

Supplementary Information

“Market Integration Reduces Kin Density in Women’s Ego-Networks in Rural Poland”

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The study was carried out in a sample of communities (21 villages and one town) randomly drawn from four neighbouring municipalities in a southern Polish district in the province of Małopolska, containing a total of 34 potential study populations. All 22 of the sampled communities agreed to participate. I did not have access to a census list of names or a map of households, so within each community every third house was sampled, with every adult woman (≥ 18 years) present in the house invited to take part in the survey. This strategy was further stratified in the town, by randomly selecting streets from a list obtained from the local government and approaching every third house/apartment on that particular street. I returned to houses that were unoccupied at the time of selection on up to three occasions. All consenting adult women were interviewed. All eligible women who declined to take part were noted as non-responders, as were women ineligible to take part due to age or illness. 52.4% to 89.4% of respondents who were approached in any village agreed to an interview, and the average response rate for the entire sample was 75% (total interviews \div [total responders + non-responders]). My sampling strategy means that important variables such as age are approximately normally distributed in all groups. The sample should not be considered representative of the country as a whole, but of the wider rural population of this particular region.

Social Network Questionnaire

The social network questionnaire was administered as part of a broad-ranging semi-structured interviews with women. The questionnaire section for eliciting the network data (questions 30, 31 and 34 of a larger interview) is given below, first in Polish and then in English. Supplementary Table 1 below provides descriptive statistics of the networks.

ID Osoba:

ID Grupa:

ID Rodziny:

9

30. Proszę wymienić do pięciu kobiet, które może nazwać Pani swoimi przyjaciółkami. Kobiet bliskich, z którymi może Pani i lubi rozmawiać o ważnych, osobistych sprawach (na przykład o dzieciach, rodzinie, zdrowiu, albo innych rzeczach). Mogą być z Panią spokrewnione albo pochodzić z poza Pani rodziny. Mogą być z tej miejscowości albo nie. Nie musi wymieniać Pani pięciu osób.

[Jeśli NIE MA]: Dlaczego nie? (zaznacz jedno)

| | | | |
|---|--------------------------|--------------------------|-------------|
| Nie rozmawiam o moich prywatnych sprawach | Nie mam nikogo bliskiego | Nie chce rozmawiać o tym | inny powód: |
|---|--------------------------|--------------------------|-------------|

31.

| | 1 | 2 | 3 | 4 | 5 |
|---|--|-----------|---|-----------|-----------|
| a. Wiek | | | | | |
| b. Ile lat się Panie znają? | | | | | |
| c. Czy jest z pani rodziny? (1=tak, 2=nie) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| d. Pokrewieństwo (kody niżej) | | | | | |
| e. Skąd pochodzi (kody niżej) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| f. Gdzie obecnie mieszka (kody niżej) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| g. Czy posiada gospodarstwo rolne? (1=tak, 2=nie) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| h. Wykształcenie [KARTA 1] | | | | | |
| i. Czy kiedykolwiek pracowała zarobkowo? (1=tak, 2=nie) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| j. Czy kiedykolwiek mieszkała zagranicą? (1=tak, 2=nie) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| k. Ile ma dzieci? | | | | | |
| l. Wiek najstarszego dziecko | | | | | |
| m. Czy kiedykolwiek w życiu stosowała naturalne metody uniknąć zajścia w ciążę? (1=tak, 2=nie, 3=NW) | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 |
| n. Czy kiedykolwiek w życiu stosowała nie-naturalne metody uniknąć zajścia w ciążę (np. prezerwatywach)? (1=tak, 2=nie, 3=NW) | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 |
| o. Jak często Pani się widzi z ta osoba? (kody niżej) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| p. Jak często się kontaktujecie? (np telefonicznie)(kody niżej) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| q. Jak blisko ze sobą jesteście? [KARTA 2] | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 |
| KODY DO PYTANIA D. POKREWIEŃSTWO 1= SIOSTRA 4= CORKA 7= INNE Z MOIM STRONE 2= BRATOWA 5= TESCIOWA 8= INNE Z STRONE MEZA 3= MATKA 6= KUZINKA 9= SYNOWA | KODY DO PYTANIA .E & .F MIESZSZE ZAMIESZKANIA 1= TUTAJ 4= MIASTO pow. 100 tys. 2= INNA WSI 5= INNY KRAJ 3= INNA MIASTO | | KODY DO PYTANIA .O & .P JAK CZESTO SIE ... 1= (Blisko) CODZIENNIE 4= RAZ NA MIESIĄC 2= RAZ NA TYDZIEŃ 5= KILKA RAZY W ROKU 3= KILKA RAZY W MIESIĄCU | | |

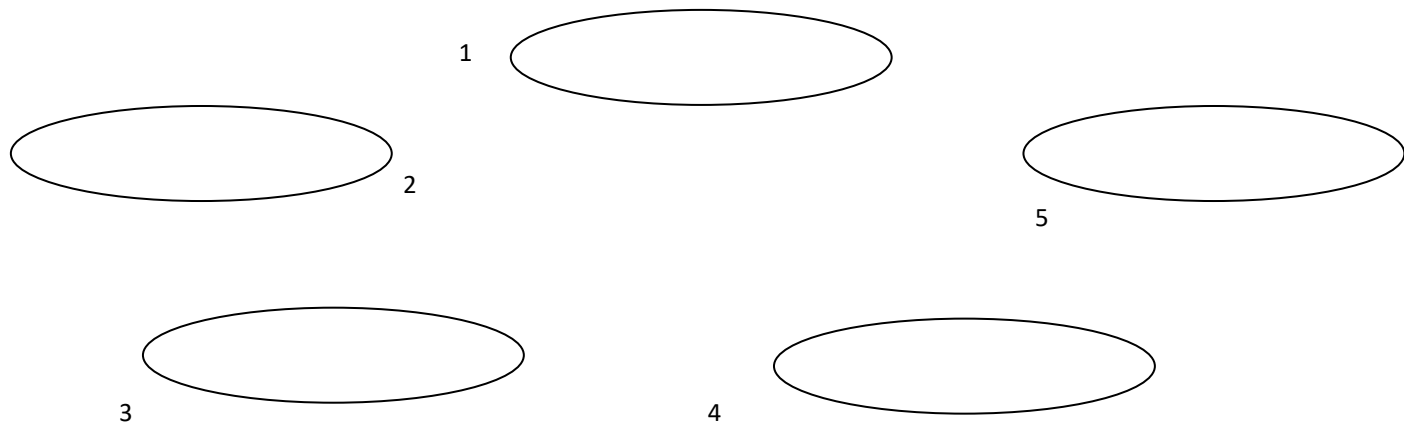
34. Proszę wskazać zależności pomiędzy kobietami, o których Pani wcześniej wspomniała. [Wpisz imiona kobiet w pola. Narysuj linie reprezentujące związki pomiędzy poszczególnymi osobami.]

