

CORPORATE PHILANTHROPY IN THE CZECH AND SLOVAK REPUBLICS

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Corporate Philanthropy in the Czech and Slovak Republics*

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Abstract

This study explores the characteristics of corporate charitable behavior in the Czech Republic and Slovakia. It is the first quantitative study for transition economies, analyzing data from two surveys for 577 and 162 firms over three (2001-2003) and five (2001-2005) years in the Czech Republic, and for 152 firms over four years (2001-2004) in Slovakia, and the first study that distinguishes different channels of support, namely, sponsoring and giving.

The results show that tax legislation, specifically, the changes in the tax rates do not have any significant effect on corporate charity in neither country. The study fails to find a difference in the role of the tax rate for sponsoring and giving but documents differences in their use. It fails to support the usual claim that foreign firms give more than domestic ones but it suggests that foreign firms are better able to use the tax advantages of the various giving channels. We identify a significant difference between the two countries: Slovakia lags behind the Czech Republic in giving, the importance of large and international firms is higher, and more small companies behave in an ad-hoc manner. Importantly, the study fails to identify any significant decline in giving in Slovakia in 2004, contrary to expectations resulting from the radical changes in its tax legislation that made giving more expensive. It suggests, though, that foreign-owned firms shifted their support from giving to sponsoring.

Keywords: corporate charity, sponsoring, giving, tax legislation, transition
JEL classification: D21, L25

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Abstrakt

V tejto štúdií sa zaoberáme charakteristikou firiem, ktoré sa venujú darcovstvu. Je to prvá kvantitatívna štúdia v tranzitívnych krajinách. Pracujeme s dátami z dvoch prieskumov v Českej republike s 577 firmami (dáta za 3 roky, 2001-2003) a 162 firmami (dáta za 5 rokov, 2001-2005), a jedným v Slovenskej republike so 152 firmami (dáta za 4 roky, 2001-2004). Je to prvá štúdia, ktorá rozlišuje rôzne spôsoby podpory, konkrétne sponzorstvo a darcovstvo.

Výsledky naznačujú, že daňová legislatíva, konkrétne zmeny v daňových sadzbách nemajú žiaden signifikantý vplyv na firemnú filantropiu ani v jednej zo skúmaných krajín. Nenachádzame žiaden rozdiel ani v úlohe daňovej sadzby pre sponzorstvo a darcovstvo, ale pozorujeme, že sú používané rôzne. Taktiež nenachádzame podporu pre tvrdenie, že zahraničné firmy dávajú viac ako domáce, avšak, zahraničné firmy sú schopné do väčšej miery využívať daňové rozdiely medzi sponzorstvom a darcovstvom. Výsledky poukazujú na výrazný rozdiel medzi skúmanými krajinami: Slovensko zaostáva za Českou republikou v darcovstve, veľké, medzinárodné firmy sú najdôležitejšími darcami, väčšie množstvo malých firiem sa správa nestrategicky. Dôležitým výsledkom je, že nepozorujeme výrazný pokles darcovstva na Slovensku v roku 2004 očakávaný ako dôsledok zmeny v legislatíve, výrazne zvyšujúcej náklady na darcovstvo. Dokumentujeme však, že firmy so zahraničnými vlastníckmi v tomto období presunuli podporu z darcovstva na sponzoring.

1 Introduction

In this work we study corporate philanthropy in the Czech and Slovak Republics, focusing on corporate financial contributions, exploring giving patterns and the impact of changes in the tax rates. The present analysis is the first quantitative study in transition countries. It compares two transition economies with a long common history but divergent recent evolutions, among other things in the legislation governing corporate giving, which can be expected to translate into significant differences in the philanthropic behavior of firms.

The existing quantitative economic studies of corporate charitable behavior all focused on developed economies such as the U.S.A. (e.g., Trost, 2005; Boatsman and Gupta, 1996; Navarro, 1988) or Great Britain (Brammer and Pavelin, 2005; Campbell et al., 2002). None of the existing studies of corporate charitable behavior in transition economies (e.g., Russia: King and Tchepournyhk, 2004; Ukraine: Ilko, 2004) includes quantitative data analysis. The major problem of this unsatisfactory state of affairs is the lack of data and difficulties related to their collection.

The situation in the Czech and Slovak Republics is symptomatic: even though several studies of corporate giving were conducted in the Slovak Republic (NDS, 2005; Velšic, 2004; Marček and Dluhá, 2002) only one of them asked to specify the donated amounts. Nevertheless, the sample is small: 107 responses for one year, 2001 (Marček and Dluhá, 2002). The only study for the Czech Republic is a survey conducted by Donors Forum¹ in 2004 (DF, 2004). In the present work we use these data (for the Czech Republic) and extend them with data that a market survey company collected on our behalf in both the Czech and Slovak Republics.

The present study is the first one that distinguishes between sponsoring and giving, two tools corporations may use to financially support philanthropic causes. It is, therefore, the first study that allows for comparison of their use, and the initial empirical test of the theory that the motivation of companies varies across the different giving 'tools' they use (Galaskiewicz and Colman, 2006). We decided to distinguish sponsoring and giving because they are subject to different tax treatments, and we expected that this will induce corporations to use them differently. Sponsoring enters books as costs, the contract requires the receiving organization to provide some services in return. Sponsoring usually occurs in sports or cultural activities, the supported organization advertises the sponsors in return for the funding. Giving, on the other hand, is established by the giving contract, nothing is

¹Czech nonprofit organization focused on support of foundations, and corporate philanthropy; www.donorsforum.cz.

required in return.²

Our analysis draws on a theoretical model developed in Clotfelter (1985) and extended in Navarro (1988). We employ panel data econometric methods to capture the unobservable firm specific effects, and treat for sample selection.

The results document a significant difference between the two countries, with the Slovak Republic lagging behind the Czech Republic, particularly in giving. We fail to identify any significant general decline in giving in Slovakia following the changes in legislation in 2004 that made giving more expensive, but we observe that firms with foreign owners shifted their support from giving to sponsoring. In addition, we observe that, while philanthropic expenditures in the Czech Republic have increased steadily over the studied period, they have remained stable in Slovakia, suggesting that the change in legislation might have counterbalanced a similar positive trend. While we observe significant differences in characteristics of companies that sponsor and give, the role of the tax rate is the same for both tools—they do not have any effect. But, we do observe a difference in behavior of firms with foreign and domestic owners in Slovakia, suggesting that different owners may respond differently to tax legislation. We fail to find support for the claim that foreign firms are more generous than the domestic ones (e.g., Bussard et al., 2005; BLF, 2004).

The study is relevant for various actors related to philanthropy: it examines the relevance of the changes in the tax legislation on corporate contributions, thus, on the income of charities, which often provide public goods that would otherwise had to be provided by public agencies. The results are important for the institutions helping to build a corporate giving culture in transition economies, suggesting that their work, indeed, makes a difference, and helps to point out the new target areas. The study is also relevant for nonprofits in that by understanding corporate behavior it may help them to target their donors more effectively.

2 Literature overview

The first part of this section is focused on the literature providing rationales for corporate giving. A number of theories have been developed to explain the motivation of firms for philanthropy; we briefly introduce the prominent ones but focus on two, profit maximization and managerial utility maximization.³ It is necessary to

²This does not mean that there is nothing given in return. But the potential payback occurs out of corporate books and may be of a less tangible nature.

³Extensive surveys of corporate giving theories are available in Galaskiewicz and Colman (2006) and Abzug and Webb (1997). This section is based on these surveys.

keep in mind that all these theories have been developed in established economies with long histories of corporate philanthropy, the differences expected in transition countries are summarized in Section 3 below.

2.1 Theoretical studies

Two classes of corporate giving theories are distinguished in literature, economic and organizational. The economic theories focus on the underlying motivation of companies to give, i.e., internal factors. The organizational theories, on the other hand, explore the conditions in the corporate environment that affect giving, i.e., external factors. The literature provides five prominent economic theories: maximization of profit, maximization of managerial utility, altruism, corporate social responsibility (CSR), and political theory; and four organizational theories: agency, stakeholder perspective, resource dependence, and institutional theory. The two most often applied theories are maximization of profit and maximization of managerial utility (e.g., Clotfelter, 1985; Navarro, 1988; Boatsman and Gupta, 1996).

Profit maximization is a firmly established and often applied theory as corporations are, in the first place, expected to maximize their profit. All their activities, including corporate charity, are therefore assumed to support this objective. Corporate charity, at first glance, seems to be only a waste of corporate funds, mitigated slightly by the possibility to deduct donations from taxes⁴. But, there is an indirect positive effect usually compared to that of advertising that makes corporate giving profitable: giving is claimed to positively influence the public image of the company (i.e., shifting out the long-run demand curve faced by the company). Moreover, giving is claimed to decrease the costs of labor by increasing employees' loyalty and productivity and decreasing their turnover.

