

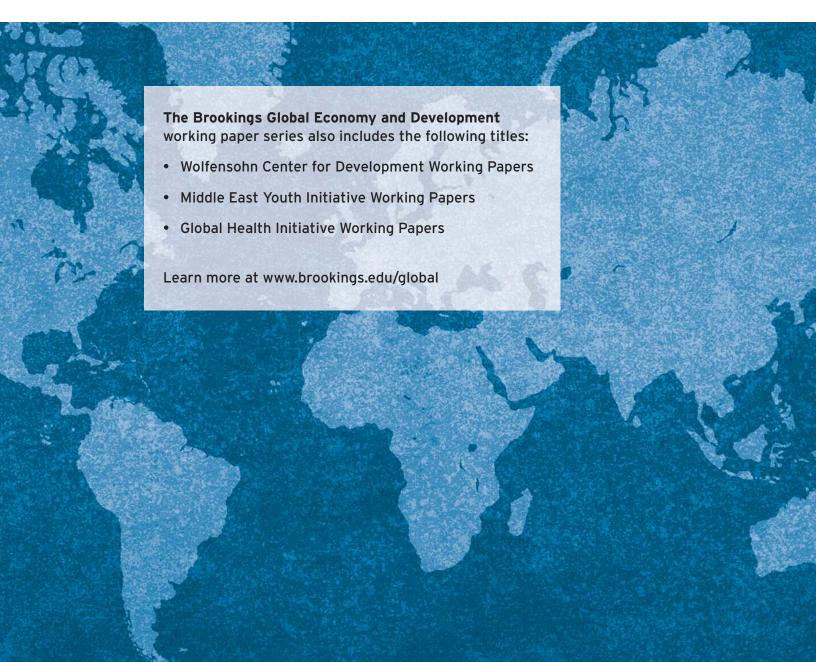


# DO PHILANTHROPIC CITIZENS BEHAVE LIKE GOVERNMENTS?

INTERNET-BASED PLATFORMS AND THE DIFFUSION OF INTERNATIONAL PRIVATE AID

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#### **ABSTRACT**

Until recently, most aid from rich to poor countries was transmitted through official bilateral and multilateral channels. But the rapid growth in private development aid from foundations, charities, and philanthropic individuals raises a host of questions regarding the allocation of aid and its selectivity across recipient countries. We analyze determinants of the supply of private aid from two large internet-based non-profit organizations that bundle contributions from individuals and transfer them as grants or loans to developing countries: GlobalGiving and Kiva. We compare the allocation of funds from these organizations to official development assistance. We find

that the selectivity of private aid is less oriented toward country-specific factors, and more toward front-line projects and individuals in developing nations. Survival analysis examining the funding rate of projects on these two Web sites confirms the lower relevance of country-specific characteristics and risks, suggesting that philanthropic individuals behave unlike official aid donors. This indicates that private aid and official aid are complementary: official aid supports countries, private aid supports people. With different preferences, formal coordination between these different donors may not be needed. Instead, each needs to understand when and how it can partner with the other to meet differing objectives.

#### INTRODUCTION

■ ntil recently, almost all international aid was provided by governments and multilateral institutions. But between 1998 and 2008, international private giving by U.S.-based corporate and independent foundations and individuals doubled. Along with foundations, non-governmental organizations, religious groups and charities in the United States contributed \$37 billion to development causes in 2007 (the World Bank, in comparison, committed about \$24 billion). This growth in private aid is seen at all levels, from "mega-charities" such as the Gates, Ford, MacArthur, Rockefeller, and Hewlett Foundations to hundreds of smaller foundations. Meanwhile, transnational non-governmental organizations (NGOs) such as CARE, Oxfam, Médecins Sans Frontières, and Save the Children, each with annual budgets exceeding \$500 million, now distribute more development aid than the entire United Nations system.

But despite this growth, relatively little is known about the allocation and effectiveness of private aid. Private aid's defenders argue that private development assistance is more effective than official development assistance (ODA) due to lower overhead costs, less susceptibility to corrupt practices, because it is allocated according to need, and because very little of the money is funneled back to consultants and contractors in rich countries (as "technical assistance"), leaving more for the beneficiaries in developing countries (cf. Dreher et al. 2009, Koch et al. 2008).

Compared to official aid, moreover, private aid is by definition more sensitive to the preferences of philanthropic-minded individuals who determine allocations across countries and, within countries, across sectors, projects and individuals. Official aid, although funded by taxpayers, gives their citizens little say over aid allocations. Despite this, survey data from donor

countries indicates that between 75 percent and 96 percent of citizens support aid to developing nations to reduce poverty, hunger and disease (Riddell 2007: 116). Even in the United States, public opinion surveys show fairly consistent support for development assistance although Americans typically overestimate the amount of aid provided by their government by a factor of 20 (PIPA 2001).

Information on the allocation of international private aid, and on the choices made by private citizens who make contributions to international causes, can potentially reveal the implicit preferences of individual citizens in a way that cannot be captured by looking at official aid allocations. New forms of internet-based giving offer rich data from which more can be learned about collective action, transaction costs and agency costs resulting from differences in preferences between official aid agencies and private taxpayers. In this paper, we analyze data from two popular internetbased non-profit organizations that collect contributions from individuals around the world and transfer them as grants or credits to individual entrepreneurs in developing countries. GlobalGiving (Washington, DC) has a platform that allows donors to support projects in developing countries sponsored by a local NGO. Kiva (San Francisco, CA) has a platform that solicits interest-free loans to be passed on as microcredits to individual (or group) entrepreneurs in developing countries.

On the assumption that the allocation of aid through these Web sites reflects philanthropic citizens' preferences regarding development assistance, we use data on internet-based transactions to determine the extent to which private preferences differ from official aid agency preferences, as well as to examine the factors that affect the supply of private development aid. We proceed in two steps: First, using a

panel of cross-national time-series observations of aid disbursements, we compare the allocation of official development aid for projects and programs to GlobalGiving's disbursements for projects, and of official microcredit lending to Kiva's microloans. As far as possible, the official aid categories are defined to overlap as closely as possible with GlobalGiving and Kiva activities. So, humanitarian aid, debt relief, technical cooperation, administrative expenses and other forms of official aid are excluded from our analysis of aid disbursements. Second, moving beyond countryspecific factors affecting aid and microloan allocations, we examine the funding rates of specific project grant or microloan requests-specifically the "speed" at which individual grant and loan requests are funded once they are posted on the GlobalGiving or Kiva Web sites.

We find that private aid is relatively less influenced than official aid by recipient country-specific factors such as GDP per capita or the quality of country institutions. Rather, project-specific and individual-specific factors are far more important in determining allocations of individual contributions than country-specific factors. Overall, we see significant evidence that philanthropic citizens do not behave like official donors.

The paper is organized as follows: we compare ODA with private aid along several dimensions, and describe the types of platforms and funding mechanisms used by GlobalGiving and Kiva. A fourth section summarizes the data and presents both panel-regression and survival analysis. The final section concludes and offers some implications for the global aid architecture.

## OFFICIAL DEVELOPMENT ASSISTANCE AND PRIVATE AID

oreign aid delivered through official channels does not provide direct connections between citizens and recipients. Citizens pay their taxes to the government, which in turn allocates resources to other governments to fund myriad public programs, among them programs that benefit poor individuals around the world. There is no face-to-face contact between an individual tax payer and the final recipient, and insofar as tax payers have inaccurate perceptions of what how their government spends development aid there are few concrete expectations of impact, return, or reward.

