0.018)	0.009 (0.026)
× <i>NK</i>						0.018 (0.039)
× <i>NKr</i>						-0.038* (0.022)
× <i>NK</i> × <i>NKr</i>						0.069** (0.028)

Appendix of Table 8 continuing at next page



Appendix of Table 8 continuing

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.014 (0.018)		-0.018 (0.018)	-0.024 (0.020)
× <i>NK</i>			0.030 (0.025)		0.034 (0.025)	0.042 (0.027)
× <i>NKr</i>			0.010 (0.019)		0.010 (0.020)	0.011 (0.021)
× <i>NK</i> × <i>NKr</i>			-0.009 (0.023)		-0.009 (0.024)	-0.016 (0.026)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.020 (0.014)		0.019 (0.013)	0.033 (0.022)
× <i>NK</i>						-0.028 (0.029)
× <i>NKr</i>						0.008 (0.023)
× <i>NK</i> × <i>NKr</i>						-0.013 (0.028)
Trustworthiness			-0.005 (0.012)		-0.003 (0.012)	-0.006 (0.020)
× <i>NK</i>						0.001 (0.030)
× <i>NKr</i>						0.008 (0.020)
× <i>NK</i> × <i>NKr</i>						0.003 (0.026)
Fair			0.013 (0.015)		0.013 (0.015)	0.013 (0.025)
× <i>NK</i>						0.009 (0.034)
× <i>NKr</i>						-0.027 (0.023)
× <i>NK</i> × <i>NKr</i>						0.029 (0.027)
Helped			0.010 (0.015)		0.010 (0.015)	0.028 (0.024)
× <i>NK</i>						-0.041 (0.035)
× <i>NKr</i>						0.002 (0.021)
× <i>NK</i> × <i>NKr</i>						-0.020 (0.028)
<b>Other attitudinal responses</b>						
Risk taking			0.020* (0.012)		0.020* (0.012)	0.022 (0.020)
× <i>NK</i>						-0.016 (0.027)
× <i>NKr</i>						-0.005 (0.022)
× <i>NK</i> × <i>NKr</i>						0.032 (0.027)
Discriminated			0.003 (0.013)		0.003 (0.013)	0.001 (0.024)
× <i>NK</i>						0.011 (0.029)
× <i>NKr</i>						-0.006 (0.021)
× <i>NK</i> × <i>NKr</i>						0.007 (0.023)

Appendix of Table 8 continuing at next page

Appendix of Table 8 continuing

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Other experimental controls</b>						
Study 1	0.040 (0.025)	0.037 (0.024)	0.047* (0.027)	0.032 (0.025)	0.042 (0.027)	0.034 (0.028)
Size of session	-0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)
<b>Demographic information</b>						
Male	0.022 (0.033)	0.032 (0.032)	0.023 (0.032)	0.040 (0.032)	0.032 (0.031)	0.029 (0.032)
× <i>NK</i>	0.027 (0.045)	0.018 (0.045)	0.019 (0.047)	0.006 (0.045)	0.009 (0.047)	0.002 (0.047)
Age: 23 ~ 28	0.079** (0.038)	0.069* (0.037)	0.057 (0.037)	0.063* (0.036)	0.050 (0.037)	0.047 (0.038)
× <i>NK</i>	-0.017 (0.058)	0.009 (0.058)	0.001 (0.064)	0.017 (0.058)	0.006 (0.063)	-0.012 (0.063)
Age: 29 ~ 45	0.017 (0.037)	0.034 (0.039)	0.024 (0.046)	0.035 (0.039)	0.020 (0.045)	-0.006 (0.047)
Age: 46 or older	0.026 (0.049)	0.040 (0.053)	0.041 (0.068)	0.040 (0.052)	0.039 (0.066)	0.027 (0.067)
Constant	0.117*** (0.043)	0.120*** (0.045)	0.117** (0.057)	0.131*** (0.046)	0.130** (0.058)	0.154** (0.061)
Observations	896	880	818	880	818	818
R-squared	0.400	0.414	0.414	0.423	0.423	0.437

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NK* is an indicator of *NK* subject being a decision maker, while *NKr* is an indicator of *NK* subject being a receipient.

