Entrepreneurial Orientation and Philanthropy in SMEs

Tomasz Mickiewicz, Arnis Sauka and Ute Stephan
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ABSTRACT

The paper analyses the entrepreneurial orientation – philanthropy link in small and medium size enterprises (SMEs). We find that SMEs that score highest on entrepreneurial orientation construct, those that have foreign owners, and those that are larger, are also most likely to declare their commitment to philanthropy. Our results are based on confirmatory factor analysis combined with regression analysis, using a representative survey of SMEs from Lithuania. Our findings that the most entrepreneurial firms are also the ones most involved in philanthropy shed light on the micro foundations of the model of development that emphasises consistency between the business initiative and the social initiative.

Keywords: Philanthropy, Entrepreneurial orientation, SME, Foreign ownership, Slack resources, Lithuania

JEL codes: D22, D64, L21, L26, M14, P30

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We are grateful to the editor, the anonymous referees of this journal and to both participants and anonymous referees of Babson College BCERC and Academy of Management (Entrepreneurship Division) conferences for helpful comments. We also acknowledge financial support by the European Commission (AIGIS project, Grant Agreement no. 225134 as well as SELUSI project FP7-SSH-2007-1, Grant Agreement no. 217622). Stan Mickiewicz provided valuable assistance. We are also grateful to John M. Mueller for discussion.
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1. Introduction

As argued convincingly by Acs and Phillips (2002) it is not only “the creation of wealth (entrepreneurship)” but also “the reconstitution of wealth (philanthropy)”, which has been essential for the inherent dynamism of the market economy (Ibid., p.201). Moreover, a recent shift from the industrial to the entrepreneurial economy creates new opportunities for strengthening the links between entrepreneurship and philanthropy. These links are most effective when focused on local action; that is when they represent small-scale projects based on face-to-face contacts, supported by reputation and community membership. Accordingly, the most effective forms of philanthropy rely on the use of decentralised knowledge and on a good understanding of local conditions (Boettke and Rathbone 2002). Under these conditions, the decentralised wealth creation (entrepreneurship) spills over onto non-profit projects embedded in the civic society. In this way, activities creating both social and economic values become mutually reinforcing.

However, our understanding of the more specific mechanisms that link entrepreneurship with philanthropy is still insufficient; with respect to the firm-level in particular. Focusing on this gap in the literature, we develop a theoretical argument linking the entrepreneurship-oriented strategies of small businesses with their pro-social orientation, and specifically with their engagement in philanthropy. This leads us to formulate empirical hypotheses related to the entrepreneurial orientation (EO)-philanthropy nexus that we test using a survey data based on interviews with owners-managers of small and medium-sized enterprises (SMEs) in Lithuania. We further account for and test two additional explanations of engagement in philanthropy. First, firms can ‘afford’ to engage in philanthropy when they have more of so-called slack resources available. Second, we posit that small firms with wider international exposure may be particularly motivated to engage in philanthropy.

We conduct our study in the institutional context of Lithuania, which differs from that of the leading developed market economies, United States in particular. Lithuania is a country on which a command economy system, alien to entrepreneurship and private initiative, was inflicted for over half of century, and lasted until the end of the Soviet occupation in 1991 (Aidis 2004). Yet the country was able to rebuild the basic formal institutional structure of the market economy relatively fast and joined the European Union in 2004. At the same time, informal institutions change more slowly (North 1990) and the Soviet system left a legacy of distrust and values conducive to entrepreneurship, including autonomy and mastery, have been particularly weak initially (Sztompka 1996; Schwartz and Bardi 1997). To address this issue, we apply additional robustness checks based
on the proposition introduced by Estrin and Mickiewicz (2011), namely that informal values are generation-specific and therefore should be reflected in the pattern of impact of age profiles on variables of interest.

Yet, apart from enhancing our understanding of the link between entrepreneurial orientation and philanthropy in the context of a newly liberalised economy, we also believe that findings from our research have a more general interpretation. As observed by Acs and Phillips (2002), focussing on the link between entrepreneurship and philanthropy leads to more general questions, challenging common assumptions about human economic behaviour, and about the motivation, objectives and attitudes behind the economic activity of individuals and firms. In particular, we are interested to see if the cluster of strategies of firms conducive to entrepreneurship (entrepreneurial orientation, see: Miller 1983; Covin and Slevin 1989; Lumpkin and Dess 1996; Covin and Wales 2011) is consistent or contradictory with philanthropy. In other words, is philanthropy strongly associated with attitudes and strategies underpinning entrepreneurship, or is it an entrepreneurial anomaly, relying on a minority of economic actors who support wider, non-economic community? We are able to shed some light on these questions with respect to Lithuania, but as we argue our answers may hold for other institutional contexts; we also hope this will lead to further exploration and research.

The paper is organised as follows. We discuss the concept of entrepreneurial orientation (EO) and the links between EO, firm’s resources and internalisation with philanthropy. We formulate our hypotheses. Next, we discuss to which extent the Soviet legacy could affect the entrepreneurship – philanthropy nexus in Lithuania. In the following sections of the paper we discuss our sample, methods, robustness checks, results, and offer final conclusions.

2. Conceptual framework

Traditionally, entrepreneurial behaviour has been regarded as individualistic, that is driven by the desire not only to earn profits but also to add to power and prestige (e.g., Hayton et al. 2002). Recent research however, challenges this view suggesting that entrepreneurial behaviour is simultaneously driven by a multitude of motives of which earning money and prestige, for instance, are not necessarily the primary ones. Additional or alternative motives include self-realisation, creativity, autonomy and independence, and also giving back to society, amongst others (e.g., Birley and Westhead, 1994; Gorgievski et al. 2011; Kuratko et al. 1997; Van Praag and Versloot 2007).

Parallel to this, some studies even suggest that entrepreneurs may thrive in collectivist cultures, rich in social networks (Hofstede et al. 2004; Kwon and Arenius 2008; Stephan and Uhlner, 20010; Pnillosand Reyes
2009). There is also some inherent ambiguity in the term ‘individualism’ (Schwartz 1990). As argued by Fukuyama (1995), some of the societies perceived as ‘individualistic’ are at the same time rich in self-organisation. Consistent with the perspective adopted by Acs and Phillips (2002) and Boettke and Rathbone (2002), this self-organisation is based on mutual links between private economic and social non-profit initiatives. Accordingly, we expect the common measure of entrepreneurship at firm level, i.e. entrepreneurial orientation (EO) to be consistent with philanthropy. As an indicator of philanthropy we examine whether entrepreneurs contribute financially to the needs of their local community via charitable giving. We assume that dynamic entrepreneurs realize the need to embed in local social structures – both to build social capital and to legitimize their entrepreneurial efforts - and one way to do so is charity. Accordingly, we posit that there is no inherent conflict between an entrepreneurial orientation and philanthropy.