Many international development charities operate in a similar manner. Private donors direct resources to an organization (with which the donor identifies with, agrees with, or otherwise trusts), and the organization in turn allocates resources to various programs and operational expenses. Some organizations do allow varying forms of "sponsorship." This usually involves donors receiving updates from recipients (e.g., updates from a child recipient), or selecting a level of donation that corresponds to different types of the organizations' activities (e.g., a donation of x dollars allows the charity to purchase y vaccines). Donors are not typically able to select which child they sponsor and funds received are not usually earmarked.

These traditional modes of aid delivery are designed to cope with the Samaritan's Dilemma. Effective giving requires an understanding of the structural causes of poverty and programs must be designed to address these causes, not just to treat the symptoms. Government agencies or organized NGOs provide an institutional basis for making these decisions. Absent that, any individual giving aid must answer a set of

questions. Why should I give (and not someone else)? Will my help be effective? How should I help? These questions can be framed in economic terms. Is there a collective action problem to solve? How high are transaction costs? Are there agency costs?

The new forms of internet-based giving offer different answers to the traditional models of charity. First, official aid and internet-based aid face different collective action constraints. For the former, taxpayers who support foreign aid in principle may be insufficiently mobilized relative to particular interest groups (Fleck and Kilby 2001; Milner and Tingley 2008). Even philanthropically-minded individuals may free ride on the efforts of larger private donors. For the latter, the internet offers an opportunity for individual action rather than collective action. Aid is an act of altruism. Second, the route that official aid takes-from taxpayers to government coffers to aid agencies to governments in developing nations to public agencies or private organizations in the field-is long and winding, and whether accurate or not, is often perceived by taxpayers in donor countries to be costly and susceptible to corruption and leakage as funds move from donor countries to beneficiaries in recipient countries. Internet-based aid offers a more direct connection between giver and recipient. Third, donor-country individuals may want to help, but recognize that they need to act through one or more intermediaries (usually governments or NGOs)-parts of a global foreignaid apparatus that may be simply too insulated or centralized to incorporate the individual preferences (see, e.g., Easterly 2005; Roodman 2006). Internetbased giving offers many more opportunities for choosing the kind of intermediation platform that donors feel most comfortable with.

#### Collective action constraints

The public economics literature suggests that collective action problems may block private giving for worthy causes because each individual, behaving rationally, tries to free-ride on others' generosity. Governments can overcome the collective action problem by taxing everyone and providing grants to the causes to which individuals would want to give. One common empirical approach is to test whether individual donations are smaller in areas where government grants are larger. Such crowding-out would be evidence of collective action problems at work.

A review of the literature by Bekkers and Wiepking (2007) finds evidence that crowding-out in domestic charities is significant. Their summary mostly looks at cross-section studies. Garrett and Rhine (2007) analyze time-series for 1965-2003 and reach the same conclusion. In the long run, cointegration tests show that increased government spending crowds out charitable giving, especially in the education sector. In the short run, however, the effects are weaker and not significant. The authors suggest that it may take time for individuals to get full information on what the government is doing.

Andreoni and Payne (2008) also confirm the crowding-out effect in a large sample of charities. They demonstrate that crowding out occurs through two channels: classic crowding out (where donors feel less willing to give) and fund-raising crowding out (where grant receiving organizations reduce their activity to collect donations). Their evidence suggests that fund-raising crowding out accounts for 68 percent of the observed crowding-out effect.

This evidence, however, relates to giving through NGOs compared to government tax-and-spend programs. It does not directly look at new forms of internet-based giving. For these platforms, the premise is that the act of individual giving gives pleasure directly to the donor—that is, assuming that giving is altruistic. If so, it would suggest that the collective-action constraint to international aid is minimal.<sup>1</sup>

What seems unquestionable is that both official aid and private international giving have risen strongly in the United States over the last decade, suggesting limited crowding out. U.S. official development assistance has doubled since 2000, from \$12 billion to \$25 billion in 2008 (in constant 2007 dollars). Private aid has also grown fast. In the United States, private giving for international development totaled \$36.9 billion in 2007. While time series data on private giving volumes is not available, the sheer number of private foundations has grown from 40,100 in 1995 to 71,000 in 2005 (with more than 650 U.S. foundations making grants for international affairs) (Lawrence, Austin and Makai 2007, Renz and Atienza 2006). Meanwhile, international NGOs quadrupled from 6,000 to 26,000 in the 1990s; today there are thought to be some 40,000 such organizations (Keohane and Nye 2000). The growth in private aid is all the more striking because survey data suggests that public opinion overestimates the size of official aid by significant amounts. In the United States, 69 percent of people think the U.S. government gives more than other countries in international aid, as a share of their GDP (Ramsay et al. 2009). That would tend to bias private giving downwards if crowding out is indeed serious.

#### Transaction costs

Official aid is perceived to have low transaction costs because it operates at large scale. But official aid travels a long route, with costs at each stage. The first stage is the cost of tax collection when money is transferred from individuals to the treasury. In this

stage, costs consist of the direct administrative costs of tax collection as well as deadweight losses from taxation. These costs can be substantial. For example, Alm (1985) found deadweight losses on U.S. taxes could approach nine percent.

In the second stage, official donor agencies transfer funds to recipient country governments to support specific development projects and programs. The administrative costs of these agencies has averaged between 4 to 5 percent according to statistics reported by the OECD Development Assistance Committee.

The third stage involves costs associated with transferring the money from the recipient government to final beneficiaries through project implementation. Administrative costs of the project, corruption, and other leakages mean that only about half the funds actually reach their stated end purpose. One study, based on surveys in Ghana, Tanzania and Rwanda concludes that, "approximately half of the overall amount allocated to clinics and hospitals did not actually reach them" (Lindelow, Kushnarova, and Kaiser 2007). Similar figures appear in other studies. The GAO, in its recent analysis of the Millennium Challenge Corporation was able to identify the allocation of 59 percent of in-country disbursements in the nine compact countries that are currently operational.2 Of this, 32 percent was for direct project-related expenses, and 27 percent was for administrative, audit, fiscal and procurement expenses (GAO 2007). Adding all these together, transaction costs on official aid could amount to 60 percent or more.

Private aid offers the promise of a much shorter route from giver to recipient. Internet-based platforms offer a direct matching between the two. There are some differences in approach. Kiva focuses on individuals, or entrepreneurs, and provides a person-to-person link. Its feedback mechanisms and other information on the site are all geared toward establishing a connection between people. GlobalGiving, in contrast, highlights the worthiness of the projects they are proposing for funding. Donors contribute directly to those activities, rather than to individuals.

In both cases, the flow of funds route is short. The money goes from an individual to Kiva or GlobalGiving, where it is pooled and transferred to a financial or project intermediary in the recipient country that then disburses to the final beneficiaries. The long route of passing through government bureaucracies is avoided.

Both Kiva and GlobalGiving report their administrative costs for developing and maintaining the Web sites and providing the matching and information services that permits the short route of funding from person to person to occur. Those costs have averaged around 10 percent. Both companies, however, are relatively new and still expanding and costs may be expected to fall significantly if their business model is successful and expansion continues at its recent rate.

Higher transaction costs are incurred at the financial intermediary that conveys the money from Kiva to the microentrepreneur and that collects repayments. Studies suggest that interest rates on microcredits need to be between 25 to 50 percent in order to cover default risk and transaction costs (Rosenberg, Gonzalez, and Narain 2009). At the upper end of that rate, the transaction costs for private giving through microcredit, to take just one example, is probably about the same as for official ODA.

