Asian Academy of Management Journal of Accounting and Finance

AAMJAF Vol. 13, No. 2, 109–133, 2017

SOCIALLY RESPONSIBLE INVESTMENT, INTERNAL FINANCING SOURCES AND ACCESS TO BANK FINANCING: EVIDENCE FROM INDIAN SURVEY DATA

Amarjit Gill[1*], Harvinder S. Mand[2], Afshin Amiraslany[3] and Neil Mathur[4]

[1]Edwards School of Business, The University of Saskatchewan,
25 Campus Drive, Saskatoon, SK, S7N-5A7, Canada
[2]Department of Commerce, University College, Benra (Dhuri),
Sangrur, East Punjab, Pin Code 148024, India
[3]Department of Finance and Management Science,
Edwards School of Business, The University of Saskatchewan
25 Campus Drive, Saskatoon, SK, S7N-5A7, Canada
[4]College of Management & Technology
Walden University, 100 Washington Avenue South
Minneapolis, MN, USA 55401

*Corresponding author: gill@edwards.usask.ca

ABSTRACT

We investigated the association between socially responsible investment, internal financing sources, and access to bank financing in the production industry of India. Using a survey research design, owners of small production firms were asked about their perceptions regarding socially responsible investment, internal financing sources, and access to bank financing. We found that socially responsible investment and internal financing sources help owners of small production firms improve access to bank financing. This study contributes to the literature on the relationship between socially responsible investment, internal financing sources, and access to bank financing. The findings may be useful for financial managers, production firm owners, investors, consultants, and other stakeholders.

Keywords: Socially responsible investment, internal financing sources, access to bank financing, production industry, India

Publication date: 28 February 2018

To cite this article: Gill, A., Mand, H. S., Amiraslany, A., & Mathur, N. (2017). Socially responsible investment, internal financing sources and access to bank financing: Evidence from Indian survey data. *Asian Academy of Management Journal of Accounting and Finance, 13*(2), 109–133. https://doi.org/10.21315/aamjaf2017.13.2.6

To link to this article: https://doi.org/10.21315/aamjaf2017.13.2.6

INTRODUCTION

Indian production firms face numerous conflicts with government and society including, but not limited to, pollution, environmental degradation, child and other labor exploitation, gambling, tobacco, alcohol and other social and environmental issues (Nambiar & Chitty, 2014; Bengtsson, 2008; Star, 2008; Arjalies, 2010; Brimble, Vyvyan & Ng, 2013). Agricultural production firms face conflicts related to negative externalities of food production, moral concerns, alcohol abuse and other health-related issues, the use of genetically modified organisms which society considers an unethical practice, animal welfare, pesticide residues, corruption, poor corporate governance, poor working conditions in the meat industry and meat scandals (Heyder & Theuvsen, 2012). These conflicts cause agency problems between the firm (agent) and stakeholders such as the government and society (principal).

Because retail banks (banks that deals with small business financing) are controlled by the central bank and the government (The Economist, 2013), agency problems create barriers to bank financing. Considering the negative impact of conflicts with government and society on the firm, modern firms in various industries have become increasingly active in improving corporate social performance by increasing socially responsible investment (Wang & Berens, 2015). Socially responsible investment is a part of corporate social responsibility (CSR) of the firm. Chen (2011) described four components of CSR as corporate accountability (i.e., the firm is accountable for its own actions under a social structure), openness (i.e., the firm should have open communication with stakeholders about its actions), transparency (i.e., the firm should minimize information asymmetry about its actions), and competitiveness (i.e., the firm should compete honestly in the market). All these components minimize agency problems between the firm and its stakeholders. Ethical investing, health, safety, and pollution prevention are among the most important components of socially responsible investment (Mill, 2006; Tsai, Chou, & Hsu, 2009). Following the above components, we define socially responsible investment, in the context of this study, as the extent to which owners of small production firms avoid investing in new ventures that produce alcohol, tobacco, and weapons; make well-planned investments to avoid environmental degradation; and make socially responsible investment to create a better life for future generations. Lahiri (2012, p. 4) classified micro, small, and medium enterprises (MMSEs) based on their limits for investment in plant, machinery and equipment for manufacturing and production enterprises in India (Table 1).

