Altruism in the household: in kind transfers in the context of kin selection

José Alberto Molina

Review of Economics of the Household

ISSN 1569-5239 Volume 11 Number 3

Rev Econ Household (2013) 11:309-312 DOI 10.1007/s11150-013-9214-9





Your article is protected by copyright and all rights are held exclusively by Springer Science +Business Media New York. This e-offprint is for personal use only and shall not be selfarchived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".



Rev Econ Household (2013) 11:309–312 DOI 10.1007/s11150-013-9214-9

Altruism in the household: in kind transfers in the context of kin selection

José Alberto Molina

Received: 23 July 2013/Accepted: 25 July 2013/Published online: 11 August 2013 © Springer Science+Business Media New York 2013

It is generally accepted that nature is, in essence, competitive. Nevertheless, the world is full of examples that demonstrate the opposite, cooperation. It is precisely this spirit of collaboration, this teamwork, that has allowed the emergence of increasingly complete forms of life. This special issue is about altruistic acts defined as behavior in which an individual assumes a cost so that others can obtain a benefit.

Darwin (1859) already realized that this altruistic behavior presented a problem for his theory of evolution by natural selection. How does one explain the existence of altruistic individuals when their conduct benefits others but entails a cost for them? The model that best explains how natural selection promotes altruistic conduct is based on kin selection: within a family nucleus altruism takes place among family members who share genes as descendants of common ancestors. This reasoning has been mathematically revealed through Hamilton's rule, stating that altruism is advantageous if the costs to the collaborator are less than the benefits generated for the individual being helped, all of which is corrected by the degree of familiarity between them (Hamilton 1964). This model of cooperation based on the Prisoner's Dilemma (Molina et al. 2013) has been empirically tested in the social sciences literature (e.g. West et al. 2011; Oli 2003; Mulder 2007; Waibel et al. 2011).

Applying these concepts to the human species we live in enormously complex societies whose rules and customs revolve around providing and guaranteeing mutual help. In fact, we humans are so accustomed to this high level of cooperation that we have not traditionally paid too much attention to what might explain this altruistic conduct or to its socio-economic implications. Economists started addressing these questions since Adam Smith (1957), who argued that interdependence among individuals provides positive utility, measured in economic terms. Edgeworth (1881) justified this interdependence in terms of the "social distance"

J. A. Molina (🖂)

University of Zaragoza and IZA, Zaragoza, Spain e-mail: jamolina@unizar.es



J. A. Molina

between individuals. More recently, Becker (1981) has placed the study of altruism in the context of kin selection: in his contributions to family economics he established that altruistic transfers between a donor and a recipient are motivated by the donor's concern for the well-being of the recipient, with no expectation of compensation.

It is in this tradition that this Special Issue presents six relevant theoretical and empirical examples of in-kind transfers within families. The studies use US as well as European data. The topics they cover include time dedicated by family members to various volunteer activities by parents on behalf of their children, other in-kind transfers from parents to children, and in-kind transfers from children to parents. The articles deal with co-residence, caring time, and love. Other types of transfers, including monetary gifts, will be considered in a future Special Issue. Given the large number of high quality manuscripts submitted to this review as a result of our call for papers on the topic of altruism we decided to split the accepted articles in this way.

In the context of pro-social behavior and using 2001 US data, Mark Ottoni-Wilhelm and Robert Bandy examine the associations between family structure during childhood and two pro-social outcomes: charitable giving and volunteering. Their measure includes all giving and volunteering except donations to religious congregations, with volunteering being assessed in terms of the number of hours per year dedicated to an organization. The quantitative importance of these two activities is given by the fact that 25 % of young adults do some kind of volunteering, with the average hours per year being 123, whereas 43 % of young adults make charitable gifts, with the average among those making such a gift standing at \$493. Substantive results are that family structure transitions during middle childhood are positively associated with subsequent volunteering activities whereas family structure transitions during adolescence are negatively associated with subsequent giving. The authors also demonstrate the advantages of a Bayesian approach to the specification-testing problem.

Adopting an inter-generational approach, Eleanor Brown and Ye Zhang focus on volunteering by parents on behalf of their children. They argue that child-related volunteering is a wide-spread activity worthy of study, given that for more than a quarter of the 63 million US individuals who volunteered in the year ending in September 2009, the most common principal activity for which they volunteered was education and youth services. Using data from the Panel Study of Income Dynamics the authors use a household production model and divide volunteering into three categories: youth-related, religious, and non-youth-related secular. They find evidence that husbands and wives respond to one another's time pressures in such a way that youth-related volunteering appears to be a task for which husbands' and wives' time inputs substitute for one another. Further, they find that this pattern also applies to housework, but not for other forms of volunteering. An increase in either spouse's hours of market work will significantly reduce that spouse's likelihood to volunteer for youth-related activities, while increasing the partner's likelihood to volunteer. A similar pattern holds for hours volunteered to youthrelated activities, with the wife's responses achieving statistical significance.