Maximization of managerial utility is the major competing hypothesis. According to this theory corporate giving results from a principal-agent problem in the company. Managers, insufficiently controlled by the owners, use corporate funds to maximize their utility through perks, charitable giving being one of them.⁵

Both these rationales have been modeled and straight-forward testable hypotheses have been derived: the optimal level of giving in firms maximizing profit does

⁴Donations are deducted fully if their volume remains below a deductibility limit, the price of giving is then $(1 - t)$, t is the corporate tax rate.

⁵Managers may have various motives for their philanthropic behavior, they may give to gain status, prestige, or gifts in exchange, or they may be altruistic. Predictions of this theory do not rely on their specific motivation.

not depend on the corporate income tax rate. But, the tax rate does matter if managers give to maximize their utility (Clotfelter, 1985; Navarro, 1988; Boatsman and Gupta, 1996; Jankech, 2002). Boatsman and Gupta (1996) show further that the impact of tax rate depends on the budget constraint imposed on the manager: if the constraint binds the income effect prevails and the tax rate has negative impact. If the constraint does not bind the substitution effect prevails and the effect of tax rates is positive. But, this model and its predictions hinge on two strong assumptions: firm optimizes over one period only and giving is fully tax deductible.

The assumption of full deductibility of giving is not necessarily valid in our environment.⁶ But, as shown in Jankech (2002), predictions of the basic model remain valid even if we relax this assumption, i.e., tax rate affects the optimal level of giving only if it is motivated by maximization of utility. He shows that an increase in the deductibility limit, if it were binding, leads to an increase in giving. This result is independent of the specific motivation for giving, maximization of profit or utility.

Clotfelter (1985) relaxes the second major assumption of the original model; he develops a two-period model that allows for accountability of the long-run payoffs of giving, he omits the consideration of managerial utility and focuses only on profit maximization. Donations from the first period build goodwill and pay off also in the second period. In this setting the predictions formulated above do not hold. If a firm maximizes profit over several periods, then tax rate affects the optimal level of giving—it is optimal to shift giving to periods when it is cheaper (i.e., the tax rate is higher). The extent of these shifts depends on the discount factor and the rate of depreciation of the accumulated capital. If there is no depreciation it is optimal to give most when it is cheapest and ‘live’ from the payoffs later on. The rate of goodwill depreciation depends on the corporate environment, corporations may decrease it by establishing a foundation, which would collect donations in the good years and pay them out smoothly over time, ensuring payoffs in later periods for a good price. Including maximization of managerial utility in a two-period framework is likely to lead to less clear-cut predictions, as tax rates will affect not only the permanent level of giving (one period model result) but also the timing of donations (two-period model), making it difficult to distinguish between maximization of utility and profit.⁷

⁶The limit for tax deductibility is high enough not to be binding, i.e., the full amount of contributions decreases the tax base. More details in Section 3.1.

⁷We attempted to extend the model for consideration of managerial utility maximization, but the task turned out too difficult, for now.

The remaining three economic theories have not been modeled yet: according to the altruistic theory corporations give because their owners are altruistic and care about worthy causes. Webb (1992) provides several reasons why an owner may prefer giving through the corporation: higher effectiveness of bigger donations that would be too big for an individual donor (big donation to one organization is more effective, thus, may better serve the purpose of donors), double-taxation of dividends (it is cheaper to give from company's profit), and free-riding (when giving corporate money all shareholders are 'forced' to give proportionally). According to political theory, corporate giving is used to influence corporate environment (Galaskiewicz and Colman, 2006). The Corporate Social Responsibility (CSR) concept has gained significant attention particularly in the last decades. According to this theory corporations have a 'duty' towards their stakeholders to behave responsibly, they are expected to 'optimize' rather than maximize their profit, taking into considerations a triple bottom line of economic, social, and environmental values (e.g., Bussard et al., 2005; BLF, 2003). Corporate giving is one of the tools they may use to fulfill these expectations.

The literature so far does not provide a testable hypothesis that would distinguish among these theories. Moreover, it seems that these theories may be included in the two major theories explained above. The altruistic theory assumes altruism, or utility maximization, of owners, which, on the outside cannot be distinguished from the maximization of managers' utility. Internally, it would be distinguishable if we observed the extent of the principal-agent problem in the company, i.e., the extent of owners' control. The CSR theory could be incorporated in profit maximization as an adjustment of the corporate environment for the increased power of various stakeholders. This merge is further supported by the shift of CSR from a competitive advantage to a must in many established economies (e.g., Brammer and Pavelin, 2005). The political theory can be identified within both main theories, depending on the motivation for the change in the environment, which could be maximization of profit or utility (of managers or owners).

Organizational theories examine the specifics of corporate environment. Somewhat simplistically, these theories suggest that it is necessary to identify the strongest stakeholders and evaluate their impact on corporate charitable behavior. The agency theory corresponds to the utility maximization theory, suggesting power is in the hands of managers, resource dependence theory suggests powerful suppliers/consumers, and the institutional theory focuses on the impact of higher uncertainty in the environment.

Galaskiewicz and Colman (2006) provide an overview of corporate charity; they structure their analysis according to the different tools corporations use to support/collaborate with nonprofits (e.g., financial support, donations of products, sponsoring, volunteering, etc.). They suggest that different types of collaboration result from different motives for giving. Taking into account that giving typically results from an interplay of several motives, i.e., identification of the main one may be rather cumbersome, it seems optimal to explore the motivation separately for different giving tools.

2.2 Empirical studies

In this section we briefly introduce empirical work on corporate giving focusing on studies that explore the role of tax legislation for giving. Extensive surveys may be found in Galaskiewicz and Colman (2006), Clotfelter (1985), or Webb (1992).

There exist two papers that empirically examine the motivation of corporate donors by examining the impact of taxes: a cross-sectional analysis by Navarro (1988) and a panel data analysis by Boatsman and Gupta (1996).⁸ Both studies are based on the one-period theoretical model described above, they test its prediction that taxes affect giving only if firms give to maximize managerial utility.

The empirical specifications in these papers differ due to the different data sets and econometric techniques used. Boatsman and Gupta (1996) analyze panel data, 212 firms over 5 years; their basic specification therefore includes only tax rate and income as the fixed effect model used captures the firms specific variables (constant in time) in the firm dummy variables. Navarro (1988) uses cross-sectional data, 249 Fortune 1000 firms from the period 1976-1982. His specification therefore includes also firm specific variables, such as, labor intensity, free riding (ability to rely on others' giving), debt-equity ratio, change in dividends, or salaries of executives.

The results from Navarro (1988) support the hypothesis that giving is a form of advertising motivated mainly by profit maximization.⁹ Analyzing the firm specific variables he shows that giving serves as a quasi-fringe benefit to employees through its impact on the community (environment), and that giving is lower due to free riding (firms in communities with high number of firms give less). Boatsman and Gupta (1996) provide results from a fixed effects specification, which proved to

⁸Other papers on corporate giving explore different topics, e.g., main factors that influence on giving (e.g., Brammer and Pavelin, 2005; Seifert et al., 2003; Webb, 1992) or the impact of corporate charity (e.g., Chang, 2003).

⁹The tax rate is significant in one specification only and with a small negative effect, offering a very weak support for maximization of utility.

be the best in comparison to pooled ordinary least squares and random effects model. Contrary to Navarro (1988) they conclude that giving is motivated by managerial utility because it is affected by the tax rate. The effect of the tax rate is negative, which means that the budget constraint imposed on the managers is binding.¹⁰ Income has a very small positive effect on giving. The possible cause of the opposite results in the two studies is the data and measures used. The Navarro (1988) study works with cross-sectional data: it is possible that there are unobservable firm characteristics that may bias his results. Another bias may be caused by the measurement error in the tax rate: Navarro (1988) uses average tax rate instead of the marginal tax rate that matters in the theoretical model and is used in Boatsman and Gupta (1996).

3 Corporate giving in transition: the Czech and Slovak Republics

In this section we summarize the specific features of transition countries, focusing on the differences to the more developed economies. We expect that, in line with the organizational theories (Section 2.1), these features affect the philanthropic behavior of corporations.¹¹ Even though during the analyzed periods both the Czech and Slovak Republics were considered established market economies (CERGE EI, 2004; CERGE EI, 2002; IVO, 2002) there remained characteristics that differed from those observed in more developed economies. We next discuss differences in the market environment, economic conditions, and philanthropic tradition.

The market environment in transition economies is not developed to the extent observed in the developed economies. The lag is due to the short history of these markets and their fast and unstable development in a short period of time. The major consequences were significant uncertainty, in particular in the early years of transition, and low transparency and high levels of corruption, which remain today (Hanousek et al., 2005; CERGE EI, 2004; Lízal and Kočenda, 2002; CERGE EI, 2002).¹² An inefficient and complicated legal system continues to support corrup-

¹⁰See the theoretical model above, Section 2.1.