Online Appendix of Table 8. Regression analysis of trust behavior: the first mover in the trust game  
(NK subjects only)

Dependent variable: Fraction of money invested by the first mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	-0.007 (0.013)	-0.003 (0.012)	0.003 (0.014)	-0.006 (0.013)	-0.000 (0.015)	-0.017 (0.021)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.595*** (0.063)	0.594*** (0.064)	0.552*** (0.073)	0.592*** (0.064)	0.549*** (0.074)	0.551*** (0.076)
<b>Priming on historical events</b>						
Confrontation	-0.051 (0.036)	-0.054 (0.038)	-0.062 (0.048)	-0.054 (0.038)	-0.062 (0.048)	-0.062 (0.048)
Peace-making	-0.034 (0.039)	-0.048 (0.040)	-0.038 (0.051)	-0.048 (0.040)	-0.038 (0.051)	-0.038 (0.052)
<b>Attitudes towards institutions</b>						
Market economy		-0.004 (0.015)	-0.008 (0.016)	0.008 (0.015)	0.003 (0.016)	0.008 (0.017)
× <i>NKr</i>				-0.024 (0.016)	-0.024 (0.018)	-0.034* (0.020)
Democracy		0.003 (0.016)	-0.003 (0.020)	-0.007 (0.017)	-0.015 (0.021)	-0.012 (0.021)
× <i>NKr</i>				0.020 (0.014)	0.023 (0.015)	0.016 (0.014)
<b>Identity</b>						
Identity: Korean			0.003 (0.026)		0.002 (0.026)	0.004 (0.027)
× <i>NKr</i>						-0.004 (0.012)
Identity: South Korean			0.006 (0.020)		0.006 (0.021)	-0.006 (0.023)
× <i>NKr</i>						0.024* (0.014)
Attitudes towards SK society			0.062** (0.031)		0.062** (0.031)	0.047 (0.033)
× <i>NKr</i>						0.030* (0.017)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			0.012 (0.018)		0.012 (0.018)	0.015 (0.018)
× <i>NKr</i>			0.002 (0.013)		0.002 (0.013)	-0.005 (0.016)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.002 (0.020)		0.003 (0.020)	0.006 (0.021)
× <i>NKr</i>						-0.006 (0.016)
Trustworthiness			-0.000 (0.019)		-0.000 (0.019)	-0.007 (0.022)
× <i>NKr</i>						0.014 (0.016)
Fair			0.025 (0.022)		0.025 (0.022)	0.024 (0.023)
× <i>NKr</i>						0.003 (0.014)
Helped			-0.020 (0.025)		-0.020 (0.025)	-0.010 (0.025)
× <i>NKr</i>						-0.019 (0.018)
<b>Other attitudinal responses</b>						
Risk taking			0.009 (0.016)		0.009 (0.016)	-0.004 (0.018)
× <i>NKr</i>						0.027* (0.015)
Discriminated			0.014 (0.017)		0.014 (0.018)	0.015 (0.018)
× <i>NKr</i>						-0.001 (0.011)
<b>Other experimental controls</b>						
Study 1	0.033 (0.037)	0.028 (0.037)	-0.049 (0.050)	0.028 (0.037)	-0.049 (0.050)	-0.049 (0.051)
Size of session	-0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
<b>Demographic information</b>						
Male	0.050 (0.033)	0.046 (0.033)	0.040 (0.037)	0.046 (0.033)	0.040 (0.037)	0.040 (0.038)
Age: 23 ~ 28	0.063 (0.046)	0.083* (0.047)	0.037 (0.051)	0.083* (0.047)	0.037 (0.051)	0.037 (0.052)
Age: 29 ~ 45	0.017 (0.038)	0.037 (0.039)	0.012 (0.048)	0.037 (0.039)	0.012 (0.048)	0.012 (0.049)
Age: 46 or older	0.030 (0.051)	0.046 (0.052)	0.060 (0.069)	0.046 (0.053)	0.060 (0.070)	0.060 (0.071)
Constant	0.157*** (0.055)	0.137** (0.056)	0.195*** (0.069)	0.140** (0.056)	0.198*** (0.070)	0.206*** (0.071)
Observations	406	390	336	390	336	336
R-squared	0.387	0.394	0.379	0.395	0.381	0.387

Notes. Robust standard errors are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. NKr is an indicator of NK subject being a recipient.

