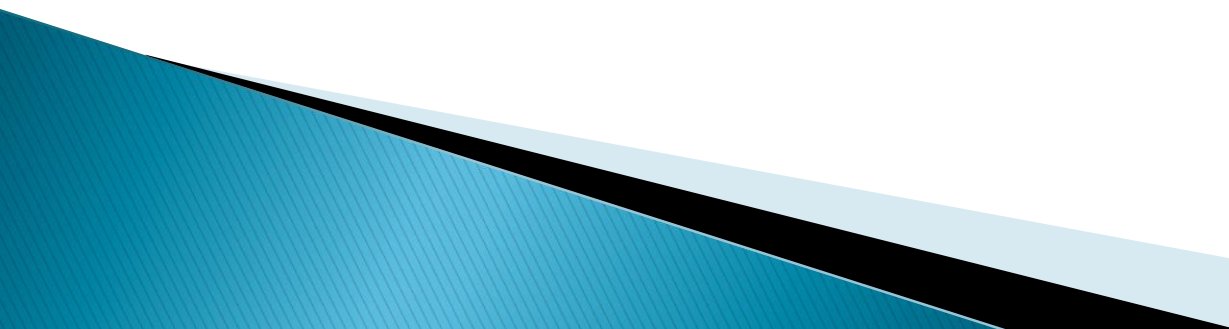


Does Corporate Giving Signal Firm Quality?

- ▶ Kiyong Chang, University of South Florida Sarasota–Manatee
 - ▶ Hoje Jo, Santa Clara University
 - ▶ Ying Li, University of Washington Bothell
-
- ▶ Jul 11, 2014 UW Tacoma CSR Academic Conference

Literature on CSR/Giving as Signal

- ▶ Firm's concern over social issues (McWilliams and Siegel, 2000)
 - ▶ Aversion to sacrificing quality (Fisman, Heal and Nair, 2008)
 - ▶ Long-term focus (Benabou and Tirole, 2010)
 - ▶ Competitive advantage (Ramchander, Schwebach, and Staking, 2012)
- 

Our Study

In this study, “quality” refers to the possession and effective usage of valuable financial resources.

So a quality firm is one that

- Possess financial resources to fund its investment opportunities and
- is not bothered by agency problems due to free cash flows.

Corporate giving

- ▶ Why do corporations donate resources to society?
 - Negative view:
 - Corporate giving is a drain on shareholder wealth (Friedman, 1970)
 - Positive view:
 - Corporate giving enhances revenue growth by improving firm images with consumers (Lev, et al. 2010; Servaes and Tamayo, 2013)

Drivers of Corporate Giving: Previous Research

- ▶ Profit Maximization
 - Creating goodwill and improving the firm's image (strategic giving)
- ▶ Managers' Utility Maximization
 - Agency theory
- ▶ Ethical Motives
 - Pro-social behavior theory
 - Managers act impelled by moral norms

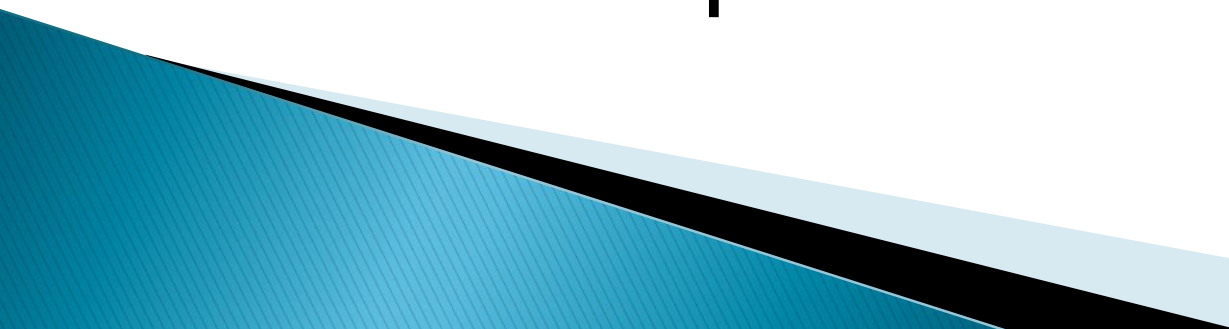
Gap

- ▶ Previous studies treat corporate giving as homogeneous.
- ▶ But corporate giving can take numerous forms.
 - Cash donations
 - In-kind donations
 - Goods: extra inventories (drugs, software, food, etc.)
 - Service: volunteering service, an accountant doing tax services for community

Gap (cont'd)

- ▶ If corporate giving contains information on corporate financial performance, where does the information reside?
 - Cash giving or in-kind giving?
 - Expected or unexpected giving?
- ▶ How would firm characteristics moderate investors reaction to such information?