#### Agency costs

From the perspective of individual donors, channeling funds through official aid agencies has the drawback that it is the agency that decides what projects to fund rather than the donor. For some, this may not be a cost but a benefit. If an official agency learns about what works in development, has an active evaluation mechanism, strong project review and implementation structures, and appropriate financial controls, it may provide valuable services to the individual donor.

On the other hand, if the official agency chooses projects on a different basis from what an individual would choose, or imposes conditions on its giving, there may be agency costs. In the past, one large source of agency costs came from tied aid, a practice where procurement was linked to the country of origin of the funds. It is unlikely that altruistic individual donors would care about whether a particular good or service was procured from a specific country, whereas

it is more obvious why a national government may care about such linkages. Estimates of the cost of tied aid vary, but averaged between 15 to 30 percent. For some types of aid, like technical cooperation, the costs of tying may be even higher.

A further source of agency costs comes from differences in approach about what makes for an effective aid intervention. Individual donors may have views about project size, gender of recipient, sector, and other characteristics that differ from official agency views. The greater the difference, the greater the agency costs of transferring aid through official channels rather than through direct person-to-person giving.

#### **GLOBALGIVING AND KIVA**

▶ lobalGiving and Kiva are two peer-to-peer development platforms that utilize the short-route relationship between donors (or lenders, in the case of Kiva) and recipients (or borrowers). Both are U.S.based 501(c)-3 non-profit organizations, and both operate primarily though their internet portals, through which anyone with a credit card or PayPal account can donate to development projects or lend to microentrepreneurs who post requests online. In the case of GlobalGiving—one of the oldest online philanthropy markets launched in 2002 by two former World Bank economists-potential grant seekers must either submit projects through one of GlobalGiving's project "partners" (mainly the United States and international NGOs) or submit projects directly after meeting certain due-diligence requirements. In the case of Kiva-started in 2005-prospective borrowers must post their projects through one of several affiliated microfinance institutions (MFIs).

Each site takes a different approach to the online "market" for philanthropy or microcredit. GlobalGiving does not restrict the size of donation requests, nor does it limit the amount of time any given project may remain posted on the Web site. By contrast, Kiva limits both loan size and time on the Web site. Until the end of 2007, individual loan requests could not exceed \$1,200; that limit has since been raised to \$3,000 as

emerging market countries were added into Kiva's portfolio.<sup>3</sup> The maximum request for group loans remains \$5,000. In addition, borrowers' projects may only list their requests on the Web site for 30 days, after which they are removed (the maximum repayment period for all loans is 24 months). Because of the smaller average size of individual projects, Kiva has occasionally had to cap individual lenders' contributions because of the lack of fundable projects.

Both GlobalGiving and Kiva also make use of Webbased, interactive forms of communication-journals, blogs, or comment forums. Those who have obtained grants through GlobalGiving, for example, can post pictures or other information documenting their progress and activities. Kiva's field partners may post "business journals" identifying how the loan is being used, or what effect it has had on the business owner. This reporting is not required by either organization, and thus the flow of information from recipients can be erratic, and the information provided is very rarely financially detailed (Bonbright, Kiryttopoulou and Iversen 2008). Nevertheless, Kiva and GlobalGiving platforms provide enough information to make a personal connection between the donor and the recipient. A key problem for both organizations is to decide on exactly what information (and how much information) to provide to permit informed choices without overwhelming an individual donor.

#### DATA, METHODS, AND RESULTS

e examine the determinants of success in online philanthropy using grant data from GlobalGiving between May 2003 and December 2008, and using loan data from Kiva between April 2006 and December 2008. Our GlobalGiving data consists of over 1,170 philanthropic projects; our Kiva data contain over 70,000 microloan requests (see Table 1). To assist prospective individual donors and lenders in making decisions, both GlobalGiving and Kiva provide some information about the projects listed. Once the projects are posted on the Web sites, potential donors and lenders can search projects by size (grant or loan amount), by recipient's region, and by sector. GlobalGiving donors may search, additionally, by project sponsor or the frontline organization that will run the project, while Kiva lenders can search by gender of the borrower (both GlobalGiving's and Kiva's Web sites also have normal search capabilities where they can query projects by any term that appears in the project description). On both Web sites, short narratives are included by the sponsoring organization (the charity that will use the money, or the MFI through which the loan is being channeled) that describe the purpose for which the funds will be used, and some brief background information of the principal grantee(s) or borrower(s). Once a project is selected, donor-lenders can contribute funds in any amount up to the full amount requested.4 Using a PayPal account (or in the case of GlobalGiving, a direct payment from a credit card or a check), donor-lenders then transfer funds in the pledged amount. Projects accumulate funds from donors-lenders in this manner until they are fully funded.

#### Descriptive analysis

Besides the central difference between GlobalGiving and Kiva-in that the former collects donations for

grant requests while the latter collects contributions to microloan requests, each organization uses differently-structured platforms to bundle funds from individuals. In particular, GlobalGiving is less restrictive in that currently there are no limits in terms of project size (and therefore contribution restrictions), listing time allowed for grant requests on its Web site, and number of requests allowed at any given time. Kiva, by contrast, limits project size, listing time allowed, and the total number of listed projects permitted on the site. All requests made to Kiva enter a "queue," and after a preliminary screening, they are posted on the Web site for a maximum of 30 days, after which they are pulled from the site.

The platform differences have created contrasting results for these organizations. Because GlobalGiving does not limit grant requests (although, as mentioned earlier, there are due diligence requirements for each grant request and/or partner organization), and because many of these grant requests are for large amounts of money, the number of projects is large, but the portion of fully-funded projects is relatively small. Kiva's more controlled approach, on the other hand, limits the number and variety of microloan requests that appear on the site, but those that do appear are always 100 percent funded. As a result, GlobalGiving has an abundance of projects but most projects are listed for several months before they are funded, while Kiva-facing no shortage of individuals willing to lend relatively small amounts-often is without an adequate number of loan requests.

These differences can be seen visibly in Figures 1 and 2. Figure 1 shows monthly gross disbursements for GlobalGiving and Kiva. GlobalGiving's monthly disbursements reached approximately \$750,000 by the end of 2008, while Kiva was disbursing about \$3.5 million. Kiva's dramatic growth of gross disbursement

Table 1: Summary statistics for survival estimations

| Variable                   | Organization | N      | Mean      | Std. Dev. | Min   | Max        |
|----------------------------|--------------|--------|-----------|-----------|-------|------------|
| Amount                     | GlobalGiving | 1,172  | 5,935.25  | 20,371.51 | 0.00  | 467,857.90 |
| HH Concentration Index     | GlobalGiving | 1,172  | 0.356     | 0.324     | 0.00  | 1.00       |
| USA Share                  | GlobalGiving | 1,171  | 0.78      | 0.31      | 0.00  | 1.00       |
| Funding rate (\$ per hour) | GlobalGiving | 1,171  | 1.19      | 6.80      | 0.00  | 159.01     |
| Hours per loan             | GlobalGiving | 1,171  | 11,110.43 | 9,784.44  | 20.93 | 40,151.92  |
| Amount (Ioan)              | Kiva         | 70,790 | 724.50    | 517.72    | 25    | 5000       |
| HH Concentration Index     | Kiva         | 64,831 | 0.143     | 0.161     | .007  | 1.00       |
| USA Share                  | Kiva         | 64,831 | 0.700     | 0.197     | 0.00  | 1.00       |
| Funding rate (\$ per hour) | Kiva         | 70,790 | 93.68     | 118.37    | 0.14  | 1913.76    |
| Hours per loan             | Kiva         | 70,790 | 51.91     | 112.73    | 1.00  | 1,781.98   |
| No. of Borrowers           | Kiva         | 70,790 | 1.63      | 2.43      | 1     | 45         |
| Gender                     | Kiva         | 70,790 | 0.77      | 0.41      | 0.00  | 1.00       |
| Star Rating                | Kiva         | 70,790 | 4.42      | 0.75      | 1     | 5          |

is also helped by the fact that by the end of 2008 many original loans were being repaid and could be re-lent. On a monthly basis, however, Kiva averaged approximately 2,229 project posts (i.e., added projects) compared to GlobalGiving's 12. Of Kiva's projects, 100 percent are fully funded in, on average, 2.03 days while 52.8 percent of GlobalGiving's projects are similarly fully funded. The average GlobalGiving project posted in 2008 received 9.5 percent of required funds from Web-based fundraising by year's end.