Appendix of Table 8. Regression analysis of trust behavior: the first mover in the trust game  
(SK subjects only)

Dependent variable: Fraction of money invested by the first mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	0.025 (0.019)	0.026 (0.019)	0.028 (0.019)	0.027 (0.020)	0.027 (0.020)	0.009 (0.022)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.792*** (0.057)	0.780*** (0.055)	0.753*** (0.060)	0.779*** (0.055)	0.753*** (0.060)	0.751*** (0.061)
<b>Priming on historical events</b>						
Confrontation	0.016 (0.043)	-0.003 (0.043)	-0.029 (0.044)	-0.003 (0.043)	-0.029 (0.044)	-0.029 (0.044)
Peace-making	0.005 (0.041)	-0.008 (0.039)	-0.016 (0.040)	-0.008 (0.039)	-0.016 (0.040)	-0.016 (0.041)
<b>Attitudes towards institutions</b>						
Market economy		-0.062*** (0.020)	-0.060*** (0.019)	-0.059*** (0.022)	-0.059*** (0.022)	-0.063*** (0.024)
× <i>NKr</i>				-0.005 (0.019)	-0.000 (0.019)	0.006 (0.023)
Democracy		0.049*** (0.017)	0.045** (0.018)	0.047** (0.020)	0.044** (0.021)	0.047** (0.021)
× <i>NKr</i>				0.005 (0.019)	0.002 (0.019)	-0.004 (0.020)
<b>Identity</b>						
Identity: Korean			0.016 (0.018)		0.016 (0.018)	0.012 (0.025)
× <i>NKr</i>						0.009 (0.030)
Identity: South Korean			-0.007 (0.018)		-0.007 (0.018)	-0.009 (0.024)
× <i>NKr</i>						0.005 (0.033)
Attitudes towards SK society			-0.009 (0.023)		-0.009 (0.023)	0.011 (0.025)
× <i>NKr</i>						-0.039* (0.022)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.025 (0.018)		-0.025 (0.019)	-0.025 (0.019)
× <i>NKr</i>			0.007 (0.020)		0.007 (0.020)	0.007 (0.021)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.036* (0.019)		0.036* (0.019)	0.032 (0.022)
× <i>NKr</i>						0.008 (0.023)
Trustworthiness			-0.004 (0.017)		-0.004 (0.017)	-0.009 (0.020)
× <i>NKr</i>						0.010 (0.020)
Fair			0.003 (0.021)		0.003 (0.021)	0.015 (0.025)
× <i>NKr</i>						-0.023 (0.023)
Helped			0.026 (0.019)		0.026 (0.019)	0.026 (0.024)
× <i>NKr</i>						0.001 (0.022)
<b>Other attitudinal responses</b>						
Risk taking			0.020 (0.016)		0.020 (0.016)	0.023 (0.020)
× <i>NKr</i>						-0.005 (0.022)
Discriminated			0.002 (0.021)		0.002 (0.021)	0.004 (0.023)
× <i>NKr</i>						-0.005 (0.021)
<b>Other experimental controls</b>						
Study 1	0.029 (0.032)	0.022 (0.032)	0.051 (0.033)	0.022 (0.032)	0.051 (0.033)	0.051 (0.034)
Size of session	-0.004 (0.004)	-0.004 (0.004)	-0.003 (0.004)	-0.004 (0.004)	-0.003 (0.004)	-0.003 (0.004)
<b>Demographic information</b>						
Male	0.027 (0.032)	0.045 (0.032)	0.030 (0.031)	0.045 (0.032)	0.030 (0.031)	0.030 (0.032)
Age: 23 ~ 28	0.069* (0.039)	0.052 (0.038)	0.044 (0.039)	0.052 (0.038)	0.044 (0.039)	0.044 (0.040)
Constant	0.170 (0.114)	0.196* (0.113)	0.172 (0.119)	0.196* (0.114)	0.172 (0.119)	0.182 (0.120)
Observations	490	490	482	490	482	482
R-squared	0.410	0.439	0.464	0.439	0.464	0.467

Notes. Robust standard errors are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NKr* is an indicator of NK subject being a recipient.