Small business firms are financially constrained (Joeveer, 2013) and encounter barriers to accessing bank credit (Sandhu, Hussain & Matlay, 2012).

Because the Central Bank of India is risk averse and controls Indian retail banks (The Economist, 2013), production firms tend to borrow from private financial institutions that have more relaxed requirements but charge very high interest rates (Gill, Mand, Obradovich & Mathur, 2015). For example, banks offer crop production loans for the agricultural industry at 7% annually, while private moneylenders charge between 20% to 30% (Ghosal & Ray, 2015).

Table 1
Classification of micro, small and medium enterprises in India.

Enterprise	Investment in Plant and Equipment
Micro Enterprises	Does not exceed twenty five lakh (2.5 million) rupees.
Small Enterprises	More than twenty five lakh (2.5 million) rupees but does not exceed five crore rupees.
Medium Enterprises	More than five crore (50 million) rupees but does not exceed ten crore (100 million) rupees.

Note: For the simplicity, we considered all the firms (micro and small) with investment in plant and equipment less than five crore rupees (50 million rupees) in the manufacturing industry as small business firms.

Since the world financial crisis and economic difficulties of 2008–2009, credit access has been increasingly restricted to firms that are relatively stronger financially with low debt to equity ratios (Wu, Guan & Myers, 2014). The higher chances of bankruptcy in the small business industry make Indian banks risk averse. Internal financing sources reduce the chances of bankruptcy (Philosophov & Philosophov, 2005) and thus, improve access to bank financing. To examine the associations between the socially responsible investment, internal financing sources, and access to bank financing, this study posited the following research questions:

> Do owners of small production firms perceive socially responsible investment to be associated with improved access to bank financing?
>
> Do owners of small production firms perceive internal financing sources to be associated with improved access to bank financing?

A previous study by Cheng, Ioannou and Serafeim (2014) concentrated on publicly traded firms to test the relationship between corporate social responsibility and access to financing in China and found that corporate social responsibility performance reduces capital constraints. We find that socially responsible investment and internal financing sources help owners of small production firms improve access to bank financing in the production industry of

India. Thus, by lending some support to the findings of Cheng et al. (2014) related to publicly traded firms, this study contributes to the literature on the relationship between socially responsible investment, internal financing sources, and access to bank financing.

Socially responsible investment indeed increases cognitive legitimacy (Scott, 1994) of production firms (i.e., perceptions that actions of the production firms are appropriate) in the eyes of lending institutions and thus, improves an access to bank financing. We also find that production firms can attain normative legitimacy (Scott, 1995) by increasing socially responsible investment to signal corporate social responsibility, assuming banks value it to make lending decisions in the small business industry. Since socially responsible investment improves access to bank financing by reducing agency problems between the firm and its stakeholders, we strongly recommend to have a written corporate policy for socially responsible investment.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

It is commonly agreed that corporate social performance (i.e., social welfare actions taken by corporations) improves the reputation of firms; therefore, modern firms in various industries have become increasingly engaged in activities aimed at doing good for society (Wang & Berens, 2015). For example, socially responsible investment helps reduce environmental degradation, gambling problems, issues related to tobacco and alcohol, and other social and environmental problems that a society faces (Bengtsson, 2008; Star, 2008; Arjalies, 2010; Brimble et al., 2013).

Socially responsible investment can reduce agency problems between borrowers and lending institutions. Renneboog, Horst, and Zhang (2008) described that socially responsible investors select firms with sound social and environmental records and expect companies to focus on social welfare. However, it is difficult for the principal (i.e., banks) to monitor the actions of the agents (i.e., firms) where there exists information asymmetry (Zinga, Augusto, & Ramos, 2013). In the context of this study, small business firms (agents) have better information about their actions related to investments which can lead conflict. In such circumstances, agency costs arise representing the cost of all activities and operating systems designed to align the interests and/or actions of small business firms (agents) with the interests of banks (principals) to avoid unethical activities and to increase socially responsible investment.