Figure 2 shows all grant and loan requests for GlobalGiving and Kiva, respectively, since their establishment. The first graph plots all requested amounts (in U.S. dollars, log scale) to GlobalGiving over a period of seven years, showing both projects that are fully funded (solid circles) and those that are as of yet not fully funded (hollow circles). The funded requests tend to be scattered along the bottom of the graph, suggesting that grant requests for large amounts are more likely to remain unfunded, and that most donations come in relatively small amounts. The second

graph shows a similar scatterplot for Kiva (over three years). As all Kiva loan requests are fully funded, there is no distinction between funded and unfunded loan requests. The graph also shows clustering at the \$1,200 level (the maximum loan for individuals in poor countries) and \$5,000 (the maximum request for groups since late 2007.

#### Comparisons with official development flows

Several observers of foreign aid have argued that assistance would have greater impact on growth and poverty were it better targeted to poorer countries, and to countries with better "institutions." Empirical work on this subject has found increasing selectivity of aid money along these lines, especially after the end of the Cold War. In the 1990s, for example, bilateral and multilateral aid was allocated more selectively, whereas in the 1980s the same donors tended to be more indiscriminate (Dollar and Levin 2006; Olofsgard and Boschini 2007). Whether private aid is



2006m1

Figure 1: Disbursements via GlobalGiving and Kiva internet portals

equally selective remains a puzzle, mainly due to the poor quality of data on private aid allocation. Some skeptics of private development aid believe that aid allocation is influenced by considerations that are unrelated to the needs of the poor in recipient countries. In particular, increased competition among NGOs for funding has prompted these groups to capitalize on the misery of the world's poor in order to perpetuate and fund themselves. As a result, NGOs may hop from crisis to crisis, forever seeking the next development cause or humanitarian disaster that will mobilize money.

2005m1

0.5

2004m1

We seek to answer this question using country-year data drawn from GlobalGiving and Kiva disbursements—which serve as useful proxies for private grants and private microloans—and comparing the results with official aid disbursements. We replicate, therefore, the approach used by Dollar and Levin (2006), who estimate the following basic equation:

 $\log(AID)_{it} = \hat{\alpha}_0 + \hat{\alpha}_1 \log (Population)_{it-1} + \hat{\alpha}_2 \log (GDP/capita)_{it-1} + \hat{\alpha}_3 (Institutions)_{it-1}$ 

GlobalGiving

2009m1

2008m1

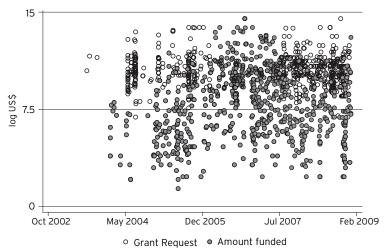
2007m1

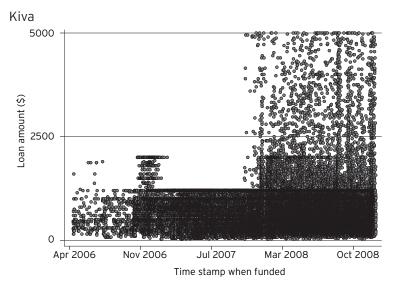
We use OLS with an error correction for contemporaneous correlation across panels, or "panel-correct" standard errors. We compare results across four aid equations: (i) net project and program aid (ODA); (ii) microlending by official development agencies; (iii) GlobalGiving disbursements; and (iv) Kiva disbursements, to examine differences in aid selectivity across recipient countries for these different types of assistance. We also restrict the panel to years for which we have GlobalGiving and Kiva data (five years and three years, respectively). As a proxy for institutions, we use the familiar Polity score of democracy. Additionally, we include a time trend, and all independent variables are lagged once.

Table 2 presents our basic results. ODA for development projects and programs covers the broadest number of countries, followed by official microcredit,

Figure 2: Projects (grants and loans) funded

GlobalGiving





GlobalGiving, and Kiva in that order. Looking at the full samples for each form of aid, we see that official aid is quite selective. More money goes to poorer countries and more democratic countries. Large countries get more money in absolute terms, but less on a per capita basis. Comparing official project aid with GlobalGiving, we see similar tendencies, but GlobalGiving is less selective. Only 20 percent of the variance of aid across countries can be attributed to country-specific factors,

compared to 52 percent for official aid. Democracy is not a factor for GlobalGiving donors.

A comparison of official microcredits with Kiva shows the same pattern. Official microloans respond in the same way as total official aid for projects to variables like country population size, per capita GDP, and democracy. But Kiva lenders only seem to care about democracy—and the sign is reversed. Kiva givers are

Table 2: Aid and microloan allocations: panel regressions

|                     | (1)        | (2)                       | (3)                           | (4)                        | (5)                   | (9)                       | (2)                           | (8)                     |
|---------------------|------------|---------------------------|-------------------------------|----------------------------|-----------------------|---------------------------|-------------------------------|-------------------------|
|                     | ODA        | Official micro-<br>credit | GlobalGiving<br>disbursements | Kiva disburse-<br>ments    | ODA                   | Official micro-<br>credit | GlobalGiving<br>disbursements | Kiva disburse-<br>ments |
| Log (population)t-1 | 0.5147***  | 0.4722***                 | 0.6486***                     | 0.153 <i>4</i><br>(0.1002) | 0.2108*** (0.0106)    | -0.1812**<br>(0.0860)     | 0.5711**<br>(0.2325)          | 0.2170**                |
| Log (GDP/capita)t-1 | -0.3787*** | -0.4119***<br>(0.0598)    | -0.2418**<br>(0.0950)         | 0.3115<br>(0.2190)         | -0.3181***            | -0.0872<br>(0.1262)       | -0.9093***                    | 0.5498***               |
| Polity Scoret-1     | 0.0277***  | 0.0675***                 | 0.0115                        | -0.0817***<br>(0.0266)     | -0.0295**<br>(0.0146) | -0.0318<br>(0.0345)       | 0.0442*<br>(0.0241)           | -0.0234***<br>(0.0081)  |
| Trend               | 0.0803***  | -0.2645***<br>(0.0742)    | 0.3376<br>(0.2271)            | 0.7322***                  | 0.1532<br>(0.1395)    | -0.6667**<br>(0.3022)     | -0.1388<br>(0.3660)           | 1.3685*<br>(0.7075)     |
| Observations        | 620        | 419                       | 260                           | 83                         | 29                    | 59                        | 59                            | 29                      |
| Number of countries | 107        | 92                        | 82                            | 36                         | 20                    | 20                        | 20                            | 20                      |
| R-squared           | 0.5891     | 0.2034                    | 0.1957                        | 0.1895                     | 0.5247                | 0.1594                    | 0.3016                        | 0.4854                  |
| Prob. (p > Chi2)    | 0.0000     | 0.0000                    | 0.0000                        | 0.0000                     | 0.0000                | 0.0000                    | 0.0000                        | 0.0000                  |

more likely to help those living in less democratic countries, perhaps because they are in greater need.