Appendix of Table 9. Regression analysis of reciprocity behavior: the second mover in the trust game

Dependent variable: Fraction of money returned by the second mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NK</i>	0.011 (0.030)	-0.006 (0.030)	-0.004 (0.038)	-0.004 (0.030)	-0.002 (0.038)	-0.003 (0.040)
<i>NKr</i>	0.009 (0.008)	0.009 (0.008)	0.010 (0.008)	0.008 (0.009)	0.009 (0.009)	0.000 (0.011)
<i>NK</i> × <i>NKr</i>	-0.019 (0.014)	-0.016 (0.013)	-0.015 (0.015)	-0.019 (0.015)	-0.018 (0.016)	-0.008 (0.017)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.511*** (0.036)	0.507*** (0.036)	0.512*** (0.037)	0.506*** (0.037)	0.510*** (0.038)	0.504*** (0.037)
1{27K}	0.029*** (0.004)	0.030*** (0.004)	0.030*** (0.004)	0.030*** (0.004)	0.030*** (0.004)	0.030*** (0.004)
<b>Priming on historical events</b>						
Confrontation	-0.018 (0.019)	-0.021 (0.019)	-0.017 (0.020)	-0.023 (0.019)	-0.018 (0.020)	-0.018 (0.020)
Peace-making	-0.033* (0.018)	-0.036** (0.018)	-0.029 (0.018)	-0.038** (0.018)	-0.031 (0.019)	-0.026 (0.019)
<b>Attitudes towards institutions</b>						
Market economy		-0.003 (0.009)	0.004 (0.010)	-0.004 (0.012)	0.002 (0.012)	-0.001 (0.013)
× <i>NK</i>				0.009 (0.020)	0.009 (0.020)	0.011 (0.021)
× <i>NKr</i>				-0.011 (0.011)	-0.010 (0.011)	-0.005 (0.013)
× <i>NK</i> × <i>NKr</i>				0.008 (0.016)	0.007 (0.017)	0.000 (0.018)
Democracy		-0.000 (0.008)	-0.002 (0.008)	-0.003 (0.010)	-0.007 (0.011)	-0.009 (0.011)
× <i>NK</i>				-0.001 (0.018)	0.004 (0.019)	0.007 (0.020)
× <i>NKr</i>				0.019** (0.009)	0.018* (0.009)	0.019* (0.010)
× <i>NK</i> × <i>NKr</i>				-0.029* (0.016)	-0.029 (0.018)	-0.030 (0.019)
<b>Identity</b>						
Identity: Korean			-0.001 (0.010)		-0.001 (0.010)	0.004 (0.012)
× <i>NK</i>						-0.011 (0.022)
× <i>NKr</i>						0.018* (0.010)
× <i>NK</i> × <i>NKr</i>						-0.022 (0.014)
Identity: South Korean			-0.007 (0.009)		-0.006 (0.009)	-0.007 (0.012)
× <i>NK</i>						-0.005 (0.020)
× <i>NKr</i>						0.002 (0.011)
× <i>NK</i> × <i>NKr</i>						0.001 (0.016)
Attitudes towards SK society			-0.017 (0.011)		-0.016 (0.011)	-0.023* (0.013)
× <i>NK</i>						0.029 (0.024)
× <i>NKr</i>						-0.008 (0.010)
× <i>NK</i> × <i>NKr</i>						0.013 (0.015)