It is well known that small businesses are financially constrained (Joeveer, 2013). These constraints cause an inability of the firm to obtain financing from

banks and issue equity to raise capital (Lamont, Polk, & Saa-Requejo, 2001). Stein (2003) found that capital constraints play an important role in affecting the firm's ability to undertake major investment decisions. Cheng et al. (2014) found that firms with better corporate social responsibility performance face significantly lower capital constraints. Since socially responsible investment is part of corporate social performance, it can lower capital constraints by providing access to bank credit for small businesses in the production industry.

Previous studies also showed that superior corporate social responsibility performance engages stakeholders to minimize opportunistic behaviour of the firm (Benabou & Tirole, 2010) and motivates firms to disclose their corporate social responsibility activities to the market (Dhaliwal, Li, Tsang, & Yang, 2011). This demonstrates their long-term focus and thus, allows them to differentiate themselves from firms without superior corporate social responsibility performance (Benabou & Tirole, 2010).

Cheng et al. (2014) showed that increased availability of data related to corporate social responsibility performance reduces informational asymmetry between the firm and investors, which in turn lowers capital constraints. Thus, reporting superior corporate social responsibility performance (socially responsible investment in the context of this study) lowers agency costs through stakeholder engagement and increased transparency, which in turn improves access to bank financing. In summary, the literature review indicates that socially responsible investment positively affects access to bank financing; therefore, it is hypothesised that:

> H1: Owners of small production firms perceive socially responsible investment to be associated with improved access to bank financing.

Internal financing sources play an important role in improving access to bank financing by reducing the chances of bankruptcy. Pecking order theory of Myers (1984) and Myers and Majluf (1984) showed that firms use internally generated funds in the form of retained earnings. These internal financing sources reduce risk of bankruptcy by requiring less debt in the capital structure. Thus, pecking order theory is particularly relevant for small businesses that typically have more difficulty obtaining external financing (Ang, 1991). Uyar and Guzelyurt (2015) found that small-to-medium enterprise (SMEs) primarily prefer internal funding sources over external ones and short-term debt over long-term debt in Turkey. Authors also found that during general economic conditions, debt-paying ability of the firm and financial distress risk play the most important role in outside financing decisions.

Small firms are usually riskier than larger corporate borrowers (Jacobson, Linde, & Roszbach, 2005) and face external financing challenges. Therefore, initially small business firms use internal funding generated through profitable operations to finance operations and investments. After internal funds are exhausted, firms use debt financing before resorting to external capital (Bhaird Mac an & Lucey, 2010). The findings of Wahyudi (2014) suggest that cash flow, capacity, and leverage are the major determinants of default in the micro, small, and medium sized firms.

While new enterprises are likely to prefer low cost and less risky or less formal financing such as internal financing (Osei-Assibey, Bokpin, & Twerefou, 2012), firms with greater internal financing are likely to have lower leverage, higher cash ratios, and suffer a lower impact from a crisis on their business operations (Bancel & Mittoo, 2011). Since internal financing sources reduce the chances of bankruptcy (Philosophov & Philosophov, 2005), they increase chances of access to bank financing. The findings of Coco and Pignataro (2012) showed that less wealthy borrowers face greater difficulty in obtaining loans. In summary, internal financing sources reduce the chances of bankruptcy. Hence the following hypothesis:

H2: Owners of small production firms perceive internal financing sources to be associated with improved access to bank financing.

METHODOLOGY

Research Design

This study utilises survey research (a non-experimental field study design) and interview data collection methods. The questionnaire used in the survey is shown in Appendix A.

Variables and Their Measurement

To remain consistent with previous research, the measurement of socially responsible investment was adopted from Turker (2008) and the evaluation of small production firm performance was adopted from Zehir, Acar, and Tanriverdi (2006). Note that to reduce heteroscedasticity (i.e., stabilize variance), the natural logarithm (ln) was calculated (Bowerman, Schermer, Johnson, O'Connell, & Murphee, 2014, p. 422) for: Firm size, firm age, owner age, and owner experience variables.

Bank financing. Bank financing (*BF*) is measured as a categorical variable. If the owner of small production firm borrowed from a bank, *BF* is given the value of 1; otherwise *BF* equals 0.

