

Fischer, Sven; Goerg, Sebastian J.; Hamann, Hanjo

Working Paper

Cui bono, benefit corporation? An experiment inspired by social enterprise legislation in Germany and the US

Preprints of the Max Planck Institute for Research on Collective Goods, No. 2013/4

Provided in Cooperation with:

Max Planck Institute for Research on Collective Goods

Suggested Citation: Fischer, Sven; Goerg, Sebastian J.; Hamann, Hanjo (2013) : Cui bono, benefit corporation? An experiment inspired by social enterprise legislation in Germany and the US, Preprints of the Max Planck Institute for Research on Collective Goods, No. 2013/4, Max Planck Institute for Research on Collective Goods, Bonn

This Version is available at:

<https://hdl.handle.net/10419/84980>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Cui Bono, Benefit Corporation?

An Experiment Inspired by Social
Enterprise Legislation in Germany
and the US

Sven Fischer
Sebastian J. Goerg
Hanjo Hamann





Cui Bono, Benefit Corporation?

An Experiment Inspired by Social Enterprise Legislation in Germany and the US

Sven Fischer / Sebastian J. Goerg / Hanjo Hamann

February 2013

CUI BONO, BENEFIT CORPORATION?

AN EXPERIMENT INSPIRED BY SOCIAL ENTERPRISE LEGISLATION IN GERMANY AND THE US*

Sven Fischer, Sebastian J. Goerg, and Hanjo Hamann

This version: February 8, 2013

Abstract

How do barely incentivized norms impact incentive-rich environments? We take social enterprise legislation as a case in point. It establishes rules on behalf of constituencies that have no institutionalized means of enforcing them. By relying primarily on managers' other-regarding concerns whilst leaving corporate incentive structures unaltered, how effective can such legislation be? This question is vital for the ongoing debate about social enterprise forms, as recently introduced in several US states and in British Columbia, Canada. We ran a laboratory experiment with a framing likened to German corporate law which traditionally includes social standards. Our results show that a stakeholder provision, as found in both Germany and the US, cannot overcome material incentives. However, even absent incentives the stakeholder norm does not foster other-regarding behavior but slightly inhibits it instead. Our experiment thus illustrates the paramount importance of taking into account both incentives and framing effects when designing institutions. We tentatively discuss potential policy implications for social enterprise legislation and the stakeholder debate.

JEL classification: A12, D01, D03, L21, M14, M52

Keywords: stakeholder value, social enterprise, benefit corporation, corporate law, experiment

* Sven Fischer: Max-Planck-Institute for Research on Collective Goods, Kurt-Schumacher-Str. 10, 53113 Bonn, Germany. Sebastian J. Goerg: Department of Economics, Florida State University, 113 Collegiate Loop, Tallahassee, FL 32306-2180, USA. Hanjo Hamann: Max-Planck-Institute for Research on Collective Goods. Corresponding author: Hanjo Hamann (hamann@coll.mpg.de). We are grateful for helpful comments by Eckart Büren, Michael Dorff, Christoph Engel, Kristoffel Grechenig, Oliver Himmler, and Klaus-Ulrich Schmolke on earlier versions of the paper.

1 Introduction

“Don’t tell me where your priorities are. Show me where you spend your money and I’ll tell you what they are.”

James W. Frick (University of Notre Dame)

The Social Purpose, and New Types, of Business Corporations

If many years from now historians analyze the turn of the first to the second decade of the current century, they might identify *corporate greed* as one of the more persistent and defining buzzwords of this era.¹ Corporate greed is said to have caused economic crises world-wide, and in one of the more unlikely motion picture sequels ever to be made, we see Gordon Gekko suggesting: “I once said “*Greed is good*”. Now it seems it’s legal.”²

This alleged greed for profit however has also given new thrust to a movement known by CSR, corporate social responsibility (e.g., Bénabou and Tirole 2010). More than ever, firms care about their reputation and discover the social purpose of doing commercial business. The “Rise of the Social Enterprise” is seen as the “Future of the Law” (Timmerman et al. 2011) and special legal entities emerge all over the world. Most notable among these may be the Low-profit Limited Liability Company, L3C (e.g., Murray and Hwang 2011) and the benefit corporation (e.g., Plerhoples 2012) of US provenance, but similar legal forms were created in the UK 2005 (“community interest companies”), as well as in Canada’s British Columbia 2012 (“community contribution company”) and elsewhere. While their exact designs differ from state to state, their common idea is that “A director of a benefit corporation has a duty to “consider the effects of any action

¹ By now, the bookstore shelves are loaded with titles like *Pigs at the Trough: How Corporate Greed and Political Corruption Are Undermining America* (A. Huffington), *Greed and Corporate Failure: The Lessons from Recent Disasters* (S. Hamilton and A. Micklethwait), or *Civic Empowerment in an Age of Corporate Greed* (E. C. Lorenz). Of course, the discussion on corporate greed also caught the attention of the legislator resulting in the Sarbanes-Oxley Act (cf. DeCelestino 2006).

² “Wall Street: Money Never Sleeps”, a film by Oliver Stone, 20th Century Fox, 2010.

or inaction upon” the stakeholders of the benefit corporation.”³ The new form of social enterprise thus invokes a terminology that has long been a bone of contention among corporate law scholars internationally: While US American scholarship had celebrated shareholder value as the “end of history” for corporate law (Hansmann and Kraakman 2001) with few notable exceptions (Blair and Stout 1999; Greenfield 2005), continental European systems like Germany traditionally put more emphasis on other corporate stakeholders such as employees and creditors, and even outside constituencies like the “general public” (Jürgens et al. 2000; Fiss and Zajac 2004).

Since stakeholder value has long been the predominant conception of German corporate law, German experiences can surely inform the social enterprise legislation currently arising in North America. The remaining two sections of this introduction elaborate on how exactly the German corporate framework is comparable to that of the new brand of US corporations, and how a study inspired by this framework can cast a light on the determinants of its efficacy.

German Stakeholder Legislation and US Benefit Corporations

The first formal requirement for German managers to consider stakeholder value dates back to 1937. At the time, Sec. 70 of the new Stock Corporation Act read:

“The Management Board has to independently manage the company as required by the well-being of the enterprise and its workforce and the common good of populace and Reich.”⁴

This provision was in force for almost thirty years, but got abolished during the 1965 redesign of corporate law. Not because it had not proven its value, but because law-

³ www.benefitcorp.net/for-directors/what-are-my-duties.

⁴ Note that, despite its conspicuous timing, this was not a statement merely of Third Reich ideology, but of “a changing economic attitude which had progressively gained popularity since the days after World War One and which today, more than ever, is a crucial requirement for any business undertaking.” (Schmidt and Meyer-Landrut 1961: 436).

makers had come to consider it so obvious that they saw no need to keep it in the law. Rather they feared that the sequence in which enterprise, workforce, populace and state appear, might be construed as a hierarchy of interests which the norm never intended (parliamentary print matter 4/171). The next bout of explicit stakeholder legislation did not appear until after the two major economic crises of the young millennium. In 2009, Sec. 4.1.1 of the German Corporate Governance Code (GCGC) was amended to read:

“The Management Board is responsible for independently managing the enterprise in the interest of the enterprise, thus taking into account the interests of the shareholders, its employees and other stakeholders, with the objective of sustainable creation of value.”