Appendix of Table 9 continuing at next page

Appendix of Table 9 continuing

	(1)	(3)	(4)	(5)	(6)	(7)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.009 (0.010)		-0.009 (0.010)	-0.010 (0.010)
× <i>NK</i>			0.001 (0.017)		0.001 (0.017)	-0.006 (0.018)
× <i>NKr</i>			0.012 (0.009)		0.010 (0.009)	0.006 (0.009)
× <i>NK</i> × <i>NKr</i>			-0.008 (0.014)		-0.008 (0.014)	-0.002 (0.016)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.017 (0.011)		0.017 (0.012)	-0.017 (0.014)
× <i>NK</i>						0.047** (0.024)
× <i>NKr</i>						0.033*** (0.011)
× <i>NK</i> × <i>NKr</i>						-0.032** (0.016)
Trustworthiness			0.000 (0.008)		0.001 (0.008)	0.010 (0.012)
× <i>NK</i>						-0.006 (0.018)
× <i>NKr</i>						-0.012 (0.012)
× <i>NK</i> × <i>NKr</i>						0.009 (0.016)
Fair			0.008 (0.010)		0.008 (0.010)	0.003 (0.011)
× <i>NK</i>						0.014 (0.022)
× <i>NKr</i>						-0.018* (0.010)
× <i>NK</i> × <i>NKr</i>						0.021 (0.019)
Helped			0.001 (0.013)		0.001 (0.013)	0.028** (0.013)
× <i>NK</i>						-0.056* (0.028)
× <i>NKr</i>						0.000 (0.010)
× <i>NK</i> × <i>NKr</i>						0.001 (0.019)
<b>Other attitudinal responses</b>						
Risk taking			-0.016* (0.008)		-0.016* (0.008)	-0.015 (0.011)
× <i>NK</i>						-0.001 (0.018)
× <i>NKr</i>						-0.011 (0.009)
× <i>NK</i> × <i>NKr</i>						0.026* (0.015)
Discriminated			-0.004 (0.007)		-0.004 (0.007)	-0.002 (0.010)
× <i>NK</i>						-0.006 (0.014)
× <i>NKr</i>						-0.000 (0.010)
× <i>NK</i> × <i>NKr</i>						0.006 (0.013)

Appendix of Table 9 continuing at next page

Appendix of Table 9 continuing

	(1)	(3)	(4)	(5)	(6)	(7)
<b>Other experimental controls</b>						
Study 1	0.060*** (0.014)	0.057*** (0.014)	0.067*** (0.018)	0.056*** (0.014)	0.065*** (0.018)	0.064*** (0.018)
Size of session	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)
<b>Demographic information</b>						
Male	-0.038** (0.019)	-0.038** (0.019)	-0.040** (0.019)	-0.036* (0.019)	-0.038** (0.019)	-0.041** (0.019)
× <i>NK</i>	0.050 (0.032)	0.044 (0.032)	0.062* (0.032)	0.041 (0.032)	0.060* (0.033)	0.053* (0.032)
Age: 23 ~ 28	0.054*** (0.020)	0.054*** (0.020)	0.057*** (0.020)	0.051*** (0.019)	0.055*** (0.020)	0.053*** (0.020)
× <i>NK</i>	-0.070* (0.037)	-0.056 (0.036)	-0.052 (0.042)	-0.053 (0.036)	-0.050 (0.041)	-0.068 (0.046)
Age: 29 ~ 45	0.020 (0.036)	0.036 (0.035)	0.057 (0.038)	0.037 (0.035)	0.057 (0.037)	0.045 (0.039)
Age: 46 or older	0.015 (0.045)	0.026 (0.047)	0.055 (0.056)	0.026 (0.047)	0.055 (0.056)	0.050 (0.063)
Constant	0.090*** (0.032)	0.096*** (0.034)	0.067* (0.038)	0.099*** (0.034)	0.071* (0.039)	0.095** (0.038)
Observations	1,790	1,758	1,634	1,758	1,634	1,634
R-squared	0.397	0.400	0.423	0.402	0.425	0.445

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NK* is an indicator of *NK* subject being a decision maker, while *NKr* is an indicator of *NK* subject being a recipient.

Appendix of Table 9. Regression analysis of reciprocity behavior: the second mover in the trust game  
(NK subjects only)