2.1. Entrepreneurial Orientation

Entrepreneurial Orientation (EO) refers to a firm’s strategic posture, i.e. its propensity to act entrepreneurially (Covin and Slevin 1989; Covin and Wales, 2011; Lumpkin and Dess 1996; Miller 1983). More specifically, an entrepreneurial firm is characterized by the emphasis on innovation, risk-taking and pro-activity (Covin and Slevin 1989; Miller 1983). In contrast, a “… non-entrepreneurial firm is one that innovates very little, is highly risk averse, and imitates the moves of competitors instead of leading the way.” (Miller 1983, p.771).

In particular, innovation such as the development of new products, services and processes is often regarded as the key component of EO (e.g. Kreiser et al. 2002). This is in line with classical conceptualizations of entrepreneurship that define innovation at its core (Drucker 1985; Schumpeter 1934; also Wong et al. 2005). Similarly, definitions of corporate entrepreneurship commonly emphasize innovation (e.g., Covin and Miles 1999; Kuratko et al. 2005; Lumpkin and Dess 1996). The EO component of risk-taking refers to a firm pursuing opportunities with high but more uncertain chances of return. Finally, pro-activity describes whether a firm is ahead of the market, i.e. it acts anticipating future market trends and competitors’ reactions.

EO has become one of the most researched concepts in entrepreneurship with a multitude of studies investigating its impact on firm performance and testing its validity in different contexts (e.g. Baker and Sinkula 2009; Hughes and Morgan 2007; Kreiser et al., 2002; Moreno and Casillas, 2008; Short et al. 2009). A recent meta-analysis summarizes over 50 empirical studies drawing on a total sample of over 14,000 firms (Rauch et al. 2009) and finds that a firm’s EO is significantly and positively related to firm performance. The EO-performance relationship is found to be similar using different operational definitions of EO such as the EO questionnaire by Covin and Slevin (1989) versus adaptations of it. Furthermore, the EO-performance link holds across different
operational definitions of a firm’s performance (e.g. growth, profitability) and longitudinal research finds that this relationship becomes stronger when a longer time window is used (Wiklund 1999; Zahra and Covin 1995). Finally, the EO construct can be replicated in different countries (Kreiser et al. 2002; Hansen et al. 2009) and EO is associated with a firm’s performance across different cultural contexts (Rauch et al. 2009). This has important implications for our research, as it suggests that within the context of EO, using a single-country sample may not be such a limiting circumstance as it seems.

2.2. Philanthropy and Entrepreneurial Orientation

The word ‘philanthropy’ has many meanings one of which is ‘other-regarding’ and ‘intending to contribute to the welfare of others’, i.e. doing something for somebody else without expecting an immediate return or personal gain. A firm’s philanthropy is often discussed in the literature with reference to large corporations and their social responsibility initiatives (e.g. Lee 2008; Campbell 2007; Orlitzky et al. 2003). Corporate social performance specifically refers to ‘a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships’ (Wood 1991, p: 693). Thus, corporate social performance includes activities such as giving to charities; the indicator used in the present research. A seminal paper by Caroll (1991) places philanthropy (‘contributing resources to the community’, Ibid., p. 228) at the top of the corporate social responsibility pyramid, being built on the foundations of ethical, legal and economic responsibilities.

One could argue that charitable giving might not be pure ‘social’ behaviour in the sense that it entails a benefit for the organization such as legitimating it in the eyes of stakeholders (Campell 2007; Orlitzky et al. 2003). While the original discussion on corporate social responsibility and the social orientation of enterprises saw it much as an ethical obligation, research to date concentrates on showing performance benefits of adopting CSR for large corporations (Lee 2008). In contrast, our research explores the social orientation of small and medium-sized enterprises and shifts the focus from the social orientation-performance debate to exploring whether a social orientation, in particular philanthropy, is compatible or conflicting with a strategic entrepreneurial orientation. Moreover, there is little literature that explains the motivation of owners/managers of smaller businesses in this context. One exception is Pistrui et al. (2000) who found that need for social and community respect plays a significant role in the motivation of East German entrepreneurs.
In the following we discuss in more detail why philanthropy and entrepreneurial orientation are not in conflict, first - more generally - drawing on the theory of human motivation, and second - more specifically - based on the role that the social milieu plays for small business owners-managers.

EO, as defined in the previous section, appears to be related to the ‘individualistic’ orientation as it is concerned with how a firm can be ahead of the market by innovating, taking risks and adopting a proactive stance towards competition. This appears not to be compatible with a concern about giving back to the community. However, drawing on the probably most comprehensive and well validated theory of human motivation (Schwartz 2005; 2009) we can posit that a social and an entrepreneurial concern are not necessarily at odds. More specifically, an entrepreneurial orientation (innovation, pro-activity, risk-taking) reflects striving for and valuing openness to change, which is a value orientation that previous research in over 70 cultures finds to be compatible, and not conflicting, with a concern for community, nature and distant others, i.e. with a social orientation (Schwartz 1990; 2005).

In addition, the social capital and the legitimacy arguments also suggest that the social and the entrepreneurial orientation can be mutually reinforcing. Social capital can be broadly defined as an ‘instantiated informal norm that promotes co-operation’ (Fukuyama 1995, p:7). Giving back to the community is an act promoting cooperation, thus entrepreneurs can build social capital through philanthropy. Social capital, in turn, has been found to be associated with entrepreneurial success. Specifically, the resources that are made available through wider, community-based networks are often embedded in voluntary associations (as contrasted with narrower, strictly private networks). Those resources include information, money, as well as emotional support and they are crucial for the discovery of entrepreneurial opportunities (Burt 1992; Kwon and Arenius 2008) and for the firm’s success (Aldrich et al. 1987; Bruederland Preisendoerfer 1998; Uzzi 1997).