Our Study

- ▶ Differentiate **cash donation** from in-kind donation
 - ▶ Differentiate expected vs. **unexpected cash donation**
 - ▶ Explore the relationship between unexpected cash donation and **future** corporate financial performance (CFP).
 - ▶ Using **signaling theory** to explain the positive relationship.
- 

Hypotheses

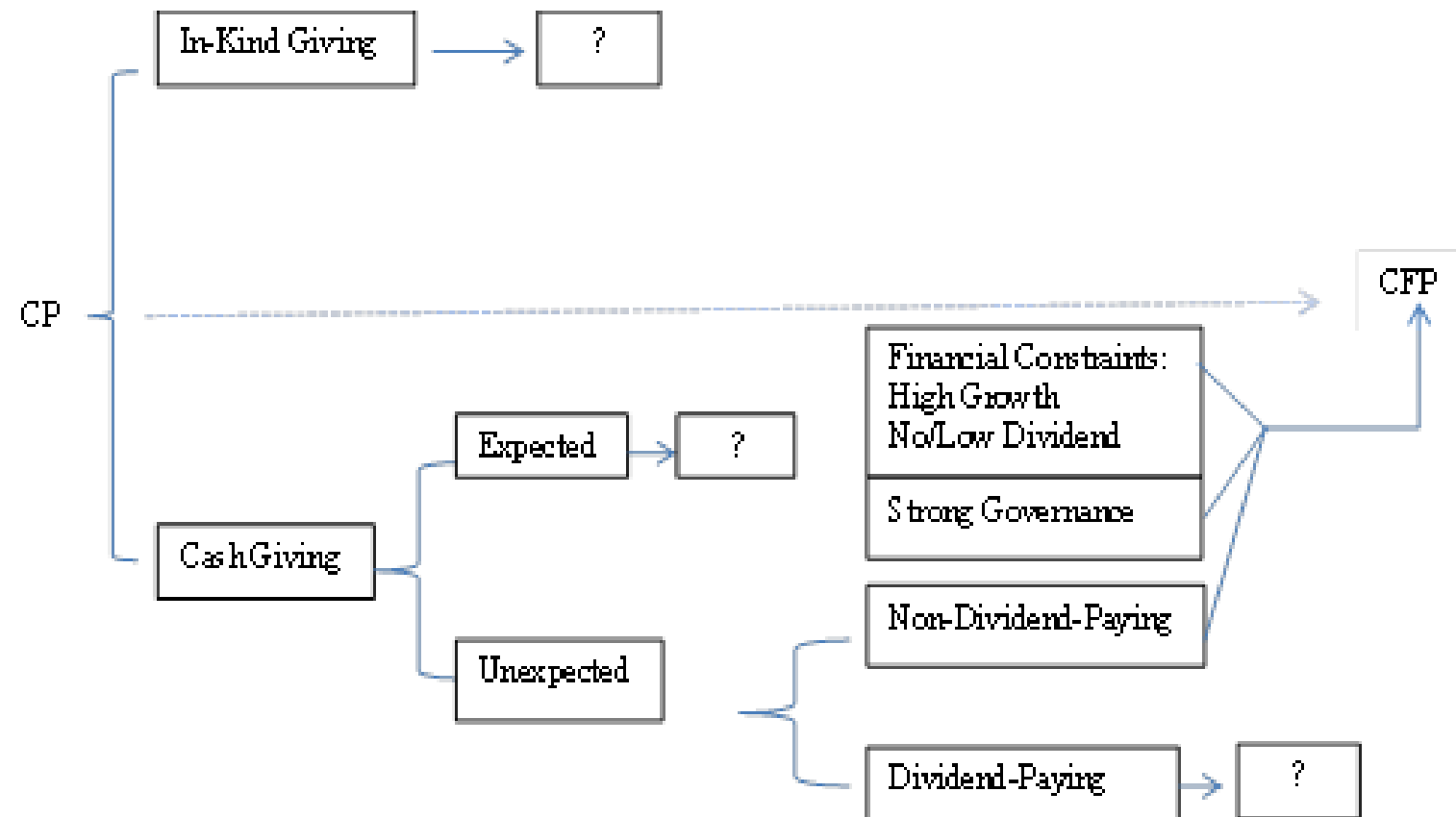
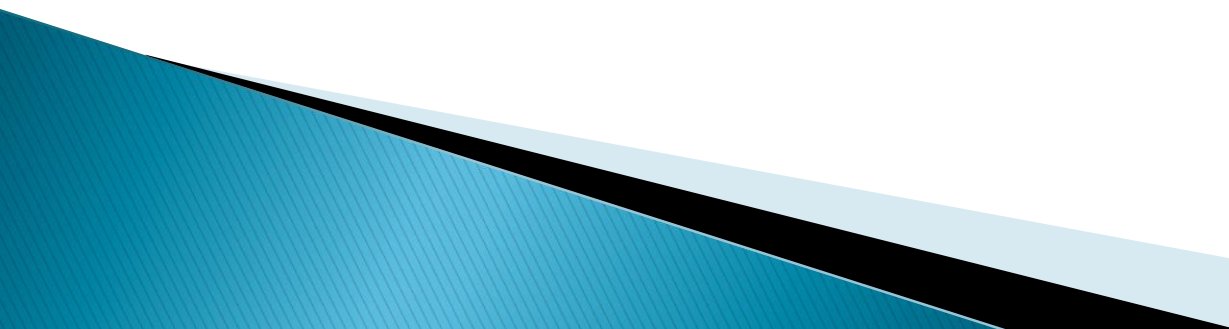