Dependent variable: Fraction of money returned by the second mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	-0.009 (0.011)	-0.005 (0.010)	-0.003 (0.011)	-0.009 (0.012)	-0.007 (0.013)	-0.005 (0.012)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.424*** (0.062)	0.413*** (0.062)	0.411*** (0.070)	0.413*** (0.062)	0.411*** (0.071)	0.411*** (0.072)
1{27K}	0.019*** (0.007)	0.021*** (0.007)	0.018** (0.007)	0.021*** (0.007)	0.018** (0.007)	0.018** (0.007)
<b>Priming on historical events</b>						
Confrontation	-0.031 (0.032)	-0.041 (0.034)	-0.031 (0.036)	-0.041 (0.034)	-0.031 (0.036)	-0.031 (0.037)
Peace-making	-0.048 (0.030)	-0.059* (0.031)	-0.036 (0.035)	-0.059* (0.031)	-0.036 (0.035)	-0.036 (0.035)
<b>Attitudes towards institutions</b>						
Market economy		0.002 (0.015)	0.005 (0.015)	0.004 (0.016)	0.006 (0.016)	0.007 (0.016)
× <i>NKr</i>				-0.003 (0.011)	-0.003 (0.012)	-0.005 (0.012)
Democracy		-0.011 (0.014)	-0.012 (0.014)	-0.007 (0.015)	-0.006 (0.017)	-0.006 (0.017)
× <i>NKr</i>				-0.009 (0.013)	-0.011 (0.015)	-0.011 (0.016)
<b>Identity</b>						
Identity: Korean			-0.004 (0.018)		-0.004 (0.018)	-0.002 (0.019)
× <i>NKr</i>						-0.005 (0.010)
Identity: South Korean			-0.010 (0.017)		-0.010 (0.017)	-0.012 (0.016)
× <i>NKr</i>						0.004 (0.011)
Attitudes towards SK society			0.017 (0.024)		0.017 (0.024)	0.016 (0.023)
× <i>NKr</i>						0.003 (0.010)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.015 (0.015)		-0.015 (0.016)	-0.015 (0.016)
× <i>NKr</i>			0.003 (0.011)		0.002 (0.011)	0.003 (0.013)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			0.028 (0.020)		0.028 (0.020)	0.029 (0.021)
× <i>NKr</i>						-0.001 (0.011)
Trustworthiness			-0.000 (0.014)		-0.000 (0.014)	0.001 (0.014)
× <i>NKr</i>						-0.003 (0.010)
Fair			0.021 (0.018)		0.021 (0.018)	0.019 (0.020)
× <i>NKr</i>						0.003 (0.016)
Helped			-0.025 (0.024)		-0.025 (0.024)	-0.024 (0.027)
× <i>NKr</i>						-0.002 (0.016)
<b>Other attitudinal responses</b>						
Risk taking			-0.011 (0.014)		-0.011 (0.014)	-0.019 (0.015)
× <i>NKr</i>						0.015 (0.012)
Discriminated			-0.005 (0.011)		-0.005 (0.011)	-0.007 (0.011)
× <i>NKr</i>						0.005 (0.007)
<b>Other experimental controls</b>						
Study 1	0.044* (0.025)	0.034 (0.024)	0.033 (0.045)	0.034 (0.024)	0.034 (0.045)	0.033 (0.045)
Size of session	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.000 (0.001)
<b>Demographic information</b>						
Male	0.017 (0.026)	0.010 (0.026)	0.019 (0.026)	0.010 (0.026)	0.019 (0.026)	0.019 (0.026)
Age: 23 ~ 28	-0.020 (0.032)	-0.003 (0.030)	-0.013 (0.042)	-0.003 (0.030)	-0.013 (0.042)	-0.013 (0.042)
Age: 29 ~ 45	0.028 (0.037)	0.051 (0.035)	0.057 (0.042)	0.051 (0.035)	0.057 (0.042)	0.057 (0.042)
Age: 46 or older	0.031 (0.047)	0.047 (0.046)	0.069 (0.063)	0.047 (0.046)	0.069 (0.063)	0.069 (0.064)
Constant	0.145*** (0.044)	0.142*** (0.045)	0.134*** (0.043)	0.143*** (0.045)	0.136*** (0.043)	0.135*** (0.043)
Observations	810	778	670	778	670	670
R-squared	0.246	0.250	0.301	0.251	0.302	0.303

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. NKr is an indicator of NK subject being a recipient.



Appendix of Table 9. Regression analysis of reciprocity behavior: the second mover in the trust game  
(SK subjects only)

Dependent variable: Fraction of money returned by the second mover	(1)	(2)	(3)	(4)	(5)	(6)
<b>Matching</b>						
<i>NKr</i>	0.003 (0.008)	0.003 (0.008)	0.006 (0.008)	0.001 (0.009)	0.004 (0.010)	-0.006 (0.011)
<b>Control for altruism</b>						
Fraction of money given in the DG	0.574*** (0.039)	0.572*** (0.040)	0.557*** (0.040)	0.571*** (0.040)	0.557*** (0.040)	0.558*** (0.040)
1{27K}	0.038*** (0.004)	0.038*** (0.004)	0.038*** (0.004)	0.038*** (0.004)	0.038*** (0.004)	0.038*** (0.004)
<b>Priming on historical events</b>						
Confrontation	-0.003 (0.022)	-0.005 (0.022)	-0.005 (0.023)	-0.005 (0.022)	-0.005 (0.023)	-0.005 (0.023)
Peace-making	-0.018 (0.021)	-0.019 (0.021)	-0.018 (0.021)	-0.019 (0.021)	-0.018 (0.021)	-0.018 (0.021)
<b>Attitudes towards institutions</b>						
Market economy		-0.004 (0.011)	0.001 (0.012)	-0.000 (0.012)	0.005 (0.012)	0.003 (0.013)
× <i>NKr</i>				-0.009 (0.011)	-0.008 (0.012)	-0.004 (0.013)
Democracy		0.006 (0.010)	-0.000 (0.010)	-0.004 (0.010)	-0.010 (0.011)	-0.010 (0.011)
× <i>NKr</i>				0.019** (0.009)	0.018* (0.010)	0.019* (0.010)
<b>Identity</b>						
Identity: Korean			0.013 (0.011)		0.013 (0.011)	0.003 (0.012)
× <i>NKr</i>						0.019* (0.010)
Identity: South Korean			-0.006 (0.010)		-0.006 (0.010)	-0.007 (0.012)
× <i>NKr</i>						0.002 (0.011)
Attitudes towards SK society			-0.029** (0.012)		-0.029** (0.012)	-0.024* (0.013)
× <i>NKr</i>						-0.009 (0.011)
<b>Attitudes towards NK refugees</b>						
Attitudes towards NK refugees			-0.014 (0.010)		-0.013 (0.010)	-0.010 (0.010)
× <i>NKr</i>			0.011 (0.009)		0.009 (0.009)	0.004 (0.010)
<b>Trust / trustworthiness attitudes (GSS)</b>						
Trust			-0.000 (0.013)		-0.000 (0.013)	-0.017 (0.014)
× <i>NKr</i>						0.034*** (0.011)
Trustworthiness			0.002 (0.011)		0.002 (0.011)	0.009 (0.012)
× <i>NKr</i>						-0.012 (0.012)
Fair			-0.004 (0.010)		-0.004 (0.010)	0.005 (0.012)
× <i>NKr</i>						-0.017* (0.010)
Helped			0.026** (0.012)		0.026** (0.012)	0.027** (0.013)
× <i>NKr</i>						-0.001 (0.010)
<b>Other attitudinal responses</b>						
Risk taking			-0.020* (0.011)		-0.020* (0.011)	-0.013 (0.011)
× <i>NKr</i>						-0.012 (0.009)
Discriminated			-0.001 (0.010)		-0.001 (0.010)	-0.001 (0.010)
× <i>NKr</i>						0.001 (0.010)
<b>Other experimental controls</b>						
Study 1	0.068*** (0.018)	0.067*** (0.018)	0.071*** (0.019)	0.067*** (0.018)	0.071*** (0.019)	0.071*** (0.019)
Size of session	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)
<b>Demographic information</b>						
Male	-0.035* (0.018)	-0.034* (0.019)	-0.039** (0.019)	-0.034* (0.019)	-0.039** (0.019)	-0.039** (0.019)
Age: 23 ~ 28	0.049** (0.020)	0.047** (0.019)	0.051** (0.020)	0.047** (0.019)	0.051** (0.020)	0.050** (0.020)
Constant	0.091 (0.062)	0.093 (0.062)	0.107* (0.060)	0.094 (0.062)	0.108* (0.060)	0.112* (0.060)
Observations	980	980	964	980	964	964
R-squared	0.496	0.497	0.522	0.499	0.524	0.529

Notes. Robust standard errors, clustered by individual subject, are reported in parentheses. \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance level. *NKr* is an indicator of NK subject being a recipient.