Socially responsible investment. Socially responsible investment (*SRI*) is the general perception of the owners of small production firms about the extent to which they invest in socially responsible small production firms. Following the definition, we selected five separate components to measure the *SRI* index. In the survey, all participants were asked to rate the extent to which they (i) avoid investing in new ventures that produce alcohol, (ii) avoid investing in new ventures that produce tobacco, (iii) avoid investing in new ventures that produce weapons, (iv) make well-planned investments to avoid environmental degradation, and (v) make socially responsible investment to create a better life for future generations. Their responses were categorised on a five-point Likert Scale assigning 5 as "Strongly Agree" and 1 as "Strongly Disagree". Responses were initially collected for each of the above five sources of *SRI*. The five measures are highly correlated with correlation values ranging from 0.66 to 0.92. Therefore, we constructed a new index by using principal component analysis (PCA). The *SRI* index is constructed using the first component, which explains approximately 84.73% of the variation.

Internal financing sources. Internal financing sources (*IFS*) measure small production firm owner's capacity to invest his or her personal and family assets in his or her own small production firm. *IFS* is measured as a dummy variable where *IFS* = 1 if the owner of small production firm has adequate internal (personal and family) financing sources to invest in a small production firm. Alternatively, *IFS* = 0 if the owner of small production firm does not have adequate internal (personal and family) financing sources to invest in a small production firm.

Firm size. Firm size (*F_SIZE*) is a categorical variable. In the survey, we identified five different firm sizes as follows: (i) INR 0 – INR 500,000, (ii) INR 500,001 – INR1,000,000, (iii) INR1,000,001 – INR2,000,000, (iv) INR2,000,001 – INR3,000,000, and (v) more than INR3,000,001. During the survey, respondents chose only one category to which the average sales of their business belong. For empirical analyses, the natural logarithm (ln) of average sales was calculated. To calculate the natural logarithm (ln) for category five, INR3,000,001 was used.

Firm age. Firm age (*F_AGE*) is measured as the actual age of a small production firm. For empirical analyses, the natural logarithm (ln) of actual age of small production firms was calculated.

Duality. Duality (*DUAL*) is a dummy variable with assigned value of 1 if the owner of small production firm is both CEO and Chair of the Board of Directors in the same company, 0 otherwise.

Small production firm performance. The definition of small production firm performance (*SPFP*) for the purposes of this study is the general perception of the owners of small production firms about the changes in net profit margin (ΔNPM), return on investment (ΔROI), and cash flow from operations (ΔCFO) of their small production firms. Following the definition, we selected three separate components to measure the *SPFP* index. In the survey, we asked all participants to rate the extent to which they believe there are changes in (i) net profit margin, (ii) return on investment, and (iii) cash flow from operations of their small production firms. Their responses were categorized on a five-point Likert Scale assigning 5 as "Highest" and 1 as "Lowest". Responses were initially collected for each of the above three sources of small production firm performance. The three measures are highly correlated with correlation values ranging from 0.82 to 0.91. Therefore, we constructed a new index by using PCA. The *SPFP* index is constructed using the first component, which explains approximately 90.96% of the variation.

Owner age. Owner age (*O_AGE*) is measured as the actual age of the owner of small production firm. For empirical analyses, the natural logarithm (ln) of actual age of the owners of small production firms was calculated.

Owner education. The education of the owner of small production firm (*O_EDU*) is a categorical variable with an assigned value of 1 = High school or less, 2 = College diploma, 3 = Bachelor's degree, 4 = Master's degree, and 5 = PhD degree or more.

Owner experience. Owner's years of experience (*O_EXP*) is measured as the actual number of years of owner experience. For empirical analyses, the natural logarithm (ln) of average number of years' experience was calculated.

Female gender. Owner female gender (*FEM*) is a dummy variable indicating whether the owners of small production firms report that they are female.

Sampling

We targeted the owners of small production firms from Punjab, Haryana, Rajasthan, and other states of India to ask about their perceptions regarding socially responsible investment, internal financing sources, and access to bank financing. Telephone directories and referrals from friends, family members,

religious places such as temples, and relatives were used to prepare an extensive list of names of the owners of small production firms and their telephone numbers to distribute surveys and to conduct telephone interviews.