According to a semi-authoritative commentary, “stakeholders” consist of at least “employees, managers, customers, suppliers and the general public” (Von Werder 2010: par. 353), giving the provision much the same flavor as its 1937 predecessor.

In the US, traditional business corporations had to comply only with shareholder interests. But very recently an alternative type of corporation, without a pure shareholder orientation, was introduced. In April 2010, Maryland was the first state to introduce so called benefit corporations and by now more than a dozen states have followed suit.⁵ The idea of benefit corporations is to bridge the gap between traditional business corporations, in which managers have too little leeway to benefit society, and traditional non-profits, in which founders have too little leeway to benefit themselves (Murray and Hwang 2011) – thus enabling entrepreneurs to set up firms that “truly serve two masters” (Plerhoples 2012: 223). The model legislation on benefit corporations, which requires directors to

“consider the effects of any action or inaction upon: (i) the shareholders of

⁵ www.benefitcorp.net/state-by-state-legislative-status.

the benefit corporation, (ii) the employees and workforce of the benefit corporation, its subsidiaries and its suppliers, (iii) the interests of customers as beneficiaries of the general public benefit or specific public benefit purposes of the benefit corporation, (iv) community and societal factors, including those of each community in which offices or facilities of the benefit corporation, its subsidiaries and its suppliers are located, (v) the local and global environment, [...]" ⁶

Compared with the German provision quoted above, its American equivalent may be more verbose, but its wording is strikingly similar to the one used in the German Corporate Governance Code. Note, though, that the German Code is drafted by a government commission, not by parliament, and is therefore no binding law in its own right. Instead, Sec. 4.1.1 GCGC summarizes what government considers to be the status quo of corporate law – binding not by virtue of the GCGC but by virtue of the body of formally enacted statutes. Despite this difference in the regulatory mechanism, the sanctioning mechanisms are identical: Shareholders “are listed first, and remain the only stakeholder entitled to bring a legal action against the corporation or its directors [... such as] a benefit enforcement proceeding for failure to consider other stakeholder interests”.⁷

A Behavioral Study Inspired by Stakeholder Legislation

Both Sec. 4.1.1 GCGC and the model legislation regarding benefit corporations seem rather odd. What good is a duty to consider a host of stakeholders, when only one of those can litigate? Doesn't this asymmetry quite naturally force managers to look no further than to the shareholders' will? Then a benefit corporation really wouldn't be much different from an ordinary corporation, whose degree of other-regarding “prefer-

⁶ www.benefitcorp.net/for-directors/guidance-considering-stakeholder-interests.

⁷ www.benefitcorp.net/for-directors/guidance-considering-stakeholder-interests.

ence” is merely a function of the generosity of its shareholders.⁸ Whether or not such stakeholder statutes can increase the other-regarding focus of corporate decision-making is ultimately an empirical question. Because “much could turn on a more sophisticated understanding of the role played by other-regarding preferences within corporations and corporate law” (Greenfield and Kostant 2003: 986), we shall turn to the behavioral literature for a first intuition of what to expect. Since managers of both classical and benefit corporations are answerable only to the shareholders, the traditional principal agent relation holds in either case. Recent behavioral studies have observed that delegating decisions to an agent markedly reduces other-regarding behavior in both the ultimatum game (Fershtman and Gneezy 2001) and the dictator game (Hamman et al. 2010).⁹ At the same time, neither the dictator who delegated her decision to an agent, nor her agent feel responsible for the reduction in the amount given to recipients (Hamman et al. 2010). It may be arguable whether the ability to commission unethical behavior while maintaining a positive self-image is really “an additional rationale” for principals to hire agents (Hamman et al. 2010) or merely one of agency’s behavioral effects. Either way, the finding is backed by other experiments showing that third parties indeed hold principals less responsible for harm inflicted through agents – even if the principals have full foreknowledge of their agent’s actions (Blount 1995, Bartling and Fischbacher 2008, Coffman 2011). This literature clearly suggests that agents have a behavioral tendency to disregard interests other than their own and that of their principal. Then how consequential can stakeholder legislation be?

Studies on the behavioral effects of agency cannot answer this question directly, as

⁸ This measure of generosity may differ between companies that actively select into the legal form of a benefit corporation (as in the US) and companies that are invariably subject to stakeholder rules (as in Germany). Presently we do not consider these different selection processes, but investigate behavior in the presence of soft law favoring stakeholders. We will return to this issue in our Discussion section.

⁹ In a standard dictator game, one participant (the proposer) receives an endowment which she is free to keep for herself or share in any way she wishes with a second participant (the receiver). In the ultimatum game, the receiver can veto the suggested division by the proposer, where veto results in zero payoffs for both players. Since the proposer in either game has little to no reason to offer positive amounts, both games are frequently used to measure other-regarding concern.

they are too decontextualized. A context-enriched environment is thus required. However using a too context-rich environment may not be feasible either. The effectiveness of norms is difficult, if not impossible, to evaluate in the real world. Norms are ambiguous and subject to partial interpretations, especially in the complex corporate world where one can hardly measure which motives actually affect policies. Corporate boards are not an ideal target of behavioral research. They are rich institutional arrangements with intransparent decision-making procedures, which makes identification of causation difficult, if not impossible. On top of that, board members are typically high-profile decision makers concerned with confidential high-stake decision tasks, which makes it difficult to engage them for behavioral research in the field. The latter issue may be ameliorated by conducting surveys (Adams et al. 2011) or interviews (Manâa 2010). Yet, the concern with causation remains. It cannot be overcome by comparing environments with and without stakeholder norms (e.g., by cross country comparison) because these are inevitably confounded with many other differences. Unless a convincing difference-in-differences approach is feasible, the most suitable research design in the present context, therefore, appears to be a controlled laboratory experiment which introduces the corporate decision-making context by imitating its incentives and framing.

2 Design

As a workhorse for our experimental investigation, we chose the widely-used dictator game (Forsythe et al. 1994). Being a non-strategic interaction, this game best reflects the interaction between a corporation and stakeholders that are not represented in corporate decision-making¹⁰ and have no immediate bargaining or sanctioning power. Our design therefore departs from Greenfield and Kostant (2003), where corporate decision-making was seen as a bargaining process and thus operationalized as an ultimatum game. While

¹⁰ In Germany that excludes e.g. employees who are represented on the supervisory board via codetermination laws, or creditors insofar as they have a seat on the supervisory board.

this perspective certainly has merit, it does not address stakeholder value so much as non-myopic shareholder value: Benefiting an agent who has direct bargaining power vis-à-vis the corporation can always be couched in terms of shareholder value. Such bargaining power may be intangible and thus hard for managers to provide evidence for, but this is better addressed by the business judgment rule than by stakeholder legislation. The specific value added by stakeholder legislation is to enable corporate social responsibility towards agents that have no discernible influence in the company. Our choice of the dictator game reflects that perspective.

Our experimental design tries to unpack corporate decision-making by systematically varying three factors in the dictator game: agency, incentives and framing. We operationalized “incentives” by introducing a manager market rather than giving shareholders the opportunity to sue; the former is easier to implement and can draw on previous literature (Hamman et al. 2010). Table 1 gives an overview of the five different treatments. Treatment 1 serves as a benchmark in which owner-managers divide a fixed pie between themselves and other stakeholders. In treatments 2 to 5 this division is decided upon by hired managers, in a 2×2 -factorial design with variations of incentives (competition) and norms. These variations are given in Table 2.

