

How do big gifts affect rival charities and their donors?

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Introduction

- Crowd-out has been a subject of research in several settings, from insurance markets to foreign direct investment
- In the non-profit sector, crowd-out has been studied with respect to government spending (Andreoni, 1993; Andreoni and Payne, 2003)
- This paper focuses on how charities respond to the activities of their rivals
- Evidence of crowd-in: a big gift to a rival increases charitable activities by 3.8% one year following the gift, and 4.7% two years following
- This rules out models of charity altruism

Framework

- Several existing models can help us predict how the activities of one charity can affect those of its rivals
 - ▶ Purely altruistic charity \implies complete crowd-out
 - ▶ Impurely altruistic charity \implies incomplete crowd-out
 - ▶ Pure warm glow charity \implies activities of rivals have no effect
 - ▶ Non-convex provision + warm-glow donors \implies crowd-in

Chronicle of Philanthropy



Richard A. Herman

LOCATION
Washington, D.C.

WEALTH SOURCE
Family Wealth

TOP CAUSE
N/A

YEARS ON LIST (1)
2013

YEAR	TOTAL GIVING RANK	BIGGEST GIFT(S)
2013	\$43,000,000* 45	Family Matters of Greater Washington

Mr. Herman invested wealth left to him by his father, Bernard, a chief engineer at Southern Railway.

Mr. Herman, who was 100 when he died last year, left the bulk of his estate to two Washington organizations. He bequeathed \$28-million to Family Matters of Greater Washington, a social-services organization to which he had been giving relatively small amounts since 1967. Described by a cousin as quiet and shy, Mr. Herman gave the organization a total of slightly more than \$490,000 during his lifetime but had no real personal contact with the group.

He also left \$15-million to the John F. Kennedy Center for the Performing Arts and stipulated that half of the gift be used to endow the Washington National Opera and the other half to endow the National Symphony Orchestra.

Mr. Herman lived across the street from the Kennedy Center and frequently went to performances there but was not closely involved with the organization in any other way.

Big gifts

- Time period: 1998-2017
- Median: \$5 million

Table: Big Gift Summary Statistics

	All gifts	Lifetime gifts	Bequests
Big Gift (real 1995 dollars, \$1,000s)	24,523	18,554	39,885
<i>NTEE Major Group</i>			
A: Arts, Culture and Humanities	143	105	38
B: Education	20	15	5
C: Environment	13	6	7
D: Animal related	7	6	1
E: Health (general)	2	2	
F: Mental Health	3	1	2
G: Disease	1	1	
I: Crime	1	1	
J: Employment	1	1	
K: Agriculture, Food	4	3	1
L: Housing, Shelter	4	4	
N: Recreation	3	2	1
O: Youth Development	2	2	
P: Human Services	6	1	5
S: Community Improvement	2	2	
T: Philanthropy	4	3	1
X: Religion	1	1	
Y: Membership Benefit Organizations	1	1	
Observations	218	157	61

Form 990

- Combine big gift data with IRS Form 990
- Filed by charities with \$50,000 or more in gross receipts
- Balance sheet information, number of employees and volunteers, mission statement

▶ Details

Ideally...

- I would estimate the following specification:

$$C_{jkst} = \alpha_j + \lambda_t + \beta C_{-jkst} + \epsilon_{jkst}$$

- $\beta = -1$ would be evidence of complete crowd-out, and indicate a model consistent with pure altruism
- $0 < \beta < -1$ would suggest incomplete crowd-out, and indicate impure altruism
- $\beta = 0$ would mean that the activities of charity j are unaffected by their rivals, and suggest a model of pure warm-glow
- $\beta > 0$ would be evidence of crowd-in
- However, if charity j is in high demand (for example in the aftermath of a hurricane), then its competitors are also likely to be in high demand, so $\hat{\beta}$ will be biased upwards

Big gifts

- Big gifts offer an exogenous shock to rival charities' activities
- These very large gifts from private donors generate a spike in revenues, the timing of which is arguably random ▶ Spikes
- Use information on both lifetime gifts and bequests
- Identification requires that the big gift must affect the charitable activities of the rival, but be uncorrelated with demand for charity j
 - ▶ This would be violated if the gift is received during a period of high demand for both the rival and charity j

▶ Exogeneity

Defining a market

- To assess the effect of a big gift on rival charities, need to define the market in which they operate
- Focus on markets at the city-level \implies charities that operate locally ▶ Local definition
- Use NTEE classification to define 3 markets:
 - ▶ Narrowest - share the same exact NTEE classification (at the centile-level) and located in the same city
 - ▶ Share the same NTEE classification at the decile-level and located in the same city
 - ▶ Broadest - same major group classification in the same city