Figure 1. The Link between Corporate Giving and CFP – Signaling Perspective

Data

- ▶ Corporate Giving information:
 - Thomson Reuters ASSET4 database
 - ▶ Financial statement and stock information:
 - Compustat and CRSP
 - ▶ Total donation: 1,722 firm-year observations
 - ▶ Cash donation: 700 firm-year observations
 - ▶ Sample: Firm-years with cash donation information
 - ▶ Unique firms: 167
 - ▶ Sample period: year 2002 to 2012
 - ▶ U.S. only sample
- 

Total vs. Cash Donation

- ▶ Average cash donation: \$6.98 million per firm (0.14% of sales)
- ▶ Average total donation: \$10.88 million per firm (0.26% of sales)

	Total Donation	Cash Donation
	Firms	Firms
variable	Mean	Mean
ROA	0.064	0.078
Log(TA)	9.743	9.646
Leverage	0.246	0.232
Cash/TA	0.113	0.140
R&D/TA	0.022	0.031
Advertising/TA	0.013	0.020
CAPX/TA	0.046	0.043
Net FA/TA	0.302	0.260
Nondiv dummy	0.161	0.195
CGOV	82.187	84.288

Corporate Giving Intensity Comparison

	All Firms that Donate				Firms that Donate Cash			
	N	Mean	Median	Std	N	Mean	Median	Std
<i>Total donation/Sale</i>	1722	0.26%	0.10%	0.53%	649	0.40%	0.17%	0.69%
<i>Cash donation/Sale</i>	700	0.14%	0.08%	0.16%	700	0.14%	0.08%	0.16%
<i>Inkind donation/Sale</i>	553	0.35%	0.07%	0.84%	479	0.36%	0.08%	0.86%
Excess cash donation					638	0	-0.01	0.126
Excess cash donation2					639	0	0.108	1.874

1st Stage: Estimate Predicted Corporate Giving

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
VARIABLES	Totdon/sale	Cashdon/sale	Inkind/sale	Log_totdon	Log_cashdon	Log_inkind
	Tobit	Tobit	Tobit	OLS	OLS	OLS
Log(TA)	0.032***	0.003	0.054**	1.311***	1.327***	1.214***
Leverage	0.018	-0.016	-0.063	0.026	-2.09	-0.373
Cash/TA	0.172	0.047	0.352*	0.975	-1.747	2.445
ROA	0.442***	0.304***	0.445**	2.265**	4.182**	3.586*
R&D/TA	1.488***	0.610**	1.81	4.890*	1.871	0.311
Advertising/TA	0.234	-0.2	0.015	5.362*	3.317	7.897*
	-0.653	(-0.650)	-0.027	-1.941	-1.133	-1.811
Nondiv dummy	0.029	-0.017	0.114	0.356*	-0.052	0.408
	-0.869	(-0.853)	-1.419	-1.655	(-0.122)	-0.758
CGOV	0	-0.002**	-0.001	0.033**	0.002	0.028**
	(-0.288)	(-2.018)	(-0.321)	-2.448	-0.282	-2.076
Industry fixed	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.266**	0.361**	-0.389	0.155	3.971**	1.845
	(-2.140)	-2.276	(-1.471)	-0.117	-2.21	-0.986
Observations	1,570	638	500	1,571	639	501
R-squared				0.479	0.467	0.527
Log likelihood	198.6	417.9	-39.02			