Table 1: Treatments

Number	Name	Characteristic
T1	Control	Manager owned company
T2	NoCompNoStake	Stakeholder norm absent, with entrenched manager
T3	CompNoStake	Stakeholder norm absent, with manager market
T4	NoCompStake	Stakeholder norm present, with entrenched manager
T5	CompStake	Stakeholder norm present, with manager market

Table 2: Overview of the 2×2 design

	No Incentives	Competition
No Stakeholder Norm	NoCompNoStake	CompNoStake
Stakeholder Norm	NoCompStake	CompStake

2.1 Treatments

T1: Manager owned company (Control)

The first treatment is a simple dictator game with three modifications to better approximate a corporate decision-making environment: First, we applied a business framing by letting participants act in the role of a “company owner” deciding on an investment that affects both her company and the “general public”. Second, our frame invoked high stakes by endowing subjects with 10,000 Taler (at an exchange rate of 800 Taler = 1 Euro) which they were supposed to allocate in any division of integers either to their firm or to the general public. Third, the general public was not modeled by another participant but by a charity to which donations were made. This best approximated a stakeholder as explicitly mentioned in Sec. 4.1.1 GCGC (and the model legislation on benefit corporations) and made subjects’ behavior meaningful outside the lab.

The dictator game decision was repeated over 10 periods. At the end of the experiment one period was randomly determined and the corresponding allocation implemented. This treatment serves as a baseline and provides a measure for the degree of subjects’ other-regarding preferences in the role of a firm owner facing a charity.

T2: Berle-Means company with entrenched manager (NoCompNoStake)

Building on the baseline game, treatment 2 introduced an agent into the decision structure. The agent was framed as a manager whom the company owner, i.e. the sole shareholder, had to hire by law and who would proceed to make the allocation on the shareholder's behalf. We thus implemented a separation of ownership and control, as the defining feature of corporations in the tradition of Berle and Means (1932). To make this even more explicit, subjects were informed that

A manager is responsible for independently managing the enterprise. According to German law, a manager is not bound by the expectations and demands of the shareholder.

The roles of shareholder and manager were randomly assigned at the beginning of the experiment, and fixed throughout. Each shareholder was partner-matched with one manager who had to be continually hired over all 10 periods.¹¹ While this design choice seems redundant, it will allow us to compare behavior to treatments with manager market. The manager received a fixed wage of 300 Taler for every period, exogenously provided by the experimenter in order to keep the amount available for distribution constant between treatments.

Our second treatment provides a measure for managers' other-regarding behavior when having full discretion over a stock of other people's money. In combination with the first treatment it allows us to investigate whether subjects in the role of managers, acting on behalf of the company owners (i.e., shareholders), make the same decisions as the owners would. Thus, this treatment allows to isolate the effect of introducing agency, with no sanctioning mechanisms on top.

¹¹ Thus, shareholders were forced to hire the same manager in every period. To keep our protocol constant across treatments, we still had them confirm the manager for each new period.

T3: Berle-Means company with manager market (CompNoStake)

The third treatment introduced a manager market into the game defined by treatment 2. The shareholder still had to delegate her decisions to a manager, but now she could choose one of three managers who were competing to be hired. Therefore, our partner-matched groups now contained four members: one shareholder and three managers, each identifiable by unique ID. At the beginning of each of the 10 periods the shareholder had to choose one of the three managers. If a manager was hired, she received an irrevocable wage of 900 Taler (otherwise nothing) for this period.¹²

To elicit the manager decisions, we employed the strategy method (Selten 1967), i.e. managers decided after the shareholder had made her hiring decision but before knowing whether they had been hired or not. If a manager was hired, the corresponding allocation was implemented and disclosed to all group members at the start of the next period. Shareholders could thus condition their hiring not only on their own previous decisions, but also on previous allocations by managers they had hired earlier. Allocations chosen by non-hired managers were not disclosed to anyone.

Since we do not allow for a competition over wages, but only over decisions in favor of the shareholder. The manager market introduces incentives to please the shareholder. This resembles the situation outside the lab: Since the decisions of a manager in most of the cases have a higher impact on the value of a company (i.e., shareholder earnings) than the manager's wage, shareholders certainly pay more attention to the manager's decision than to her actual wage.

¹² This is equal in expected value to the wage in treatment 2, and also equivalent to the payment scheme of Hamman et al. (2010: 1830), where agents are endowed upfront (3,000 Taler in our case) and in each period face fixed opportunity costs (300 Taler in our case), zero marginal cost and constant marginal revenue (900 Taler in our case).

T4: Stakeholder norm without manager market (NoCompStake)

In this treatment we introduced a stakeholder norm in the spirit of the German Corporate Governance Code. The procedure was identical to the one in **NoCompNoStake**, but for one very subtle variation: We added a short excerpt from Sec. 4.1.1 of the German Corporate Governance Code to the paragraph about managers' duties (italicized here, but not in the original).

A manager is responsible for independently managing the enterprise. According to German law, a manager is not bound by the expectations and demands of the shareholder; *rather he “manages the enterprise in the interest of the stakeholders [e.g. shareholders, employees, customers, general public], with the objective of sustainable creation of value.” (Sec. 4.1.1 of the German Corporate Governance Code)*

This treatment, in comparison with **NoCompNoStake**, allows us to isolate the impact of the non-binding stakeholder provision. Since both our quote from Sec. 4.1.1 GCGC and our instructions (see the explanations for treatment 1) explicitly mention the general public, participants should easily see the connection.

T5: Stakeholder norm with manager market (CompStake)

Between treatments 4 and 5 we reintroduced the manager market. Thus, treatment **CompStake** was identical to **CompNoStake**, except that the same excerpt from the German Corporate Governance Code as in **NoCompStake** was presented to the managers.

This treatment, in comparison with **CompNoStake**, allows us to isolate the impact of the non-binding stakeholder provision under competition among managers. In addition, the comparison with **NoCompStake**, allow us to investigate whether competition

hampers the effectiveness of a non-binding stakeholder provision.

2.2 Experimental Procedure

The experiment was conducted at the BonnEconLab of the University of Bonn. In total 149 subjects participated in the study. They were randomly invited from a pool of 6,000 registered subjects via the online-recruiting database ORSEE (Greiner, 2004). Out of the 149 participants in our sample, 93 were female (62.42%). Participants ranged in age from 19 to 32 years, with an average age of 22.92 years. With the exception of two, all were either university students or already had a university degree. In total, 36.73% had a background in natural sciences, psychology or medicine, 34.69% in law, politics or economics, and 28.57% in other subjects, including the humanities. 89.93% of the subjects were native speakers of German, the experiment’s language of instruction. Table 3 gives the number of independent observations, the number of subjects, the fraction of female participants and the average age per treatment.

Table 3: Number of observations and subjects’ characteristics

	Treatment	# Obs.	# Subjects	Female	Age
T1	Control	13	13	.54	21.6
T2	NoCompNoStake	12	24	.58	24.1
T3	CompNoStake	10	40	.58	23.7
T4	NoCompStake	12	24	.75	22.8
T5	CompStake	12	48	.58	22.4
<hr/>					
Total		59	149	.62	22.9

Upon arrival subjects were seated in separate cabins and received instructions. These instructions were read aloud, with subsequent control questions being distributed afterwards. The experiment started only after all subjects had correctly answered all questions. Subsequent interactions were entirely computer-mediated, through a pro-

gram developed in z-Tree (Fischbacher, 2007).¹³

To avoid confounding the general willingness to donate to a charity with the willingness to donate to a specific one, we revealed the charity only after all decisions were made. However subjects were told at the beginning of the experiment that the charity had the seal of approval by the German Central Institute for Social Issues (DZI), ensuring that the charity was tested and well-reputed.