Moreover, by engaging in philanthropy firms build their legitimacy vis-à-vis stakeholders, the wider public, and the government (including the local government, which is particularly important for small firms), all of which in turn allow the firm to run its operations more effectively (Campell 2007; Orlitzky et al. 2003; Lee 2008). Entrepreneurial firms with their emphasis on being first in the market, e.g. introducing new products, services and processes that might not yet be accepted in the market, may have a higher need to engage in philanthropy in order to build legitimacy for their organization and its new products, services and processes.

This link is highlighted by Zimmerman and Zeitz (2002), who argue that achieving legitimacy is particularly important for growth-oriented firms, as for those firms, wider access to resources is a limiting factor, which legitimacy helps to overcome. In particular, philanthropic activities may have features of both conformance and creation strategies aiming at building business’ legitimacy. Charitable activity indicates that a
business supports societal norms and aims embedded in charitable organisations in its neighbourhood (conformance strategy). At the same time, philanthropy may support new social entrepreneurship ventures, which transforms the environment in which the small business operates (creation strategy). The most direct case of ‘creation strategy’ relates to a firm-sponsored charitable foundation. Taken together, we hypothesize based on social capital and legitimacy arguments that:

Hypothesis 1: Philanthropy (charitable contributions) is positively associated with firm’s entrepreneurial orientation.

2.3. Philanthropy and Slack Resources

Philanthropy may be seen at the top of the corporate responsibility pyramid, in a sense that engagement in philanthropy comes only after some more essential strategic objectives of the firm are satisfied. In particular, for any firm, its ultimate foundations are in economic responsibility, that is in taking proper care of financial and economic objectives of the firm (Carroll 1991). Firms have been found to be more likely to engage in sponsoring of social projects when they have the resources to do so. This corresponds to the so-called ‘slack resources’ view, which is also described as a relationship between ‘having’ and ‘giving’ (e.g. Amato and Amato 2011; Orlitzky et al. 2003; Siebert et al. 2004). Essentially, according this perspective, slack resources enable firms to engage in charitable activities. Slack resources may be non-financial (e.g. labour, spare equipment or materials, office space) and all these resources can be directed towards philanthropy. However, the most typical case relates to slack resources in the discretionary form of cash, transferable with lowest additional transaction cost compared with other resources.

Moreover, the focus on owner-managers, as in our study, is interesting, as firms with no separation of ownership and control face no agency problem. With separation of ownership and control, slack resources could be used in ways that run against the shareholders’ intentions. In contrast, use of slack resources comes at a higher opportunity cost to managers who are also owners of their businesses. Accordingly, in this case, we are able to isolate a resource-availability effect associated with the hierarchy of owners-managers objectives (discussed above), from any issues related to arbitrary use of slack resources by hired managers.

Resources are accumulated as a result of good performance (Orlitzky et al. 2003) and we test whether past performance contributes to a firm’s philanthropic orientation. However, we introduce an additional dimension alongside past performance. Namely, spending away ‘free’ cash resources comes at a higher opportunity cost, in a case when access to external finance is more difficult. With no security of drawing
additional finance, running low cash balances comes at greater risk of temporary external shocks to revenues creating threats to the firm. Accordingly, alongside past performance we also include access to external financing and posit:

**Hypothesis 2:** Philanthropy (charitable contributions) is positively associated with firm’s (a) past performance and (b) access to finance.

### 2.4 Philanthropy and Internationalisation

As argued by Acs and Dana (2001), the process of globalisation leads to institutional learning, and in particular to the spread of the model of philanthropy that is consistent with the long-term development under the market economy system. If so, it is natural to look for the microeconomic foundations of this process. Consistent with this, a stream of recent research focuses on the impact of both international trade and international investment by large multinational companies on pro-social business activities. Philanthropy is analysed alongside more ‘institutionalised’ modes of social engagement (business-social partnership, volunteering, trust funds), and the former may often evolve into the latter (e.g. Amato and Amato 2011; Chapple and Moon 2005; Goyal 2006). In particular, akin to the legitimacy argument discussed above, Goyal (2006) interprets social contribution of multinational companies to the host countries communities as a signalling device used by foreign investors to demonstrate that they have long-term intentions consistent with the local expectations. This in turn triggers positive, supportive response from the host countries governments, but also from firm’s customers, local employees and shareholders (including local shareholders in case of joint ventures). Thus, according to this argument, foreign direct investment (FDI) by large multinational companies is one of the drivers of philanthropy.

At the same time, far less is understood about the links between foreign ownership of small companies and philanthropy. Specifically, Goyal’s (2006) argument, about the strategic nature of interactions between these firms and national governments of host countries, is far less likely to apply here: the small size of those firms make any direct contacts with central government unlikely. A typical case of either favourite or negative tax treatment may be relevant for large multinational companies, but not for a single small-size foreign-owned firm. At the same time however, even small companies may still be both visible and affected by local government and low-level administration, with respect to issues like planning and construction, licensing and environmental regulations. Thus, the signalling / legitimacy argument may still be relevant for small companies, and for those with foreign ownership in particular: coming from outside, the foreign investors are in an even greater need of building their reputation towards the local stakeholders, compared with the local owners. In addition, size and
resource limitations imply that philanthropy, unlike more institutionalised forms of pro-social activities, may be
the most typical form of pro-social activities of small companies, which justifies our focus.

A second argument motivating our expectation of the link between foreign ownership and philanthropy
draws from Acs and Dana (2001) intuitions we referred to above. In particular, we would expect that companies
that have wider international contacts, both as a result of having foreign investors but also of exporting, are more
exposed to business cultures in which pro-social attitudes are embedded and therefore, via the processes of
organisational learning and adaptation, are likely to import these attitudes and strategies. Accordingly, we
hypothesise:

**Hypothesis 3:** Philanthropy (charitable contributions) is positively associated with a degree of firm’s
internationalization as captured by (a) presence of foreign investors and (b) export share.

### 2.5 Soviet legacy

The three hypotheses we declared above are of general nature and include no business environment
specific characteristics. Yet we need to consider if and to which extent the business environment corresponding
to our empirical sample may affect some of the associations we hypothesise. Similar to other countries in Central
Europe, entrepreneurship re-emerged in Lithuania as one of the key drivers of economic recovery in the early
1990s. The new enterprises could quickly fill domestic market gaps inherited from the command economy
system of supply and identify exporting opportunities (Aidis 2004; Aidis and Mickiewicz 2006).