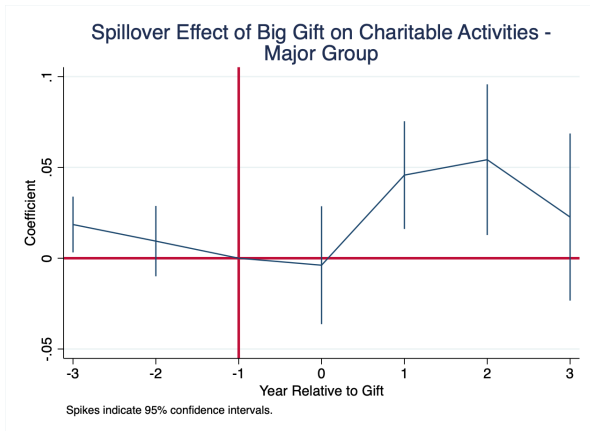
Empirical Strategy

Separately, for each definition of a market, m , I run regressions of the form:

$$\log Y_{jkt} = \alpha_j + \lambda_t + \sum_{s \in \mathcal{S}} \beta_{ms} BG_{imt} \mathbb{1}\{t = s\} + \gamma_m BG_{imt} \mathbb{1}\{t \notin \mathcal{S}\} + \epsilon_{jkt}$$

- Y_{jkt} will be expenditure on charitable activities (level of grants and other assistance paid out by the organization), total contributions and fundraising expenditure
- BG_{imt} is a dummy variable equal to one if any charity $i \neq j$ in market m at time t receives a big gift
- β_{ms} is the effect of big gifts to rival firms in the market m , s periods after the gift
- $\mathbb{1}\{t = s\}$ is an indicator equal to one if t is s periods away from the gift, where $\mathcal{S} = \{-2, -1, 0, 1, 2, 3\}$
- γ_m captures longer run effects

Results



► Decile-level

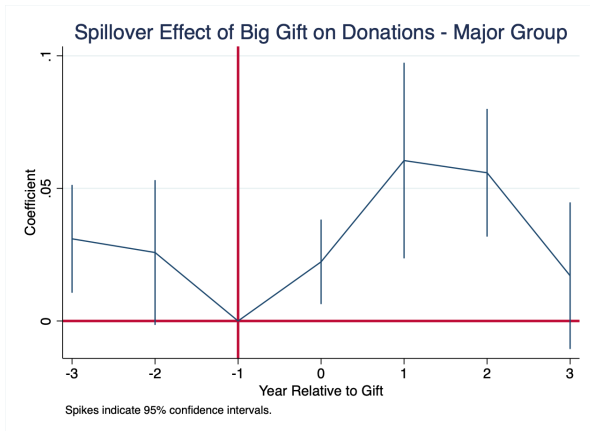
Crowd-in

- Positive coefficients conflict with predictions of altruism/warm glow models
- Charity budget constraint:

$$\textit{CharitableActivities} + \textit{NonCharitableActivities} = \textit{Resources}$$

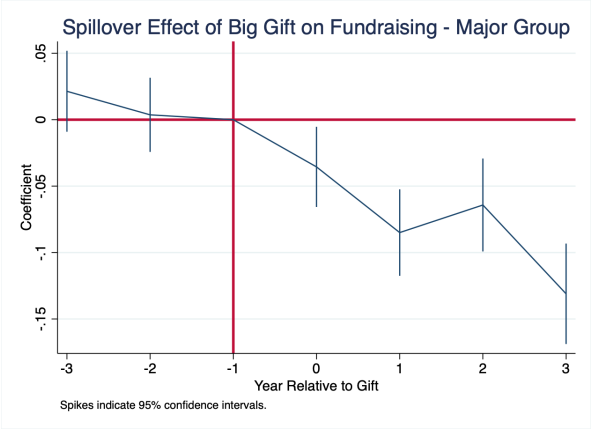
- Rise in charitable activities driven by increase in resources or reduction in non-charitable expenditure, or both