Given that the population is "abstract" [i.e., it is not possible to obtain a list of all members of the focal population] (Huck, 2008, p. 101), a non-probability (purposive) sample was obtained. In a purposive sample, participants are screened for inclusion based on criteria associated with members of the focal population. We chose this method because Indian owners of the small production firms were reluctant to participate in the research because of the lack of time due to their personal and business responsibilities. Therefore, there was the possibility of sampling bias (the threat to representational ability of a sample). To avoid sampling bias, we chose research participants who were indeed representative of the population for the study.

Although we targeted Haryana, Rajasthan, and other states of India, the majority of surveys came from the Punjab state of India because of the lack of cooperation from the other research participants. The sample included approximately 1,100 research participants. A total of 322 surveys were completed over the telephone, through personal visits, or received by e-mail and three of them were non-usable. Thus, the response rate was roughly 29%. We assumed the remaining cases similar to the selected research participants. Out of 322 surveys, only three surveys came from Haryana and six surveys came from Rajasthan; therefore, surveys from Haryana and Rajasthan were included in surveys that came from Punjab state.

Common method bias does not appear to be a problem because variables used in this study, although self-reported, are largely measured objectively. Nevertheless, a factor analysis (e.g., Podsakoff & Organ, 1986) indicated that common method bias does not seem to be a concern for this study.

Confidentiality

To solve confidentiality issues, we assured all subjects that their personal identification including names would not be disclosed during the analysis, interpretation, and publication of data. Before conducting the telephone interviews, all subjects received instruction regarding the purpose of the research, and asked for their permission to use the data provided. Any information obtained in connection with this study and that can identify specific respondents is confidential and will be disclosed only with subjects' permission or as required by law.

EMPIRICAL MODELS, ANALYSIS AND DISCUSSION

Empirical Models

The socially responsible investment (*SRI*) and internal financing sources (*IFS*) affect access to bank financing. Socially responsible investment helps mitigate an agency and asymmetric information problem between the firm and stakeholders such as banks, governments, and society. Internal financing sources help reduce the chances of bankruptcy. Therefore, we consider *SRI* and *IFS* as main explanatory variables in access to bank financing, and all other variables are considered individual control variables in the following main regression model:

$$BF_i = \alpha_0 + \alpha_1.SRI_i + \alpha_2.IFS_i + \sum \beta_i X_i + \varepsilon_i \quad (1)$$

In the Equation (1), i refers to individual small business production firm, BF_i is access to bank financing of small business production firm i, and X_i represents individual control variables corresponding to firm i. ε_i is a normally distributed disturbance term. In the estimated model, α_1 and α_2 measure the magnitude at which *SRI* and *IFS* affect access to bank financing. We extend the above model by considering different set of control variables one at a time. The coefficients of variables of Model (1) are estimated by applying logistic regression method. We used firm size (*F_SIZE*), firm age (*F_AGE*), CEO duality (*DUAL*), small business performance (Δ*SPFP*), owner age (*O_AGE*), owner education (*O_EDU*), owner experience (*O_EXP*), and female gender (*FEM*) as control variables. Equation (1) is relevant for testing H1 and H2.

Descriptive Statistics

Table 2 shows a series of descriptive statistics. In the dataset, some of the variables, except *SRI* and Δ*SPFP* indices, are individual dummy/categorical variables. The data exhibits that the distribution of *SRI* and Δ*SPFP* is almost symmetrical around their mean values and thus there is no outlier present in either of the indices. Value of skewness for all the scales used in this study are within the range of −0.752 to −1.153, which is an excellent range. According to Mason, Lind, and Marchal (1991), values of skewness usually ranges from −3 to +3 when the data are normally distributed.

Table 2 also shows the differences in variables among individual firms with bank financing and with private financing. Findings show that i) internal financing sources for the small production firms with bank financing are significantly higher compared to those with private financing (mean 0.84 versus 0.32); (ii) *SRI* is significantly higher among small production firms with bank