¹¹We compare the situation in the Czech and Slovak Republics to that in the U.S.A. and western European countries. We realize that the differences present here are even stronger in countries east of Slovakia, further strengthening our arguments, as suggested in Ilko (2004) for Ukraine, or King and Tchepournyhk (2004) for Russia.

¹²The corruption perception index in both countries remains very high, it was 4.3 on a 10 point scale, 10 being the best, in both countries in 2005 (47-50th place, together with Greece and Namibia, among 159 countries, www.transparency.org).

tion and intransparent behavior.¹³ Uncertainty in Slovakia was higher until 1998 due to the political instability, marked by a severe lack of transparency, corruption, and politically motivated decisions. Many of these problems, however, remained also after the change in the government in 1998, though their intensity decreased significantly (IVO, 2002). A number of important changes improving the Slovak market environment occurred in 2003-2004, namely, the reforms of the tax legislation, health care, and the pension system.

Countries in transition continue to lag behind their more developed counterparts also in their economic performance, an important determinant of corporate charity.¹⁴ Lower levels of giving in post-communist countries are, indeed, often explained by the unfavorable economic conditions (Kivilo, 2005; Ilko, 2004; King and Tchepournyhk, 2004; Brooks, 2002, Marček and Dluhá, 2002). Fidrmuc and Gerxhani (2005) show that unfavorable economic conditions in transition account also for their low stock of social capital, measured by civic participation and access to social networks. Nevertheless, both the Czech and Slovak Republics have experienced significant economic growth in the periods under consideration,¹⁵ suggesting parallel growth in corporate philanthropy.

A lack of tradition of philanthropy¹⁶ and corporate social responsibility (CSR) is another feature of transition countries that is expected to strongly negatively influence corporate charitable behavior. Development and popularization of CSR has been supported by the International Business Leaders Forum (BLF), a non-profit organization with national branches in both countries. BLF in the Czech Republic has been in existence since 1992, when it was established in then still common Czechoslovakia (www.blf.cz). The Slovak BLF came into existence only in spring 2004 (www.blf.sk). Nevertheless, the number of companies understanding and implementing the concept of CSR remains low in both countries (CR: BLF, 2004; SR: WB, 2004).¹⁷ One of the possible explanations of this low engagement is,

¹³The income tax law in the Czech Republic was amended 43 times in 10 years, steadily increasing in complexity and number of exceptions (CERGE-EI, 2002). Legislation in the Slovak Republic was afflicted by similar problems (e.g., Lizal and Kocenda, 2002), including the problems with complexity and frequent changes (MFSR, 2003; Moore, 2005). However, the laws governing corporate giving remained simple (see Section 3.1).

¹⁴Corporate giving remains a relatively stable fraction of before tax profits in the U.S.A. (Clotfelter, 1985; Galaskiewicz and Colman, 2006).

¹⁵www.oecd.org

¹⁶Nonprofit organizations and charitable giving had been practically non-existent during communism.

¹⁷Charitable giving is one of the aspects of CSR, but the main focus of corporations in the Czech and Slovak Republic remains on the internal issues such as care for employees, transparency, and environmental protection (BLF, 2004; WB, 2004).

according to BLF SR (2005), the ignorance of the public, thus, insufficient pressure on companies to get involved.

The inefficient operation (or at least a perception of such) and unprofessional behavior of nonprofits, caused to some extent by their short histories¹⁸ and reliance on volunteers rather than professional employees, further hinders cooperation between the corporate sphere and nonprofits (Marček and Dluhá, 2002). Attempts to enforce cooperation among organizations in the two sectors (supported by nonprofits such as PANET (SR), or Donors Forum (CR)) have strengthened after accession to the EU in May 2004 via the European regional programs focused on cooperation among three sectors: public, for-profit, and non-profit (Bussard et al., 2005; Dluhá and Marček, 2003; DF, 2004).

In Slovakia, there is yet another difference which is expected to significantly affect corporate charitable behavior, tax assignation.¹⁹ Tax assignation for physical persons, an opportunity to assign a fraction of one's paid income tax to a particular charitable or publicly beneficial purpose, was introduced in 2000 to become effective in 2002.²⁰ The fraction that could be assigned was set to 1%. The scheme was extended to corporations in 2003, the extension was proposed by the government after it rejected nonprofits' request to distribute a fraction of income from privatization as was done in the CR. While tax assignation for physical persons exists in several other, mostly transition, countries,²¹ tax assignation for corporations is unique for Slovakia. In 2004 the fraction that may be assigned increased to 2% for both corporations and physical persons.

Tax assignation represents an additional source of funds for nonprofits²² and we include it, to a certain extent, in this study even though it is not philanthropy in its true sense. Corporations that assign do not donate their own resources, they only distribute fraction of state funds. Nevertheless, firms usually consider assignation a form of philanthropy²³ possibly because assignation requires that the firm makes

¹⁸Most of the nonprofit organizations in transition countries have been established since the fall of communism, there are only a few with longer tradition, e.g., the Red Cross or amateur sports organizations (see e.g., Fric and Goulli, 2001).

¹⁹The attempts to introduce tax assignation in the Czech Republic have not been successful yet (www.rozhodni.cz).

²⁰The law became effective two years later because the government expected a decline in the budget caused by a significant decrease in corporate tax rate in the year 2001.

²¹For example, Hungary, where it was first introduced, or Poland (www.onepercent.hu).

²²Tax assignation is indeed a significant additional source of income, in 2004 corporations assigned 570 million Sk, 92% of the total amount they could have assigned. In addition, 276 million Sk were assigned by physical persons (SNSC, 2005).

²³According to a survey performed in 2005 84% of companies considered assignation a form of philanthropy (NDS, 2005).

a decision and shows some interest in the organization it supports.

3.1 Relevant legislation

This section summarizes the legislation that governs corporate philanthropy. Legislation in the Czech and Slovak Republics, including that governing corporate philanthropy was very similar (e.g., Lízal and Kočenda, 2002) until 2004 when there were several major changes in Slovakia. In this section we focus on three different tools with different tax treatment that corporations use to support nonprofit organizations: sponsoring, giving, and in Slovakia also tax assignment.

Sponsoring, governed by a contract about sponsoring, is often compared to advertising. Expenditures on sponsoring enter books as costs, decreasing taxable income without further restrictions. The corporate tax rate is therefore the only legal factor that influences the expenditures on sponsoring. Due to an income effect, increasing the tax rate increases sponsoring, because its price is lower. However, the income from sponsoring is a business income for the receiving organization, and it has to be taxed.²⁴

Giving, governed by a donation contract, includes financial donations and donations of products and services. Expenditures on giving represent after-tax expenditures, tax deductible up to a limit. Therefore, giving is affected not only by the corporate income tax rate, as is sponsoring, but also by the limit on tax deductibility. The limits vary across countries, their evolution in the CR and SR is summarized in Table 1. The legislation in the Czech Republic has become complex, with many additional exceptions and changes in the limit in the last four years.²⁵ The limit in Slovakia had been stable, 2% of the taxable income²⁶ until 2004, when new legislation abolished the deductibility of donations.²⁷

Tax assignment, which exists in the Slovak Republic only, allows corporations (and physical persons) to assign a fraction of their taxes to particular purposes,

²⁴NPOs in the Czech Republic may deduct 30% of their income from their taxable income, or 300,000 Czk (if 30% is less), maximum possible deduction is 1,000,000 Czk. The upper bound on deductions in the SR is 300,000 Sk.

²⁵Firms in the Czech Republic may deduct value of donations to listed causes up to 2% of their tax base, the limit is moved to 5% if the (additional) donations support natural disaster causes. In 2002 and 2003 the limit was shifted to 10% due to floods in 2002 (the 5% in addition had to be in support of the flooded areas). Minimum donation that can be deducted is 2,000 Czk. (The Act on Income Taxes No. 586/1992 Coll. in the wording of its future amendments.)

²⁶In both countries donations had to be deducted in the year they were given (different from the U.S.A. with the possibility to carry forward donations above the limit). State owned companies did not have the right to deduct any gifts.

²⁷The Act on Income Taxes No. 595/2003 Coll.

namely, to the listed publicly beneficial organizations, most often nonprofits. The assigned funds belong to the state, the government delegates the decision about how to distribute the assigned funds (collected taxes) to the tax payers if they choose to do so.