Results



► Decile-level

Results



▶ Decile-level

Results

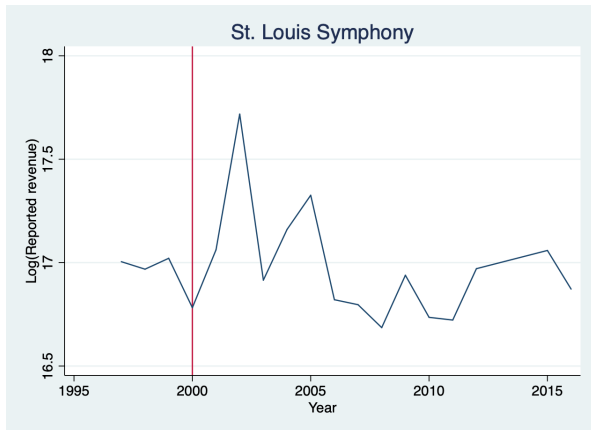
- Dollar value of gifts
 - ▶ Donors consider charities operating at the same decile-level as complements, and at the same centile-level as substitutes. This is especially true in thin markets
- Heterogeneity by charity size
 - ▶ Smaller charities increase activities more; larger charities cut back on fundraising more
- Heterogeneity by gift size
 - ▶ Positive effects on activities and donations are more pronounced following smaller gifts

Conclusion

- Evidence of crowd-in: a big gift to a rival increases charitable activities
 - ▶ ↑ donations; ↓ fundraising expenditure
- Results inconsistent with models of charity altruism or pure warm glow, but consistent with other existing models
- Any future model should capture the following features:
 - ▶ A big gift has informational value regarding the quality of the recipient, but also the cause as a whole
 - ▶ Competition between donors means that a big gift to the Detroit Symphony induces the supporters of the Detroit Opera House to increase donations
 - ▶ Charities dislike fundraising \implies if a big gift brings publicity to their cause, they may have an incentive to decrease fundraising efforts

Thank you!
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Case studies - Lifetime Gift



- \$40 million gift

Table: Exogeneity concerns

	Log(Activities j + 1000)	Log(Activities j + 1000)	Log(Activities j + 1000)
	Major group	Decile-level	Centile-level
Log(Rivals' charitable activities)	0.0075*** (0.0012)	0.0153*** (0.0015)	0.0186*** (0.0025)
Charity Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
Observations	1875340	1036927	389636
R-Squared	.0386	.0111	.0181

	Log(Charitable activities j + 1)	Log(Charitable activities j + 1)	Log(Charitable activities j + 1)
	Major group	Decile-level	Centile-level
Log(Rivals' big gifts + 1)	0.0002 (0.0007)	-0.0007 (0.0014)	0.0010 (0.0019)
Charity Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
Observations	2248851	1400312	689844
R-Squared	.0395	.0036	.0054

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Restrict to local charities

- Organizations omitted if:
 - ▶ change their state of filing any time between 1998 and 2017
 - ▶ the organization's name or mission statement on the Form 990 includes key words such as "international" or "global"
 - ▶ the charity ever files a return on behalf of a group of affiliated charities

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Decile-level - Activities

Table: Big Gift Spillover Effects - Charitable Activities

	Log(Charitable activities + 1000)	Log(Charitable activities + 1000)
	Major group	Decile-level
Big Gift * Period t	-0.0129 (0.0165)	-0.0160 (0.0217)
Big Gift * Period t+1	0.0384*** (0.0145)	0.0259** (0.0122)
Big Gift * Period t+2	0.0468** (0.0200)	0.0203 (0.0193)
Big Gift * Period t+3	0.0162 (0.0225)	0.0139 (0.0187)
Charity Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
Observations	2248851	1400312
R-Squared	.0396101	.0405905

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Decile-level - Donations

Table: Big Gift Spillover Effects - Contributions

	Log(Contributions + 1000)	Log(Contributions + 1000)
	Major group	Decile-level
Big Gift in Market * Period t	0.0129 (0.00802)	0.00987 (0.0179)
Big Gift in Market * Period t+1	0.0538*** (0.0197)	0.0576*** (0.0179)
Big Gift in Market * Period t+2	0.0483*** (0.0121)	0.0384*** (0.0147)
Big Gift in Market * Period t+3	0.0117 (0.0130)	-0.00718 (0.0280)
Charity Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
Observations	2398113	1483029
R-Squared	.0028754	.0032551

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Decile-level - Fundraising

Table: Big Gift Spillover Effects - Fundraising

	Log(Fundraising + 1000)	Log(Fundraising + 1000)
	Major group	Decile-level
Big Gift in Market * Period t	-0.0408 (0.0490)	-0.104 (0.0729)
Big Gift in Market * Period t+1	-0.0884* (0.0470)	-0.0872 (0.0574)
Big Gift in Market * Period t+2	-0.0687** (0.0337)	0.0204 (0.0523)
Big Gift in Market * Period t+3	-0.134*** (0.0458)	-0.256*** (0.0808)
Charity Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
Observations	2262244	1408271
R-Squared	.0682173	.0689028

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