After the experiment, subjects answered a questionnaire about socio-demographic details and motives for their decisions. In addition, all subjects completed the Justice Sensitivity Questionnaire (Schmitt, Gollwitzer, Maes, and Arbach 2005), with scales for justice sensitivity from the perspectives of victims, observers, and perpetrators.

Finally, subjects were paid individually and the amounts assigned to charity were put into a transparent glass jar. The last subject supervised the counting of the total donation and the online transfer to the charity. All subjects were informed about this procedure in the instructions. Including instructions, control questions, 10 decision periods, post-questionnaire and payments, each session lasted between one and two hours with average payments per subject of 10.22 Euro (i.e., about US\$ 13.50).

3 Hypotheses

The baseline of our experiment was provided by the **Control** treatment. The rich experimental literature on dictator games shows that most proposers (on average 64 %) transfer some non-trivial positive amount (on average 28.3 %) to the receivers (Engel 2010: 588-9). Our recipient was a charity, which has been shown to increase average redistribution rates by as much as threefold and reduce the number of purely selfish subjects (Eckel and Grossman 1996: 187). On the other hand we applied a business

¹³ Screenshots of the computer screens are given in the Appendix.

framing which has been shown to move behavior closer to rational predictions (Arlen et al. 2002). But even business-framed decision experiments “do suggest some role for such other-regarding preferences, albeit only a weak one.” (Arlen et al. 2002: 32). We therefore expected our baseline to dampen, but not completely eliminate the prevalence of positive transfers.

Introducing managers in **NoCompNoStake** and **NoCompStake** puts agents in charge of financial decisions without restraining them to the principals’ interests since managers were free to donate to the charity whatever amount they pleased. In such cases, the managers can expropriate funds as they see fit (e.g., Shleifer and Vishny 1997: 742). Given this liberty over corporate funds, managers will likely engage in a sort of competition, assessing their income relative to that of other corporate stakeholders. In our treatments without competition, this lateral comparison figured prominently in that agents faced a secure, fixed wage of 3,000 Taler (10×300) while principals were paid out of a budget of 10,000 Taler from one random round. If agents transferred to the charity as much as senders usually do in the dictator game (20 to 30 % of their endowment), their principals would still be twice as well off as they themselves. However, subjects are often inequality averse and promote a distribution of payoffs that is more equal (Fehr and Schmidt 1999; Bolton and Ockenfels 2000). Thus, an inequality averse manager would transfer more than senders in a standard dictator game commonly do. Thus the first hypothesis tested in this paper is

Hypothesis 1: *In treatments with entrenched managers and without a manager market transfers are higher than in **Control** (i.e. **NoCompNoStake** > **Control** and **NoCompStake** > **Control**).*

Moving on from the simple entrenched manager case to one with three competing managers, we turn to Hamman et al. (2010) for an intuition of what to expect. In their treatments with agency, transfers initially equaled those in the condition without competing agents, but very quickly declined to half of those in the baseline condition

(Hamman et al. 2010: 1832). Facing a market, managers needed to please the shareholders to be hired again and thus managers suppressed their own generosity. This could be seen especially in the last round, where transfers exceeded previous ones by far, “driven largely by several agents [...] choosing to give away all \$10 in the final round, when there are no future possible repercussions from principals.” (Hamman et al. 2010: 1831 fn. 10). Compared to Hamman et al. (2010), our **CompNoStake** and **CompStake** treatments differ primarily in terms of framing and the charity recipient. We assumed that this difference would not change the general pattern, but would merely affect its level.

Hypothesis 2: *The manager market aligns the managers’ behavior with the shareholders’ interests and thus reduces the transfers (i.e., $NoCompNoStake > CompNoStake$ and $NoCompStake > CompStake$).*

Introducing the stakeholder frame into the treatments with and without the manager market, we adopted the naive hypothesis underlying Sec. 4.1.1 GCGC (and the model legislation on benefit corporations): Stakeholder legislation serves to increase the consideration given to stakeholders. We should therefore expect higher transfers in both of these treatments if the legal framing does work at all.

Hypothesis 3: *The introduction of the stakeholder norm increases the awareness for the stakeholders’ concerns and thus transfers (i.e., $NoCompStake > NoCompNoStake$ and $NoCompStake > NoCompNoStake$).*

4 Results

Figure 1 gives the distributions of donations and Table 4 the summary statistics for each treatment. As expected we observe positive transfers in all five treatments.

Mean and median transfers in treatment **Control** are at about 1,000 and 500, re-

Table 4: Summary statistics

	Treatment	Mean	Median	SD
T1	Control	1061.44	500	1289.43
T2	NoCompNoStake	5418.88	6000	3485.51
T3	CompNoStake	1947.58	125.5	3265.05
T4	NoCompStake	3858.26	2849	2832.66
T5	CompStake	1605.97	250	2797.91

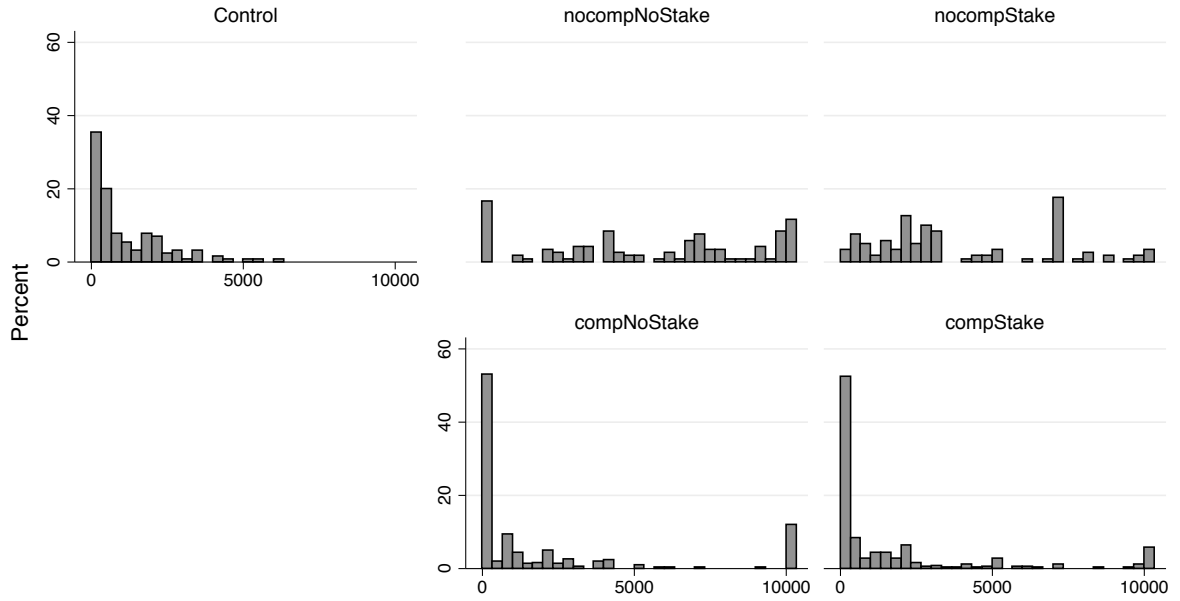


Figure 1: Amount (out of 10,000) donated to Charity on Shareholder's behalf

spectively. On average, only 2 out of 13 subjects transferred more than 2,000 Taler. Conversely, only 2 out of 13 subjects transferred zero throughout.