Table 1: Tax Legislation

Czech Republic		Slovak Republic	
Limit on tax-deductibility			
2% of tax-base		2% of tax-base	
5% (if natural disaster causes)			
10% for 2002-2003 (floods)		Since 2004 – no deductibility	
Corporate tax rate			
Until 2004	31%	2000 – 2001	29%
2004	28%	2002 – 2003	25%
2005	26%	2004	19%
2006 and later	24%		
Tax assignment			
		Since 2003	2%

3.2 Hypotheses

The hypotheses are motivated partially by the model by Navarro (1988); transition is expected to have no effect on the qualitative predictions of the model, but it is expected to influence the quantitative predictions: due to lower appreciation of corporate charitable behavior by consumers we expect that the impact of giving on demand is smaller, i.e., the profit-maximizing level of donation is lower. For the same reason we expect that the utility managers gain from giving is lower, relatively to the utility gained from other perks. On the other hand, the uncertain in-transparent environment of transition increases the incidence of principal-agent problems, giving managers more opportunities to divert funds. Nevertheless, it is difficult to predict what will the managers divert the funds to, they can choose to give less than is optimal for the company and to spend the funds elsewhere, but they can also choose to increase giving above the optimal level.²⁸ The final effect of these factors remains to be tested empirically. We divide the hypotheses to be tested into two groups, economic and organizational, as above in Section 2.1.

²⁸We thank Rich Steinberg for pointing this out.

Economic theories

The economic theories analyze the motivation for corporate charity, the model by Navarro (1988) allows to distinguish between maximization of managerial utility and profit. If we remained in the one-period framework, the significance of the tax rate coefficient would allow for the distinction. Allowing for two-periods, though, makes the analysis more complicated and the predictions are not straightforward. Thus, we omit this interpretation of the tax rate coefficient and focus solely on the importance of the tax rate as such.

We expect that corporations in transition are strongly motivated by maximization of profits, thus, they shift their giving to periods with higher taxes. This results in independent of the framework (one- or two-period model) used. We expect that profit maximization results from the periods of significant instability and uncertainty in the environment that has been here in the past. In addition, this behavior results from the motivation to decrease the tax burden as much as possible, a strong motivation particularly in transition (Hanousek and Palda, 2002).²⁹ Tax rates in both countries have declined in the periods under consideration, the changes were announced in advance, hence, firms were motivated and able to shift donations to the earlier periods. Changes in the Czech Republic were smaller than those in the SR, thus, we expect lower impact. The most significant changes occurred in Slovakia in 2004, when the tax rate decreased significantly (25% to 19%), deductibility of donations was abolished, and tax assignments were introduced. We, therefore, expect this change to have the most significant effect.

Hypothesis 1: The tax rate plays a significant role in the giving decision.³⁰ The impact of the tax rate was stronger in Slovakia, particularly the change between 2003 and 2004.

Galaskiewicz and Coleman (2005) suggest that companies optimize their use of the different giving channels, thus, that they have different motivation for the use of different channels. In this study we distinguish two channels of support, sponsoring and giving. The fact that these two channels are subject to a different tax treatment

²⁹We claim that the firms that engage in philanthropy tend to avoid rather than evade taxes because they are more ‘visible’ because of their philanthropic activities. If they preferred to evade taxes, we claim that they would not invest in charity and attract unwanted attention. Thus, we do not expect that evasion would make estimation problematic.

³⁰The existing studies of corporate philanthropy in the U.S.A. use two measures of the tax rate, average and marginal. The corporate tax rates in Czech and Slovak Republics are constant for all levels of income, but they have decreased in the past years, with some changes in the periods under consideration here.

offers initial support for the hypothesis of different motivation. Different impact of the tax rate would offer additional support that the motivation is different. Because giving is treated more favorably in the Czech Republic than in Slovakia, we expect that the preference for sponsoring will be stronger in Slovakia.

Hypothesis 2: The impact of tax rate on philanthropic expenditures is different for sponsoring and for giving. The difference is bigger in Slovakia.

Organizational theories

This section focuses on the external factors influencing corporate philanthropy. As suggested by the organizational theories we examine the stakeholders with a potential to affect the behavior of corporations.

Size of the company is a typical factor influencing expenditures on philanthropy. This is natural as large companies have more funds available, thus, they also spend more in absolute amounts on charity.

Hypothesis 3: Big companies are more active in philanthropy.

Ownership of the company is another factor that has influence on philanthropy. Namely, it is often claimed that foreign owners bring to their companies corporate culture from their home countries, where philanthropic and CSR traditions are more established. Companies with foreign owners therefore take the lead in philanthropic behavior in transition economies (e.g., Bussard et al., 2005; BLF, 2004). An additional factor increasing the giving of foreign companies may be a higher need to build relationships and goodwill in the foreign country.

Hypothesis 4: Foreign owned companies are more active in philanthropy.

Type of the industry in which the company operates, also co-determines its corporate giving. Firms in services are closer to their customers, which makes their involvement in the community more important and increases also their incentives to participate in philanthropy. Retail firms, on the other hand deal with large groups of consumers making their participation in philanthropy important. These pressures are smallest in manufacturing.

Hypothesis 5: Firms in retail and services are more active in philanthropy than firms in manufacturing.

Firms operating at different levels face different conditions and meet different stakeholder groups. Firms operating at the international level are expected to meet stronger stakeholder groups and operate in an environment with higher expectations on corporate behavior. These factors are expected to increase their engagement. On the other hand, firms operating at the regional level are closer to their stakeholders and the needs of the local community. Which of these forces is stronger is an empirical question.

Hypothesis 6: Level of operation affects philanthropic behavior of companies.

The last factor we want to discuss is location. We assume that the biggest difference exists between the firms in the capital and other regions. There are several factors decreasing philanthropic engagement in the capital: free riding—firms in areas with many other companies tend to free ride on giving of the others (Navarro, 1988), anonymity of relations in large cities—building of relationships and cooperation is more difficult. There are though also factors increasing giving in the capital: better economic performance—companies have more resources to give, higher density of nonprofit organizations—the pressures to give are higher as is the demand for donations. As above, it remains an empirical question to determine which of these forces is stronger.

Hypothesis 7: Philanthropic behavior of firms located in the capital differs from that of firms in other regions.

4 Data

The data used are the first of its kind in both countries,³¹ they were collected using face-to-face interviews by market survey company Median (Median SR in the SR). Data for the Czech Republic were collected in two surveys: the first sample was collected for the Czech Donors Forum in 2004, covering 577 firms over three years (2001-2003), with an over-sampling of large and medium-sized firms.³²

³¹There have been several studies of corporate philanthropy performed in the Slovak Republic (Marček and Dluhá, 2002; Velšic, 2004; NDS, 2005), but the only study asking for amounts spent (for 2001) was the study by Marček and Dluhá (2002). The sample is rather small hinting low willingness to disclose this information (107 respondents out of 194 participating). The only study in the Czech Republic was the survey performed by Donors Forum, we work with this data.

³²A representative sample would include 98% of firms below 50 employees, providing insufficient information on big firms, which are the most important givers. In addition, the sample included a group of big firms specified by Donors Forum, which may bias the results slightly, even though the sample was made representative afterwards.

The second sample was collected in 2006, covering 162 firms over five years (2001-2005), focusing entirely on large and medium-sized firms.³³ The Slovak sample was collected in 2005, covering 152 firms over four years (2001-2004). Here, too, large and medium-sized firms are over-sampled.³⁴ Details about the samples are summarized in Table 2 below.

The focus of our surveys was on quantitative information about corporate philanthropy.³⁵ The collected data include amounts spent on sponsoring and giving, number of supported entities, supported areas, target groups, and information about the companies (number of employees, industry, geographical area, legal form, level of operation, sales, and income before taxes). We attempted to obtain additional information on the companies but failed because, to induce participation, they were guaranteed anonymity.

It is not possible to obtain any hard data on corporate philanthropy, thus, it was necessary to collect data using surveys.³⁶ The data, therefore, exhibit typical survey data problems including sample selection—we have data only for the firms that were willing to cooperate. In our case, firms that do not contribute usually do not respond to these questionnaires (Navarro, 1988). Similarly, small firms and firms contributing small amounts do not respond (Helland and Smith, 2003). This problem though is partially addressed in our samples because we cover not only giving but also sponsoring (and assignation in the SR).

Several problems of the samples stem from the specific nature of the studied topic. The major hurdle is quality of the information on giving and sponsoring expenditures, which is often low: the corporations are reluctant to publicize any specific information regarding their philanthropic spending (Múčka, 2005; Kivilo, 2004; Marček and Dluhá, 2002). Low quality of giving data results from the unclear accounting rules that guide giving, particularly giving of material gifts, or services. Often even the companies themselves have problems to distinguish between sponsoring and giving, making reporting problematic. To mitigate this problem the surveys emphasized several times the distinction between the two methods of sup-

³³It includes only companies with more than 50 employees.

³⁴The first Czech survey was performed by Donors Forum, which required an overview of the whole market. We replicated the survey in both countries to obtain additional data but due to limited resources we focused on large firms only.

³⁵The original survey in the CR included also a qualitative part about strategies and management of philanthropy (DF, 2004). This part was omitted in both additional surveys.

³⁶Giving is tax-deductible in the CR but not in the SR, thus, the tax-office cannot provide the information. Moreover, not all companies claim deductibility, and the tax-office cannot provide individual data. Sponsoring belongs to advertising and PR expenditures, thus, it is not possible to trace the information in accounting books.

port. To deal with the reluctance to report the specific values respondents were allowed to report the information in intervals. Unfortunately, the first survey in the CR did not give the respondents an opportunity to provide also the exact amount if they would. We corrected this in the additional surveys in both countries, where the intervals were offered only when the respondents declined to provide the exact amount. Data on profit before taxes and sales were reported in intervals as well.³⁷

A closely related problem concerns the structure of the reporting intervals used,³⁸ namely, the first interval (for giving and sponsoring) in the original Czech survey was very broad, up to 200,000 Czk. As a result nearly 79% of the reported giving (company/year) fell into this interval. We corrected this in the additional surveys, where we split the first category into four subcategories, but to maintain the same number of intervals we merged the top three intervals. Throughout the study we work with the different intervals for the different studies, though for comparison we provide also results with common intervals—intervals merged so that they are the same for all three samples. The fact that the respondents had to report the information retrospectively for the last 3, 4, or 5 years may also bias results. The extent of this problem was mitigated by the fact that the interviews were arranged in advance, thus, the respondents had time to prepare.

The last concern we want to discuss regards reporting of profits. If only the firms with profit too low or too high would refrain from reporting them, the estimated regressions would suffer from incidental truncation. The bias depends on the type of firms that did not report their profits—if the firms with low profits do not report, the estimated impact of profits on giving would be biased downwards. However, we are unable to control for the willingness to report this information.

4.1 Structure of data sets

The structure of the samples is summarized in Table 2. This is the structure of the original data collected; for the analysis we merge the two Czech samples³⁹ and weight the data to obtain a sample representative of the population.⁴⁰

Table 3 summarizes aggregate information on corporate philanthropy in both

³⁷None of the surveys asked for the exact amounts of sales or PBT as the used intervals were rather narrow, thus, the information is of sufficient quality.

³⁸Two types of intervals were used, one for giving and sponsoring (9 categories), and a second one for sales and PBT (180 categories).

³⁹We tested that the merge is possible using the Chow test of equality of coefficients.

⁴⁰Firms in the sample are of various legal forms, more than 80% in all samples are joint-stock and limited liability companies. The fraction of publicly traded companies is negligible because the Czech and Slovak financial markets remain small and inefficient.

Table 2: Structure of the samples

	CR I	%	CR II	%	SR	%
Number of employees						
Less than 50	310	54	-	-	67	44
50 - 250	194	34	108	67	56	37
250 - 1000	48	8	41	25	25	16
1000 and more	25	4	13	8	4	3
Ownership						
Foreign	38	7	21	13	21	14
Mostly foreign	31	5	10	6	9	6
Mostly domestic	54	9	41	25	26	18
Domestic	454	79	90	56	94	62
Level of operation						
International	90	16	50	31	48	33
National	148	25	65	40	57	38
Regional	339	59	47	29	43	29
Industry						
Manufacturing	248	43	110	68	90	60
Retail	135	23	7	4	27	18
Services	194	34	45	28	33	22
Total	577	100	162	100	152	100

countries: fraction of firms participating in sponsoring/giving (*Participation*), average amount spent on sponsoring/giving (*Amount*),⁴¹ average amount reported in common intervals (CI),⁴² sponsoring/giving as a fraction of profits before taxes (average amount divided by profit before tax, *Amount/profit*), and sponsoring/giving as a fraction of profits before taxes computed using CI. Data are weighted to be representative of the population of firms in the country. We tested for the equality of means between the two countries using the Wald test, the results are provided in the last column (for both sponsoring and giving).

We observe that despite the fact that there is a significant difference between the expenditures on sponsoring and giving in the Czech Republic when reported in the original and common intervals, we do not observe this difference in the share categories (*Amount/profit*). This is caused by the fact that even though there is a significant decline in the average expenditures due to the merging of the last three

⁴¹Amounts are in thousands of Czech Crowns, adjusted for inflation with the base in 2001.

⁴²Common intervals are used to enable better comparison of the samples. Common intervals are the same in all samples, i.e., they group data from the narrow intervals in the SR and new CR sample to form the big first interval in the original CR sample, and vice-versa for the high categories.

Table 3: Comparison CR/SR, basic indicators

	Sponsoring			Giving			Assignment
	CR	SR	Wald test	CR	SR	Wald test	SR
Participation	0.56 (.01)	.60 (.03)		.61 (.01)	.42 (.03)	***	.51 (.04)
Amount	471.75 (63.00)	133.41 (33.07)	***	375.85 (64.76)	58.61 (16.97)	***	
Amount (CI)	317.13 (24.40)	167.43 (32.37)	***	246.15 (18.36)	101.75 (16.67)	***	
Amount/profit	.33 (.04)	.11 (.02)	***	.44 (.06)	.05 (.01)	***	
Amount/profit (CI)	.32 (.04)	.27 (.05)		.44 (.06)	.22 (.05)	***	

Standard errors are in parentheses. *** denotes significant difference between the means in CR and SR at 1%

Notes: Amounts are in thousands of Czech Crowns, adjusted for inflation with base year 2001.

Common intervals (CI) allow a better comparison of the samples. They group data from the narrow intervals in the SR and CR sample to form the big first interval in the original CR sample, and vice-versa for the high categories.

intervals of the original Czech sample, we cannot observe this decline in the share categories because these observations are missing—these firms did not provide the information on their profit. This information is missing only in the largest category (over 50 million Czk); reporting in the other categories does not exhibit significant differences. Thus, the data on the largest donors are excluded from the analysis that work with profit as a variable.

We observe that even though firms in Slovakia participate in sponsoring to a similar extent as firms in the Czech Republic and they also spend a similar fraction of their profit on sponsoring, their participation and spending on giving are significantly lower. Participation in sponsoring and spending as a fraction of profit in CI are the only categories in which we fail to reject the null hypothesis of equality between the countries. The differences in the data reported in the original and common intervals show the biases are caused by the size of the first interval (SR results) and the merging of the last intervals (CR results). Nevertheless, the differences in giving between the countries remain significant also in common intervals, Slovakia remains below the CR. A comparison of profitability shows that profits in Slovakia are significantly below those in the CR (average profit in CR was 227,431, in SR 14,040 thousand Czk). Importantly, the difference is mainly driven by less than 1% of firms with very high profit, which is missing in Slovakia. The result is even stronger when we take into account that the fraction of firms that reported

profit was higher in Slovakia, including firms with high profit.⁴³

In the Slovak Republic, participation in assignation is slightly (although not significantly) below that in sponsoring but significantly (at the 10% level) above participation in giving. Comparing the fraction to that obtained in the un-weighted sample⁴⁴ we observe a downward shift, i.e., small firms assign less often. This could be caused also by the fact that probability of low (zero) profit among small firms is higher—these firms pay no or low taxes and have nothing to assign. Similarly, the level of participation in giving is higher in the un-weighted sample (47%), i.e., small firms participate less in giving. We also compared sponsoring and giving in the years before and after assignation in Slovakia, but we failed to find any significant difference.

We do not have data on the amounts assigned. This question was omitted from the survey as we did not expect any company to assign less than the two percent allowed by law. Though, we asked whether they used the assignations to the full extent, only 9% of companies responded that they assigned less than 2%.

5 Methodology and results

5.1 Methodology

We analyze two decisions—how much to spend on sponsoring and how much on giving.⁴⁵ The panel format of data allows for the accountability of the unobservable firm specific effects using either random or fixed effects specification, REM or FEM. With random effects we impose a strong restriction that the firm specific effects are uncorrelated with the error term, this assumption is relaxed in the fixed effects specification. The fixed effects, however, do not allow for the examination of the impact of the observed firm specific variables (Wooldridge, 2002). We first test for the appropriate specification comparing the pooled OLS regression, REM, and FEM. If FEM proves to be the correct specification, we estimate an additional model to evaluate the effects of the observable firm characteristics of interest (Wooldridge, 2003). The specification is a random effects model with residuals from the fixed effects model as a dependent variable, the explanatory variables are the observed firm specific variables of interest. In this specification, there is no variation in time

⁴³More than 70% of firms in Slovakia reported their profit, while the fraction in the Czech Republic is only around 50%.

⁴⁴Available on request.

⁴⁵Data about the amounts assigned are not available.

any longer, all we measure is the ‘between’ variation across firms.

As discussed in the data section, we need to cope with a typical problem of survey data, sample selection. We can deal with this problem to some extent because we have data for sponsoring and giving—we have information also for firms that did not give but sponsored and vice versa. This makes it possible to employ Heckman’s two step procedure (Green, 1993) to account for the potential self-selection of firms. In the first step we estimate the selection equation using probit on the participation (separately for sponsoring and giving) decision. In the second step we estimate the appropriate specification as identified above with the selection parameter λ among the explanatory variables.