Czarny = Spokrewnieni

Zielony = Rodzina przez małenstwo

Czerwony = Bliscy przyjaciele

Niebieski = Tylko znajomi



30. Please name up to five women, who you could call your friends. These are women you are close to, and who you can talk to about important personal matters (for example about your children, family, health, or other things). These women can be your relatives or come from outside your family. They can be from this village or anywhere else. You don't have to name five.

[If NONE]: Why not? (mark one)

| | | | |
|------------------------------------|----------------------------|---------------------------------|---------------|
| I don't talk about my private life | I don't have anybody close | I don't want to talk about this | Other reason: |
|------------------------------------|----------------------------|---------------------------------|---------------|

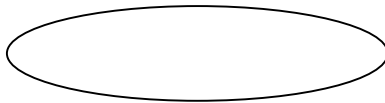
31.

| | 1 (name) | 2 (name) | 3 (name) | 4 (name) | 5 (name) |
|--|--|-------------|--|-------------|-------------|
| a. Age | | | | | |
| b. How many years have you known each other? | | | | | |
| c. Is she a member of your family? (circle 1=yes, 2=no) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| d. Relationship (if related) (codes below) | | | | | |
| e. Where is she from? (codes below) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| f. Where does she currently live? (codes below) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| g. Does she live on/have a farm? (circle 1=yes, 2=no) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| h. Education level [KARTA 1] | | | | | |
| i. Did she ever work for wages? (circle 1=yes, 2=no) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| j. Did she ever live abroad? (circle 1=yes, 2=no) | 1 2 | 1 2 | 1 2 | 1 2 | 1 2 |
| k. How many children does she have? | | | | | |
| l. Age of eldest child | | | | | |
| m. Did she ever in her life use natural methods to avoid getting pregnant? (1=yes, 2=no, 3= Don't know) | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 |
| n. Did she ever in her life use other/non-natural methods to avoid getting presents (e.g. condoms, pills)? (1=yes, 2=no, 3=Don't know) | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 | 1 2 3 |
| o. How often do you see each other? (codes below) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| p. How often do you contact each other? (e.g by telephone) (codes below) | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 |
| q. How close are you? [SHOWCARD 2] | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 |
| CODES FOR Q.D - RELATIONSHIP 1= SISTER 4= DAUGHTER 7= OTHER ON MY SIDE OF THE FAMILY 2= SISTER IN LAW 5= MOTHER IN LAW 8= OTHER ON MY HUSBANDS SIDE OF THE FAMILY 3= MOTHER 6= COUSIN 9= DAUGHTER IN LAW | CODES FOR Q.E & F – PLACE OF RESIDENCE 1= THIS VILLAGE/TOWN 4= TOWN OVER 100,000 2= OTHER VILLAGE 5= OTHER COUNTRY 3= OTHER TOWN | | CODES FOR Q.O & P – FREQUENCY OF CONTACT 1= (Almost) EVERY DAY 4= ONCE A MONTH 2= ONCE A WEEK 5= COUPLE OF TIMES A YEAR 3= A FEW TIMES A MONTH | | |

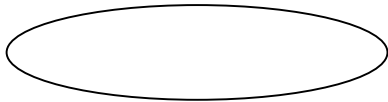
34. Please help me to connect these women that you have mentioned. [Write friends names in the circles. Draw the following coloured lines between the relevant women to show their connections to each other. If there is no relationship, do not draw a line]

| | | | |
|-------------------------------|--------------------------|--------------------|---------------------|
| BLACK = Genealogical relative | GREEN = Affinal relative | RED = Close friend | BLUE = acquaintance |
|-------------------------------|--------------------------|--------------------|---------------------|

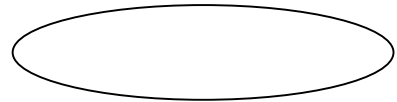
1



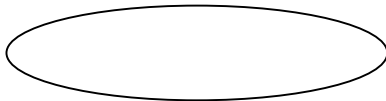
2



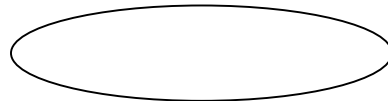
5



3



4



Social network description

| Variable | mean | s.d. | range |
|--|-------|-------|------------|
| Mean number of friends (all respondents) | 2.92 | 1.46 | 0 to 5 |
| Mean number of friends (nominators only) | 3.11 | 1.30 | 1 to 5 |
| Mean friendship duration (years) | 23.18 | 13.57 | 0.67 to 78 |
| Mean number of kin | 1.37 | 1.33 | 0 to 5 |
| Mean number non-kin | 1.55 | 1.32 | 0 to 5 |

| Relationship to ego | % all alters | % networks |
|----------------------------|--------------|------------|
| Mother | 3.46% | 10.71% |
| Sister | 17.22% | 37.74% |
| Daughter | 4.99% | 9.17% |
| Cousin | 4.32% | 10.82% |
| Other genealogical kin | 3.86% | 9.43% |
| Mother-in-law | 0.52% | 1.49% |
| Sister-in-law | 7.63% | 18.18% |
| Daughter-in-law | 1.96% | 8.16% |
| Other affine | 3.29% | 8.16% |

| Origin of friends | |
|--------------------------|--------|
| From same village | 49.47% |
| From other village | 36.39% |
| From other town | 10.23% |
| From other city | 3.72% |
| From another country | 0.19% |

| Current location of friends | |
|------------------------------------|--------|
| Resident in same village | 52.70% |
| Resident in other village | 28.54% |
| Resident in other town | 11.48% |
| Resident in other city | 5.67% |
| Resident in another country | 1.62% |

| Frequency of face-to-face contact | |
|--|--------|
| Daily | 43.69% |
| Weekly | 25.12% |
| Few times a month | 14.44% |
| Once a month | 8.59% |
| Few times a year or less | 8.16% |

| Frequency of phone/email contact | |
|---|--------|
| Daily | 66.81% |
| Weekly | 22.65% |
| Few times a month | 6.69% |
| Once a month | 2.82% |
| Few times a year or less | 1.02% |

Supplementary Table 1. Breakdown of social network characteristics.

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------------|-----------------|----------------------------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 2.79 | 0.16 | 17.80 | 0.57 | 0.14 | 4.04 | 0.000 | 1.77 | 1.34 | 2.32 | -1.42 | 0.10 | -14.23 | 0.000 | 0.24 | 0.20 | 0.29 |
| Relative Age | -0.11 | 0.06 | -1.83 | 0.20 | 0.05 | 3.70 | 0.000 | 1.22 | 1.10 | 1.36 | -0.08 | 0.04 | -2.03 | 0.042 | 0.93 | 0.86 | 1.00 |
| Relative Age sq | -0.05 | 0.04 | -1.46 | 0.34 | 0.05 | 7.23 | 0.000 | 1.40 | 1.28 | 1.53 | -0.02 | 0.03 | -0.60 | 0.551 | 0.98 | 0.94 | 1.04 |
| Relative SES | 0.12 | 0.05 | 2.32 | -0.06 | 0.05 | -1.26 | 0.209 | 0.94 | 0.86 | 1.03 | -0.11 | 0.03 | -3.22 | 0.001 | 0.90 | 0.84 | 0.96 |
| Relative Material Wealth | 0.12 | 0.04 | 2.91 | -0.07 | 0.04 | -1.88 | 0.060 | 0.93 | 0.86 | 1.00 | -0.02 | 0.03 | -0.66 | 0.509 | 0.98 | 0.94 | 1.03 |
| Relative Market Integration | 0.02 | 0.04 | 0.45 | 0.05 | 0.03 | 1.49 | 0.137 | 1.05 | 0.98 | 1.12 | -0.11 | 0.02 | -4.71 | 0.000 | 0.89 | 0.85 | 0.94 |
| Relative Farming Wealth | 0.00 | 0.04 | 0.03 | 0.03 | 0.04 | 0.80 | 0.426 | 1.03 | 0.96 | 1.11 | -0.02 | 0.02 | -0.87 | 0.383 | 0.98 | 0.94 | 1.03 |
| Farmer Status | 0.05 | 0.08 | 0.56 | 0.18 | 0.07 | 2.54 | 0.011 | 1.20 | 1.04 | 1.38 | 0.05 | 0.05 | 0.99 | 0.323 | 1.05 | 0.95 | 1.16 |
| Migrant Status | -0.04 | 0.07 | -0.61 | -0.41 | 0.06 | -6.45 | 0.000 | 0.67 | 0.59 | 0.75 | 0.02 | 0.04 | 0.43 | 0.666 | 1.02 | 0.94 | 1.11 |
| Ever Married | 0.14 | 0.11 | 1.29 | 0.49 | 0.10 | 4.89 | 0.000 | 1.63 | 1.34 | 1.99 | 0.84 | 0.08 | 11.03 | 0.000 | 2.32 | 2.00 | 2.69 |
| Number of Sisters | 0.01 | 0.02 | 0.45 | 0.09 | 0.02 | 4.40 | 0.000 | 1.09 | 1.05 | 1.13 | 0.11 | 0.01 | 9.04 | 0.000 | 1.12 | 1.09 | 1.15 |
| Average Market Integration | 0.04 | 0.09 | 0.47 | -0.16 | 0.07 | -2.25 | 0.025 | 0.85 | 0.74 | 0.98 | -0.14 | 0.05 | -2.92 | 0.004 | 0.87 | 0.79 | 0.95 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | Variance | Std.Dev. | | | | | | | | |
| (Intercept) | 0.13 | 0.36 | | 0.07 | 0.27 | | | 0.03 | 0.18 | | | | | | | | |
| Residual | 1.98 | 1.41 | | n/a | n/a | | | n/a | n/a | | | | | | | | |
| Model type | Linear | | | Binomial | | | | Binomial | | | | | | | | | |
| Number of observations | 1972 | | | 1637 | | | | 1854 | | | | | | | | | |
| Number of groups | 22 | | | 22 | | | | 22 | | | | | | | | | |

Supplementary Table 2. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using the full datasets.

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------------|-------------------|----------------|--------------------|-----------|---------------|----------------------------|--------------------------|-------------------|----------------|--------------------|-----------|---------------|------|--|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | |
| Intercept | 2.97 | 0.13 | 22.34 | 1.05 | 0.12 | 8.73 | 0.000 | 2.86 | 2.26 | 3.62 | -0.67 | 0.07 | -9.56 | 0.000 | 0.51 | 0.45 | 0.59 | |
| Relative Age | -0.03 | 0.07 | -0.51 | 0.22 | 0.06 | 3.67 | 0.000 | 1.24 | 1.11 | 1.40 | -0.14 | 0.04 | -3.63 | 0.000 | 0.87 | 0.80 | 0.94 | |
| Relative Age sq | -0.13 | 0.04 | -2.95 | 0.27 | 0.05 | 5.03 | 0.000 | 1.31 | 1.18 | 1.45 | 0.05 | 0.03 | 1.76 | 0.078 | 1.05 | 0.99 | 1.11 | |
| Relative SES | 0.12 | 0.06 | 2.07 | -0.06 | 0.05 | -1.21 | 0.225 | 0.94 | 0.85 | 1.04 | -0.12 | 0.03 | -3.54 | 0.000 | 0.89 | 0.83 | 0.95 | |
| Relative Material Wealth | 0.10 | 0.04 | 2.27 | -0.10 | 0.04 | -2.16 | 0.031 | 0.91 | 0.83 | 0.99 | -0.02 | 0.03 | -0.74 | 0.461 | 0.98 | 0.93 | 1.03 | |
| Relative Market Integration | 0.00 | 0.04 | 0.04 | 0.02 | 0.04 | 0.53 | 0.593 | 1.02 | 0.95 | 1.10 | -0.10 | 0.02 | -3.84 | 0.000 | 0.91 | 0.87 | 0.95 | |
| Relative Farming Wealth | -0.03 | 0.04 | -0.77 | 0.04 | 0.04 | 0.96 | 0.336 | 1.04 | 0.96 | 1.13 | -0.03 | 0.02 | -1.13 | 0.261 | 0.97 | 0.93 | 1.02 | |
| Farmer Status | 0.05 | 0.09 | 0.57 | 0.30 | 0.08 | 3.66 | 0.000 | 1.35 | 1.15 | 1.59 | 0.06 | 0.05 | 1.13 | 0.257 | 1.06 | 0.96 | 1.18 | |
| Migrant Status | -0.06 | 0.07 | -0.84 | -0.46 | 0.07 | -6.88 | 0.000 | 0.63 | 0.56 | 0.72 | 0.03 | 0.04 | 0.78 | 0.437 | 1.03 | 0.95 | 1.13 | |
| Number of Sisters | 0.02 | 0.02 | 0.83 | 0.10 | 0.02 | 4.71 | 0.000 | 1.11 | 1.06 | 1.16 | 0.12 | 0.01 | 9.39 | 0.000 | 1.13 | 1.10 | 1.16 | |
| Average Market Integration | 0.04 | 0.10 | 0.40 | -0.17 | 0.09 | -1.90 | 0.057 | 0.84 | 0.70 | 1.01 | -0.13 | 0.05 | -2.84 | 0.005 | 0.87 | 0.80 | 0.96 | |
| Random Effects | Variance Std.Dev. | | | Variance Std.Dev. | | | | | | | Variance Std.Dev. | | | | | | | |
| (Intercept) | 0.17 | 0.42 | | 0.12 | 0.35 | | | | | | 0.03 | 0.17 | | | | | | |
| Residual | 1.99 | 1.41 | | n/a | n/a | | | | | | n/a | n/a | | | | | | |
| Model type | Linear | | | Binomial | | | | | | | Binomial | | | | | | | |
| Number of observations | 1598 | | | 1315 | | | | | | | 1497 | | | | | | | |
| Number of groups | 22 | | | 22 | | | | | | | 22 | | | | | | | |

Supplementary Table 3. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using the subset of all married women (total n = 1,598).

| | (a) Social Network Size | | | (b) Density | | | | | (c) Kinship Density | | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------|----------------------------|------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 2.86 | 0.18 | 16.12 | 0.48 | 0.17 | 2.87 | 0.004 | 1.61 | 1.16 | 2.23 | -1.34 | 0.11 | -12.14 | 0.000 | 0.26 | 0.21 | 0.32 |
| Relative Age | -0.12 | 0.08 | -1.57 | 0.24 | 0.08 | 3.18 | 0.001 | 1.27 | 1.10 | 1.48 | -0.06 | 0.05 | -1.32 | 0.185 | 0.94 | 0.85 | 1.03 |
| Relative Age sq | -0.08 | 0.05 | -1.69 | 0.42 | 0.06 | 6.94 | 0.000 | 1.52 | 1.35 | 1.71 | -0.01 | 0.03 | -0.24 | 0.813 | 0.99 | 0.94 | 1.05 |
| Relative SES | 0.13 | 0.07 | 1.84 | -0.02 | 0.07 | -0.26 | 0.797 | 0.98 | 0.86 | 1.12 | -0.12 | 0.04 | -2.73 | 0.006 | 0.89 | 0.82 | 0.97 |
| Relative Material Wealth | 0.11 | 0.05 | 2.15 | -0.04 | 0.05 | -0.87 | 0.383 | 0.96 | 0.87 | 1.06 | -0.03 | 0.03 | -1.14 | 0.254 | 0.97 | 0.91 | 1.03 |
| Relative Market Integration | 0.00 | 0.05 | 0.07 | 0.03 | 0.05 | 0.58 | 0.561 | 1.03 | 0.94 | 1.13 | -0.11 | 0.03 | -3.75 | 0.000 | 0.89 | 0.84 | 0.95 |
| Relative Farming Wealth | 0.00 | 0.04 | 0.08 | 0.03 | 0.04 | 0.84 | 0.403 | 1.03 | 0.96 | 1.12 | -0.03 | 0.02 | -1.18 | 0.240 | 0.97 | 0.93 | 1.02 |
| Migrant Status | -0.10 | 0.09 | -1.12 | -0.47 | 0.09 | -5.47 | 0.000 | 0.62 | 0.52 | 0.74 | 0.13 | 0.05 | 2.49 | 0.013 | 1.14 | 1.03 | 1.27 |
| Ever Married | 0.19 | 0.15 | 1.28 | 0.83 | 0.14 | 6.13 | 0.000 | 2.30 | 1.76 | 3.00 | 0.76 | 0.10 | 7.73 | 0.000 | 2.14 | 1.76 | 2.59 |
| Number of Sisters | 0.01 | 0.03 | 0.25 | 0.07 | 0.02 | 2.89 | 0.004 | 1.07 | 1.02 | 1.13 | 0.10 | 0.01 | 7.00 | 0.000 | 1.11 | 1.08 | 1.14 |
| Average Market Integration | 0.07 | 0.10 | 0.70 | -0.15 | 0.10 | -1.59 | 0.111 | 0.86 | 0.71 | 1.04 | -0.18 | 0.05 | -3.63 | 0.000 | 0.83 | 0.76 | 0.92 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | | | | Variance | Std.Dev. | | | | | |
| (Intercept) | 0.15 | 0.39 | | 0.13 | 0.36 | | | | | | 0.03 | 0.17 | | | | | |
| Residual | 2.03 | 1.42 | | n/a | n/a | | | | | | n/a | n/a | | | | | |
| Model type | Linear | | | Binomial | | | | | | | Binomial | | | | | | |
| Number of observations | 1239 | | | 1015 | | | | | | | 1155 | | | | | | |
| Number of groups | 22 | | | 22 | | | | | | | 22 | | | | | | |

Supplementary Table 4. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using the subset of all farmers (total n = 1,239).

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------|---------------|----------------------------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 2.76 | 0.17 | 15.79 | 0.20 | 0.17 | 1.17 | 0.243 | 1.22 | 0.87 | 1.71 | -1.19 | 0.12 | -9.75 | 0.000 | 0.30 | 0.24 | 0.39 |
| Relative Age | -0.11 | 0.08 | -1.50 | 0.24 | 0.08 | 2.96 | 0.003 | 1.27 | 1.08 | 1.49 | -0.07 | 0.05 | -1.40 | 0.162 | 0.93 | 0.84 | 1.03 |
| Relative Age sq | -0.01 | 0.05 | -0.21 | 0.49 | 0.06 | 7.96 | 0.000 | 1.64 | 1.45 | 1.85 | -0.03 | 0.03 | -0.93 | 0.354 | 0.97 | 0.92 | 1.03 |
| Relative SES | 0.13 | 0.07 | 1.84 | -0.13 | 0.07 | -1.77 | 0.077 | 0.88 | 0.76 | 1.01 | -0.09 | 0.05 | -1.84 | 0.066 | 0.92 | 0.83 | 1.01 |
| Relative Material Wealth | 0.15 | 0.05 | 3.06 | 0.07 | 0.05 | 1.32 | 0.187 | 1.07 | 0.97 | 1.19 | 0.00 | 0.03 | 0.15 | 0.883 | 1.00 | 0.94 | 1.07 |
| Relative Market Integration | -0.03 | 0.05 | -0.58 | -0.05 | 0.05 | -1.14 | 0.255 | 0.95 | 0.86 | 1.04 | -0.16 | 0.03 | -5.12 | 0.000 | 0.85 | 0.80 | 0.91 |
| Relative Farming Wealth | 0.00 | 0.05 | 0.06 | -0.19 | 0.05 | -3.69 | 0.000 | 0.83 | 0.75 | 0.92 | 0.05 | 0.03 | 1.66 | 0.097 | 1.05 | 0.99 | 1.12 |
| Farmer Status | 0.05 | 0.10 | 0.44 | 0.37 | 0.10 | 3.80 | 0.000 | 1.45 | 1.20 | 1.76 | -0.17 | 0.07 | -2.62 | 0.009 | 0.84 | 0.74 | 0.96 |
| Ever Married | 0.20 | 0.12 | 1.65 | 0.57 | 0.12 | 4.90 | 0.000 | 1.77 | 1.41 | 2.22 | 0.83 | 0.09 | 9.64 | 0.000 | 2.30 | 1.94 | 2.72 |
| Number of Sisters | 0.00 | 0.03 | -0.11 | 0.11 | 0.03 | 3.92 | 0.000 | 1.11 | 1.06 | 1.18 | 0.09 | 0.02 | 5.56 | 0.000 | 1.10 | 1.06 | 1.13 |
| Average Market Integration | 0.03 | 0.09 | 0.33 | -0.10 | 0.08 | -1.19 | 0.234 | 0.91 | 0.78 | 1.06 | -0.15 | 0.06 | -2.26 | 0.024 | 0.86 | 0.76 | 0.98 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | | | | Variance | Std.Dev. | | | | | |
| (Intercept) | 0.10 | 0.32 | | 0.07 | 0.27 | | | | | | 0.06 | 0.24 | | | | | |
| Residual | 1.93 | 1.39 | | n/a | n/a | | | | | | n/a | n/a | | | | | |
| Model type | Linear | | | Binomial | | | | | | | Binomial | | | | | | |
| Number of observations | 1221 | | | 1028 | | | | | | | 1154 | | | | | | |
| Number of groups | 22 | | | 22 | | | | | | | 22 | | | | | | |

Supplementary Table 5. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using the subset of all non-migrants (total n = 1,221).

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------------|-----------------|----------------------------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 2.74 | 0.20 | 13.47 | 0.70 | 0.20 | 3.57 | 0.000 | 2.01 | 1.37 | 2.94 | -1.32 | 0.14 | -9.18 | 0.000 | 0.27 | 0.20 | 0.35 |
| Relative Age | -0.19 | 0.08 | -2.23 | 0.24 | 0.08 | 3.02 | 0.003 | 1.27 | 1.09 | 1.48 | 0.01 | 0.06 | 0.21 | 0.835 | 1.01 | 0.91 | 1.13 |
| Relative Age sq | -0.04 | 0.06 | -0.73 | 0.41 | 0.07 | 5.63 | 0.000 | 1.50 | 1.30 | 1.73 | 0.03 | 0.04 | 0.64 | 0.526 | 1.03 | 0.95 | 1.11 |
| Relative SES | 0.07 | 0.07 | 0.90 | -0.11 | 0.07 | -1.62 | 0.105 | 0.90 | 0.79 | 1.02 | -0.10 | 0.05 | -1.95 | 0.052 | 0.91 | 0.83 | 1.00 |
| Relative Material Wealth | 0.09 | 0.06 | 1.60 | -0.11 | 0.06 | -1.84 | 0.065 | 0.90 | 0.80 | 1.01 | 0.05 | 0.04 | 1.26 | 0.208 | 1.05 | 0.97 | 1.13 |
| Relative Market Integration | 0.00 | 0.05 | 0.09 | 0.10 | 0.05 | 2.12 | 0.034 | 1.11 | 1.01 | 1.22 | -0.12 | 0.04 | -3.45 | 0.001 | 0.88 | 0.83 | 0.95 |
| Relative Farming Wealth | -0.02 | 0.06 | -0.31 | 0.10 | 0.06 | 1.65 | 0.100 | 1.10 | 0.98 | 1.23 | -0.03 | 0.04 | -0.70 | 0.484 | 0.97 | 0.90 | 1.05 |
| Farmer Status | 0.15 | 0.11 | 1.32 | 0.24 | 0.10 | 2.30 | 0.021 | 1.27 | 1.04 | 1.55 | 0.08 | 0.08 | 1.07 | 0.284 | 1.09 | 0.93 | 1.26 |
| Migrant Status | -0.09 | 0.10 | -0.95 | -0.30 | 0.09 | -3.33 | 0.001 | 0.74 | 0.63 | 0.89 | -0.02 | 0.06 | -0.31 | 0.755 | 0.98 | 0.86 | 1.11 |
| Ever Married | 0.16 | 0.15 | 1.08 | 0.30 | 0.14 | 2.15 | 0.032 | 1.35 | 1.03 | 1.79 | 0.72 | 0.11 | 6.52 | 0.000 | 2.05 | 1.65 | 2.55 |
| Average Market Integration | 0.12 | 0.11 | 1.11 | -0.11 | 0.09 | -1.27 | 0.206 | 0.89 | 0.75 | 1.06 | -0.16 | 0.07 | -2.46 | 0.014 | 0.85 | 0.75 | 0.97 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | Variance | Std.Dev. | | | | | | | | |
| (Intercept) | 0.16 | 0.40 | | 0.10 | 0.31 | | | 0.06 | 0.24 | | | | | | | | |
| Residual | 1.78 | 1.34 | | n/a | n/a | | | n/a | n/a | | | | | | | | |
| Model type | Linear | | | Binomial | | | | Binomial | | | | | | | | | |
| Number of observations | 976 | | | 825 | | | | 933 | | | | | | | | | |
| Number of groups | 22 | | | 22 | | | | 22 | | | | | | | | | |

Supplementary Table 6. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using the subset of all women with one or zero sisters (total n = 976).

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------------|-------------------|----------------|--------------------|--------------------------|---------------|----------------------------|--------------------------|-------------------|----------------|--------------------|--------------------------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 2.77 | 0.18 | 15.51 | 0.65 | 0.16 | 4.05 | 0.000 | 1.91 | 1.40 | 2.62 | -1.30 | 0.11 | -11.52 | 0.000 | 0.27 | 0.22 | 0.34 |
| Relative Age | -0.11 | 0.06 | -1.84 | 0.20 | 0.05 | 3.75 | 0.000 | 1.22 | 1.10 | 1.36 | -0.07 | 0.04 | -1.98 | 0.048 | 0.93 | 0.86 | 1.00 |
| Relative Age sq | -0.05 | 0.04 | -1.45 | 0.34 | 0.05 | 7.24 | 0.000 | 1.40 | 1.28 | 1.54 | -0.02 | 0.03 | -0.63 | 0.530 | 0.98 | 0.94 | 1.03 |
| Relative SES | 0.12 | 0.05 | 2.31 | -0.06 | 0.05 | -1.22 | 0.222 | 0.95 | 0.86 | 1.03 | -0.10 | 0.03 | -3.19 | 0.001 | 0.90 | 0.84 | 0.96 |
| Relative Material Wealth | 0.12 | 0.04 | 2.91 | -0.07 | 0.04 | -1.86 | 0.063 | 0.93 | 0.86 | 1.00 | -0.02 | 0.03 | -0.66 | 0.513 | 0.98 | 0.94 | 1.03 |
| Relative Market Integration | 0.02 | 0.04 | 0.45 | 0.05 | 0.03 | 1.51 | 0.131 | 1.05 | 0.98 | 1.13 | -0.11 | 0.02 | -4.70 | 0.000 | 0.89 | 0.85 | 0.94 |
| Relative Farming Wealth | 0.00 | 0.04 | 0.04 | 0.03 | 0.04 | 0.80 | 0.421 | 1.03 | 0.96 | 1.11 | -0.02 | 0.02 | -0.84 | 0.402 | 0.98 | 0.94 | 1.03 |
| Farmer Status | 0.04 | 0.08 | 0.53 | 0.19 | 0.07 | 2.61 | 0.009 | 1.21 | 1.05 | 1.39 | 0.05 | 0.05 | 0.91 | 0.364 | 1.05 | 0.95 | 1.16 |
| Migrant Status | -0.04 | 0.07 | -0.61 | -0.40 | 0.06 | -6.43 | 0.000 | 0.67 | 0.59 | 0.76 | 0.02 | 0.04 | 0.47 | 0.637 | 1.02 | 0.94 | 1.11 |
| Ever Married | 0.14 | 0.11 | 1.29 | 0.49 | 0.10 | 4.90 | 0.000 | 1.64 | 1.34 | 1.99 | 0.84 | 0.08 | 11.00 | 0.000 | 2.31 | 1.99 | 2.69 |
| Number of Sisters | 0.01 | 0.02 | 0.44 | 0.09 | 0.02 | 4.40 | 0.000 | 1.09 | 1.05 | 1.13 | 0.11 | 0.01 | 9.07 | 0.000 | 1.12 | 1.09 | 1.15 |
| Population Density | 0.13 | 0.43 | 0.30 | -0.45 | 0.35 | -1.30 | 0.194 | 0.64 | 0.32 | 1.26 | -0.60 | 0.24 | -2.49 | 0.013 | 0.55 | 0.34 | 0.88 |
| Random Effects | Variance Std.Dev. | | | Variance Std.Dev. | | | | Variance Std.Dev. | | | Variance Std.Dev. | | | | Variance Std.Dev. | | |
| (Intercept) | 0.14 | 0.37 | | 0.09 | 0.30 | | | 0.04 | 0.20 | | | | | | | | |
| Residual | 1.98 | 1.41 | | n/a | n/a | | | n/a | n/a | | | | | | | | |
| Model type | Linear | | | Binomial | | | | Binomial | | | Binomial | | | | Binomial | | |
| Number of observations | 1972 | | | 1637 | | | | 1854 | | | 22 | | | | 22 | | |
| Number of groups | 22 | | | 22 | | | | 22 | | | 22 | | | | 22 | | |

Supplementary Table 7. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using population density instead of market integration as a community level predictor in the models.

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------|---------------|----------------------------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 3.57 | 0.70 | 5.13 | 0.12 | 0.53 | 0.22 | 0.825 | 1.12 | 0.40 | 3.19 | -1.73 | 0.36 | -4.77 | 0.000 | 0.18 | 0.09 | 0.36 |
| Relative Age | -0.11 | 0.06 | -1.84 | 0.20 | 0.05 | 3.71 | 0.000 | 1.22 | 1.10 | 1.36 | -0.07 | 0.04 | -2.02 | 0.044 | 0.93 | 0.86 | 1.00 |
| Relative Age sq | -0.05 | 0.04 | -1.45 | 0.34 | 0.05 | 7.23 | 0.000 | 1.40 | 1.28 | 1.53 | -0.02 | 0.03 | -0.60 | 0.548 | 0.98 | 0.94 | 1.04 |
| Relative SES | 0.12 | 0.05 | 2.33 | -0.06 | 0.05 | -1.26 | 0.207 | 0.94 | 0.86 | 1.03 | -0.11 | 0.03 | -3.22 | 0.001 | 0.90 | 0.84 | 0.96 |
| Relative Material Wealth | 0.12 | 0.04 | 2.91 | -0.07 | 0.04 | -1.88 | 0.060 | 0.93 | 0.86 | 1.00 | -0.02 | 0.03 | -0.65 | 0.517 | 0.98 | 0.94 | 1.03 |
| Relative Market Integration | 0.02 | 0.04 | 0.45 | 0.05 | 0.03 | 1.48 | 0.139 | 1.05 | 0.98 | 1.12 | -0.11 | 0.02 | -4.72 | 0.000 | 0.89 | 0.85 | 0.94 |
| Relative Farming Wealth | 0.00 | 0.04 | 0.01 | 0.03 | 0.04 | 0.82 | 0.411 | 1.03 | 0.96 | 1.11 | -0.02 | 0.02 | -0.85 | 0.396 | 0.98 | 0.94 | 1.03 |
| Farmer Status | 0.05 | 0.08 | 0.60 | 0.18 | 0.07 | 2.51 | 0.012 | 1.20 | 1.04 | 1.38 | 0.05 | 0.05 | 0.96 | 0.335 | 1.05 | 0.95 | 1.16 |
| Migrant Status | -0.04 | 0.07 | -0.62 | -0.41 | 0.06 | -6.45 | 0.000 | 0.67 | 0.59 | 0.75 | 0.02 | 0.04 | 0.43 | 0.664 | 1.02 | 0.94 | 1.11 |
| Ever Married | 0.15 | 0.11 | 1.32 | 0.49 | 0.10 | 4.87 | 0.000 | 1.63 | 1.34 | 1.99 | 0.84 | 0.08 | 11.02 | 0.000 | 2.32 | 1.99 | 2.69 |
| Number of Sisters | 0.01 | 0.02 | 0.50 | 0.09 | 0.02 | 4.36 | 0.000 | 1.09 | 1.05 | 1.13 | 0.11 | 0.01 | 8.98 | 0.000 | 1.12 | 1.09 | 1.15 |
| Average Market Integration | 0.01 | 0.09 | 0.08 | -0.14 | 0.07 | -1.89 | 0.059 | 0.87 | 0.75 | 1.01 | -0.13 | 0.05 | -2.53 | 0.012 | 0.88 | 0.80 | 0.97 |
| Average Completed Fertility | -0.20 | 0.18 | -1.14 | 0.12 | 0.13 | 0.88 | 0.380 | 1.13 | 0.86 | 1.47 | 0.08 | 0.09 | 0.88 | 0.381 | 1.08 | 0.91 | 1.30 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | | | Variance | Std.Dev. | | | | | | |
| (Intercept) | 0.13 | 0.36 | | 0.07 | 0.26 | | | | | 0.03 | 0.18 | | | | | | |
| Residual | 1.98 | 1.41 | | n/a | n/a | | | | | n/a | n/a | | | | | | |
| Model type | Linear | | | Binomial | | | Binomial | | | | | | | | | | |
| Number of observations | 1972 | | | 1637 | | | 1854 | | | | | | | | | | |
| Number of groups | 22 | | | 22 | | | 22 | | | | | | | | | | |

Supplementary Table 8. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density including community average completed fertility as a covariate at the community level of the models.

| | (a) Social Network Size | | | (b) Density | | | | | (c) Kinship Density | | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------|-------------------|----------------|--------------------|-----------|----------------------------|------|-----------------|-------------------|----------------|--------------------|-----------|---------------|------|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | |
| Intercept | 3.50 | 0.48 | 7.23 | 1.04 | 0.37 | 2.82 | 0.005 | 2.82 | 1.37 | 5.79 | -1.39 | 0.28 | -5.02 | 0.000 | 0.25 | 0.14 | 0.43 |
| Relative Age | -0.11 | 0.06 | -1.81 | 0.20 | 0.05 | 3.70 | 0.000 | 1.22 | 1.10 | 1.36 | -0.08 | 0.04 | -2.03 | 0.042 | 0.93 | 0.86 | 1.00 |
| Relative Age sq | -0.05 | 0.04 | -1.45 | 0.34 | 0.05 | 7.23 | 0.000 | 1.40 | 1.28 | 1.53 | -0.02 | 0.03 | -0.60 | 0.551 | 0.99 | 0.94 | 1.04 |
| Relative SES | 0.12 | 0.05 | 2.34 | -0.06 | 0.05 | -1.27 | 0.206 | 0.94 | 0.86 | 1.03 | -0.11 | 0.03 | -3.21 | 0.001 | 0.90 | 0.84 | 0.96 |
| Relative Material Wealth | 0.12 | 0.04 | 2.92 | -0.08 | 0.04 | -1.90 | 0.057 | 0.93 | 0.86 | 1.00 | -0.02 | 0.03 | -0.66 | 0.509 | 0.98 | 0.94 | 1.03 |
| Relative Market Integration | 0.02 | 0.04 | 0.45 | 0.05 | 0.03 | 1.50 | 0.134 | 1.05 | 0.98 | 1.13 | -0.11 | 0.02 | -4.71 | 0.000 | 0.89 | 0.85 | 0.94 |
| Relative Farming Wealth | 0.00 | 0.04 | 0.02 | 0.03 | 0.04 | 0.79 | 0.428 | 1.03 | 0.96 | 1.11 | -0.02 | 0.02 | -0.87 | 0.383 | 0.98 | 0.94 | 1.03 |
| Farmer Status | 0.05 | 0.08 | 0.59 | 0.18 | 0.07 | 2.55 | 0.011 | 1.20 | 1.04 | 1.38 | 0.05 | 0.05 | 0.99 | 0.322 | 1.05 | 0.95 | 1.16 |
| Migrant Status | -0.04 | 0.07 | -0.54 | -0.40 | 0.06 | -6.38 | 0.000 | 0.67 | 0.59 | 0.76 | 0.02 | 0.04 | 0.44 | 0.661 | 1.02 | 0.94 | 1.11 |
| Ever Married | 0.14 | 0.11 | 1.28 | 0.49 | 0.10 | 4.86 | 0.000 | 1.63 | 1.34 | 1.98 | 0.84 | 0.08 | 11.03 | 0.000 | 2.32 | 2.00 | 2.69 |
| Number of Sisters | 0.01 | 0.02 | 0.43 | 0.09 | 0.02 | 4.41 | 0.000 | 1.09 | 1.05 | 1.13 | 0.11 | 0.01 | 9.04 | 0.000 | 1.12 | 1.09 | 1.15 |
| Average Market Integration | 0.02 | 0.09 | 0.18 | -0.18 | 0.07 | -2.67 | 0.008 | 0.83 | 0.73 | 0.95 | -0.14 | 0.05 | -2.87 | 0.004 | 0.87 | 0.79 | 0.96 |
| Proportion of Migrants | -1.74 | 1.14 | -1.53 | -1.18 | 0.86 | -1.38 | 0.168 | 0.31 | 0.06 | 1.65 | -0.07 | 0.65 | -0.12 | 0.908 | 0.93 | 0.26 | 3.31 |
| Random Effects | Variance | Std.Dev. | | Variance | Std.Dev. | | | | | | Variance | Std.Dev. | | | | | |
| (Intercept) | 0.12 | 0.34 | | 0.06 | 0.24 | | | | | | 0.03 | 0.18 | | | | | |
| Residual | 1.98 | 1.41 | | n/a | n/a | | | | | | n/a | n/a | | | | | |
| Model type | Linear | | | Binomial | | | | | | | Binomial | | | | | | |
| Number of observations | 1972 | | | 1637 | | | | | | | 1854 | | | | | | |
| Number of groups | 22 | | | 22 | | | | | | | 22 | | | | | | |