Note that the number of recipient countries varies considerably across development flows. In large part, this is due to the unbalanced nature of the GlobalGiving and Kiva panels. Countries that receive annual ODA do not receive these private forms of aid annually. Moreover, although the range of countries is expanding, the Kiva panel only covers 36 countries. We rerun estimations (1) - (4) on a core sample with the same countries in each comparison. That reduces the coverage to 29 observations in 20 countries. In these reduced samples, there is not much change in results except that the democracy variable becomes insignificant. But there is more evidence that Kiva appears to be selecting in the opposite direction to official microcredits, with more Kiva loans flowing to richer, less-democratic countries.

Any judgments from these panel data should be approached with caution, given the sample variability and the short time span. In addition, it is possible that aid and loan selectivity is not based on factors identifiable in cross-country time series panel regressions, i.e., country-specific factors such as wealth, and institutional quality. However, on balance, the evidence seems to confirm what others have found, namely that official aid is selective across countries based on income level and democracy. At the same time, we find that internet-based givers are less swayed by these factors and may even select in the opposite way.

Given that both Kiva and GlobalGiving are internetbased platforms drawing from the same group of potential donors, it may seem surprising that our results differ between the two of them. One explanation is that the funding mechanism drives the cross-country allocation. GlobalGiving is based on a project-funding concept. If poor countries have developed an expertise in project preparation to attract money from official donors, then those same countries may have better projects to offer. In the case of Kiva, all loans flow through participating financial intermediaries. These may be more developed in richer countries (or as countries grow richer). Similarly, Kiva donors may feel a special empathy for entrepreneurs struggling in non-democratic systems, and hence have a higher propensity to lend to them.

Clearly we need more information on what it is about the project or the recipient individual that motivates people to help. Information about the country in which the recipients reside does not seem to be that relevant. We turn instead to project specific factors by analyzing the rate at which projects are funded. If a project gets very quickly funded, we can assume that it appeals to many more people, or that people care deeply about that project. If a project languishes, then it has less appeal. The funding rate therefore reveals information about the preferences of donors with respect to the project or recipient individual.

#### Survival analysis

Given our underlying interest in the rate at which projects are funded, we use survival analysis. Survival analysis provides estimates of the effect of various covariates on the time it takes for "failure." It is usually used to estimate the effect of variables on mortality rates, for example. In our case, "failure" means that a project is fully funded and is removed from the Web site. The faster a project "fails," the more popular it is with donors-lenders. To estimate "failure," we use the Cox proportional-hazards model which has the following benchmark specification:

$$h(t|Q,x,w) = h_0(t) \exp (\beta_0 Q + \beta_x x + \beta_y w_i + \mu)$$

where, for every grant or loan, t is the log of the number of hours required to fully fund a grant or loan request,  ${\bf Q}$  is the amount of funds requested,  ${\bf x}$  is a vector of project-specific covariates,  ${\bf w}$  is a vector of time-, country-, and sector-based effects,  ${\bf \mu}$  is a random disturbance, and  ${\bf h}_{\rm o}(t)$  is the baseline hazard function, i.e. the hazard function for  ${\bf Q}$ ,  ${\bf x}$ , and  ${\bf w}=0$ . An advantage of the semi-parametric Cox model is that the resulting estimates depend on the *order* in which events occur, not the actual *times* at which they occur. Thus the functional form of the baseline hazard function  ${\bf h}_{\rm o}(t)$  is not specified ex ante (as with hazard models that rely on specific distributional forms), but determined from the data.

In addition to requested grant or loan size (which we also model quadratically), we include several other project-specific variables. For Kiva, we are able to control for the number of borrowers, the fraction of borrowers that are women, and the duration of the loan repayment (in months), as well as for the sector being financed. Tables 3 and 4 present these basic hazard estimates for GlobalGiving and Kiva projects, respectively. The "hazard" estimates correspond to the rate at which project requests are fulfilled—in days (log) for GlobalGiving and in hours (log) for Kiva. Positive coefficients imply that the "failure" rate is higher, that is the project gets funded faster.

For both internet portals, larger amounts requested take longer periods to be funded. With Kiva, we also see a preference for funding groups of borrowers rather than individual borrowers, and for funding women entrepreneurs over their male counterparts. Both of these traits—group liability and the preference toward female clients—are, of course, strongly associated with microfinance regimes around the world (Riddell 2007: 274).

For both sets of estimations the addition of country, sector, and time (month) dummies does not alter these basic results. For Kiva we also include dummy variables representing the nature of the MFIs through which Kiva loans flow. Note that MFIs that work with Kiva have been assigned a rating of between one and five "stars," with one star representing highest risk, and five stars lowest risk, based on Kiva's experience with the MFI.4 We include dummies for two- to five-star ratings. Relative to one-star-rated MFIs, only those loan requests made through two-star MFIs exhibit a faster funding rate that is statistically significant, suggesting that two-star MFI projects have a slight advantage over one-star projects, but none of the lowest-risk rated MFI projects (three-, four-, and five-star) are funded any faster than two-star projects. Risk matters to Kiva's lenders, but only at the bottom of the scale. Coefficients on other variables are largely unaffected by adding MFI star ratings to the analysis.

It has been argued that private aid is subject to greater volatility than official aid, as private aid is vulnerable to the whims of philanthropic individuals as well as to the vicissitudes of economic life in the countries in which they live. To examine whether economic conditions in the donor-lenders' countries of residence affect their grant-giving or lending, we use the lagged daily change in the closing Dow Jones Industrial Average, on the assumption that stock-market changes are a useful proxy for economic conditions in donor-lender countries, and that deteriorating economic conditions might make philanthropic individuals more hesitant to contribute online to development projects. If that is the case, naturally, one should expect fund requests to be fulfilled at slower rate. For GlobalGiving, we find that changes in the Dow have no effect on grant-making rates. But for Kiva, our results show that increases in the Dow actually *lower* the hazard rate for Kiva loan

Table 3: Hazard coefficients for GlobalGiving grants

|                              | (1)       | (2)       | (3)       | (4)       | (5)       |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Amount (log)                 | -0.567*** | -0.519*** | -0.518*** | -0.536*** | -0.400*** |
|                              | (-5.170)  | (-3.959)  | (-4.387)  | (-4.325)  | (-2.946)  |
| Amount2 (log)                | 0.027***  | 0.022**   | 0.023***  | 0.028***  | 0.018*    |
|                              | (3.352)   | (2.274)   | (2.651)   | (3.054)   | (1.791)   |
| Trend (month)                | -0.003    |           |           | 0.001     |           |
|                              | (-1.072)  |           |           | (0.339)   |           |
| Dow Jones Monthly Change     |           |           | 0.000     |           |           |
|                              |           |           | (0.581)   |           |           |
| Sovereign Risk               |           |           |           | 0.010     | 0.019     |
|                              |           |           |           | (0.234)   | (0.425)   |
| GDP per Capital (log)        |           |           |           | 0.244***  | 0.247***  |
|                              |           |           |           | (2.902)   | (2.706)   |
| Polity Score                 |           |           |           | 0.000     | -0.007    |
|                              |           |           |           | (0.028)   | (-0.483)  |
| ODA per Capita (log)         |           |           |           | 0.140***  | 0.127**   |
|                              |           |           |           | (2.587)   | (2.249)   |
| East Asia and Pacific        |           |           |           | 0.641***  | 0.508***  |
|                              |           |           |           | (3.965)   | (2.888)   |
| Europe and Central Asia      |           |           |           | -36.017   | -32.748   |
|                              |           |           |           | (-0.000)  | (-0.000)  |
| Latin American and Caribbean |           |           |           | -0.198    | -0.041    |
|                              |           |           |           | (-1.057)  | (-0.204)  |
| Middle East                  |           |           |           | 0.386     | 0.398     |
|                              |           |           |           | (1.632)   | (1.546)   |
| South Asia                   |           |           |           | 0.686***  | 0.648***  |
|                              |           |           |           | (3.717)   | (3.343)   |
| Country dummies              | No        | Yes       | Yes       | No        | No        |
| Sector dummies               | No        | Yes       | Yes       | Yes       | Yes       |
| Month dummies                | No        | Yes       | No        | No        | Yes       |
| Observations                 | 1174      | 1169      | 1169      | 1042      | 1042      |
| % Fail                       | 40.63%    | 40.63%    | 40.63%    | 40.12%    | 40.12%    |
| Prob. (p > chi2)             | 0.0000    | 0.0000    | 0.0000    | 0.0000    | 0.0000    |
| (z-score in parenthesis)     |           |           |           |           |           |

Table 4: Hazard coefficients for Kiva microloans

|                               | (1)                    | (2)                    | (3)                    | (4)                   | (5)                    |
|-------------------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|
| Amount                        | -0.002***              | -0.002***              | -0.002***              | -0.002***             | -0.002***              |
| Amount2                       | (-99.282)<br>0.000***  | (-103.777)<br>0.000*** | (-100.970)<br>0.000*** | (-88.728)<br>0.000*** | (-104.547)<br>0.000*** |
| Amountz                       | (63.270)               | (68.015)               | (62.021)               | (60.239)              | (72.325)               |
| No. of Borrowers              | 0.026***               | 0.015***               | 0.035***               | 0.005*                | 0.009***               |
|                               | (10.698)               | (5.677)                | (11.843)               | (1.803)               | (3.312)                |
| Gender (% female)             | 0.229***               | 0.284***               | 0.298***               | 0.246***              | 0.275***               |
|                               | (24.365)               | (26.204)               | (26.813)               | (22.771)              | (25.955)               |
| Loan term (months)            | -0.010***              | -0.041***              | -0.036***              | -0.019***             | -0.037***              |
| Trend (day)                   | (-10.595)<br>-0.001*** | (-27.861)              | (-21.043)              | (-13.097)             | (-28.443)              |
| Sovereign Risk                | (-36.007)              |                        |                        |                       | -0.013***              |
| Sovereigh Misk                |                        |                        |                        |                       | (-3.344)               |
| GDP per Capita (log)          |                        |                        |                        |                       | 0.038***               |
|                               |                        |                        |                        |                       | (4.171)                |
| Polity Score                  |                        |                        |                        |                       | 0.016***               |
|                               |                        |                        |                        |                       | (10.624)               |
| ODA per Capita (log)          |                        |                        |                        |                       | 0.015***               |
| Dow Jones Daily Change        |                        |                        |                        | -0.000***             | (2.884)                |
| E 14 ' CD ''                  |                        |                        |                        | (-3.271)              | 0.012                  |
| East Asia & Pacific           |                        |                        |                        |                       | -0.013                 |
| E. Europe & Central Asia      |                        |                        |                        |                       | (-0.840)<br>-0.448***  |
| L. Larope & Central Asia      |                        |                        |                        |                       | (-25.306)              |
| Latin America & Caribbean     |                        |                        |                        |                       | -0.345***              |
|                               |                        |                        |                        |                       | (-18.853)              |
| Middle East                   |                        |                        |                        |                       | 0.050**                |
|                               |                        |                        |                        |                       | (2.262)                |
| 2 Star                        |                        |                        |                        |                       | 0.305***               |
| 3 Star                        |                        |                        |                        |                       | (3.347)<br>0.002       |
| S Stat                        |                        |                        |                        |                       | (0.024)                |
| 4 Star                        |                        |                        |                        |                       | -0.159*                |
|                               |                        |                        |                        |                       | (-1.881)               |
| 5 Star                        |                        |                        |                        |                       | -0.185**               |
|                               |                        |                        |                        |                       | (-2.189)               |
| Country Dummies               | No                     | Yes                    | Yes                    | Yes                   | No                     |
| MFI Dummies                   | No                     | No                     | Yes                    | No                    | No                     |
| Sector Dummies  Month Dummies | No<br>No               | Yes<br>Yes             | Yes<br>Yes             | Yes<br>No             | Yes<br>Yes             |
|                               |                        |                        |                        |                       |                        |
| Observations                  | 70790                  | 70790                  | 70790                  | 70790                 | 65242                  |
| % Fail<br>Prob. (p > chi2)    | 100%<br>0.0000         | 100%<br>0.0000         | 100%<br>0.0000         | 100%<br>0.0000        | 100%<br>0.0000         |
|                               | 0.0000                 | 0.0000                 | 0.0000                 | 0.0000                | 0.0000                 |
| (z-score in parenthesis)      |                        |                        |                        |                       |                        |

requests—Kiva loans are fulfilled at a slower rate following increases in the Dow–although the magnitude of the effect is small.

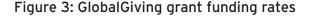
For both sets of estimations, finally, we replace country dummies with various country-specific measures to test whether these country characteristics matter for philanthropic individuals. We include: sovereign risk (taken from assigning values of 0 to 8 corresponding to standard sovereign ratings (a higher value signifying lower risk), GDP per capita (log), the Polity index of democracy (ranging from -10 for dictatorship to +10 for democracy), and official development aid per capita (log). Sovereign risk ratings for the recipient country do not appear to affect the rate at which grants or loans are made, either for GlobalGiving or Kiva.<sup>6</sup> For Kiva loans, however, loan requests made from democratic countries are funded faster than comparable loans from non-democratic countries (there is no effect on GlobalGiving grant rates). For GlobalGiving grants, we also find that requests from aid-dependent countries are funded at a slightly faster rate than those from countries that receive less aid, but this in not the case with Kiva. Both sets of estimations, moreover, indicate that funding requests from richer countries are fulfilled faster than requests from poorer countries. For Kiva, again holding all other variables at their means, increasing the per-capita income of the recipient county from the 25<sup>th</sup> sample percentile to the 75<sup>th</sup> percentile reduces the funding time by approximately three hours. This may be due to a form of pre-selection if the poorest countries are less likely to have in place the front-line NGO or MFI infrastructure needed to receive online funds. In general, however, these country-specific coefficients suggest that (i) individual donor-lenders do not consistently take into account country-specific factors when making decisions regarding to whom to grant or lend; and (ii) the one factor that seems to

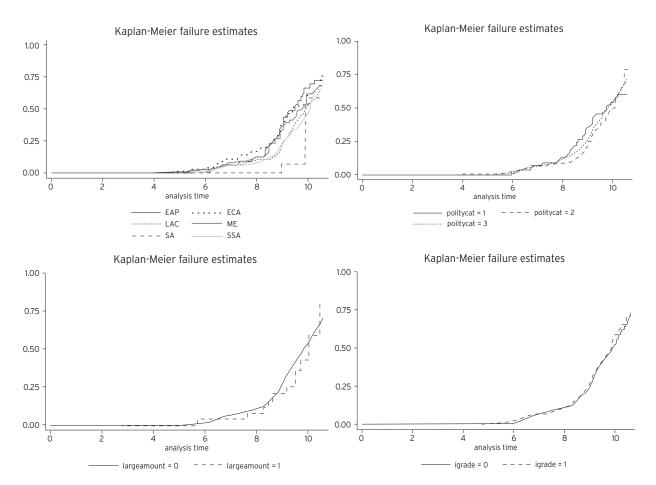
matter-country wealth-exhibits an effect that is the opposite of what is expected.

