#2014-064

Giving in South Africa: Determining the influence of altruism, inequality aversion and social capital

Nyasha Tirivayi
UNU-MERIT Working Papers

ISSN 1871-9872

Maastricht Economic and Social Research Institute on Innovation and Technology,
UNU-MERIT

Maastricht Graduate School of Governance
MGSoG

*UNU-MERIT Working Papers intend to disseminate preliminary results of research carried out at UNU-MERIT and MGSoG to stimulate discussion on the issues raised.*
Giving in South Africa: Determining the influence of altruism, inequality aversion and social capital

Nyasha Tirivayi*

May 2014

Abstract

I use data from the South African Social Giving Survey to investigate the role of social capital and motivations for giving to formal charities and beggars. Results suggest that both impure altruism and inequality aversion positively influence giving to formal charities but they have no influence on giving to beggars. The role of social capital is varied. Members of informal insurance groups are more likely to give to both charities and beggars, while members of formal community groups are more likely to give to charities only. Members of interest groups are actually less likely to donate to charities and prefer giving to beggars.

JEL classification

H41; C31; C35; D64

Keywords

Charitable giving; impure altruism, inequality aversion, social capital, South Africa

* Corresponding author: tirivayi@merit.unu.edu. UNU-Merit (United Nations University) Keizer Karelplein 19, 6211 TC, Maastricht, Netherlands. Telephone: +31433884435.
1. Introduction

The literature on the economics of charitable giving is dominated by studies from the developed world. Moreover, household surveys containing comprehensive data on charitable giving are rare in developing regions like sub-Saharan Africa. This study addresses this knowledge gap in economic literature by utilizing data from the only survey on giving in South Africa.

I determine “why” people give by investigating whether impure altruism (warm glow) and inequality aversion are motives of charitable giving in a diverse country like South Africa. Individuals driven by impure altruism receive utility or experience a “warm glow” from the act of giving (Andreoni, 1990), unlike pure altruism where the main interest is in the welfare of recipients (Roberts, 1984). Studies by Derin-Güre and Uler (2010) and Yamamura (2012) have demonstrated that inequality aversion motivates charitable giving in US and Japan. I also focus on social capital which is also another key determinant of giving (Brooks, 2005). It is especially relevant to poor South African communities where giving has a collective character (Habib et al., 2008). Social capital is measured by associational membership (Putnam, 2000), classified into three categories; formal community groups, formal interest/political groups and informal insurance groups (prevalent in African settings and intended for risk-pooling rather than civic engagement).

To help understand “why” people give, I compare giving to formal charities and beggars. Beggars are a recognized recipient of charitable giving in South Africa (Everatt et al., 2005). This comparison is one way of looking at “to whom and when” people are altruistic. Formal charities, unlike beggars, are intermediaries and formal structures. Furthermore, beggars may be
viewed as deviants, lazy or undeserving recipients such that giving is construed as a perverse incentive that encourages dependency on charity (Lee and Farell, 2003). Formal charities and beggars could also present different contexts for altruism. Unlike formal charities, beggars mostly receive small donations and mostly use face to face verbal solicitation; hence it is plausible that negative audience effects and avoidance (driven by social pressure) could dominate and thus suppress giving (Andreoni et al., 2011; Andreoni and Bernheim, 2009; DellaVigna et al., 2012). This study assumes that given the likely differences in context and public attitudes, giving to beggars might not be as utility enhancing or preferable as giving to formal charities.

Giving denotes both cash and in kind donations and is evaluated at the extensive margin. The results suggest that both impure altruism and inequality aversion are significantly and positively associated with giving to formal charities but not to beggars. Social capital has varied influence. Members of informal insurance groups give to both charities and beggars at similar probabilities, unlike members of formal community groups who only give to formal charities. Interestingly, members of interest/political groups are less likely to give to charities, but are more likely to give to beggars.