Despite the initial wave of entrepreneurship in Central Europe, the Soviet system left a legacy of social
attitudes that were not conducive to entrepreneurship and the rates of entrepreneurial entry remained relatively
lower compared with other countries at a similar level of development in Far East Asia and Latin America
(Estrin and Mickiewicz 2011). Some of those inherited attitudes are not only detrimental to entrepreneurship
(Ibid.) but also to any private sector self-organisation, including philanthropy-based non-profit activities
(Boettke and Rathbone 2002).

However, there are reasons to believe that the impact of the Soviet past plays a much smaller role in
Lithuania than in most other former Soviet republics. First, (similar to Latvia and Estonia) the period of
Communism was shorter in Lithuania, compared with most of the other former Soviet republics, therefore some
cultural traits were better preserved from an earlier pre-Second World War period. Second, economic policies in
Lithuania, which reflect public attitudes, are more pro-market than elsewhere, including a flat income tax. More
broadly, one key measure of the public attitudes and resulting policies is related to the expectations about the
strong organising role of the government. These attitudes have an impact on economic policy choices and we may proxy the latter by the size of government expenses in GDP, which has been demonstrated to affect entrepreneurship in a negative way (Aidis et al. 2010). However, Lithuania with 29% of GDP being redistributed by the state budget, scores favourably when compared with some other economies in the region\(^1\). Thirdly, while the Soviet economic system was detrimental both for entrepreneurship and for non-profit private self-organisation, the entrepreneurial talent of those who were least risk averse was channelled into illegal entrepreneurship. Apart from a narrow licensed craft sector, all entrepreneurship was illegal: under the command economy system any private economic initiative starting with a simple trade of basic commodities could be prosecuted. Nevertheless, over time, enforcement had became weak, and during the final stage of the communist system, this shadow entrepreneurial sector in Lithuania was thriving. Aidis and Praag (2007) document that this experience of economic activity in Lithuania was a significant factor associated with the development of attitudes that were conducive to entrepreneurship in the market economy shortly after.

Thus, we have reasons to believe that the influence of the Soviet past on Lithuanian businesses is by now limited and lessons we learn for this economy have wider implications. However, we will return to this question when discussing empirical robustness of the results.

3. Sample and Methods

3.1 Sample

The present study draws on 270 randomly sampled phone interviews with owners and owner-managers of small and medium-sized enterprises (SMEs), i.e. firms with less than 250 employees. Interviews were conducted in Lithuania during January-March, 2008. The firm contact information was obtained from the official statistics compiled by the Lithuanian State Enterprise Centre of Registers.

The sampling frame was 800 randomly selected companies from the official register. Out of the list of 800 firms, 238 companies could not be contacted (either moved to another office and the new tenants could not provide the correct contact information, or the phone line was not in use anymore). Additionally, 42 phone numbers appeared to be non-existent, which can be explained either by the probability that those companies have

\(^1\)Government expenses as a percentage of GDP are at the level similar to 28% in neighbouring Latvia, but lower than 34% in Poland, and much smaller than 43% observed in Hungary. They also remain at the lower end of the European Union spectrum (on par with Germany at 29%, but far less than 44% in France). On the other hand, the difference becomes significant, when we compare Lithuania to some dynamic economies on a similar level of development in other parts of the world, for instance Korea (20%) or Chile (17%) (all data from World Bank, *World Development Indicators* database and relates to 2007).
gone out of business or by errors in the company registry. During the initial contact phase, the company representatives (usually administrators or secretaries) were informed about the study, and were asked for direct contact with the owner or owner-manager.

Out of 520 companies that we established contact with, 162 refused to connect us to the top person(s), which was typically motivated by time constraints, winter holidays or other reasons. Talking directly to the owners/owner-managers of the firm, in 83 cases the respondents declared that they had no willingness to participate in the survey. Finally, 275 owners or owner-managers of SMEs agreed to be interviewed, and the corresponding number of questionnaires was filled in, which gives an overall response rate of 34.4%. Five of those 275 were excluded from the present analyses due to missing data. On average, interviews lasted 15 minutes.

The final sample represented 270 enterprises from the five largest Lithuanian cities as well as 27 other smaller towns. The enterprises were on average six years old (Mean (M): 5.98, Standard Deviation (SD): 2.02) and had a mean of 18 employees (M: 18.47, SD: 23.68). The enterprises were active in retail trade (10.0% of sample), wholesale trade (16.3%), construction (14.4%), manufacturing (17.4%) and other services (41.5%).

To verify how representative our data is, we compared our sample with 4,770 firms with less than 250 employees that are registered in the Orbis database for Lithuania, which is the only available dataset with a wide coverage of firms’ population. The mean number of employees in the Orbis sample is much higher, at 61 employees. However, this is not necessarily an indication of a selection bias in our sample; quite the contrary, it is in the Orbis data that the smallest firms are likely to be underrepresented. When comparing more detail of the distribution, we find that while for our sample the 25th percentile corresponds to 2 full-time permanent employees, the corresponding number is 7 for the Orbis database. We posit that the micro firms are underrepresented in the latter. Interestingly however, the median value of Orbis database, which is 20 employees, is close to our sample, for which the corresponding value is 18. Sectoral comparison reveals that percentages for construction, manufacturing and retail trade are very similar, however there is one significant difference compared with the Orbis firms: they are far more concentrated in wholesale trade (31% versus 16% in our sample) which comes at the cost of a correspondingly lower share of other services. Again this seems consistent with size differences as discussed above: many service and repair firms are of micro size, while wholesale trade firms tend to be large.
3.2 Measures and statistical analysis

**Philanthropy.** Our key variable of interest is based on the survey instrument intended to capture the charitable contributions of SMEs. We asked the following question: “In the past 12 months, do you consider that your business has contributed to the sponsorship for social needs (donations for hospitals, social organizations, sports, etc.)?” The answers were recorded on a 5-point Likert scale: 1- ‘no’, 2 – ‘yes, but very little’, 3-‘yes, partly’, 4 – ‘yes to a large extent’ and 5 – ‘yes to a very large extent’. This became our dependent variable, intended to capture the extent of direct social contribution of owners-managers that goes beyond their narrowly defined economic role. To conduct a robustness check, we dummy-coded philanthropic orientation ( 0 – no charitable giving, 1 – charitable giving). This variable reduces the available variance captured in the 5-point scale but is a more robust measure, in the sense that it eliminates possible response-bias due to different interpretations of the scale points ‘very little’, ‘partly’, ‘to a large extent’ and ‘to a very large extent’.