Our first hypothesis stated that transfers would be higher if decided upon by an agent rather than the principal. Mere eyeballing the three graphs in the upper row of Figure 1 supports this conjecture. Across all periods, transfers in treatments **NoCompNoStake** and **NoCompStake** are significantly higher than in treatment **Control** ($p < 0.01$, one-sided Mann-Whitney u-test). Obviously, subjects in the role of managers prefer higher

donations than shareholders themselves do. We therefore conclude our first result.

Result 1: *In treatments with entrenched managers and without a manager market transfers are higher than in **Control**.*

Our second hypothesis stated that manager competition would lower transfers. This can be observed in Figure 1 and Table 4: Both treatments with competition (**CompNoStake** and **CompStake**) have significantly lower mean transfers than their counterparts without competition (**NoCompNoStake** and **NoCompStake**) (both with $p < 0.01$, Mann-Whitney u-test).

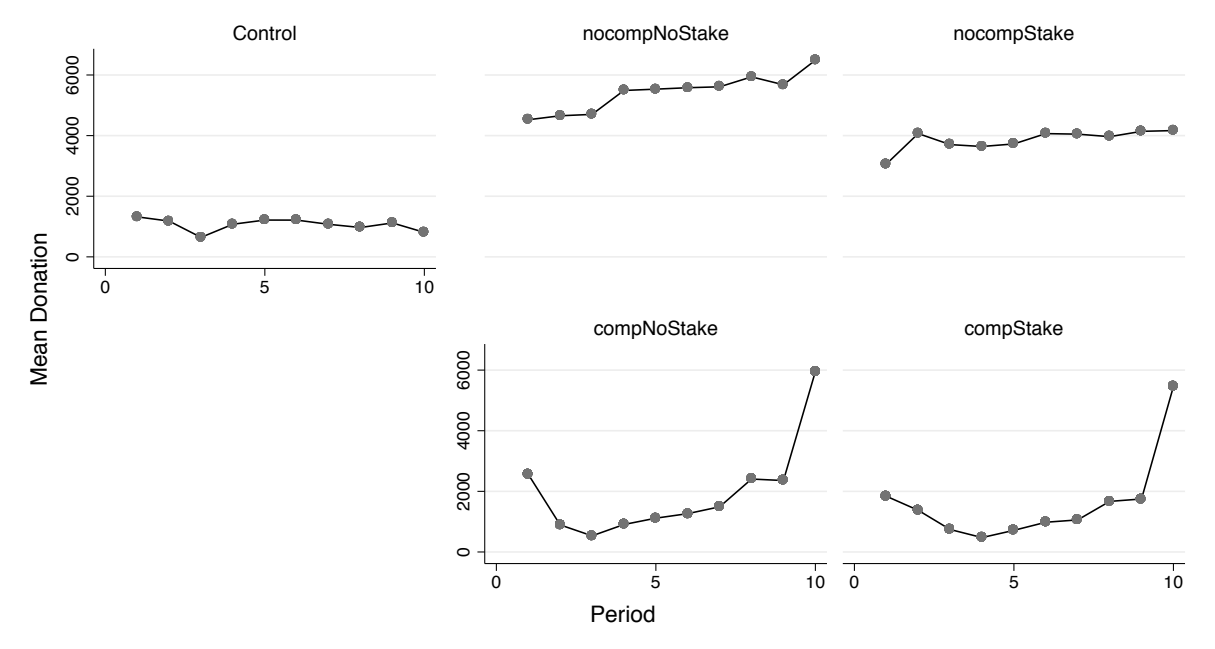


Figure 2: Amount (out of 10,000) donated to Charity over time

Figure 2 demonstrates that this difference is already present in the first period: Transfers in **CompNoStake** and **CompStake** are significantly lower than the ones in **NoCompNoStake** and **NoCompStake**, respectively ($p = 0.028$ and $p = 0.047$, Mann-Whitney u-tests).¹⁴ This indicates that managers perceive a market-induced pressure to

¹⁴ In the first period we included each individual decision in the test, as by virtue of the strategy method they were all statistically independent. In the following periods they were no longer independent, as subjects received feedback whether they were selected or not, given their previous decisions.

comply with shareholders' interests. However they initially seem to underestimate this pressure, so that transfers decrease even further after period 1.¹⁵

Table 5: Mixed effects logit estimation on the probability of being selected again.

	Coeff.		Std. error	p-value
Constant	0.2227		0.7087	0.753
$D_{t:2-6} \times \text{Donation}_{t-1}$	-0.0022	**	0.0009	0.012
$D_{t:7-10} \times \text{Donation}_{t-1}$	0.0001		0.0003	0.558

$$N = 149, \chi^2(2) = 6.82, p = 0.033*$$

Mixed effects regression with random subject wise effects nested in matching group effects.

Dependent variable is an indicator for whether the manager was chosen again at t .

$D_{t:i-j}$ is an indicator for periods i to j . Data contains only managers selected in $(t-1)$.

Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Is a manager more or less likely to be chosen again if he donated a lot? Table 5 shows the results of a stepwise mixed effects logit estimation, explaining whether a manager was selected again by the shareholder. The independent variables are split in two: once for early periods 2 through 6 and once for all remaining periods. The Variable Donation_{t-1} gives the transfer of the previous round by the same manager. More specifically, we estimate two distinct functions, one for periods 2 to 6 and one for 7 to 10.¹⁶ The results show a significant selection effect in early rounds: The more a manager donates, the less likely he will be selected again. This effect turns out to remain significant if the time split is moved further towards the beginning of the experiment. From period 7 onwards, however, estimates are insignificant throughout. Thus, there are no significant selection effects after period 6, which is why the above estimation is split at this period. Note, however that despite the low coefficient the selection due to the previous donation is fairly strong. The marginal effect at sample averages in periods 2 to 6 is -0.0021.¹⁷

¹⁵ The differences between the treatments with and without competition are highly significant throughout periods 2 to 9 ($p \leq 0.01$ for comparisons **CompNoStake** vs. **NoCompNoStake** and **CompStake** vs. **NoCompStake**, Mann-Whitney u-tests).

¹⁶ Note that the independent variable is lagged and therefore can only start with period 2.

¹⁷ Despite the similarity, this is not the coefficient from Table 5.

Therefore, a manager who donates 100 more, decreases the likelihood of being chosen again by 21%, a rather strong effect. However, the estimation only explains little of overall variance. Including a dummy for the last period or separate shift effects does not change results.

Since shareholders conditioned their hiring decisions on previous allocations, managers had an incentive to please them. The effectiveness of this incentive can be gleaned from the behavior of managers who had continuously not been hired: Stated transfers of managers that had not been selected for at least four periods in a row were significantly higher than the transfers of those who had been selected at least once in the last four periods ($p < 0.01$, Wilcoxon signed-rank test). But even regularly selected managers increased their transfers as soon as the pressure to comply with the shareholders' interest vanished: In the last period, where average transfers no longer differed significantly from the ones in treatments without a manager market ($p > 0.14$ for comparisons **CompNoStake** vs. **NoCompNoStake** and **CompStake** vs. **NoCompStake**, both two-sided Mann-Whitney u-tests).

Transfers in both competition treatments are therefore u-shaped: They start at moderate levels, decrease over time to significantly lower values and resurge in the last period, where half of all hired managers transferred the entire 10,000 Taler to charity. This observation is in line with Hamman et al. (2010) and lends some support to their interpretation of “agents expressing displeasure at having aided in treating recipients unfairly in all previous rounds” (Hamman et al. 2000: 1831 fn. 10). We conclude:

Result 2: *The manager market aligns the managers' behavior with the shareholders' interests. When market incentives vanish, managers significantly increase their transfers.*

We now turn to the effectiveness of the stakeholder provision. We hypothesized—in line with the innocent assumption of Sec. 4.1.1 GCGC—that the stakeholder provisions would have the desired effect, i.e. increase consideration given to the general public, as

proxied by the charity in our experiment.

However there is no significant difference between the two treatments with manager markets (**CompStake** vs. **CompNoStake**), neither overall nor in any single period ($p = 0.509$ overall, $0.129 < p < 0.842$ for individual periods, two-sided Mann-Whitney u-test). This suggests that the stakeholder norm does not play itself out in the presence of an incentive to be hired. In fact, except for the last period, our three treatments **CompNoStake**, **CompStake** and **Control** are indistinguishable in statistical terms ($0.172 < p < 0.446$, Mann-Whitney u-test for between-treatment comparisons in all periods except period 10).

More surprisingly, we also observe no positive effect of the stakeholder norm in the treatments without manager market: Transfers to the charity are **not** higher in **NoCompStake** than in **NoCompNoStake**. If anything we observe the opposite, as Table 4 illustrates that the mean transfer in treatment **NoCompStake** is even lower than that in **NoCompNoStake**. While not being significant overall ($p = 0.1489$) or for any single period ($0.125 < p < 0.603$, all two-sided Mann-Whitney u-test), this descriptive difference persists over all periods ($587.91 < \Delta(t)_{NoCompNoStake-NoCompStake} < 2322$).

We thus conclude:

Result 3: *We do not observe that the stakeholder norm increases transfers. On the contrary, descriptively there seems to be an effect in the opposite direction.*

In a final step, we test the robustness of our previous results with parametric analyses and try to obtain some additional insight into the transfer decisions. Table 6 gives the estimation results from panel regressions explaining the actual transfers to the charity in treatments 2 to 5.

The estimations support our previous results: competition decreases transfers significantly, while the introduction of the stakeholder norm does not increase transfers. In fact, the coefficient for the stakeholder norm is negative in all specifications and even

Table 6: Random effects GLS estimation of transfers to charity

	(1)	(2)	(3)	(4)
Period	80.17* (44.06)	129.2* (69.14)	129.2* (69.29)	129.2* (69.45)
Last Period	2,282*** (657.3)	117.8 (500.6)	117.8 (501.7)	117.8 (502.8)
Stake	-479.1 (484.7)	-1,561 (1,163)	-1,729 (1,126)	-1,877* (983.1)
Competition	-3,097*** (613.9)	-3,899*** (931.5)	-3,865*** (930.4)	-4,125*** (866.1)
Period×Competition		-105.4 (82.88)	-141.8* (76.83)	-140.5* (77.61)
Last Period×Competition		4,797*** (1,194)	4,579*** (1,157)	4,573*** (1,164)
Stake×Competition		1,725 (1,216)	1,984* (1,185)	1,889* (1,044)
Unemployed _{t-4}			2,278** (976.0)	2,161** (943.6)
Justice Sensitivity			464.6** (223.1)	500.1** (219.7)
Age				-260.0*** (79.84)
Female				319.6 (447.9)
Constant	4,209*** (667.4)	4,696*** (884.4)	3,200** (1,290)	9,162*** (2,329)
Observations	460	460	460	460
Number of subjid	81	81	81	81
Overall R^2	0.319	0.372	0.397	0.469
Prob > chi2	< 0.001	< 0.001	< 0.001	< 0.001

Clusters on group level; Robust Standard errors in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.10;

Only actually implemented transfers are used. An estimation with all data from the the strategy method obtains qualitatively similar results. See Table 8 in the Appendix.

becomes weakly significant after adding several controls (Model 4). We do observe a positive interaction of stakeholder norm and competition ($Norm \times Competition$), but its net effect is negligible, given the negative coefficient for the main effect.

The panel regression allows us to investigate some developments over time. We ob-

serve a general increase of transfers over time and a huge and highly significant increase in the last period. As Models 2, 3, and 4 demonstrate this last period increase is limited to the treatments with competition (with a significant interaction effect *Last Period* \times *Competition* and a non-significant main effect *Last Period*). Furthermore, we observe evidence for the decrease of transfers due to the competition (*Period* \times *Competition*). With competition, managers face the risk of not being hired and this leads to additional adverse effects. After being unemployed for more than four periods, managers tend to transfer significantly higher amounts to the charity (*Unemployed*_{*t*-4}). We can only speculate whether this is caused by frustration, desire for revenge, image awareness or genuinely stronger concern for charity.

Models 3 and 4 also include a measure for personal sensitivity towards unjust behavior, as elicited using the Justice Sensitivity Questionnaire.¹⁸ As might be expected, being sensitive to injustice is positively correlated with managers' transfers.

Parametric analyses therefore confirm our previous results, and additionally we suggest:

Result 4: *Transfers increase significantly if managers have a higher justice sensitivity and if they had been unemployed for at least four periods.*

As a very last step we turn to elicited beliefs and post-questionnaire items. Additional insight into managers' decisions is provided by the beliefs which we elicited with every allocation decision, asking what shareholders would do if left to their own devices. We found that across all treatments, managers' beliefs were statistically indistinguishable from each other and from the true shareholder behavior in **Control** ($p > 0.384$, two-sided Mann-Whitney u-test for all 10 between-treatment comparisons), meaning that

¹⁸ We were interested in the justice sensitivity scales from the perspectives of observers and perpetrators. However, both scales are significantly correlated in our sample (Spearman's rank correlation, $p < 0.001$ with $\rho = 0.6164$). Therefore, we generated one overall scale using both perspectives (Cronbach's $\alpha = 0.804$) and used this as our Justice Sensitivity scale. Our results remain valid if we use only one of the sub scales.

managers were well-calibrated with respect to their shareholders' preferences.

Our post-questionnaire items cast more light on this finding. One of the five-level Likert items ("strongly disagree" to "strongly agree") that our subjects had to answer read "Managers felt bound to the expectations of their shareholders". Note that managers answering in the affirmative admitted noncompliance with their framed duties, according to which "a manager is not bound by the expectations and demands of the shareholder". In the two treatments with manager competition, 70 % and 62.5 % of subjects selected one of the two agreement levels of this item, but even in the treatments without manager competition, this percentage was still 20.83 % and 29.16 %, respectively. Overall, subjects in the treatments without competition replied with an average of 1.25 on the 0 to 4 Likert scale, while subjects in the competition treatments replied with a significantly higher average of 2.67 ($p < 0.001$, Mann-Whitney u-test). The incentivized competition frame thus seems to have lowered managers' regard for the non-incentivized duties frame and given them a justification to submit to the competitive pressure.

Result 5: *Managers were well aware of shareholders' preferences and chose to abandon their stated duties based on their perceived incentives to conform to the shareholders' expectations.*

5 Summary and Discussion

We have conducted an experiment to cast shed light on some determinants of the efficacy of stakeholder legislation. In a dictator game variant with business framing, subjects were prompted to transfer any part of an exogenous endowment to the general public (represented by a charity) on behalf of their enterprise. In one condition, subjects were framed to be owner-managers, in four others they were shareholders or managers required to take complementary steps towards this decision.

In all treatments, the business framing strongly depressed transferred amounts, with less than half of the usually observed allotment going to charity. In treatments with a manager, these managers transferred significantly higher amounts to the charity than shareholders had done themselves. This may be read as a case of agency costs, which in turn were reduced to almost zero if managers had to compete for their position. Such competition induced behavior virtually indistinguishable from shareholder behavior in the absence of managers. On the one hand, shareholders hired managers that were less other-regarding, on the other hand managers conformed consciously to what they (rightly) thought shareholders would expect.

When additionally prompting managers to pay due consideration to stakeholders such as the general public—as in Sec. 4.1.1 of the German Corporate Governance Code—this did not happen. Managers behaved no different in the presence of this norm. This even held if the institutionalized incentive of competition was lacking; if managers responded to the legal provision at all, they did so by lowering their transfers to charity.

One potential explanation might be that increasing the salience of stakeholder interests also increased the salience of shareholder interests. In our experiment managers were prompted to act in the “interest of the stakeholders [e.g. shareholders, employees, customers, general public]” where subjects might have read the order in which the different constituencies appeared as a ranking of priority. Thus the apparent “stakeholder frame” of Sec. 4.1.1 GCGC may also be a “shareholder frame”, in that it also emphasizes shareholder interests.¹⁹ This points to the fact that in any given context, it may not be apparent which reference group a normative framing favors. In our experiment, as in reality, subjects may construe normative expectations quite differently than expected.

Our study tentatively suggests policy implications for the design of social enterprises

¹⁹ Also, one might contend that a stakeholder norm does not imply charitable giving, but rather far-sighted investments into the company’s reputation, its home base environment (e.g. improving worker supply in the future by investing in schools today) or quite generally any measures that benefit the company in the long run. Yet if stakeholder value was nothing but long-term shareholder value, its *raison d’être* were quite questionable. See our argument above, in Section 2.

such as low-profit limited liability companies and benefit corporations. Lawmakers must be careful to consider incentives, and should think carefully about how to phrase the stakeholder norm. Because of the managers' incentive to please shareholders, it might be ill-advised for benefit corporations to empower only shareholders. Unless shareholders in a benefit corporation are assumed to be very other-regarding, managers will first and foremost maximize shareholder value, just as in a classical corporation without any stakeholder norm. Anticipating that, investors in a benefit corporation need not be interested in social endeavors, so the label "benefit corporation" can not even be trusted to effectively select the "right" shareholders. Therefore, the incentive structure does deserve more careful attention by policy-makers.

Regarding the stakeholder norm itself, our results shed some doubt on whether such an appeal will be helpful at all. Maybe stakeholders are better off if directors are not faced with a list of constituencies in which shareholders feature prominently at the very top. Perhaps managers should be formally granted full discretion—which stakeholder norms usually confer upon them anyhow by some catch-all phrase like "any other pertinent factors or the interests of any other group that [the directors] deem appropriate".²⁰ On the other hand, lawmakers may just want to remind management that shareholders, too, are stakeholders to be considered. Given the results of this paper, however, such reminders are barely necessary as long as management acts under the threat of being sanctioned by shareholders, and by shareholders only.

Only a number of countries have yet introduced social enterprise forms like the benefit corporation. Thus the empirical investigation of stakeholder norms is still in its infancy. Obviously our study can only be a first attempt at empirically analyzing stakeholder norms. While it allows to disentangle different aspects that are inevitably confounded in the outside world, it does invite complementary field studies to check the robustness and bolster the external validity of our findings. For the time being, our results put a

²⁰ www.benefitcorp.net/for-directors/guidance-considering-stakeholder-interests

tentative question mark over the efficacy of “stakeholder” norms which put shareholders in first position and are enforced exclusively by them.

Bibliography

- Adams, R. B., A. N. Licht, and L. Sagiv (2011). Shareholders and stakeholders: How do directors decide? *Strategic Management Journal* 32(12), 1331–1355.
- Arlen, J., M. Spitzer, and E. Talley (2002). Endowment effects within corporate agency relationships. *The Journal of Legal Studies* 31(1), pp. 1–37.
- Bartling, B. and U. Fischbacher (2012). Shifting the blame: On delegation and responsibility. *The Review of Economic Studies* 79(1), 67–87.
- Berle, A. and G. Means (1932). *The Modern Corporation and Private Property*. New York: Harcourt, Brace and World. See also 2nd ed. 1967.
- Blair, M. and L. Stout (1999). A team production theory of corporate law. *Virginia Law Review* 85(4), 247–328.
- Blount, S. (1995). When social outcomes aren’t fair: The effect of causal attributions on preferences. *Organizational Behavior and Human Decision Processes* 63, 131–144.
- Bénabou, R. and J. Tirole (2010). Individual and corporate social responsibility. *Economica* 77(305), 1–19.
- Bolton, G. E. and A. Ockenfels (2000). ERC: A theory of equity, reciprocity, and competition. *The American Economic Review* 90(1), 166–193.
- Coffman, L. C. (2011). Intermediation reduces punishment (and reward). *American Economic Journal: Microeconomics* 3(4), 77–106.

- DeCelestino, C. M. (2007). Krispy Kreme, Sarbanes-Oxley, and corporate greed. *University of Miami Business Law Review* 15(2), 225–245.
- Eckel, C. C. and P. J. Grossman (1996). Altruism in anonymous dictator games. *Games and Economic Behavior* 16, 181–191.
- Engel, C. (2011). Dictator games: a meta study. *Experimental Economics* 14, 583–610.
- Fehr, E. and K. M. Schmidt (1999). A theory of fairness, competition and cooperation. *The Quarterly Journal of Economics* 114(3), 817–868.
- Fershtman, C. and U. Gneezy (2001). Strategic delegation: An experiment. *The RAND Journal of Economics* 32(2), pp. 352–368.
- Fischbacher, U. (2007). Z-Tree: Zurich toolbox for ready-made economic experiments. *Experimental Economics* 10(2), 171–178.
- Fiss, P. C. and E. J. Zajac (2004). The diffusion of ideas over contested terrain: The (non)adoption of a shareholder value orientation among german firms. *Administrative Science Quarterly* 49(4), 501–534.
- Forsythe, R., J. L. Horowitz, N. E. Savin, and M. Sefton (1994). Fairness in simple bargaining experiments. *Games and Economic Behavior* 6(3), 347–369.
- Greenfield, K. (2005). New principles for corporate law. *Hastings Business Law Journal* 1, 87–119.
- Greenfield, K. and P. C. Kostant (2003). An experimental test of fairness under agency and profit-maximization constraints (with notes on implications for corporate governance). *George Washington Law Review* 71(4+5), 983–1024.
- Greiner, B. (2004). An online recruitment system for economic experiments. In K. Kremer and V. Macho (Eds.), *Forschung und wissenschaftliches Rechnen 2003*, Volume 63