Supplementary Table 9. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density including the proportion of migrants as a covariate at the community level of the models.

| | (a) Social Network Size | | | (b) Density | | | | | | (c) Kinship Density | | | | | | | | |
|-----------------------------|--------------------------------|-------------------|----------------|--------------------------|-------------------|----------------|--------------------|-----------|---------------|----------------------------|--------------------------|-------------------|----------------|--------------------|-----------|---------------|------|--|
| Fixed Effects | Estimate | Std. Error | t value | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | Estimate | Std. Error | z-value | Pr(> z) | OR | 95% CI | | |
| Intercept | 2.80 | 0.16 | 17.82 | 0.58 | 0.14 | 4.11 | 0.000 | 1.78 | 1.35 | 2.34 | -1.43 | 0.10 | -14.33 | 0.000 | 0.24 | 0.20 | 0.29 | |
| Relative Age | -0.11 | 0.06 | -1.83 | 0.20 | 0.05 | 3.73 | 0.000 | 1.22 | 1.10 | 1.36 | -0.08 | 0.04 | -2.06 | 0.039 | 0.93 | 0.86 | 1.00 | |
| Relative Age sq | -0.06 | 0.04 | -1.46 | 0.33 | 0.05 | 7.19 | 0.000 | 1.40 | 1.28 | 1.53 | -0.01 | 0.03 | -0.57 | 0.570 | 0.99 | 0.94 | 1.04 | |
| Relative SES | 0.12 | 0.05 | 2.33 | -0.05 | 0.05 | -1.15 | 0.249 | 0.95 | 0.87 | 1.04 | -0.11 | 0.03 | -3.26 | 0.001 | 0.90 | 0.84 | 0.96 | |
| Relative Material Wealth | 0.12 | 0.04 | 2.93 | -0.07 | 0.04 | -1.71 | 0.087 | 0.93 | 0.87 | 1.01 | -0.02 | 0.03 | -0.70 | 0.484 | 0.98 | 0.94 | 1.03 | |
| Absolute Market Integration | 0.02 | 0.04 | 0.42 | 0.04 | 0.04 | 1.04 | 0.300 | 1.04 | 0.97 | 1.12 | -0.12 | 0.03 | -4.61 | 0.000 | 0.89 | 0.85 | 0.93 | |
| Relative Farming Wealth | 0.00 | 0.04 | 0.03 | 0.03 | 0.04 | 0.72 | 0.471 | 1.03 | 0.95 | 1.11 | -0.02 | 0.02 | -0.88 | 0.379 | 0.98 | 0.94 | 1.03 | |
| Farmer Status | 0.05 | 0.08 | 0.55 | 0.18 | 0.07 | 2.52 | 0.012 | 1.20 | 1.04 | 1.38 | 0.05 | 0.05 | 1.00 | 0.318 | 1.05 | 0.95 | 1.16 | |
| Migrant Status | -0.04 | 0.07 | -0.62 | -0.41 | 0.06 | -6.46 | 0.000 | 0.67 | 0.59 | 0.75 | 0.02 | 0.04 | 0.44 | 0.660 | 1.02 | 0.94 | 1.11 | |
| Ever Married | 0.14 | 0.11 | 1.29 | 0.49 | 0.10 | 4.83 | 0.000 | 1.62 | 1.33 | 1.98 | 0.84 | 0.08 | 11.08 | 0.000 | 2.33 | 2.00 | 2.70 | |
| Number of Sisters | 0.01 | 0.02 | 0.45 | 0.09 | 0.02 | 4.41 | 0.000 | 1.09 | 1.05 | 1.13 | 0.11 | 0.01 | 9.05 | 0.000 | 1.12 | 1.09 | 1.15 | |
| Average Market Integration | 0.03 | 0.09 | 0.38 | -0.18 | 0.07 | -2.42 | 0.015 | 0.84 | 0.72 | 0.97 | -0.09 | 0.05 | -1.88 | 0.060 | 0.91 | 0.83 | 1.00 | |
| Random Effects | Variance Std.Dev. | | | Variance Std.Dev. | | | | | | | Variance Std.Dev. | | | | | | | |
| (Intercept) | 0.13 | 0.36 | | 0.07 | 0.27 | | | | | | 0.03 | 0.18 | | | | | | |
| Residual | 1.98 | 1.41 | | n/a | n/a | | | | | | n/a | n/a | | | | | | |
| Model type | Linear | | | Binomial | | | | | | | Binomial | | | | | | | |
| Number of observations | 1972 | | | 1637 | | | | | | | 1854 | | | | | | | |
| Number of groups | 22 | | | 22 | | | | | | | 22 | | | | | | | |

Supplementary Table 10. Multilevel regression estimates, standard errors and (where appropriate) odds ratios and 95% confidence intervals from the models of (a) Social Network Size, (b) Density and (c) Kinship Density using uncentered versions of the market integration variable at the household level.