Table 2
Descriptive statistics

	Mean	SD	Min	Median	Max	BF = 1	PF= 0	Compare –Mean t-test
BF	0.71	0.45	0	1	1			
IFS	0.69	0.46	0	1	1	0.84	0.32	0.52**
SRI	0.00	1.00	−2.48	0.17	1.05	0.22	−0.53	−0.75**
SRI1) Avoids investing in new ventures that lead to alcohol production.	3.69	1.26	1	4	5	3.90	3.17	0.73**
SRI3) Avoids investing in new ventures that lead to weapons production.	3.67	1.32	1	4	5	3.90	3.11	0.79**
SRI4) Makes well-planned investments to avoid environmental degradation.	3.93	1.14	1	4	5	4.20	3.27	0.93**
SRI5) Makes SRI to create a better life for future generations.	4.00	1.14	1	4	5	4.28	3.29	0.99**
ΔSPFP	0.00	1.00	−2.86	0.17	1.18	0.23	−0.57	−0.34**
ΔSPFP1) Change in net profit margin	3.77	1.02	1	4	5	4.00	3.22	0.78**
ΔSPFP2) Change in return on investment	3.84	1.03	1	4	5	4.07	3.27	0.80**
ΔSPFP3) Change in operating cash flow	3.88	1.07	1	4	5	4.11	3.30	0.81**
F_SIZE	14.41	0.74	12.43	14.73	14.91	14.53	14.11	0.42**
F_AGE	2.59	1.04	0.00	2.83	4.38	2.47	2.91	−0.44*
DUAL	0.68	0.47	0	1	1	0.73	0.57	0.16*
O_AGE	3.85	0.26	2.71	3.87	4.38	3.84	3.85	−0.01
O_EDU	2.02	1.06	1	2	4	2.24	1.47	0.77**
O_EXP	2.95	0.65	0.00	2.99	4.09	2.92	3.01	−0.18
FEM	0.86	0.35	0	1	1	0.89	0.80	0.09†

Notes: † $p < 0.10$, * $p < 0.05$, and ** $p < 0.01$; Variables include access to bank financing (*BF*), socially responsible investment (*SRI*), internal financing sources (*IFS*), firm size (*F_SIZE*), firm age (*F_AGE*), CEO duality (*DUEL*), change in small production firm performance (Δ*SPFP*) owner age (*O_AGE*), owner education (*O_EDU*), owner experience (*O_EXP*), and owner is female (*FEM*). Standard deviation (*SD*), Minimum (*Min*), Maximum (*Max*), and Private financing (*PF*).

financing compared to those with private financing (mean 0.22 versus −0.53); (iii) financial performance of the small production firms with bank financing is significantly higher compared to those with private financing (mean 0.23 versus −0.57); (iv) firm size of the small production firms with bank financing is larger than those with private financing; and (v) education level of the owners of the small production firms with bank financing is much higher than those with private financing, all differences are significant at the 1% level. Similarly, *t*-test results show that (i) firm age of the small production firms with bank financing is slightly lower compared to those with private financing (mean 2.47 versus 2.91); and (ii) the CEO duality in the small production firms with bank financing is slightly higher compared to those with private financing (mean 0.73 versus 0.57), all differences are significant at the five percent level. Likewise, higher number of small production firms with bank financing are managed by male owners compared to those with private financing (mean 0.89 versus 0.80), difference is significant at the five percent level.

Principal Component Analysis (PCA)

To reduce dimensionality (i.e., to reduce number of variables), we used principal component analysis. According to Pereira and Sassi (2012), principal component analysis is one of the most popular methods for dimensionality reduction of a feature set. As shown in Table 3, factor analysis extracts two factors (denoted as Component 1 and Component 2) and all the items loaded on the expected factors. This shows that common factor bias is not a concern. Varimax rotation explains 87.42% of the variance in the original scores. The test statistic for Kaiser-Meyer-Olkin (KMO), a Measure of Sampling Adequacy is 0.83. Kaiser (1974, p. 36) suggests accepting values greater than 0.50 as indicative of the validity of factor analysis.

We analyse each question subset to calculate the weighted factor scores. The variables constructed through factor analysis (*SRI* and Δ*SPFP*) are standardised, and therefore they all have mean 0 and standard deviation 1 by construction. The first principal component is strongly correlated with five of the original variables: *SRI1, SRI2, SRI3, SRI4,* and *SRI5*. The second principal component increases with only three of the values: Δ*SPFP1,* Δ*SPFP2,* and Δ*SPFP3*. We can conclude that principal component analysis allows using an aggregate variable for each factor. We also computed Cronbach alphas on the above indicated clusters of items: *SRI* 0.943; and Δ*SPFP* 0.965.