Excess (Unexpected) Donation

- Market expects companies donate certain amount each year (giving “reputation”) and thus the expected giving does not contain further information to market.
- Excess total (cash, in-kind) donation
= Actual donation – Predicted donation
calculated from the models of corporate giving in the 1st stage)
- In the 2nd stage regression, we use the residual (excess donation) as independent variable.

Advantage of using Excess Donation

- Only unexpected giving contains information that can signal firm's future financial performance.
- Less endogeneity concerns
 - $\text{Corr}(\text{cash donation}, \log(\text{TA})) = 0.10 \text{ (0.53)}$
 - $\text{Corr}(\text{cash donation}, \text{ROA}) = 0.13 \text{ (0.16)}$
 - $\text{Corr}(\text{excess cash donation}, \log(\text{TA})) = 0.00$
 - $\text{Corr}(\text{excess cash donation}, \text{ROA}) = 0.00$
- Limitation: Model risk

Measure Future Abnormal Financial Performance

- ▶ $ROA(t+1) - ROA(t)$
- ▶ Excess one-year stock return using Fama and French five risk factor models
 - Market return – risk-free return
 - Small stock – big stock return
 - High B/M – Low B/M return
 - Momentum and Liquidity factors
 - Actual future one-year stock return – expected one-year risk-adjusted return
(CAR FF5)

Corporate Giving and CFP

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
VARIABLES	FF5	FF5	FF5	ROA _{t+1}	ROA _{t+1}	ROA _{t+1}
	1 yr return	1 yr return	1 yr return	-ROA _t	-ROA _t	-ROA _t
Log(TA) _t - Log(TA) _{t-1}	0.160	-0.011	-0.148**	-0.037*	-0.039	-0.104***
Leverage _t - Leverage _{t-1}	-0.063	0.289	0.302	0.025	0.043	0.189***
ROA _t -ROA _{t-1}	-0.313	-0.191	-0.129			
R&D/Ta _t - R&D/Ta _{t-1}	-0.165	-0.643	-1.142	0.573***	0.599***	0.202
Adv/Ta _t - Adv/Ta _{t-1}	2.709	2.276	3.871**	-0.072	-0.12	-0.207
CAPX/Ta _t - CAPX/Ta _{t-1}	1.972	0.524	0.426	-0.211	-0.016	-0.264
Net FA/Ta _t - Net FA/Ta _{t-1}	0.549	0.122	0.107	0.087	0.089	-0.018
Nondiv dummy _{t-1}	0.022	0.04	0.046	0.018***	0.018**	0.007
CGOV _t -CGOV _{t-1}	0.001	0.001	0.001	0.000	0.002	0.000
Excess cash Donation	0.269***			0.033**		
Excess inkind Donation		-0.006			-0.000	
Excess total Donation			-0.007			0.003
FF12Industry fixed	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.210***	0.185**	0.114***	0.011	0.017	0.008
Observations	529	416	1,285	503	406	1,215
R-squared	0.123	0.098	0.063	0.089	0.092	0.144