**Entrepreneurial Orientation (EO).** EO was measured with a questionnaire widely used and validated in prior research (e.g., Covin and Slevin 1989; Miller and Friesen 1982; Rauch et al. 2009) evaluating the firm’s emphasis on innovation, risk-taking and proactivité. More specifically we used items suggested by Covin and Slevin (1989) supplemented by two additional items regarding innovation, and one item each for risk-taking and pro-activity as suggested by Lumpkin (1998), Lumpkin et al.(2009) and similarly by Moreno and Casillas (2008).

Lumpkin and Dess (1996) suggested two further components of EO: autonomy and competitive aggressiveness. Autonomy is understood to be more an enabler or a precondition of EO (e.g. Kuratko et al. 2005; Morris et al. 2007). Competitive aggressiveness shows conceptual overlap with pro-activity, i.e. being the first in a market and ahead of competition. However, the theoretical foundation for an aggressive stance towards competitors as a defining feature of an entrepreneurial firm orientation is less clear. Research on organizational networking and open innovation suggests that collaboration with competitors can also be considered to be entrepreneurial (e.g. Chiaromonte 2006).

There has been some debate in the literature whether EO should be conceptualized as three separate dimensions or whether they form an integrated whole (e.g., Covin and Slevin 1989; Lumpkin and Dess 1996). Most studies treat EO as one dimension (e.g. Rauch et al. 2009). Given the theoretical background which defines innovation, pro-activity and risk-taking each as components of EO and given the fact that prior research finds

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2A limitation of the data is that one item of the Covin and Slevin’s (1989) item measuring pro-activity (“In dealing with its competitors my company, typically seeks to avoid competitive clashes, preferring a ‘live-and-let live’ posture vs. typically adopts a very competitive ‘undo-the competitors’ posture.”) was not included in the current study.
these components to co-vary, EO is best conceptualized as a second-order factor consisting of three
distinguishable, yet related first-order factors (Covin and Wales, 2011). In line with Covin and Wales’s (2011)
review of the measurement of EO including the measurement of EO based on the scale of Covin and Slevin
(1989), we specify a hierarchical factor model (Figure 1) with both reflective first- and second-order constructs.
This is a model with innovativeness, pro-activeness and risk-taking modelled as first-order factors loading on the
second-order factor of entrepreneurial orientation. We employed confirmatory factor analysis to test this model,
using AMOS 18 (Arbuckle 2009). The specified model fitted the data reasonably well with Chi² = 130.55 (df = 51)
and CFI = .93, TLI = .91, and GFI = .93 all exceeding the .90 cut-off criterion (Hu and Bentler 1995; 1999).
RMSEA was .076 and as such did not meet the suggested upper threshold of .06 (Hu and Bentler 1999).

After eliminating items which showed cross-loadings, a more parsimonious model (see Figure 1) based
on 9 items, showed an excellent model fit with Chi² = 45.72 (df = 24) and CFI = .97, TLI = .96, and GFI = .96 all
exceeding the .90 and even the stricter .95 cut-off criterion (Hu and Bentler 1995; 1999). RMSEA was .058 and
as such lower than the recommended maximum of .06 (Hu and Bentler 1999) again indicating a good model fit.
All items loaded substantially and significantly (p < .001) onto their corresponding first-order factor, i.e. on
innovation, pro-activity and risk-taking. The first-order factors in turn loaded substantially and significantly
(p < .001) onto a second-order Entrepreneurial Orientation factor (see figure 1 for all factor loadings). The overall
Cronbach’s alpha for entrepreneurial orientation based on the 9-item scale was .82 (and as such better than for
the 12-item EO scale .75).

The Appendix contains the list of retained items. In contrast to the original Covin and Slevin’s (1989)
scale, the retained items for innovation include not only aspects of product/service innovation but also process
innovations. The risk-taking scale consists of the three items suggested by Covin and Slevin (1989). The pro-
activity scale also closely resembles the original Covin and Slevin (1989) scale except for one item. This item
emphasises following the leader or being ahead of competition in introducing new products or ideas. It is
conceptually consistent with the theoretical background of the scale. Thus the EO scale employed in this
research diverges slightly from the Covin and Slevin scale which may limit the comparability of our findings
with past research somewhat. However, Rauch et al. (2009) showed that the association of EO with firm
performance is relatively unaffected by the specific measurement scale used. Thus, although not all items of the
Covin and Slevin (1989) scale are contained in our measure, it does contain validated items of closely related EO
measures. Thus, we use a content valid scale to measure EO, which is consistent with past research.
Financial resources and a firm’s performance. In line with prior research we use a subjective measure of ‘satisfaction with capital availability’ as it is difficult to obtain objective measures of whether or not available capital is sufficient for small and medium-sized firms (Wiklund 1999). Owner-managers responded to the question how they regard their company’s access to financial capital using a 7-point scale ranging from 1 – ‘Insufficient and a great impediment for our development’, to 7 – ‘Fully satisfactory for the firm’s development’. Wiklund and Shepherd (2005) provide convergent and discriminant validation of this measure.

We measure past firm performance using an index of two items, one measuring the change in sales turnover over the past 12 months (short ‘turnover’ hereafter) and the second capturing change in net sales profit over the past 12 months (short ‘profit’ hereafter). Both were rated by respondents on a 5-point scale ranging from 1 – ‘decrease a lot (more than -40%)’ to 5 – ‘increase a lot (more than 40%)’. The Cronbach Alpha for this two item index is 0.73.

Internationalization. Firm internationalization was evaluated by two questions. The first question asked about the extent to which the firm has attracted investments from abroad over the past 12 months (FDI). The owner-managers answered using a 5-point scale from 1 – ‘no’, 2 – ‘yes, but very little’, 3 – ‘yes, partly’, 4 – ‘yes to a big extent’ and 5 – ‘yes, to a very big extent’. While this corresponds most closely to our motivation of Hypothesis 3, we also introduced a second measure of internationalization: a long-term change in export share. Owner-managers rated on a 5-point scale how their export share developed over the past three 3 years with 1 meaning ‘decrease a lot (more than -40%)’ to 5 ‘increase a lot (more than 40%)’.