2. Data and estimation strategy

Data from the South Africa Social Giving Survey (December 2003) are used. The survey is a nationally representative cross-sectional sample of 2996 respondents. All respondents are aged 18 years old and above and average age is about 39 years.
The following model is estimated:

\[ \text{Giving}_i = \beta_0 + \beta_1 \lambda_i + \beta_2 \delta_i + \beta_3 X_i + \epsilon_i \]

where \( \text{Giving}_i \) is a binary variable indicating the charitable giving by individual \( i \). This is obtained from yes or no answers to questions asked separately about cash and in kind donations (food/clothes/goods) to charities and beggars (beggar/街 child/someone asking for help). \( \lambda_i \) denotes impure altruism (WARMGLOW) and inequality aversion of individual (INEQUAL) \( i \). The proxy for impure altruism is generated from responses to the statement “I give because it makes me feel better”. This statement reveals possible utility generated from giving. The proxy for inequality aversion is generated from responses to the statement “I give because I have more than I need”. This may indicate intent for redistribution and thus concerns about inequality. Each proxy has three response options; “1 (agree)”, “2 (neutral)” and “3 (disagree)”. 

\( \delta_i \) is a set of variables that are proxies for social capital, denoted as a count of membership in formal interest groups (political, student and environmental organizations), informal insurance groups (savings groups/stokvels and burial societies) and formal community groups (civic/social movement, book club, cultural organization, community development committee, community policing association, residential association, rotary, women’s group and youth group). \( X_i \) is a vector of characteristics such as race, gender, education level, household assets, household size, religious affiliation, type of residence (urban or rural, formal or informal dwelling), and regional dummies. Unfortunately the survey did not have information on marital status and household income. The proxy for income is an asset wealth index created using factor analysis.
Separate probit estimations are carried out to compare giving to formal charities and to beggars.

Sample characteristics are presented in table 1.

**Table 1 Sample characteristics, 2003**

<table>
<thead>
<tr>
<th>Variables</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>65.49</td>
</tr>
<tr>
<td>Black</td>
<td>77.77</td>
</tr>
<tr>
<td>Christians</td>
<td>84.04</td>
</tr>
<tr>
<td><strong>Motives</strong></td>
<td></td>
</tr>
<tr>
<td>Give to formal charities</td>
<td>64.25</td>
</tr>
<tr>
<td>Give to beggars</td>
<td>62.75</td>
</tr>
<tr>
<td>WARMGLOW</td>
<td>84.71</td>
</tr>
<tr>
<td>INEQUAL</td>
<td>16.16</td>
</tr>
<tr>
<td><strong>Social capital (group membership)</strong></td>
<td></td>
</tr>
<tr>
<td>Formal community</td>
<td>31.07</td>
</tr>
<tr>
<td>Informal insurance</td>
<td>46.83</td>
</tr>
<tr>
<td>Interest/political</td>
<td>21.30</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>2.996</td>
</tr>
</tbody>
</table>

Source: South Africa Social Giving Survey (SASGS 2003)

### 3. Empirical results

The marginal effects (table 2) indicate that those who feel better from giving (impure altruism) the probability of giving to formal charities increases by 9 per cent compared to those who disagree. Individuals expressing inequality aversion (I have more than I need), are more likely to give to charities by 6 per cent compared to those who disagree. However, agreement with both these motives does not significantly influence giving to beggars, consistent with the assumption that giving to beggars might not be as utility enhancing or preferable as giving to charities.

Concerning the role of social capital, a one unit increase in formal community group membership increases the probability of giving to formal charities by 5 per cent but has no
significant influence on giving to beggars. In contrast, a one unit increase in the membership of informal insurance groups increases the probability of giving to both charities and beggars by 4 per cent. Interestingly, a one unit increase in the membership of interest/political groups reduces (increases) the probability of giving to charities (beggars) by 7 per cent. Conceivably, audience effects (Andreoni and Bernheim, 2009) in the beggar context (verbal ask, non-anonymous) enhance the giving behaviours of political individuals as this boosts their social image.