- of *GWDG Bericht*, pp. 79–93. Göttingen: Gesellschaft für Wissenschaftliche Datenverarbeitung.
- Hamman, J. R., G. Loewenstein, and R. A. Weber (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review* 100(4), 1826–1846.
- Hansmann, H. and R. Kraakman (2000). The end of history for corporate law. *Georgetown Law Journal* 89, 439–468.
- Jürgens, U., K. Naumann, and J. Rupp (2000). Shareholder value in an adverse environment: the german case. *Economy and Society* 29(1), 54–79.
- Manâa, M. (2010). Legal business history. In *Law and Society Association Conference*, Chicago, USA.
- Murray, J. H. and E. I. Hwang (2011). Purpose with profit: Governance, enforcement, capital-raising and capital-locking in low-profit limited liability companies. *University of Miami Law Review* 66(1), 1–52.
- Plerhoples, A. (2012). Can an old dog learn new tricks? applying traditional corporate law principles to new social enterprise legislation. *Transactions: The Tennessee Journal of Business Law* 13(2), 221–265.
- Schmidt, W. and J. Meyer Landrut (1961). § 70 aktg. In C. H. Barz, R. Fischer, U. Klug, K. Mellerowicz, J. Meyer-Landrut, W. Schilling, and W. Schmidt (Eds.), *Aktiengesetz: Großkommentar* (2nd ed.), pp. 430–445. Berlin: de Gruyter.
- Schmitt, M., M. Gollwitzer, J. Maes, and D. Arbach (2005). Justice sensitivity: Assessment and location in the personality space. *European Journal of Psychological Assessment* 21(3), 202–211.

- Selten, R. (1967). Die Strategiemethode zur Erforschung des eingeschränkt rationalen Verhaltens im Rahmen eines Oligopolexperiments. In H. Sauermann (Ed.), *Beiträge zur experimentellen Wirtschaftsforschung*, pp. 136–168. Tübingen: Mohr.
- Shleifer, A. and R. W. Vishny (1997). A survey of corporate governance. *The Journal of Finance* 52, 737–783.
- Timmerman, L., M. de Jongh, and A. Schild (2011). The rise of the social enterprise: How social enterprises are changing company law worldwide. In S. Muller, S. Zouridis, M. Frishman, and L. Kistemaker (Eds.), *The Law of the Future and the Future of Law*, pp. 305–319. Oslo: Torkel Opsahl.
- Von Werder, A. (2010). Zusammenwirken von vorstand und aufsichtsrat. In H.-M. Ringleb, T. Kremer, M. Lutter, and A. von Werder (Eds.), *Kommentar zum Deutschen Corporate Governance Kodex* (4th ed.), pp. 351–554. München: Beck.

Appendix

Table 7: Random effects GLS estimation of treatments

	(1)	(2)	(3)
NoCompNoStake	4,357*** (949.1)	4,357*** (950.0)	4,834*** (945.5)
NoCompStake	2,797*** (773.2)	2,797*** (773.8)	3,137*** (821.3)
CompNoStake	434.9 (375.6)	432.5 (370.3)	664.0 (504.3)
CompStake	426.2 (418.9)	524.2 (421.7)	615.0 (473.9)
Period		154.8*** (38.40)	154.8*** (38.33)
Age			-204.1** (80.89)
Female			614.5 (429.5)
Constant	1,061*** (286.7)	210.0 (362.2)	4,291** (1,740)
Observations	590	590	590
Number of subjid	94	94	94
Prob > chi2	< 0.001	< 0.001	< 0.001
Overall R^2	0.308	0.325	0.376

Treatment coefficients are with respect to the control treatment.
Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.10

Table 8: Random effects GLS estimation of transfers to stakeholder using all data

	(1)	(2)	(3)	(4)
Period	78.78* (47.61)	129.2* (68.88)	129.2* (68.95)	129.2* (69.03)
Last Period	3,004*** (526.9)	117.8 (498.7)	117.8 (499.3)	117.8 (499.9)
Norm	-668.7* (405.2)	-1,561 (1,159)	-1,765 (1,118)	-1,903* (980.7)
Competition	-2,847*** (608.1)	-3,487*** (919.4)	-3,303*** (911.5)	-3,666*** (829.3)
Period×Competition		-68.77 (91.19)	-130.3 (84.80)	-128.1 (84.90)
Norm×Competition		1,219 (1,208)	1,432 (1,155)	1,443 (1,007)
Last Period×Competition		3,936*** (796.8)	4,039*** (775.7)	4,035*** (777.1)
Unemployed _{t-4}			1,118** (540.9)	1,077** (531.6)
Justice Sensitivity			564.3*** (207.2)	582.6*** (207.1)
Age				-241.2*** (72.25)
Female				371.9 (401.3)
Constant	4,239*** (663.6)	4,696*** (881.1)	2,879** (1,219)	8,412*** (2,103)
Observations	900	900	900	900
Number of subjid	90	90	90	90
Overall R^2	0.252	0.279	0.324	0.364
Prob > chi2	< 0.001	< 0.001	< 0.001	< 0.001

Clusters on group level; Robust Standard errors in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.10;
Data by all managers (hired or not) are used, in contrast to Table 6 above.

Der Aktionär hat soeben entschieden, welchen Manager er einstellt.
Der eingestellte Manager hat bereits 900 Taler auf seinem Konto gutgeschrieben bekommen.

Sie erfahren **zunächst nicht** wer eingestellt wurde.
Nehmen Sie an Sie wurden eingestellt:

Bitte entscheiden Sie, wie viel der Aktionär und die Allgemeinheit jeweils erhalten sollen.

Die Aufgabe des Managers im deutschen Recht: Er "leitet das Unternehmen unter Berücksichtigung der Belange der dem Unternehmen verbundenen Gruppen (Stakeholder) [z.B. Aktionäre, Arbeitnehmer, Kunden, die Allgemeinheit] mit dem Ziel nachhaltiger Wertschöpfung." (Ziff. 4.1.1 Deutscher Corporate Governance Kodex)

Entscheidungen in vorherigen Runden				
Runde	Manager		Auszahlung Aktionär	Spenden-konto
1	2		2952	7048
2	3		8993	1007
3	1		9016	984

Maximum Aktionär

10000

Minimum Spendenkonto

0

Aktionär

8833

Spendenkonto:

1167

0

Minimum Aktionär

10000

Maximum Spendenkonto

Bitte treffen Sie Ihre Entscheidung durch Verschieben des Reglers und bestätigen Sie Ihre Eingabe.

OK

Figure 3: Screenshot: Allocation decision by the manager

Periode

4 von 10

Verbleibende Zeit [sec]: 45

Entscheidungen in vorherigen Runden

Runde	Manager		Ihre Auszahlung	Spendenkonto
1	2		2952	7048
2	3		8993	1007
3	1		9016	984

Sie haben die Rolle des Aktionärs.

Welcher Manager soll in dieser Runde entscheiden?

Der eingestellte Manager bestimmt, wie viel von den 10000 Talern auf das jeweilige Konto gezahlt werden sollen. Dafür erhält er 900 Taler.

Die Aufgabe des Managers im deutschen Recht: Er "leitet das Unternehmen unter Berücksichtigung der Belange der dem Unternehmen verbundenen Gruppen (Stakeholder) [z.B. Aktionäre, Arbeitnehmer, Kunden, die Allgemeinheit] mit dem Ziel nachhaltiger Wertschöpfung." (Ziff. 4.1.1 Deutscher Corporate Governance Kodex)

Manager 1

Manager 2

Manager 3

Figure 4: Screenshot: Selection of a manager