Altruism in the household 311

The article by Paul Bingley and Ian Walker is also about in-kind transfers as a form of altruism. It starts from the premise that government transfer programs are often provided to a parent on behalf of a child, and that transfers for specific client groups, such as children, are often in-kind rather than cash. However, these transfers may at least partially crowd out private expenditures on the goods in question, since they reduce the incentive for other individuals, parents for example, to make altruistic transfers. These transfers are often made to one household member on behalf of another, so there may also be agency concerns. The authors use three nutrition programs for children in UK households to cast light on altruism effects. Specifically, they examine the effects of transferring private goods (milk and food) on household expenditures, with this being a direct means of testing for altruism. The results indicate that the milk programs crowd out private milk expenditures by about 80 % of their value, whereas Free School lunches are estimated to crowd out private food expenditures by only around 15 % of their value.

Also in an inter-generational context, Viola Angelini and Anne Laferrère consider that the nest-leaving period is the time where household decisions can be viewed through the lens of parental altruism. More specifically, the authors present a theoretical model that allows for two channels of parental altruism: providing a home for co-residence or helping pay for other accommodations. In the empirical analysis, the authors use retrospective life-history data from Europe's Survey of Health, Ageing and Retirement to assess parental altruism. In particular, they examine the effect of parental resources and home characteristics on the age at which individuals now aged 50 or older left the nest, across thirteen countries. The authors show that the nest-leaving age has declined from one cohort to the next, with a relative decline in the age of leaving one's parents to begin a family, and an increase in the age of leaving home to pursue higher education. The authors test an altruistic model in which constrained parents push the child out, whereas less constrained "proximity altruistic" parents help the child by providing a home, or even help the child to leave the nest, in the case of the wealthiest "active altruists". Taking into account the endogenous child's choice of education, they find that most parents help by being proximity altruists, while some helped their children move out, and that the quality of the home had an important influence on the nest-leaving age.

Ingela Alger and Donald Cox begin by observing that mothers tend to spend more time caring for children than fathers. They then ask: are there evolutionary reasons to expect mothers to be more altruistic toward children than fathers? The economics literature has documented gender differences that are thought to be partly due to preferences. Evolutionary biology complements this approach by treating preferences as the outcome of natural selection. The authors examine the well-developed biological literature to make a *prima facie* case for the evolutionary roots of parental preferences, considering the most rudimentary of traits—gender differences in gamete size and internal fertilization—and explain how these factors have been thought to generate male–female differences in altruism toward children and other preferences related to family behavior. In a first approximation, the authors indicate that possession of the larger gamete (i.e. the egg) promotes maternal altruism, while having the smaller gamete (i.e. the sperm) encourages



J. A. Molina

wanderlust and detracts from paternal altruism. This evolutionary approach to the family illuminates connections between issues typically considered as separate topics in family economics, such as parental care and marriage markets.

Finally, Shoshana Grossbard and Sankar Mukhopadhyay examine how children affect self-reported parental happiness, and also how children affect the psychic benefits of being in couple, after assuming that what makes parents happy could possibly include altruistic motivations. The authors infer that, after ruling out some competing compensation mechanisms, loss of spousal love is compensated for by altruistic feelings towards children. In particular, the authors examine how children affect happiness and relationships within a family by analyzing two unique questions in the 1997 cohort of the National Longitudinal Study of Youth. The authors find that (a) the presence of children is associated with a loss of spousal love; (b) the loss of spousal love is associated with a significant loss of overall happiness. If children reduce feelings of being loved by the spouse but do not reduce reported happiness, even though spousal love induces happiness, then it must be the case that children contribute to parental happiness by providing other benefits.

Together, these articles demonstrate the importance of altruism in modelling intra- and inter-household economic behaviors. In presenting a broad range of ideas the authors demonstrate how the economic approach helps understand altruistic behavior.

Acknowledgments I am grateful for helpful comments from Shoshana Grossbard. This contribution has been benefited from the funding from the Spanish Ministry of Economics (Project ECO2012-34828).

References

- Becker, G. S. (1981). A treatise of the family. Cambridge: Harvard University Press.
- Darwin, C. (1859). On the origin of species by means of natural selection or the prevervation of favored races in the struggle for life. London: John Murray.
- Edgeworth, F. (1881). Mathematical psychics: An essay of the application of mathematics to the moral sciences. London: C. Kegan Paul and Co.
- Hamilton, W. D. (1964). The genetical evolution of social behaviour. *Journal of Theoretical Biology*, 7, 1–52.
- Molina, J.A., Giménez-Nadal, J.I., Cuesta, J.A., García Lázaro, C., Moreno, Y., Sanchez, A. (2013). Gender differences in cooperation: experimental evidence on high school students. IZA DP N° 7421.
- Mulder, M. G. (2007). Hamilton's rule and kin competition: the Kipsigis case. *Evolution and Human Behavior*, 28, 299–312.
- Oli, M. K. (2003). Hamilton goes empirical: estimation of inclusive fitness from life-history data. *Proceedings of the Royal Society Biological B*, 270, 307–311.
- Smith, A. (1957). The theory of moral sentiments. Printed for A. Millar, in the Strand; and A. Kincaid and J. Bell. in Edinburgh.
- Waibel, M., Floreano, D., & Keller, L. (2011). A quantitative test of Hamilton's rule for the evolution of altruism. *PLoS Biology*, 9(5), 1–7.
- West, S. A., Murray, M. G., Machado, C. A., Griffin, A. S., & Herre, E. A. (2011). Testing Hamilton's rule with competition between relatives. *Nature*, 409, 510–513.