Table 3
Rotated component matrix [a, b]

	Component	
	1	2
SRI		
My firm…:		
SRI1)…Avoids investing in new ventures that lead to alcohol production.	**0.945**	0.116
SRI2)…Avoids investing in new ventures that lead to tobacco production.	**0.945**	0.098
SRI3)…Avoids investing in new ventures that lead to weapons production.	**0.926**	0.114
SRI4)…Makes well-planned investments to avoid environmental degradation.	**0.885**	0.254
SRI5)…Makes socially responsible investment to create a better life for future generations.	**0.819**	0.273
ΔSPFP		
On the average, over the past 3 years how much did the …?		
Δ*SPFP1)*…Net profit margin of your small business change?	0.192	**0.931**
Δ*SPFP2)*…Return on investment of your small business change?	0.177	**0.951**
Δ*SPFP3)*...Cash flow of your small business from operations change?	0.136	**0.930**

Notes: [a] Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation
Rotation converged in 3 iterations
[b] Varimax Rotation = 87.42%

Pearson Bivariate Correlation Analysis

The correlation coefficient matrix exhibits that *SRI, IFS, F_SIZE, DUAL,* Δ*SPFP,* and *O_EDU* ($\rho_{SRI,\ BF} = 0.339$; $\rho_{IFS,\ BF} = 0.510$; $\rho_{F\_SIZE,\ BF} = 0.257$; $\rho_{DUAL,\ BF} = 0.162$; $\rho_{\Delta SPFP,\ BF} = 0.364$; and $\rho_{O\_EDU,\ BF} = 0.333$) are positively and significantly correlated with *BF*, suggesting that socially responsible investment, internal financing sources, firm size, CEO duality, changes in small production firm performance, and owner education positively influence the access to bank financing in India. Likewise, the correlation coefficient matrix exhibits that *F_AGE* ($\rho_{FA,\ BF} = -0.193$) is negatively and significantly correlated with *BF*, implying that firm age negatively influence the access to bank financing in India (see Table 4).

Table 4
Correlation coefficient

	BF	*SRI*	*IFS*	*SIZE*	*FA*	*DUAL*	*ΔSPFP*	*AGE*	*EDU*	*EXP*	*FEM*
BF	1										
SRI	0.339**	1									
IFS	0.510**	0.357**	1								
F_SIZE	0.257**	0.180**	0.416**	1							
F_AGE	−0.193**	−0.172**	−0.152**	−0.090	1						
DUAL	0.162**	0.158**	0.107	0.096	−0.118*	1					
ΔSPFP	0.364**	0.353**	0.419**	0.278**	−0.107	0.117*	1				
O_AGE	−0.009	0.016	0.070	−0.040	0.333**	−0.162**	0.028	1			
O_EDU	0.333**	0.191**	0.333**	0.269**	−0.378**	0.070	0.292**	−0.344**	1		
O_EXP	−0.063	−0.017	0.064	0.091	0.499**	−0.110	0.032	0.687**	−0.320**	1	
FEM	0.107	0.029	0.180**	0.179**	−0.030	0.431**	−0.010	−0.123*	0.093	−0.026	1

Notes: * $p < 0.05$ and ** $p < 0.01$; Variables include access to bank financing (*BF*), socially responsible investment (*SRI*), internal financing sources (*IFS*), firm size (*F_SIZE*), firm age (*F_AGE*), CEO duality (*DUEL*), change in small production firm performance (*ΔSPFP*) owner age (*O_AGE*), owner education (*O_EDU*), owner experience (*O_EXP*), and owner is female (*FEM*).

Regression Results and Discussion

Socially responsible investment, internal financing sources, and access to bank financing

Table 5 reports the estimated coefficients of Equation (1). The findings show that *SRI, IFS,* Δ*SPFP,* and *O_EDU* positively affect the access to bank financing in the Indian small business production industry.

The coefficients of *SRI* in columns (1), (2), (3), (4), (9), (10), and (11) of *BF* are positive and significant at the 1%, 1%, 1%, 1%, 5%, 1%, and 5% level, respectively, implying that socially responsible investment positively affects the access to bank financing in the Indian small business production industry. