

Local Institutions and the Dynamics of Community Sorting: Online Appendix

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Sample Instructions

Hello and welcome to our experiment!

In this experiment, you will be asked to make a series of choices on the computer. There will be 20 periods and in each period you will choose which *group* you wish to belong to. The payment you receive depends on the actions of you and your fellow group members, so it is important that you fully understand the instructions. If you have questions at any point, please press the “Push for Assistance” button below your screen.

You will participate with 7 other people in this room. There are six available groups which you may join, and at the start of each period, everyone will simultaneously select their group for that period. You will then make an investment in your group. The more that has been invested in your group – by you or by the other group members – the higher your payoff will be, but whoever makes the investment must pay for it.

Your investment may be any amount, from 0 up to 1000 tokens. The chart beside your computer gives examples of what your payoff for the period would be for various amounts that *you personally* invest in the group (the columns listed along the top) and the *total* invested in your group (the rows listed along the left). These values may vary for different participants.

For example, say that you are in a group with two other people. They collectively invest 40 tokens and you personally invest 20 tokens, so that the total investment in your group is 60. What would your payoff be in this period? You personally invested 20 tokens, so look in the column marked 20. The investments in your group total 60, so look in the row marked 60. Your payoff in this period would have been 328.

There are six available groups which you may join. You will be assigned to a group for the first period. After that, at the start of each period, everyone will simultaneously select their group for that period. At the start of each period, everyone will simultaneously select their group for that period. You are free to select a different group in the next period. The available groups will be the same for the duration of the experiment. If you move to a different group, you must pay a cost of 5 units, which will be deducted from your payoff at the end of the period.

Each period will proceed as follows. First, you will see a screen such as that in the figure to the right, showing the available groups, along with the number of people in each group and total investments in each group, in each of the previous three periods. You will also see your personal payoff from your group from the previous three periods (not including any moving costs you may have incurred). Once you have chosen your group, you will see a screen indicating how many members are in the group in that period and will enter your investment. You’ll then see the total investments made and your payoff for the period.

	Group 1	Group 2
# of Members 1 Period Ago:	0	0
Total Investment 1 Period Ago:	0	0
Your Investment 1 Period Ago:	0	0
Payoff from Group 1 Period Ago:	0	0
# of Members 2 Periods Ago:	0	0
Total Investment 2 Periods Ago:	0	0
Your Investment 2 Periods Ago:	0	0
Payoff from Group 2 Periods Ago:	0	0

At the end of the experiment, we will add up your payoffs from all periods and you will receive 1 USD for every 600 units.

Figure 1: VCM Instructions Page 1

Please take a moment to answer the following practice questions.

1. You are in a group by yourself or in which the other members do not invest. What is your payoff if you invest:

0 tokens?

5 tokens?

85 tokens?

2. You move into a new group this period. The other members of your group invest 155 and you invest 5, for a total of 160. What is your payoff for this period? Don't forget to subtract the cost of moving.

Please notify the experimenter if you have any questions or once you have finished, so we can check your answers.

I Submit:		My Group Submits:		0	5	10	20	30	40	45	50	60	70	80	85	90	100	150	200	250	300	340	360	400	450	500
0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	136.8	131.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	195.7	190.7	185.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	254.6	249.6	244.6	234.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	289.1	284.1	279.1	269.1	259.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	313.6	308.6	303.6	293.6	283.6	273.6	268.6	273.6	268.6	273.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	323.6	318.6	313.6	303.6	293.6	283.6	278.6	273.6	268.6	273.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	332.5	327.5	322.5	312.5	302.5	292.5	287.5	282.5	277.5	272.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	348.0	343.0	338.0	328.0	318.0	308.0	303.0	298.0	288.0	283.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	361.1	356.1	351.1	341.1	331.1	321.1	316.1	311.1	301.1	291.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	372.5	367.5	362.5	352.5	342.5	332.5	327.5	322.5	312.5	302.5	292.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	377.6	372.6	367.6	357.6	347.6	337.6	332.6	327.6	317.6	307.6	297.6	292.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90	382.5	377.5	372.5	362.5	352.5	342.5	337.5	332.5	322.5	312.5	302.5	292.5	287.5	282.5	-	-	-	-	-	-	-	-	-	-	-	-
100	391.4	386.4	381.4	371.4	361.4	351.4	341.4	331.4	321.4	311.4	301.4	291.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	406.9	401.9	396.9	386.9	376.9	366.9	361.9	356.9	346.9	336.9	326.9	316.9	306.9	-	-	-	-	-	-	-	-	-	-	-	-	-
140	420.0	415.0	410.0	400.0	390.0	380.0	375.0	370.0	360.0	350.0	340.0	330.0	320.0	-	-	-	-	-	-	-	-	-	-	-	-	-
160	431.4	426.4	421.4	411.4	401.4	391.4	386.4	381.4	371.4	361.4	351.4	346.4	341.4	331.4	281.4	-	-	-	-	-	-	-	-	-	-	-
180	441.4	436.4	431.4	421.4	411.4	401.4	396.4	391.4	381.4	371.4	361.4	356.4	351.4	341.4	291.4	-	-	-	-	-	-	-	-	-	-	-
200	450.4	445.4	440.4	430.4	420.4	410.4	405.4	400.4	390.4	380.4	370.4	365.4	360.4	350.4	300.4	250.4	-	-	-	-	-	-	-	-	-	-
220	458.5	453.5	448.5	438.5	428.5	418.5	413.5	408.5	398.5	388.5	378.5	368.5	358.5	348.5	298.5	258.5	-	-	-	-	-	-	-	-	-	-
240	465.9	460.9	455.9	445.9	435.9	425.9	420.9	415.9	405.9	395.9	385.9	375.9	365.9	355.9	305.9	265.9	-	-	-	-	-	-	-	-	-	-
260	472.7	467.7	462.7	452.7	442.7	432.7	422.7	412.7	402.7	392.7	382.7	372.7	362.7	352.7	302.7	262.7	-	-	-	-	-	-	-	-	-	-
280	479.0	474.0	469.0	459.0	449.0	439.0	434.0	429.0	419.0	409.0	399.0	389.0	379.0	369.0	319.0	279.0	229.0	-	-	-	-	-	-	-	-	-
300	484.8	479.8	474.8	464.8	454.8	444.8	439.8	434.8	424.8	414.8	404.8	394.8	384.8	374.8	324.8	284.8	234.8	184.8	-	-	-	-	-	-	-	-
320	490.3	485.3	480.3	470.3	460.3	450.3	440.3	430.3	420.3	410.3	400.3	390.3	380.3	370.3	320.3	280.3	230.3	180.3	-	-	-	-	-	-	-	-
340	495.5	490.5	485.5	475.5	465.5	455.5	445.5	435.5	425.5	415.5	405.5	395.5	385.5	375.5	325.5	285.5	235.5	185.5	-	-	-	-	-	-	-	-
360	500.3	495.3	490.3	480.3	470.3	460.3	450.3	440.3	430.3	420.3	410.3	400.3	390.3	380.3	330.3	290.3	240.3	190.3	-	-	-	-	-	-	-	-
380	504.9	499.9	494.9	484.9	474.9	464.9	454.9	444.9	434.9	424.9	414.9	404.9	394.9	384.9	334.9	294.9	244.9	194.9	144.9	-	-	-	-	-	-	-
400	509.3	504.3	499.3	489.3	479.3	469.3	459.3	449.3	439.3	429.3	419.3	409.3	399.3	389.3	339.3	299.3	249.3	199.3	149.3	109.3	-	-	-	-	-	-
420	513.4	508.4	503.4	493.4	483.4	473.4	463.4	453.4	443.4	433.4	423.4	413.4	403.4	393.4	343.4	303.4	253.4	203.4	153.4	113.4	-	-	-	-	-	-
440	517.4	512.4	507.4	497.4	487.4	477.4	467.4	457.4	447.4	437.4	427.4	417.4	407.4	397.4	347.4	307.4	257.4	207.4	157.4	117.4	-	-	-	-	-	-
460	521.2	516.2	511.2	501.2	491.2	481.2	471.2	461.2	451.2	441.2	431.2	421.2	411.2	401.2	351.2	311.2	261.2	211.2	161.2	121.2	71.2	-	-	-	-	-
480	524.8	519.8	514.8	504.8	494.8	484.8	474.8	464.8	454.8	444.8	434.8	424.8	414.8	404.8	354.8	314.8	264.8	214.8	164.8	124.8	74.8	-	-	-	-	-
500	528.2	523.2	518.2	508.2	498.2	488.2	478.2	468.2	458.2	448.2	438.2	428.2	418.2	408.2	358.2	318.2	268.2	218.2	168.2	128.2	78.2	28.2	-	-	-	-

Figure 3: VCM Payoff Table

Hello and welcome to our experiment!

In this experiment, you will be asked to make a series of choices on the computer. There will be 20 periods and in each period you will choose which *group* you wish to belong to. The payment you receive depends on the actions of you and your fellow group members, so it is important that you fully understand the instructions. If you have questions at any point, please press the “Push for Assistance” button below your screen.

You will participate with 7 other people in this room. There are six available groups which you may join, and at the start of each period, everyone will simultaneously select their group for that period. You will then make an investment in your group. The more that has been invested in your group – by you or by the other group members – the higher your payoff will be, but whoever makes the investment must pay for it.

Each of the six groups has its own *fixed policy* regarding how many tokens *must* be invested by *each* group member. If you join the group you must invest this amount. For instance, assume that you and two others choose to join a group with an investment policy of 20 tokens. You must each then invest 20 tokens in group that period, so the total group investment is $20 \times 3 = 60$.

The table below provides the payoffs you’d receive from being in groups with various investment policies and numbers of members. These values may vary for different participants.

Policy:	0	1	5	10	20	30	45	60	75	85	90	100	200
Number of Members:													
1 Member	0	-1	132	186	235	259	279	288	292.0	292.6	292.5	291.4	250
2 Members	0	58	191	245	294	318	337	347	350.9	351.5	351.4	350.4	309
3 Members	0	92	225	279	328	352	372	381	385.4	386.0	385.9	384.8	344
4 Members	0	117	250	304	352	377	396	406	409.8	410.5	410.3	409.3	368
5 Members	0	136	269	323	371	396	415	425	428.8	429.4	429.3	428.2	387
6 Members	0	151	284	338	387	411	431	440	444.3	444.9	444.8	443.7	403
7 Members	0	164	297	351	400	425	444	453	457.4	458.0	457.9	456.8	416
8 Members	0	176	309	362	411	436	455	465	468.7	469.4	469.2	468.2	427

So in the example above, what your payoff be for the period? Your group has a twenty token investment policy, so look in the column marked 20. You are in a group with two others, so look in the row marked “3 Members.” Your payoff in this period would have been: 328.

You will be assigned to a group for the first period. After that, at the start of each period, everyone will simultaneously select their group for that period. You are free to select a different group in the next period. The available groups and the policies associated with them will be the same for the duration of the experiment. If you

Figure 4: Fixed Tax Instructions Page 1

move to a different group, you must pay a cost of 5 tokens, which will be deducted from your payoff at the end of the period.

Each period will proceed as follows. First, you will see a screen such as that in the figure to the right, showing the available groups and the policies associated with them, along with the number of people in each group and total investments in each group, in each of the previous three periods. You will also see your personal payoff from your group from the previous three periods (not including any moving costs you may have incurred). Once you have chosen your group, you will see a screen indicating how many members are in your group in that period and will enter your investment. Your required investment will be displayed and you must enter this exact amount into the box beneath it for the experiment to proceed. You'll then see the total investments made and your payoff for the period.

	Group 1	Group 2
Your Investment	5	10
# of Members 1 Period Ago	0	0
Total Investment 1 Period Ago	0	0
Your Return 1 Period Ago	0	0
# of Members 2 Periods Ago	0	0
Total Investment 2 Periods Ago	0	0
Your Return 2 Periods Ago	0	0

At the end of the experiment, we will add up your payoffs from all periods and you will receive 1 USD for every 600 units.

Please take a moment to answer the following practice questions.

1. You select a group with an investment policy of 25 tokens. How many tokens must you invest this period?
2. You are in a group by yourself. What is your payoff if you invest:
 - 0 tokens?
 - 5 tokens?
 - 85 tokens?
3. You move into a new group this period, and the investment policy is 20 tokens. What is your payoff for this period if there is one other group member? If there are 3 other group members? Don't forget to subtract the cost of moving.
4. For any given number of members, which group policy gives you the highest payoff?

Please notify the experimenter if you have any questions or once you have finished, so we can check your answers.

Figure 5: Fixed Tax Instructions Page 2

Hello and welcome to our experiment!

In this experiment, you will be asked to make a series of choices on the computer. There will be 20 periods and in each period you will choose which *group* you wish to belong to. The payment you receive depends on the actions of you and your fellow group members, so it is important that you fully understand the instructions. If you have questions at any point, please press the “Push for Assistance” button below your screen.

You will participate with 7 other people in this room. There are six available groups which you may join, and at the start of each period, everyone will simultaneously select their group for that period. You will then make an investment in your group. The more that has been invested in your group – by you or by the other group members – the higher your payoff will be, but whoever makes the investment must pay for it.

Each of the six groups has its own *fixed policy* regarding how many tokens (in *total*) *must* be invested by the group. If you join the group, you must invest your share of this amount. For instance, assume that you and two others choose to join a group with an investment policy of 60 tokens. You must each then invest $60/3 = 20$ tokens in group that period, so that the total group investment is 60.

The table below provides the payoffs you’d receive from being in groups with various investment policies and numbers of members. These values may vary for different participants.

Policy:	0	5	10	20	50	60	100	200	300	340	360	500	680
Number of Members:													
1 Member	0	132	186	235	283	288	291	250	184.8	155.5	140.3	28	-126
2 Members	0	134	191	245	308	318	341	350	334.8	325.5	320.3	278	214
3 Members	0	135	192	248	316	328	358	384	384.8	382.1	380.3	362	328
4 Members	0	136	193	250	320	333	366	400	409.8	410.5	410.3	403	384
5 Members	0	136	194	251	323	336	371	410	424.8	427.5	428.3	428	418
6 Members	0	136	194	251	324	338	375	417	434.8	438.8	440.3	445	441
7 Members	0	136	194	252	325	339	377	422	442.0	446.9	448.9	457	457
8 Members	0	136	194	252	326	341	379	425	447.3	453.0	455.3	466	469

So in the example above, what your payoff be for the period? Your group has a sixty token investment policy, so look in the column marked 60. You are in a group with two others, so look in the row marked “3 Members.” Your payoff in this period would have been: 328.

You will be assigned to a group for the first period. After that, at the start of each period, everyone will simultaneously select their group for that period. You are free to select a different group in the next period. The available groups and the policies associated with them will be the same for the duration of the experiment. If you move to a different group, you must pay a cost of 5 tokens, which will be deducted from your payoff at the end of the period.

Figure 6: Chapter 3 Fixed Quantity Instructions Page 1

Each period will proceed as follows. First, you will see a screen such as that in the figure to the right, showing the available groups and the policies associated with them, along with the number of people in each group and total investments in each group, in each of the previous three periods. You will also see your personal payoff from your group from the previous three periods (not including any moving costs you may have incurred). Once you have chosen your group, you will see a screen indicating how many members are in your group in that period and will enter your investment. Your required investment will be displayed and you must enter this exact amount into the box beneath it for the experiment to proceed. You'll then see the total investments made and your payoff for the period.

	Group 1	Group 2
Your Investment	5	10
# of Members 1 Period Ago:	0	0
Total Investment 1 Period Ago:	0	0
Your Return 1 Period Ago:	0	0
# of Members 2 Periods Ago:	0	0
Total Investment 2 Periods Ago:	0	0
Your Return 2 Periods Ago:	0	0

At the end of the experiment, we will add up your payoffs from all periods and you will receive 1 USD for every 600 units.

Please take a moment to answer the following practice questions.

1. You select a group with an investment policy of 25 tokens. How many total tokens must your group invest this period?
2. You are in a group by yourself. What is your payoff if you invest
0 tokens?
5 tokens?
85 tokens?
3. You move into a new group this period, and the investment policy is 200 tokens. What is your payoff for this period if there is one other group member? If there are 3 other group members? Don't forget to subtract the cost of moving.

Please notify the experimenter if you have any questions or once you have finished, so we can check your answers.

Figure 7: Chapter 3 Fixed Quantity Instructions Page 2

Hello and welcome to our experiment!

In this experiment, you will be asked to make a series of choices on the computer. There will be 20 periods and in each period you will choose which *group* you wish to belong to. The payment you receive depends on the actions of you and your fellow group members, so it is important that you fully understand the instructions. If you have questions at any point, please press the “Push for Assistance” button below your screen.

You will participate with 7 other people in this room. There are six available groups which you may join, and at the start of each period, everyone will simultaneously select their group for that period. You will then make an investment in your group. The more that has been invested in your group – by you or by the other group members – the higher your payoff will be, but whoever makes the investment must pay for it.

In each period, each of the six groups will choose its own *policy* regarding how many tokens *must* invested by *each* group member in that period. This policy will be voted on by the group’s current members in each period, with the median number selected as the group’s policy. Everyone must invest the amount chosen by their group. For instance, assume that you are in a group with two others and your group chooses an investment policy of 20 tokens. You must each then invest 20 tokens in group that period, so the total group investment is $20 \times 3 = 60$.

The table below provides the payoffs you’d receive from being in groups with various investment policies and numbers of members. These values may vary for different participants.

Policy:	0	1	5	10	20	30	45	60	75	85	90	100	200
Number of Members:													
1 Member	0	-1	132	186	235	259	279	288	292.0	292.6	292.5	291.4	250
2 Members	0	58	191	245	294	318	337	347	350.9	351.5	351.4	350.4	309
3 Members	0	92	225	279	328	352	372	381	385.4	386.0	385.9	384.8	344
4 Members	0	117	250	304	352	377	396	406	409.8	410.5	410.3	409.3	368
5 Members	0	136	269	323	371	396	415	425	428.8	429.4	429.3	428.2	387
6 Members	0	151	284	338	387	411	431	440	444.3	444.9	444.8	443.7	403
7 Members	0	164	297	351	400	425	444	453	457.4	458.0	457.9	456.8	416
8 Members	0	176	309	362	411	436	455	465	468.7	469.4	469.2	468.2	427

So in the example above, what your payoff be for the period? Your group has a 20 token investment policy, so look in the column marked “20.” You are in a group with two others, so look in the row marked “3 Members.” Your payoff in this period would have been: 328.

Each group will choose its policy by voting. Once everyone has selected their group for the period, you and your group members will each submit a vote for the group’s policy. The median vote will be implemented: for groups with an odd number of members, the middle-most vote is implemented and for groups with an even number of members, the average of the two middle-most votes is implemented.

Figure 8: Chapter 3 Voting Instructions Page 1

In the first period, you will be assigned to a group. After that, at the start of each period, everyone will simultaneously select their group for that period. You are free to select a different group in the next period. The available groups will be the same for the duration of the experiment. If you move to a different group, you must pay a cost of 5 tokens, which will be deducted from your payoff at the end of the period.

Each period will proceed as follows. First, you will see a screen such as that in the figure to the right, showing the available groups, along with the number of people in each group, and the policy and total investments in each group, in each of the previous three periods. You will also see your personal payoff from your group from the previous three periods (not including any moving costs you may have incurred). Once you have chosen your group, you will see a screen indicating how many members are in your group in that period and will enter your vote. The group's vote will then be displayed as your required investment and you must enter this exact amount into the box beneath it for the experiment to proceed. You'll then see the total investments made and your payoff for the period.

	Group 1	Group 2
# of Members 1 Period Ago	0	0
Group Policy 1 Period Ago	0.00	0.00
Payoff from Group 1 Period Ago	0.00	0.00
# of Members 2 Periods Ago	0	0
Group Policy 2 Periods Ago	0.00	0.00
Payoff from Group 2 Periods Ago	0.00	0.00
# of Members 3 Periods Ago	0	0
Group Policy 3 Periods Ago	0.00	0.00
Payoff from Group 3 Periods Ago	0.00	0.00

At the end of the experiment, we will add up your payoffs from all periods and you will receive approximately 1 USD for every 600 units.

Please take a moment to answer the following practice questions.

1. Your group implements an investment policy of 25 tokens. How many tokens must you invest this period?
2. You are in a group by yourself. What is your payoff if you invest:
0 tokens?
5 tokens?
85 tokens?
3. You move into a new group this period, and the investment policy is 20 tokens. What is your payoff for this period if there is one other group member? If there are 3 other group members? Don't forget to subtract the cost of moving.
4. For any given number of members, which group policy gives you the highest payoff?

Please notify the experimenter if you have any questions or once you have finished, so we can check your answers.

Figure 9: Chapter 3 Voting Instructions Page 2

Table 1: Primary Reasons for Switching Groups (by Subject)

	Fixed Tax	Fixed Quantity	Vote	VCM	Total
Population Size	32.2%	34.4%	5%	15.6%	20.7%
Tax or Expenditure Policy	32.3%	12.5%	32.5%	-	20%
Profits [including members and history]	16.1%	28.1%	22.5%	3.1%	17.8%
Exploratory	6.5%	9.4%	0%	12.5 %	6.7%
Total Contributions	-	-	-	9.4%	2.2%
Others Contributing Less	-	-	-	21.9%	5.2%
Never Moved / Declined to Answer	12.9%	15.6%	40%	37.5%	27.4%

Table 2: Primary Reasons for Entering Group (by Subject)

	Fixed Tax	Fixed Quantity	Vote	VCM	Total
Population Size	29%	25%	27.5%	9.7%	20.2%
Tax or Expenditure Policy	16.1%	9.4%	17.5%	-	11.2%
Profits [including members and history]	38.7%	44.8%	10%	3.2%	23.1%
Random	3.2%	6.3%	5%	12.9 %	6.7%
Total Contributions	-	-	-	19.4%	4.5%
Empty	0%	3.1%	15%	12.9%	8.2%
Never Moved / Declined to Answer	12.9%	12.5%	35%	38.7%	25.4%

Table 3: Information Shown to Subjects for each of the Previous 3 Periods While Making Location Choice

VCM	Fixed Tax	Fixed Quantity	Vote
— Realized Payoff Listed Under Own Location —			
— Number of Residents in Each Location —			
Own Contribution (in own location)	Fixed, Posted	Fixed, Posted	Enacted
Total Contributions (each location)	Tax Policy (each location)	Expenditure Policy (each location)	Tax Policy (each location)