The main drawback of FEM is that it cannot account for the fact that data are in intervals, we estimate the models using the middle points of the reporting intervals. Interval regression is possible only in REM—an ordered probit model estimated using maximum likelihood.⁴⁶ We therefore estimate the random effects interval regression for comparison. To account for the simultaneity of the choices in giving and sponsoring we estimate also a system of seemingly unrelated equations.

Models explaining the amounts spent on sponsoring or giving exhibit one additional problem: potential endogeneity of profit. The optimal donations depends on the corporate characteristics, profitability being one of them, but, we assume that donations also affect profit of the company. Hence, including profit among the explanatory variables results in an endogeneity problem that should be fixed using instrumental variables. Unfortunately, the data we have at our disposal do not provide any potential instruments.⁴⁷ It is, therefore, not possible to test for endogeneity. To avoid the endogeneity problem in our analysis we do not include profit among the explanatory variables. In this way we also avoid the problem of incidental truncation caused by the potential nonrandom profit reporting, as discussed in the data section above.⁴⁸

⁴⁶There is not sufficient statistics to estimate conditional fixed effects, the estimates in unconditional fixed effects are biased (Stata manual).

⁴⁷We created an instrument using the profitability of the industry, i.e., average profit of all other companies in the market. However, the number of companies within industry groups was too small (if we wanted to maintain some industry structure). Thus, the variable did not properly instrument for the omitted profit and we did not use it in the analysis further on.

⁴⁸Exclusion of profit may cause an omitted variable bias. We compared the coefficients at the other variables in the specifications with and without profit and the differences were negligible, thus, the omitted variable problem does not seem to play a role.

5.2 Empirical model

The empirical model is based on the theoretical model from Navarro (1988) and extended for the consideration of organizational characteristics. We examine two specifications, one for the amounts spent on sponsoring and one for giving (in the model we denote them generally philanthropy, *Phil*):

$$\begin{aligned} Phil_{i,t} = & \beta_0 + \beta_1 Size_{i,t} + \beta_2 IndD_i + \beta_3 LopD_i + \beta_4 Capital_i + \beta_5 OwnD_i \quad (1) \\ & + \beta_6 FD_i + \beta_7 Year + \beta_8 TaxD_i + \beta_9 CRII_i + \mu. \end{aligned}$$

We use logarithmic transformation of the amount variables, the dependent and applicable explanatory variables, to get estimates of elasticities. The specifications may be estimated on a merged sample (both countries together) or separately for each country, the choice depends on the similarity of the two countries.

The explanatory variables are:

Size, variable capturing the size of the company, used to normalize the levels of giving (big companies give more in absolute values). Size is measured by two variables: *Sales*, the volume of sales and *NoE*, number of employees.

IndD, dummy variables indicating different industries: manufacturing, retail, and services. They capture possible differences in the reliance on philanthropy across different industries. The industries closer to their customers are expected to give more. We use services as the benchmark group.

LopD, categorical variable indicating the level of operation: international, national, and regional. This variable captures the potential power and expectations of company's stakeholders.

Capital, dummy variable indicating firms located in the capital, Bratislava or Prague.

OwnD, dummy variables indicating different ownership structures: foreign, mixed, and domestic. The variables are expected to capture the differences in the philanthropic culture and behavior of domestic and foreign owners.

FD, dummy variable distinguishing firms with a foundation or a foundation fund. It captures possible strategic philanthropic behavior of a firm, signaling higher engagement in philanthropy.

Year, categorical variable capturing the possible time trend in giving.

TaxD, represents four dummy variables indicating different corporate tax rates.

There were three different tax rates in Slovakia, and three in the Czech Republic, see Table 1. Tax dummies are denoted Tax1 SR (year 2001), Tax2 SR (2002-2003), Tax3 SR (2004), Tax1 CR (2001-2003), Tax2 CR (2004), Tax3 CR (2005). Two for each country are included in the regressions, setting the third one as a benchmark.

CR II, dummy variable denoting the additional, second sample for the Czech Republic. Details about the sample are in the data section.

5.3 Results

5.3.1 Participation

In this section we report results on participation in sponsoring, giving, and, in the Slovak Republic, assignation. The sponsoring and giving specifications are used to obtain the estimate of the selection parameter, λ , to correct for selectivity in the expenditures specifications of interest that follow. We tested for the equality of coefficients in the two countries. The hypothesis was rejected and we therefore estimate the model separately for the Czech and the Slovak Republics. We performed a similar test comparing the first and second Czech sample, where we failed to reject the hypothesis of equal coefficients. Therefore, we merged the two samples, but to account for a difference in the levels⁴⁹ using a dummy variable denoting the second sample, *CR II*. In both cases we estimated a linear probability model, probit, and a system of seemingly unrelated equations. Here we report, Table 4, only results from probit random effects, because we use it further for the Heckman's selection correction and the fact that results from the other models do not differ significantly.⁵⁰

Several results on participation were summarized in Table 3; we observed that participation of firms in sponsoring was similar in both countries, but the Czech firms gave significantly more often. This offers some support for Hypothesis 2 that sponsoring is preferred to giving in Slovakia. We also observed that only approximately half of Slovak firms participate in assignation, a very low number if we take into account that assignations impose only negligible costs (administrative) on the company. This may be caused by two factors discussed in more detail below: low profitability of firms (positive profits, thus, positive tax dues, are a necessary condition for assignation), and lack of interest in the subject.

The results summarized in Table 4 offer some support for Hypothesis 3 that big firms are more active in philanthropy. We observe that in both countries size of the

⁴⁹The original sample included several large donors.

⁵⁰Results from the other estimations are available on request.

company (measured by the number of employees and sales) increases engagement in both sponsoring and giving. Sales have similar effect on both; the number of employees increases giving more than sponsoring. This result is in line with the profit maximization hypothesis because a higher number of employees means higher importance of labor force for profitability, thus, greater pressure on responsible behavior of the corporations towards their employees. Number of employees has a very strong positive effect on giving in Slovakia, suggesting that small companies are involved in giving significantly less often than those in the Czech Republic. This result hints that the philanthropic culture, particularly among small firms, is not as developed in Slovakia as it is in the Czech Republic. Firms with few employees, though, do sponsor and participate in assignation. In summary, small firms seem to be interested in philanthropy, the problem may be in the lack of resources.

The effect of industry, Hypothesis 5, differs between the two countries: in Slovakia firms in retail are the most active in both sponsoring and giving. We do not observe any difference in the participation of firms in manufacturing and services. In the Czech Republic, however, we observe no difference between the industries in giving, but firms in services (the omitted category) are the most active in sponsoring. Thus, we observe that industry indeed affects the charitable behavior of companies though we do not find support for Hypothesis 5 that firms in services participate more with the exception of sponsoring in the Czech Republic. These results suggest that despite the closer link between the firms in services and their customers and the low mobility of these companies, stakeholders lack either power or willingness to induce engagement in philanthropy.

Results regarding the level of operation, Hypothesis 6, show opposite results in the two countries: in Slovakia, firms at the international level participate significantly more in both sponsoring and giving; in the Czech Republic we observe no difference in sponsoring, but local and regional firms participate more in giving. This again suggests that Slovak philanthropic culture lags behind that in the Czech Republic, with philanthropy still being a domain of large and internationally operating firms. In addition, stakeholders in Slovakia seem to be less powerful, unable to induce participation of firms at the local levels.

The effect of ownership is explored in three categories: foreign, mixed, and domestic. We find weak support for Hypothesis 4 in the Czech Republic, foreign firms engage more in giving. But, Hypothesis 4 is not supported in Slovakia, foreign firms do not differ from firms with other ownerships in giving and they participate less in sponsoring and assignations. This result is unexpected, it shows that foreign

Table 4: Participation, random effects probit

	Sponsoring			Giving			Assignment		
	CR		SR	CR		SR	SR		
Number of employees	0.61	*	-0.56	0.91	***	1.09	**	-0.97	*
	(0.33)		(0.49)	(0.32)		(0.52)		(0.51)	
Sales log	0.32	***	0.40	**	0.35	***	0.23	0.91	***
	(0.07)		(0.18)		(0.07)		(0.19)	(0.22)	
Manufacturing	-0.69	**	1.08		-0.06		0.26	0.96	
	(0.34)		(0.73)		(0.33)		(0.70)	(0.71)	
Retail	-0.58	*	1.60	**	0.42		1.74	**	0.68
	(0.32)		(0.75)		(0.37)		(0.72)	(0.74)	
Level of operation	-0.13		-1.93	***	0.84	***	-1.01	**	-1.52
	(0.24)		(0.39)		(0.23)		(0.38)	(0.41)	***
Capital	-1.08	**	-0.04		-1.36	***	-2.23	***	2.33
	(0.44)		(0.92)		(0.45)		(0.85)	(0.99)	**
Foreign own	1.28		-5.40	***	1.28	*	-0.20	-1.71	*
	(0.89)		(1.04)		(0.75)		(0.96)	(1.0)	
Mixed own	0.54		-0.27		-0.51		1.09	-1.16	
	(0.45)		(0.72)		(0.44)		(0.67)	(0.75)	
CR II	-0.74				0.06				
	(0.60)				(0.59)				
Year	0.30	***	0.02		0.32	***	0.10	0.29	
	(0.08)		(0.39)		(0.07)		(0.34)	(0.30)	
Tax1 CR	0.19				-0.64				
	(0.57)				(0.60)				
Tax2 CR	0.28				0.05				
	(0.63)				(0.65)				
Tax1 SR			-0.05				-0.24		
			(0.68)				(0.60)		
Tax3 SR			-0.13				0.09		
			(0.66)				(0.58)		
Const	-3.61	***	1.25		-6.21	***	-3.13	-6.36	
	(1.12)		(2.37)		(1.19)		(2.44)	(2.75)	
No. of obs.	1665		504		1665		504	254	
Log-likelihood	-608.92		-107.12		-611.94		-139.33	94.57	

Standard errors are in parentheses.

*** denotes significant difference at 1%, ** at 5%, * at 1%

Tax1 CR denotes the first tax period in the CR, 2001-2003, Tax2 CR, 2004.

Tax1 SR denotes the first tax period in Slovakia, 2001, Tax3 SR the last one, 2004. See Table 1 for details.

firms lag in sponsoring but we cannot conclude that they are the leaders in giving. The lack of difference in giving in Slovakia may as well be caused by the fact that all companies are similarly inactive rather than active. These results, however, do not yet show the extent of their engagement.

The effect of being located in the capital, Hypothesis 7, is negative: firms in the capitals engage significantly less in philanthropy than firms in the other regions. We cannot distinguish what drives this result, whether free riding, as the number of firms in the capitals is higher than in other regions,⁵¹ or the anonymity of the city, which could make it more difficult to establish partnerships.

Finally, we observe a strong positive impact of time on participation in the Czech Republic. This trend is missing in Slovakia. We observe no significant impact of the changes in tax rates contrary to our expectations particularly in Slovakia (Hypothesis 1), though the missing growth in Slovakia offers partial support for the negative impact of these changes.⁵²

5.3.2 Expenditures on philanthropy

Tables 5 and 6 summarize results from the main specifications for the expenditures on sponsoring and giving.⁵³ To account for the potential selection bias we include among the explanatory variables Heckman's lambda obtained from the participation equations summarized in the previous section. As in the previous analysis we merge the two Czech samples and analyze Slovakia separately. We used the Hausmann test to compare the suitability of the fixed and random effects, the test rejected the null hypothesis of independence of the firm specific effects and error term in both specifications; thus, we estimated FEM with the results summarized in Table 5.⁵⁴ In order to test the hypotheses regarding the observed firm characteristics we estimated a random effects model on the residuals from the fixed effects regression as described in the methodology section above. Results from these estimations are summarized in Table 6.⁵⁵

⁵¹www.czso.cz, www.statistics.sk

⁵²We suspect that corporate philanthropy in Slovakia has similar 'potential' to grow as in the Czech Republic, due to the favorable economic evolution, GDP growth, as well as development of infrastructure supporting corporate philanthropy as summarized in section 3 above.

⁵³We have no information on expenditures on assignments. The reason was that assignments are fixed to be below 2% of due taxes with no incentives to assign less than 2%.

⁵⁴We also tested for suitability of panel data estimation versus stacked pooled data estimation, the test rejected the pooled estimation.

⁵⁵We provide only results from the fixed and random effects, the results from the control treatments (interval regression, seemingly unrelated regression) did not differ significantly and are available on request.

First, we observe that the coefficients at Heckman’s lambda are insignificant in Slovakia, i.e., the selection bias in this case does not present a major hurdle. Therefore, in the decomposition regression below we report results from the models without correcting for the selection bias.⁵⁶ The coefficients in the fixed effects specification are insignificant even though the explanatory power of the models is rather high (as measured by the *AdjustedR*²). The main explanatory power, therefore, comes from the firm specific characteristics, which we cannot observe in this specification but explore below in the regression on residuals.

We do not identify any significant differences either between giving and sponsoring or between the two countries. Sales have no effect on the expenditures on philanthropy with the exception of giving in the Czech Republic. Thus, if a firm chooses to participate in philanthropy then its expenditures do not depend on its size and, possibly, financial situation.⁵⁷ We do not observe any time trend in any of the specifications. This is caused by the fact that growth already appears in the participation decision—once a firm decides to participate in philanthropy its expenditures remain stable in real terms.

We fail to support Hypothesis 2, that there is a difference in the effect of tax rate on sponsoring and giving because the tax rate does not have a significant effect on either of the amounts spent. Moreover, observing no significant coefficient at *Tax3 SR*, a dummy variable capturing the 2004 change in the legislation, we fail to support Hypothesis 1 that giving in Slovakia decreased significantly after this change. The only evidence we have to this end is the missing growth of participation (contrary to the Czech case) described in the previous section.

To test the organizational theories’ hypotheses we turn to the random effects model estimated on the residuals from the fixed effects regression, Table 6.⁵⁸ When looking at the results it is necessary to keep in mind that we analyze only the information for firms that gave or sponsored (in at least one year) and reported the information on their sales.

Size, measured by the *Number of employees*, has no effect on the expenditures on sponsoring. In giving, however, we observe an opposing effect in the two countries: in the Czech Republic small firms give more than firms with many employees, the opposite is true in Slovakia. Results are in line with those regarding participation: participation in sponsoring increases in the financial size of the company, the

⁵⁶We do not provide results from the fixed effect estimation as they are similar to those provided.

⁵⁷Sales are positively correlated with profitability.

⁵⁸The estimations in Slovakia are on residuals from fixed effects regressions without correction for the selection bias.

Table 5: Expenditures, fixed effects specification with correction for selection bias

	Sponsoring		Giving	
	CR	SR	CR	SR
Sales log	0.41 (0.28)	-0.06 (0.26)	0.45 *** (0.16)	0.03 (0.42)
Year	0.08 (0.07)	0.09 (0.08)	0.06 (0.06)	-0.05 (0.16)
Tax1 CR	0.03 (0.17)		-0.17 (0.21)	
Tax2 CR	0.09 (0.14)		-0.001 (0.16)	
Tax1 SR		0.22 (0.16)		0.15 (0.31)
Tax3 SR		-0.17 (0.17)		0.06 (0.28)
Inv. Mills	-1.18 * (0.70)	-2.02 (1.61)	-1.18 *** (0.42)	-1.38 (0.99)
Const	1.27 (3.11)	4.73 (3.49)	0.63 (1.77)	3.94 (5.18)
<i>Adj.R</i> ²	0.59	0.9	0.67	0.76
No. of obs.	1062	312	1183	229

Standard errors are in parentheses.

*** denotes significant difference at 1%, ** at 5%, * at 1%

number of employees has positive effect only in the Czech Republic. Participation in giving, on the other hand, increases more significantly as the number of employees increases. The effect is stronger in Slovakia, where a high number of employees increases also expenditures. This result further supports the hypothesis that the development of philanthropic culture, particularly among small firms, is lagging in Slovakia.

The impact of ownership differs between sponsoring and giving: while ownership has no effect on expenditures on sponsoring, foreign owned firms spend significantly less than the domestic ones on giving. Thus, foreign firms are not the leaders in philanthropy. In addition, foreign owners are more profit oriented, preferring sponsoring to giving as a cheaper and simpler tool of support. To further test this hypothesis in Slovakia we added additional explanatory variables to the regression—interaction terms between the year 2004 and ownership, as the change in 2004 was expected to have the strongest effect on philanthropy. Results are listed in the third column of Table 6 for both sponsoring and giving. The results, indeed, show support for the expectation. While the domestic firms did not change

Table 6: Expenditures, decomposition of firm effects

	Sponsoring			Giving		
	CR	SR	SR 2	CR	SR	SR 2
Number of employees	- 0.09 (0.12)	0.25 (0.27)	0.25 (0.27)	-0.57 *** (0.16)	0.54 * (0.28)	0.54 * (0.28)
Manufacturing	0.30 (0.22)	0.72 (0.52)	0.72 (0.52)	-0.02 (0.29)	-0.98 ** (0.42)	-1.0 ** (0.42)
Retail	-0.07 (0.27)	0.57 (0.59)	0.58 (0.59)	-0.54 * (0.31)	-0.81 * (0.45)	-0.84 * (0.44)
Level of operation	0.42 *** (0.14)	-0.61 * (0.33)	-0.60 * (0.33)	-0.26 (0.18)	-0.34 (0.24)	-0.34 (0.23)
Foundation	0.58 ** (0.24)	-0.001 (0.96)	-0.007 (0.95)	0.97 *** (0.37)	-0.64 (0.81)	-0.64 (0.81)
Capital	-0.12 (0.27)	-0.61 (0.48)	-0.61 (0.48)	0.56 * (0.31)	1.09 (0.94)	0.94 (0.85)
Foreign	-0.45 (0.30)	1.36 (0.98)	1.15 (0.97)	-1.11 ** (0.45)	-1.72 * (0.99)	-1.46 (0.91)
Mixed	-0.26 (0.26)	-0.20 (0.52)	-0.32 (0.52)	-0.28 (0.36)	-0.57 (0.39)	-0.80 (0.41)
Foreign 2004			0.71 *** (0.20)			-0.80 (0.58)
Mixed 2004			0.33 *** (0.11)			0.67 (0.49)
Domestic 2004			-0.15 (0.14)			-0.13 (0.15)
CR II	-2.03 *** (0.21)			-2.50 *** (0.24)		
Const	-0.62 *** (0.49)	0.48 (0.93)	0.51 (0.95)	2.07 *** (0.60)	0.76 (0.78)	0.82 (0.79)

Standard errors are in parentheses.