**Table 2 Probit estimation for charitable giving in South Africa (2003).**

<table>
<thead>
<tr>
<th>Dependent variable: Cash/in-kind donations</th>
<th>Formal charities</th>
<th>Beggars</th>
<th>( \text{ME} )</th>
<th>( \text{SE} )</th>
<th>( \text{ME} )</th>
<th>( \text{SE} )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal/household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-0.001</td>
<td>(0.020)</td>
<td>0.009</td>
<td>(0.021)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race(^d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-0.07*</td>
<td>(0.038)</td>
<td>-0.040</td>
<td>(0.039)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>0.053</td>
<td>(0.066)</td>
<td>0.268****</td>
<td>(0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed race</td>
<td>-0.074</td>
<td>(0.049)</td>
<td>0.092**</td>
<td>(0.043)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.002***</td>
<td>(0.001)</td>
<td>-0.001**</td>
<td>(0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education(^b)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 1-7</td>
<td>0.064*</td>
<td>(0.037)</td>
<td>0.007</td>
<td>(0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8-12</td>
<td>0.022</td>
<td>(0.039)</td>
<td>-0.002</td>
<td>(0.038)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-secondary</td>
<td>0.098**</td>
<td>(0.046)</td>
<td>0.034</td>
<td>(0.050)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>0.212****</td>
<td>(0.043)</td>
<td>0.025</td>
<td>(0.065)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Religion(^c)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>0.320****</td>
<td>(0.020)</td>
<td>-0.131***</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Christians</td>
<td>0.334****</td>
<td>(0.034)</td>
<td>-0.064**</td>
<td>(0.032)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other religion</td>
<td>0.256****</td>
<td>(0.028)</td>
<td>-0.056</td>
<td>(0.054)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wealth index</td>
<td>0.057****</td>
<td>(0.015)</td>
<td>0.022</td>
<td>(0.015)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household size</td>
<td>-0.009</td>
<td>(0.007)</td>
<td>0.009</td>
<td>(0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children &lt; 18</td>
<td>0.027***</td>
<td>(0.010)</td>
<td>-0.012</td>
<td>(0.010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community group</td>
<td>0.052****</td>
<td>(0.013)</td>
<td>0.016</td>
<td>(0.013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest group</td>
<td>-0.067****</td>
<td>(0.019)</td>
<td>0.077****</td>
<td>(0.020)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal insurance group</td>
<td>0.042****</td>
<td>(0.016)</td>
<td>0.039**</td>
<td>(0.016)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Motives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WARMGLOW(^e): agree</td>
<td>0.090**</td>
<td>(0.036)</td>
<td>0.055</td>
<td>(0.036)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WARMGLOW: neutral</td>
<td>0.074*</td>
<td>(0.044)</td>
<td>0.014</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INEQUAL(^f): agree</td>
<td>0.057**</td>
<td>(0.025)</td>
<td>-0.015</td>
<td>(0.027)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INEQUAL: neutral</td>
<td>0.060**</td>
<td>(0.029)</td>
<td>-0.082***</td>
<td>(0.032)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Region dummies</strong></td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>( N )</td>
<td>2937</td>
<td></td>
<td></td>
<td></td>
<td>2937</td>
<td></td>
</tr>
<tr>
<td>pseudo ( R^2 )</td>
<td>0.129</td>
<td></td>
<td></td>
<td></td>
<td>0.117</td>
<td></td>
</tr>
<tr>
<td>Goodness of fit</td>
<td>0.434</td>
<td></td>
<td></td>
<td></td>
<td>0.212</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-1672.599</td>
<td></td>
<td></td>
<td></td>
<td>-1707.316</td>
<td></td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LR chi2(35)</td>
<td>493.76</td>
<td></td>
<td></td>
<td></td>
<td>452.13</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha, wealth index</td>
<td>0.739</td>
<td></td>
<td></td>
<td></td>
<td>0.739</td>
<td></td>
</tr>
</tbody>
</table>
ME are marginal effects; SE is standard error, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, **** $p < 0.001$. Referent categories: a is white, b is no education, c is atheists, e is disagree, f is disagree. Dwelling type dummies also included, but not shown here.

Consistent with previous literature, demographics and socioeconomic variables such as age, higher education, religious affiliation, wealth, and having young children positively influence giving to formal charities (Bekker and Wiepking, 2011; Wiepking and Bekkers, 2012). However, these factors have negative or insignificant effects on giving to beggars. Christians are particularly less likely to give to beggars compared to atheists.

4. Conclusion

Giving behaviours in South Africa have implications on how domestic resources are and can be mobilized for charity and poverty alleviation (Everatt et al., 2005). This study’s results broadly indicate that “who gives and why” varies by “when and to whom”, consistent with the emerging assertion in literature that giving is contextual (Andreoni et al., 2011). As this study used cross sectional data, further survey and experimental research is however needed to provide deeper insights into the sources of the differences between giving to charities and beggars in South Africa.

Acknowledgement
Thanks to Patrick M. Rooney (IUPUI), Stefano DellaVigna (UCBerkeley) and Micheline Goedhuys (UNU-MERIT) for their advice.
References


The UNU-MERIT WORKING Paper Series

2014-01 The medium-term effect of R&D on firm growth by Marco Capasso, Tania Treibich and Bart Verspagen
2014-02 Diverse and uneven pathways towards transition to low carbon development: The case of diffusion of solar PV technology in China by Michiko Iizuka
2014-03 User innovators and their influence on innovation activities of firms in Finland by Jari Kuusisto, Mervi Niemi and Fred Gault
2014-04 Migration, remittances and household welfare in Ethiopia by Lisa Andersson
2014-05 Path-breaking directions of nanotechnology-based chemotherapy and molecular cancer therapy by Mario Coccia and Lili Wang
2014-06 Poor trends - The pace of poverty reduction after the Millennium Development Agenda by Richard Bluhm, Denis de Crombrugghe, Adam Szirmai
2014-07 Firms’ adoption of international standards: Evidence from the Ethiopian floriculture sector by Mulu Gebreeyesu
2014-08 School choice, segregation, and forced school closure by Cheng Boon Ong and Kristof De Witte
2014-09 Gender difference in support for democracy in Sub-Saharan Africa: Do social institutions matter? by Maty Konte
2014-10 Why are women less democratic than men? Evidence from Sub-Saharan African countries by Cecilia García-Peñalosa and Maty Konte
2014-11 Tipping points? Ethnic composition change in Dutch big city neighbourhoods by Cheng Boon Ong
2014-12 Technology life cycle and specialization patterns of latecomer countries. The case of the semiconductor industry by Giorgio Triulzi
2014-13 Patents as quality signals? The implications for financing constraints on R&D by Dirk Czarnitzki, Bronwyn H. Hall and Hanna Hottenrott
2014-14 Assessment of effectiveness of Chinese aid in competence building and financing development in Sudan by Samia Satti Osman Mohamed Nour
2014-15 Education, training and skill development policies in Arab Gulf countries: Macro-micro overview by Samia Satti Osman Mohamed Nour
2014-16 Structure of labour market and unemployment in Sudan by Samia Satti Osman Mohamed Nour
2014-17 Overview of knowledge transfer in MENA countries - The case of Egypt by Samia Satti Osman Mohamed Nour
2014-18 The impact of ICT in public and private universities in Sudan by Samia Satti Osman Mohamed Nour
2014-19 End-user collaboration for process innovation in services: The role of internal resources by Mona Ashok, Rajneesh Narula and Andrea Martinez-Noya
2014-20 Public investment and regional politics: The case of Turkey by Mehmet Guney Celbis, Denis de Crombrugghe and Joan Muysken
2014-21 Infrastructure and the international export performance of Turkish regions by Mehmet Guney Celbis, Peter Nijkamp and Jacques Poot
2014-22 Discovering and explaining work-family strategies of parents in Luxembourg by Nevena Zhelyazkova
2014-23 Parental leave take up and return to work of mothers in Luxembourg: An application of the model of nested dichotomies by Nevena Zhelyazkova
2014-25 One Europe or several? Causes and consequences of the European stagnation by Jan Fagerberg and Bart Verspagen
2014-26 The harmony of programs package: Quasi-experimental evidence on deworming and canteen interventions in rural Senegal by Théophile Azomahou, Fatoumata Diallo and Wladimir Raymond
2014-27 Country Terms of Trade 1960-2012: Trends, unit roots, over-differencing, endogeneity, time dummies, and heterogeneity by Thomas Ziesemer
2014-28 The structure and comparative advantages of China's scientific research - Quantitative and qualitative perspectives by Lili Wang
2014-29 Transition to knowledge-based economy in Saudi Arabia by Samia Satti Osman Mohamed Nour
2014-30 Challenges and opportunities for transition to knowledge-based economy in Arab Gulf countries by Samia Satti Osman Mohamed Nour
2014-31 Migration of international students and mobilizing skills in the MENA Region by Samia Satti Osman Mohamed Nour
2014-32 Beyond product innovation; improving innovation policy support for SMEs in traditional industries by René Wintjes, David Douglas, Jon Fairburn, Hugo Hollanders and Geoffrey Pugh
2014-33 The impact of innovation support programmes on SME innovation in traditional manufacturing industries: an evaluation for seven EU regions by Dragana Radić, Geoffrey Pugh, Hugo Hollanders and René Wintjes
2014-34 Beliefs dynamics in communication networks by Théophile T. Azomahou and Daniel C. Opolot
2014-35 Stability and strategic diffusion in networks by Théophile T. Azomahou and Daniel C. Opolot
2014-36 Epsilon-stability and the speed of learning in network games by Théophile T. Azomahou and Daniel C. Opolot
2014-37 Afghan unaccompanied minors in the Netherlands: Far away from home and protected? by Carla Buil and Melissa Siegel
2014-38 Multinational production and trade in an endogenous growth model with heterogeneous firms by Hibret B. Maemir and Thomas Ziesemer
2014-39 The political economy of research and innovation in organic photovoltaics (OPV) in different world regions by Serdar Türkeli and René Kemp
2014-40 Towards the societal system of innovation: The case of metropolitan areas in Europe by Serdar Türkeli and René Wintjes
2014-41 To return permanently or to return temporarily? Explaining migrants' intentions by Özge Bilgili and Melissa Siegel
2014-42 Catching up and lagging behind in a balance-of-payments-constrained dual economy by Alejandro Lavopa
2014-43 An introduction to the economics of rare earths by Eva Bartekova
2014-44 The unequal effect of India's industrial liberalization on firms' decision to innovate: Do business conditions matter? By Maria Bas and Caroline Paunov
2014-45 Insurgents in motion: Counterinsurgency and insurgency relocation in Iraq by Pui-hang Wong
Successive leadership changes in the regional jet industry by Daniel Vertesy
Demand, credit and macroeconomic dynamics: A microsimulation model by Huub Meijers, Önder Nomaler and Bart Verspagen
Accessibility analysis as an urban planning tool: Gas station location by D.A. Escobar, C. Cadena-Gaitán, F.J. García
China's economic embrace of Africa - An international comparative perspective by Tobias Broich and Adam Szirmai
Mapping regional social enterprise ecosystems in India: Framework and indicators by Lina Sonne
Does shelter assistance reduce poverty in Afghanistan? By Craig Loschmann, Christopher R. Parsons and Melissa Siegel
How important is innovation? A Bayesian factor-augmented productivity model on panel data by Georges Bresson, Jean-Michel Etienne and Pierre Mohnen
Does too much work hamper innovation? Evidence for diminishing returns of work hours for patent grants by Mehmet Güney Celbi, Serdar Türkeli
Globalization, the rise of biotechnology and catching up in agricultural innovation: The case of Bt technology in India Michiko Iizuka and Ajay Thutupalli
Where are innovation indicators, and their applications, going? by Fred Gault
Productivity in services in Latin America and the Caribbean by Elena Arias-Ortiz, Gustavo Crespi, Alejandro Rasteletti and Fernando Vargas
Optimal public investment, growth, and consumption: Fresh evidence from African countries by Augustin Kwasi Fosu, Yoseph Yilma Getachew and Thomas H.W. Ziesemer
International R&D alliances by firms: Origins and development by Rajneesh Narula and Andrea Martínez-Noya
Appropriability mechanisms, innovation and productivity: Evidence from the UK by Bronwyn H. Hall and Vania Sena
The size of patent categories: USPTO 1976-2006 by François Lafond
Asset recombination in international partnerships as a source of improved innovation capabilities in China by Simon C. Collinson and Rajneesh Narula
The viability of sustained growth by India's MNEs: India's dual economy and constraints from location assets by Rajneesh Narula
The effect of unconditional cash transfers on adult labour supply: A unitary discrete choice model for the case of Ecuador by Andrés Mideros and Cathal O'Donoghue
Giving in South Africa: Determining the influence of altruism, inequality aversion and social capital by Nyasha Tirivayi