Figures 3 and 4 depict these results graphically using Kaplan-Meier failure curves for GlobalGiving grants and Kiva loans according to several categories of interest. Curves in the upper part of the graphs show faster "failure" or funding rates. For both organizations, the graphs depict the advantage of small-fund requests (grant or loan requests below the mean plus one standard deviation). We also see a distinct disadvantage to requests coming from the former statesocialist countries of Eastern Europe and Central Asia relative to other regions. Countries with investmentgrade sovereign risk ratings (BBB or above on the Standard & Poor's scale), have a slight advantage for Kiva loans but no advantage for GlobalGiving grants. Democratic countries (between 5 and 10 on the Polity scale) have faster failure rate for Kiva requests, but little effect on GlobalGiving fundraising. For Kiva, additionally, we see the preference for lending to females. We also see the advantage of two-star rated MFIs relative to all other rankings.

#### Internet platforms and donor fragmentation

In practice, projects may be funded faster because they are seen as having lower risk or because they have some attribute that is preferred by the donorlender. We would like to separate between these two. Our hypothesis is that when projects are high risk individual donor-lenders try to reduce their exposure and projects end up with higher fragmentation across donors. Conversely, low risk projects may induce an individual to provide larger amounts of funding. We can therefore use information on the concentration of donors in each project to ascertain the degree of risk of that project. But we cannot simply add an additional

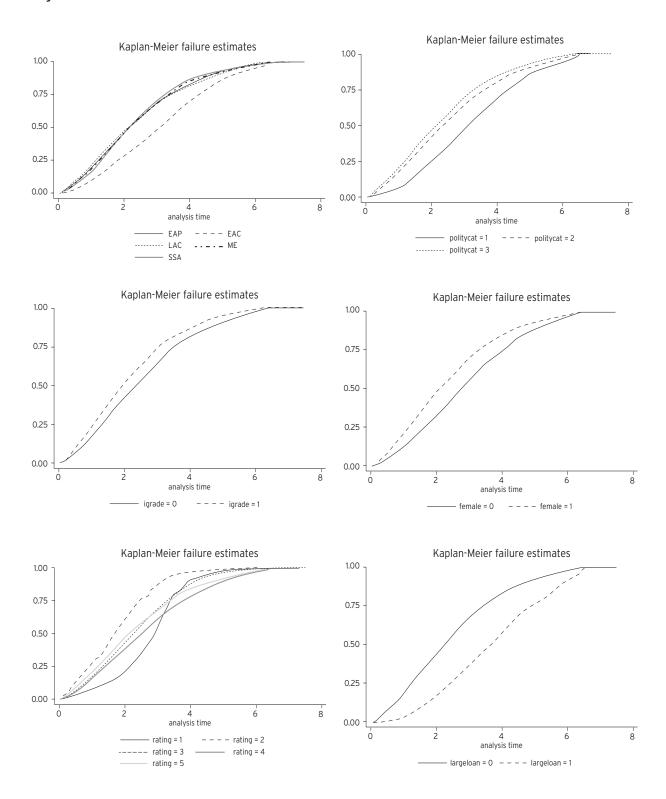




covariate to the survival models used above, because of the fact that both the level of fragmentation and the funding rate may be jointly determined. Indeed, the choices that individual donor-lenders make affect both the amount of funding as well as the distribution of donations or loans provided.

To examine these relationships, therefore, we rely on a seemingly-unrelated regression (SUR) model in which we regress the funding rate for each project (measured here as dollar per month or dollars per hour for GlobalGiving or Kiva, respectively, both in natural logs) and a measure of donor fragmentation against a common set of project-specific covariates. The funding rate is a measure of preference for the project—a faster funding rate suggests more people are attracted to that project or individuals care more deeply about the project. We use a Hirschman-Herfindahl concentration index of the sum of squared donation/loan fractions as a measure of fragmentation, or a proxy for risk.

Figure 4: Kiva loan fulfillment rates



Our SUR results are presented in Table 5. For the Kiva estimations, the coefficients in the funding rate equation mirror the coefficients in the survival analysis. Funding rates are higher for smaller projects, those with female borrowers, shorter-term loans, and loans to the Middle East.7 On the other hand, loans are more concentrated for projects that are smaller, have more borrowers, that are of longer duration, that are in countries with higher per capita GDP, and that are intermediated through the worst rated MFI. The per capita GDP coefficients show the two forces that individual lenders contend with. On the one hand, their preferences may lean toward entrepreneurs in poorer countries (funding rate equation). On the other hand, lending to entrepreneurs in poorer countries may be more risky (HHI equation). In sum, the factors that would make a microloan riskier, as expected, tend to take the longest time to fund and tend to be funded by larger numbers of lenders contributing smaller

amounts. For GlobalGiving the results are somewhat different. Large projects actually have faster funding rates, but are associated with lower concentration of donors. South Asian projects have the fastest funding rates.

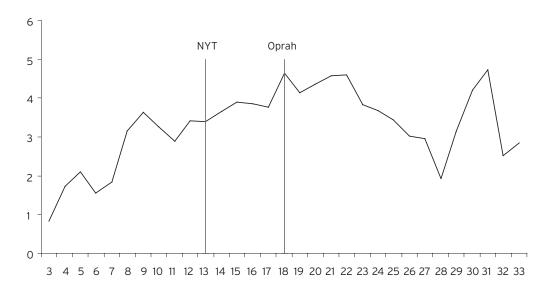
From these SUR results, we generate coefficients for month-by-month dummies, and plot these for both GlobalGiving and Kiva projects in Figure 5. The graphic shows, then, the time-fixed effects controlling for all other determinants. It shows that Kiva's platform has remained relatively stable (in terms of dollars per hour per project) while GlobalGiving—much more volatile—has been increasing. The implication is that Kiva has expanded its aggregate throughput by managing to fund a greater number of projects (at the same rate per project), while GlobalGiving's growth has been driven by faster funding rates for each project.

Table 5: SUR: funding rate and activity concentration

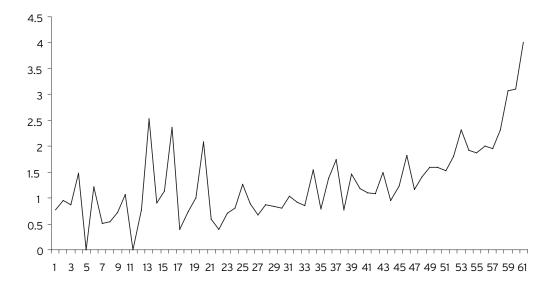
|                           | K                         | iva                             | Global                     | Giving                 |
|---------------------------|---------------------------|---------------------------------|----------------------------|------------------------|
|                           | (1)                       | (2)                             | (1)                        | (2)                    |
|                           | Dollars per Hour<br>(log) | HHI                             | Dollars per Month<br>(log) | HHI                    |
| Amount                    | -0.0007***<br>(-30.48)    | -0.0003***<br>(-77.02)          | 0.6066***                  | -0.3298***<br>(-17.03) |
| Amount2                   | 0.0000***                 | 0.0000***                       | 0.0169***<br>(3.44)        | 0.0186***              |
| No. of Borrowers          | 0.0010<br>(0.30)          | (45.81)<br>0.0059***<br>(12.50) | (3.44)                     | (13.23)                |
| Gender (% female)         | 0.3375***<br>(27.10)      | -0.0031*<br>(-1.65)             |                            |                        |
| Loan term (months)        | -0.0380***<br>(-26.51)    | 0.0006***<br>(2.62)             |                            |                        |
| Sovereign Risk            | 0.0219***<br>(4.85)       | -0.0005<br>(-0.76)              | 0.0262<br>(1.19)           | -0.0034<br>(-0.53)     |
| GDP per Capita (log)      | -0.0387***<br>(-3.53)     | 0.0049***                       | -0.0003<br>(-0.01)         | 0.0115<br>(0.85)       |
| Polity Score              | 0.0025<br>(1.56)          | 0.0001<br>(0.42)                | -0.0072<br>(-1.11)         | 0.0030 (1.63)          |
| DDA per Capita (log)      | 0.0034<br>(0.57)          | 0.0017*<br>(1.81)               | 0.0595**                   | -0.0050<br>(-0.60)     |
| East Asia and Pacific     | -0.1027***<br>(-5.78)     | 0.0157***<br>(5.85)             | 0.2338***                  | 0.0202                 |
| Europe and Central Asia   | -0.4491***<br>(-21.64)    | -0.0088***<br>(-2.80)           | 0.0571<br>(0.22)           | 0.0206 (0.28)          |
| atin America              | -0.2327***<br>(-10.56)    | -0.0176***<br>(-5.28)           | 0.1644*<br>(1.66)          | 0.0053<br>(0.19)       |
| ⁄liddle East              | 0.1958***<br>(7.57)       | -0.0098**<br>(-2.52)            | 0.3121**                   | 0.0115<br>(0.31)       |
| North America             | (1.57)                    | (2.32)                          | 0.0000                     | 0.0000                 |
| South Asia                |                           |                                 | 0.3403***                  | 0.0803***<br>(2.86)    |
| 2 Star                    | 0.2180**<br>(2.13)        | -0.0502***<br>(-3.25)           | (3. 10)                    | (2.00)                 |
| 3 Star                    | 0.0478<br>(0.50)          | -0.0848***<br>(-5.85)           |                            |                        |
| 4 Star                    | -0.1742*<br>(-1.84)       | -0.0677***<br>(-4.75)           |                            |                        |
| 5 Star                    | -0.2223**<br>(-2.35)      | -0.0664***<br>(-4.64)           |                            |                        |
| Constant                  | 0.0000                    | 0.5277***<br>(4.91)             | 0.0983<br>(0.11)           | 0.0000 (.)             |
| Dbservations<br>R-squared | 63518<br>0.35             | 63518<br>0.17                   | 1041<br>0.84               | 1041<br>0.52           |

Figure 5: SUR betas, funding rate (dollars per hour or dollars per month)





#### Betas on Month Dummies, Sureg (GG)



#### **CONCLUSIONS**

e have shown that the cross-country allocation of aid, the speed at which projects get funded, and the concentration of donors differ according to the platform used to intermediate between the individual donor and the final beneficiary. Official aid tends to be responsive to country-specific factors in aid recipient countries, especially the income level and institutional environment. These factors seem to affect private individuals—at least those who give through internet contributions—to a lesser degree. They care more about project specific factors. Kiva, a platform oriented toward people-to-people giving, has expanded microcredits at a very rapid rate. GlobalGiving, a project-oriented platform, has also expanded quickly, but not as quickly as Kiva.

Our findings suggest that the aid platform matters a great deal. We can think about three different, and mutually complementary, types of aid. Official aid is focused on support for individual developing countries. GlobalGiving has developed a platform in support of specific projects. Kiva's platform is focused on support to individual (or group) entrepreneurs.

These findings have implications for policy. We suggest that there are few inherent advantages to official aid over private aid in terms of collective action. New internet based technology appears to have reduced the advantage that official agencies once held in terms of transaction costs. By its very nature, official aid has disadvantages in terms of agency costs. Multiple private aid platforms can provide a choice for donors

to give money to recipients in developing countries in a much more direct way than ever before. The rapid growth of private aid may be attributed to the attractiveness of this "short route" to giving. But not all recipient countries are organized to take advantage of this. Our findings suggest that the design of projects can be fine-tuned to make them more attractive to donors. To give an example: it is probably more effective to invest in providing assistance to entrepreneurs to allow them to develop a sensible project idea than to invest in building the capacity of microfinance intermediaries. Private lenders seem not to care too much about the rating of these agencies.

Another obvious conclusion is that aid recipient countries would do well to organize themselves to take advantage of new forms of private aid. In some countries, like India, MFIs must first obtain approval from the Reserve Bank before they can borrow abroad. That is an obvious barrier to accessing private loans from Kiva, for example. India could benefit by relaxing its rules for highly concessional credits.

The phenomenal growth of Kiva is testimony to the power of internet-based giving. Kiva has shown that it is possible to bundle large numbers of borrowers and reach a scale, which is already significant even in global terms. What has not been shown is that organizing aid in this fashion is more effective for development. A comparison of development effectiveness between public and private aid platforms is an important direction for future research.

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#### **ENDNOTES**

- There is considerable evidence of "psychic" rewards to charitable giving. Experiments, for example, show that giving charitable donations triggers brain activity in the subgenual cortex/septal region, areas related to social attachment and bonding in other species (Moll et al. 2006). They conclude that altruistic behavior may be hardwired into humans. Kosfeld (2008) emphasizes that trust in other humans is a biologically-based part of human nature. Kosfeld's experiments show that the presence of oxytocin, a hormone that reduces social anxiety and helps people meet and bond with each other, is also linked with a greater degree of trust that good behavior will be reciprocated. The conclusion is that people have an in-built desire and tendency to respond when they see someone in need. Internet-based giving provides the connection with the needy. These biological studies suggest there is no collective action problem when individuals have the opportunity to help others directly.
- 2. The remaining 41 percent of funds have still not been classified by use.
- Kiva users now can loan to U.S. recipients (loan limit = \$10,000), too. However, these loans were not available in the time period examined in this study.
- 4. A minimum \$10 contribution is required for GlobalGiving; a minimum of \$25 is required for Kiva.
- 5. The Kiva Web site states that a "5-Star Field Partner is a highly established microlending institution with a proven track record, audited financials and high ratings from independent evaluators. In contrast, a 1-Star Field Partner is usually young and unproven-but with the potential to reach entrepreneurs not reached by more established Field Partners." The ratings are assigned based on audits, credit ratings, independent evaluations, estimations of existing portfolio risk, Kiva repayment performance, and the age of the MFI, among other factors.

- Note that a large amount of grants and loans are provided to countries that are unrated, which in our scaling, are scored as zero.
- Iraq and Afghanistan are both classified as in the Middle East and account for the significant preference in lending to this region.



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