Control variables. EO has been found to be a more ‘effective’ strategy for smaller businesses (Rauch et al. 2009) hence we control for firm size using the natural log of the number of permanent full-time employees. Similarly, we control for firm age (using the natural log of firm age in years) since younger firms are often considered to be more entrepreneurial. For both variables, firm size and age, the original variables showed a skewed distribution, thus adhering to protocols outlined by Tabachnick and Fidell (2007), we log-transformed both variables to avoid biased results. Moreover, industry branch was controlled for by using dummy variables for retail trade, wholesale trade, construction and manufacturing.

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3 We also conducted a robustness check substituting this index with the owners subjective appraisal of firm success in response to the question ‘Please assess the overall performance of your business, rated on a scale from 1 – success, 2 – satisfactory, 3 – relatively satisfactory, 4 – relatively unsatisfactory, to 5 – very unsatisfactory. We did not, however, include this subjective item in our firm success index as it showed only low correlations with turnover and sales. Thus the subjective success assessment captures a distinct aspect of firm performance, which justifies its use as a robustness check. The results remained unchanged and further details are available upon request.
Building on the discussion above, we present results of structural equation modelling which combines factor analytics with the regression approach and has the advantage of explicitly taking measurement errors and inter-correlations among predictors into account (e.g. Kline 2005). As a robustness check, we repeated all analysis using ordered probit regression estimations. The results are highly similar and can be obtained from the authors upon request.

4. Results

4.1. Hypotheses and control variables

Simple correlations for all the variables are displayed in Table 1 and provide initial support for Hypothesis 1: entrepreneurial and philanthropic orientation are positively correlated \( r = .37, p < .001 \) as well as for Hypothesis 3: philanthropic orientation is also positively correlated with indicators of internationalization (attraction of foreign direct investment and increasing export share).

While correlation results are consistent with our assumptions, in formal testing of hypotheses we rely on structural equation modelling. Figure 2 and Table 2 display the results of regressing the predictor variables, EO, access to finance, past firm performance, as well as internationalization measures (export share and attracted FDI) on philanthropic orientation while controlling for potential covariates (firm size, firm age and industry sector). Overall 25% of the variance of a firm’s philanthropic orientation was explained by this set of predictor and control variables. The model fitted the data well with \( \chi^2 = 193.39 \) \((df = 130)\) and \( CFI = .95, TLI = .92, \) and \( GFI = .94 \) all exceeding the .90 and partly the stricter .95 cut-off criterion (Hu and Bentler 1995; 1999). RMSEA was .043 and as such lower than the recommended maximum of .06 (Hu and Bentler 1999), again indicating a good model fit.

We now turn to the discussion of our findings related to the hypotheses.

**Hypothesis 1.** Entrepreneurial orientation (EO) was significantly related to the firm’s philanthropic orientation \( \beta = .27, p < .01, \) see figure 2 and table 2). As a robustness check we also substituted the dummy-coded philanthropic orientation variable for the continuous philanthropic orientation measure. The relationship
of philanthropic orientation and EO remains significant albeit somewhat reduced ($\beta = .17, p<.05$), which is to be expected as dummy-coding reduces the variance of the philanthropic orientation measure.

**Hypothesis 2.** Neither access to capital nor past performance was significantly related to the firms philanthropic orientation (see figure 2 and table 2). Thus the results are not in line with H2. However, both access to capital and past performance were significantly positively related to the firms EO. This result is in line with prior findings that EO is a resource consuming strategy and dependent on sufficient access to capital (Moreno and Casillas 2008; Wiklund 1999).

**Hypothesis 3.** Both measures of internationalization - the attraction of foreign direct investment and export share – were significantly and positively associated with the firms’ philanthropic orientation at $p<.10$ with $\beta = .11$ and $\beta = .10$. In addition and consistent with past research (e.g. De Clercq et al. 2005) we also observed greater internationalization (particularly foreign direct investment) to relate positively to EO. Again we conducted a robustness check by using the dummy-coded philanthropic orientation variable. All observed relationships were closely similar.

**Control variables.** Of the control variables, firm size measured as the natural log of the number of permanent employees was consistently positively related to a firm’s philanthropic orientation (as well as to its entrepreneurial orientation). Thus, bigger firms seem to be more inclined to give back to society.

### 4.2. Robustness check: post-Soviet heritage

We presented arguments suggesting that the Communist past may be affecting Lithuanian business environment to far less extent that most other former Soviet republics, however we also introduce some additional empirical tests to verify it. Estrin and Mickiewicz (2011) take age profiles as indicative of persistence of norms and values, with an older generations being far more affected by the Soviet heritage. This is consistent with findings that cultural values are stable except for generational changes (e.g. Inglehart, 2008). Similarly Guriev and Zhuravskaya (2009) focus on age in their discussion of transition countries. Following this we introduced age into our models in the form of two variables: we use a continuous age effect and a threshold effect represented by a dummy, where the owners-managers born before 1970 are given a value of one. The latter variable roughly separates respondents that spent part of their live after completing their secondary education under communism from those who did not have such experience. It also conveniently splits the sample into almost two equal parts (51.3% of respondents were born before 1970). We introduced alternatively either both or one of those age variables into our models, but found no significant effects. We take this as a
tentative evidence that norms and values inherited from Communism no longer affect business owners in Lithuania in a significant way. Results are available from the authors upon request.

5. Discussion and final conclusions

We found that the most entrepreneurial small companies are also those that are most likely to be engaged in philanthropy. The importance of this link between private for profit and private non-profit activities is that they are mutually reinforcing – rather than being mutually exclusive as is commonly assumed (Acs and Phillips, 2002). While entrepreneurial firms are likely to benefit from the social capital and legitimacy gained through their philanthropic activities, they may also benefit from distinct knowledge that non-profit organisations hold (Acs and Braunerhjelm, 2004). Conversely, non-profit ventures may benefit from knowledge transfers that accompany the financial transfers (Acs and Braunerhjelm, 2004). Finally, voluntary associations create a social milieu where entrepreneurial networks are formed, supporting private initiative (Estrin et al., 2011).