2nd Stage: Excess cash donation and CFP Conditional on Firm Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	ROA _{t+1}	ROA _{t+1}	FF5 return	FF5 return	FF5 return	FF5 return
	-ROA _t Dividend	-ROA _t Non Div	Low Dividend	High Dividend	High growth	Low growth
Log(TA) _t - Log(TA) _{t-1}	0.084***	-0.007	0.202	-0.071	0.350**	0.042
Leverage _t - Leverage _{t-1}	-0.038	-0.302**	-0.279	0.009	0.147	-0.094
ROA _t -ROA _{t-1}			-0.433	0.477	-0.463	0.069
			(-1.404)	(0.884)	(-1.011)	(0.290)
R&D/Ta _t - R&D/Ta _{t-1}	0.702***	0.501	0.570	0.364	-0.410	-0.183
	(5.034)	(1.462)	(0.195)	(0.395)	(-0.276)	(-0.091)
Adv/Ta _t - Adv/Ta _{t-1}	-0.387	2.295*	2.636	1.638	12.737**	-0.059
	(-1.320)	(1.885)	(0.467)	(0.928)	(2.067)	(-0.035)
CAPX/Ta _t - CAPX/Ta _{t-1}	-0.187	-0.014	3.105**	0.801	3.096*	-2.025*
	(-1.181)	(-0.058)	(2.018)	(0.784)	(1.835)	(-1.740)
Net FA/Ta _t - Net FA/Ta _{t-1}	0.028	0.848***	1.383*	-0.762	2.059**	-0.251
	(0.276)	(3.675)	(1.975)	(-1.534)	(2.520)	(-0.407)
Nondiv dummy _{t-1}			0.042	0.353***	0.014	0.015
			(0.816)	(3.045)	(0.268)	(0.221)
CGOV _t -CGOV _{t-1}	-0.000	-0.000	-0.001	0.002	0.001	-0.001
	(-0.122)	(-0.110)	(-0.409)	(1.344)	(0.442)	(-0.440)
Excess cash Donation	0.017	0.109**	0.508***	0.077	0.278***	0.187
	(1.629)	(2.244)	(2.881)	(0.979)	(3.239)	(1.094)

Excess cash donation and CFP with corporate governance and financial constraints

VARIABLES	(1) FF5	(2) FF5	(3) ΔROA_{t+1}	(4) ΔROA_{t+1}	(5) FF5	(6) FF5
	High	Low	High	Low	High	Low
	CGOV	CGOV	CGOV	CGOV	CGOV	CGOV
$\text{Log(TA)}_t - \text{Log(TA)}_{t-1}$	-0.061	0.687***	-0.058*	-0.028	-0.095	0.689***
$\text{Leverage}_t - \text{Leverage}_{t-1}$	0.226	0.181	0.134	-0.152**	0.209	0.198
$\text{ROA}_t - \text{ROA}_{t-1}$	-0.418*	0.483			-0.366*	0.488
$\text{R\&D/Ta}_t - \text{R\&D/Ta}_{t-1}$	-1.044	-0.193	0.533**	0.423	-0.925	-0.193
$\text{Adv/Ta}_t - \text{Adv/Ta}_{t-1}$	1.786	5.523*	-0.066	-0.173	1.557	5.501
$\text{CAPX/Ta}_t - \text{CAPX/Ta}_{t-1}$	3.113*	1.113	-0.122	-0.115	2.979*	1.105
$\text{Net FA/Ta}_t - \text{Net FA/Ta}_{t-1}$	-0.297	2.979***	0.053	0.023	-0.497	3.053**
	(-0.651)	(2.714)	(0.489)	(0.087)	(-1.064)	(2.640)
$\text{Nondiv dummy}_{t-1}$	0.036	-0.134*	0.017**	0.006	0.026	-0.131*
	(0.765)	(-1.967)	(2.126)	(0.347)	(0.579)	(-1.869)
$\text{CGOV}_t - \text{CGOV}_{t-1}$	0.003	-0.005**	0.000	0.000	0.003	-0.005**
	(1.425)	(-2.459)	(0.200)	(0.091)	(1.466)	(-2.441)
Excess Cash donation	0.283***	0.097	0.032*	-0.007	0.094	0.022
	(2.940)	(0.434)	(1.823)	(-0.132)	(1.140)	(0.075)
High KZ *					0.871***	0.133
Excess Cash donation					(2.760)	(0.345)

Do Moderating Firm Characteristics Alone Drive CAR FF5?

	Cash Holding /Total Assets	Sales Growth	KZ Index	Corporate Governance
Low	0.067	0.022	0.041	0.051
High	0.012	0.054	0.037	0.026
Dif	0.055**	-0.032	0.005	0.025

Conclusion

- Not all types of corporate giving have the same signaling effect.
 - Only cash giving signals a firm's future financial performance.
 - But in-kind giving does not signal.
- Only excess cash giving (**unexpected** giving) has information on **future** CFP and signals.

Conclusion

- Cash donations have greater signaling effect for firms with greater information asymmetry and where possession of financial resources is value-creating.
 - No or low dividend paying firms
 - High growth firms
 - Well governed firms

Thank you!!