*** denotes significant difference at 1%, ** at 5%, * at 1%, (*) at 11%.

SR 2 denotes additional specification to examine the impact of the change in 2004 on different ownership forms.

their behavior significantly in 2004, foreign firms did—they increased expenditures on sponsoring, the effect on giving is negative but not significant. This result suggest that sponsoring and giving are substitutes and the profit-oriented firms shift towards the cheaper one.

We observe no difference in spending on sponsoring among industries; firms in retail, and in Slovakia also those in manufacturing, spend less on giving. Thus, we partially support Hypothesis 5 that firms in services give most (though they give least often), followed by firms in retail and manufacturing. The difference between sponsoring and giving may result from their different nature, giving being a result of stakeholders' pressures and their closeness to the company, sponsoring being

aimed at attracting customers, similar to advertising.

The level of operation, Hypothesis 6, matters only for the expenditures on sponsoring. In the Czech Republic regionally operating firms spend more on sponsoring, in Slovakia they spend the least. We observe no differences in giving. The absence of a difference in expenditures between firms at the international and local level is positive, though, we have to keep in mind that the local firms in Slovakia do participate significantly less often.

Regarding Hypothesis 7, we observe that firms in Prague spend more on giving than firms in other regions. We observe no other difference. We are not able to identify the specific motives for such behavior; one possible reason is the positive correlation between profitability and location in Prague. As we do not control for profits in the specification, location might capture some of this effect.

We observe that levels in the second sample are significantly below the levels in the old one. The Chow test of similarity of coefficients failed to reject the hypothesis of no difference, the only difference is in the level captured by *CR II*. This is possibly caused by the non-random choice of some participants in the original Czech survey, the important donors. Even though the additional companies were chosen so that the sample would become representative, inclusion of these major donors may cause the upward bias in the level of giving.

To address the problem of the bad structure of the first interval in the original Czech sample we estimated the same specifications using common intervals, in addition, we did not use the middle point of the first interval but the average of the observations obtained from the additional samples. This estimation was used to observe the effect of the merging of the first interval. The results from this control treatment did not differ significantly from the results presented above, with one exception: the coefficients at two tax dummies (Tax2 CR, Tax1 SR) were significant.⁵⁹ This difference suggests that merging the intervals may emphasize differences that would otherwise remain unobservable. On the other hand, the large intervals were not created with any theory in mind, thus, the observed effect is likely to be artificial choosing another merging of intervals would probably lead to a different result. Nevertheless, the obtained results offer some support to the hypothesis that there is a difference in the motivation for sponsoring and giving.

⁵⁹Results from this estimation are available on request.

5.4 Discussion

In this section we briefly discuss the problems with the performed analysis and describe what would an ideal data set look like.

The official source of data on corporate philanthropy would be the tax office, which obtains the information on corporate giving when firms claim deduction on their donations. There are, however, several problems with such data. Most importantly, these data are usually not available at the individual firm level, but only in aggregates. But, even if it was possible to obtain the individual data, they would not provide the complete picture of corporate philanthropy—first, they do not capture sponsoring, which enters the books as costs within the broader category of spending on promotion. In addition, evidence from the U.S.A. shows that small firms in particular often do not claim deductions on their donations, biasing the picture further (Muirhead, 1999).

Therefore, it is necessary to collect the data using a survey, a method with several drawbacks that need to be accounted for. The first problem arises with sampling: data collected in surveys are subject to sample selection such that information is only available for firms that agree to participate. This problem can be addressed using methods such as the Heckman two-step procedure (Wooldridge, 2002), which imposes additional restrictions on estimation. Ideally, to ensure identification it is necessary to have additional explanatory variables, otherwise the estimation hinges on the assumption of normality of the distribution and the fact that the selection estimation is nonlinear.

Quality of the collected data poses another problem. Firms are often not very forthcoming in reporting the expenditures on sponsoring or giving. This bias though seems to play only a minor role in our study: once firms agreed to be surveyed they were willing to report the specific amounts as well. In the Slovak sample 63% to 70% of the firms that gave were willing to report the specific amount given (the responsiveness varied over time). The rate was even higher for sponsoring, on average 75% reported also the specific amount. Responsiveness may vary with the survey method used, only 55% reported the amounts in survey reported in Marček & Dluhá (2002).

There remains a significant fraction of firms that prefer to report the information in intervals. Here, it is necessary to design the structure of the reporting intervals so that the survey does reveal as much information as possible. Ideally, the survey should be designed in steps. First, there should be a preliminary search for the distribution of giving. Then, the intervals for the actual survey should be designed

to best capture the information obtained.⁶⁰

An important problem with the present data set is the promised anonymity of the participating subjects, which makes their later identification (even for research purposes) impossible. Thus, it is necessary to ensure sufficient identification of subjects to enable merging with additional information from other data sources. It is possible, to some extent, to substitute this by asking additional questions in the survey, but, it may increase the costs of surveying. In addition, it is always valuable to be able to compare data from different sources to ensure their quality.

6 Conclusion

In this study we analyzed corporate philanthropic behavior of firms in two transition countries, Czech Republic and Slovakia using survey data of 739 firms in the CR and 152 in Slovakia. The results reveal that despite the long common history of the two countries there are significant differences in the current philanthropic behavior of firms. Namely, firms in the Czech Republic give more often and give significantly more than firms in Slovakia. In addition, giving in Slovakia is more prevalent among large firms operating at the international level, while in the Czech Republic smaller, regional firms also participate. These differences between the countries seem to be caused by the differences in profitability, further enforced by missing ‘leaders’ in Slovakia, i.e., large Slovak firms give less than large Czech firms. The differences in sponsoring are of a smaller extent.

One of the major questions of this study was the impact of taxes—did the decreasing corporate tax rates affect corporate philanthropy? If we looked only at the significance of tax variables the answer would be no, none of the changes had significant impact on either sponsoring or giving. But, these results need to be considered with caution because the changes in the tax rates in the Czech Republic were rather minor. In Slovakia, the changes were more significant, in particular the change in 2004. However, even this change does not have significant impact on the giving. Unfortunately, the insignificance of this coefficient may be caused by the nature of the data which does not allow to clearly distinguish the year specific effects from the impact of the changes in the tax rate. The fact that while in the Czech Republic we observe a significant growth in participation in both sponsoring and giving and participation in Slovakia has remained stable despite significant

⁶⁰We implemented this procedure in the additional surveys. We obtained the data for the CR after they have been collected, i.e., we were not able to influence the design of this survey.

economic growth and activities in support of corporate philanthropy suggests that the impact of the tax change in the year 2004 may be negated by the potential growth.

To further evaluate the impact of the tax change in 2004 in Slovakia we analyzed it separately for firms with different ownership. We observed that while the change had no effect on firms with domestic or mixed ownership, it had a significant effect on firms with foreign owners that shifted their support to sponsoring in 2004, suggesting that foreign firms are better in optimizing their tax benefits than domestic companies. In general, though, we did not find support for the hypothesis that firms with foreign capital give or sponsor more. We observed that foreign owned firms in the CR give more often, but their expenditures are below those of other firms. Participation of foreign owned firms in Slovakia is significantly below participation of domestic firms in sponsoring. Their expenditures in sponsoring are similar, but they are significantly below those of domestic firms in giving.

We failed to support our hypothesis regarding higher engagement of firms in services with the exception of sponsoring in the CR. Their expenditures in giving, however, are the highest in both countries. This may result from the fact that profitability of firms in services is the lowest when compared to the other industries, having negative effect on participation. On the other hand, once they start to engage in philanthropy they, possibly because of their close relationships with stakeholders, give more.

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