For Lithuania, our findings imply that the country is moving in a direction which is arguably consistent with an entrepreneurial-based economic development trajectory (as described by Acs and Phillips, 2002). This is further corroborated by our findings that philanthropy is most supported where firms are most internationalised, by having foreign investors in particular. Overall, finding these positive relationships of EO with philanthropy in the Lithuanian context is striking, given the norms and values, which Lithuania inherited from the command economy period, alien to both entrepreneurship and to self-organisation that defines non-profit private activities. The process of change in informal institutions is typically seen as slow (North, 1990), but our results indicate that it is taking place. To combine economic initiative with social orientation may be a norm, which is deeply rooted in culture or perhaps even human nature, and therefore may be less difficult to restore after Communism than one could think.

We find that larger SME firms in terms of number of people employed are more likely to engage in philanthropy, suggesting that philanthropic giving may also serve to legitimize the firm in the eyes of its employees. Such reasoning is consistent with the stakeholder theory (see Lee, 2008) which argues that the integrating the interest of various stakeholders (including employees) is central for the performance of the firm. Moreover, engaging in philanthropy and other corporate social responsibility initiatives increases the attractiveness of a firm to prospective employees (Turban and Greening, 1997).

With regard to the strategic management literature on the entrepreneurial orientation of firms (e.g. Covin and Slevin, 1999; Lumpkin and Dess, 1996; Miller, 1993), our findings suggest that a pro-social orientation and philanthropy are compatible with a strategic focus on entrepreneurship. Perhaps, we should even think of
them as components of an entrepreneurial orientation which allow the firm to embed in its local context – by building social capital and gaining legitimacy. Here, future research is needed to test the proposed mechanisms. Studies should be conducted longitudinally to shed light on whether an entrepreneurial orientation leads to more philanthropic engagement, whether the reverse is the case, or whether they emerge jointly.

While our results are of novel and preliminary nature, and the cross-sectional nature of our data implies caution in forming any judgments on causality, we believe that the findings may have wider implications for future research. In particular, they suggest that the traditional and almost exclusive focus on individualism, self-interest and economic return in entrepreneurship might need rethinking. Private initiative contains a strong social element; successful examples of entrepreneurship are characterised not by lonely efforts of individuals but by self-organisation. Indeed, it is this capacity for (local) self-organisation which is at the core of both economic initiative and civic society. If one accepts that entrepreneurs are not just one-dimensional economic actors, but are at the same time embedded in local communities, the link between economic initiative and civic society is to be expected.

As we stressed, we see our study as an exploratory one. We believe that the questions we address are novel, yet we face data limitations. Future studies could explore in more depth (e.g. by means of a qualitative interview or case study) why small business entrepreneurs engage in philanthropy, as we need to build a richer understanding of what motivates them to engage in philanthropy. Future research should also work towards a better understanding of the tangible benefits that entrepreneurs obtain from contributing to civic society, such as access to information spill-overs and networking or legitimisation in the eyes of the key stakeholders. Moreover, the present study includes one aspect of social firm performance that is giving to charity. Future studies can extend the present findings by analysing the association with different aspects of corporate social performance in addition to philanthropy, such as business practices relating to environmental behaviour, treatment of shareholders and co-owners, employees, customers and suppliers (e.g., Campbell 2007).
References


APPENDIX: ENTREPRENEURIAL ORIENTATION

How many new lines of products or services has your firm marketed in the past 3 years?

*i1* - No new lines of products or services 1 2 3 4 5 6 7 Very many new lines of products and services

*i2* - Changes in product or service lines have been mostly of a minor nature 1 2 3 4 5 6 7 Changes in product or service lines have usually been quite dramatic

*i3* (reverse scored) - My firm prefers to design its own unique new processes and methods of production 1 2 3 4 5 6 7 My firm prefers to adapt for our own use methods and techniques that others have developed and proven

In general, the top managers of my firm . . .

*r1* - Have a strong proclivity for low risk projects (with normal and certain rates of return) 1 2 3 4 5 6 7 Have a strong proclivity for high risk projects (with chances of very high returns)

*r2* - Believe that owing to the nature of the environment, it is best to explore it gradually via careful, incremental behavior 1 2 3 4 5 6 7 Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm’s objectives

*r3* - When confronted with decision-making situations involving uncertainty, my firm . . .

Typically adopts a cautious, ‘wait-and-see’ posture in order to minimize the probability of making costly decisions 1 2 3 4 5 6 7 Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities

In dealing with its competitors, my firm . . .

*p1* - Typically responds to action which competitors initiate 1 2 3 4 5 6 7 Typically initiates actions which competitors then respond to

*p2* - Is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc. 1 2 3 4 5 6 7 Is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.

*p3* - In general, the top managers of my firm have . . .

A strong tendency to ‘follow the leader’ in introducing new products or ideas 1 2 3 4 5 6 7 A strong tendency to be ahead of other competitors in introducing novel ideas or products
<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 EO</td>
<td>3.95</td>
<td>1.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2 Philantropy (giving to charity)</td>
<td>1.76</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3 Philantropy (giving to charity) – dummy</td>
<td>0.53</td>
<td>0.50</td>
<td>0.31***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4 Manufacturing</td>
<td>0.17</td>
<td>0.38</td>
<td></td>
<td>-0.01</td>
<td>0.02</td>
<td>0.08</td>
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<td></td>
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<tr>
<td>5 Wholesale trade</td>
<td>0.16</td>
<td>0.37</td>
<td></td>
<td>0.08</td>
<td>0.10*</td>
<td>0.07</td>
<td>-0.20***</td>
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</tr>
<tr>
<td>6 Retail trade</td>
<td>0.10</td>
<td>0.30</td>
<td></td>
<td>0.04</td>
<td>0.02</td>
<td>-0.03</td>
<td>-0.15*</td>
<td>-0.15*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7 Construction</td>
<td>0.14</td>
<td>0.35</td>
<td></td>
<td>0.08</td>
<td>0.05</td>
<td>0.11t</td>
<td>-0.19**</td>
<td>-0.18**</td>
<td>-0.14*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Size (ln number employees)</td>
<td>2.40</td>
<td>1.00</td>
<td>0.27***</td>
<td>0.31***</td>
<td>0.32***</td>
<td>0.19***</td>
<td>-0.12*</td>
<td>-0.12t</td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Age (ln firm age)</td>
<td>1.73</td>
<td>0.33</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.09</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.05</td>
<td>-0.15*</td>
<td>0.10t</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Past performance (sales turnover)</td>
<td>3.99</td>
<td>1.08</td>
<td>0.40***</td>
<td>0.30***</td>
<td>0.31***</td>
<td>0.08</td>
<td>0.18**</td>
<td>-0.08</td>
<td>0.10t</td>
<td>0.27***</td>
<td>-0.10</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>11 Access to finance</td>
<td>4.56</td>
<td>1.76</td>
<td>0.30***</td>
<td>0.20***</td>
<td>0.20***</td>
<td>0.08</td>
<td>0.04</td>
<td>-0.08</td>
<td>0.12t</td>
<td>0.22***</td>
<td>-0.11t</td>
<td>0.29***</td>
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<td></td>
</tr>
<tr>
<td>12 Foreign direct investment</td>
<td>0.20</td>
<td>0.41</td>
<td>0.15*</td>
<td>0.19**</td>
<td>0.16**</td>
<td>0.05</td>
<td>0.05</td>
<td>-0.12t</td>
<td>-0.06</td>
<td>0.02</td>
<td>-0.03</td>
<td>0.09</td>
<td>0.12*</td>
<td></td>
</tr>
<tr>
<td>13 Export share</td>
<td>3.19</td>
<td>0.74</td>
<td>0.10t</td>
<td>0.17**</td>
<td>0.12*</td>
<td>0.27***</td>
<td>0.06</td>
<td>0.00</td>
<td>-0.13*</td>
<td>0.10t</td>
<td>0.06</td>
<td>0.26***</td>
<td>0.04</td>
<td>0.14*</td>
</tr>
</tbody>
</table>

N=270, *p<.10, **p<.05, ***p<.01, ****p<.001
**TABLE 2**

Predictors of Philanthropy: Standardized and Unstandardized Estimates including Factor Loadings of Items on Entrepreneurial Orientation (EO) Construct

<table>
<thead>
<tr>
<th></th>
<th>Standardized estimate (regression weight, ( \beta ))</th>
<th>Unstandardized estimate (B)(^a)</th>
<th>S.E.(^a)</th>
<th>( p )(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypotheses testing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>EO</td>
<td>.267</td>
<td>.253</td>
<td>.089</td>
<td>.004</td>
</tr>
<tr>
<td>Access to finance</td>
<td>.035</td>
<td>.018</td>
<td>.030</td>
<td>.562</td>
</tr>
<tr>
<td>Past performance</td>
<td>.063</td>
<td>.064</td>
<td>.055</td>
<td>.248</td>
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<td>FDI</td>
<td>.108</td>
<td>.232</td>
<td>.120</td>
<td>.054</td>
</tr>
<tr>
<td>Export</td>
<td>.098</td>
<td>.116</td>
<td>.068</td>
<td>.088</td>
</tr>
<tr>
<td><strong>Control variables(regressed on Philanthropy)</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Size (ln employees)</td>
<td>.196</td>
<td>.172</td>
<td>.057</td>
<td>.002</td>
</tr>
<tr>
<td>Firm age (ln)</td>
<td>.087</td>
<td>.228</td>
<td>.150</td>
<td>.129</td>
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<tr>
<td>Retail trade</td>
<td>.019</td>
<td>.056</td>
<td>.169</td>
<td>.743</td>
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<td>Construction</td>
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<td>.943</td>
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<td>Manufacturing</td>
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<td>-.096</td>
<td>.143</td>
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<td>Wholesale</td>
<td>.076</td>
<td>.179</td>
<td>.142</td>
<td>.208</td>
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<tr>
<td><strong>EO factor loadings (hierarchical factor analysis)</strong></td>
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<td></td>
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<tr>
<td>EO on proactiveness</td>
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<td>1.367</td>
<td>.182</td>
<td>.001</td>
</tr>
<tr>
<td>EO on innovativeness</td>
<td>.747</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EO on risk-taking</td>
<td>.600</td>
<td>.869</td>
<td>.133</td>
<td>.001</td>
</tr>
<tr>
<td>P1 on proactiveness</td>
<td>.816</td>
<td>.789</td>
<td>.062</td>
<td>.001</td>
</tr>
<tr>
<td>P2 on proactiveness</td>
<td>.829</td>
<td>1</td>
<td>-</td>
<td>-</td>
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<tr>
<td>P3 on proactiveness</td>
<td>.783</td>
<td>.887</td>
<td>.058</td>
<td>.001</td>
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<tr>
<td>I1 on innovativeness</td>
<td>.790</td>
<td>1.127</td>
<td>.121</td>
<td>.001</td>
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<tr>
<td>I2 on innovativeness</td>
<td>.741</td>
<td>1</td>
<td>-</td>
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<td>I3 on innovativeness</td>
<td>.437</td>
<td>.566</td>
<td>.091</td>
<td>.001</td>
</tr>
<tr>
<td>R1 on risk-taking</td>
<td>.562</td>
<td>.652</td>
<td>.088</td>
<td>.001</td>
</tr>
<tr>
<td>R2 on risk-taking</td>
<td>.561</td>
<td>.682</td>
<td>.092</td>
<td>.001</td>
</tr>
<tr>
<td>R3 on risk-taking</td>
<td>.871</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Variance explained in Philanthropy</strong></td>
<td>25%</td>
<td></td>
<td></td>
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<tr>
<td><strong>Model fit</strong></td>
<td>( X^2 = 193.39 ) (df=130), CFI = .95, TLI = .92, GFI = .94, RMSEA = .043</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)due to the model estimation process within the confirmatory factor analyses part of the model (bottom half of this table) one item factor loading per latent factor is fixed to 1. SE and \( p \) are not estimated for those items (e.g., Kline, 2005).
FIGURE 1

Hierarchical Factor Structure Entrepreneurial Orientation

Note. All displayed coefficient estimates are statistically significant ($p<.001$). Measurement errors and residuals are not displayed to increase readability. All figures available from the authors upon request.
FIGURE 2

Predictors of Philanthropy (Standarized Estimates)

Note. Figures in bold and bolded paths are statistically significant (at least $p<.05$). Measurement errors and residuals as well as intercorrelations amongst control variables are not displayed to increase readability. All figures available from the authors upon request.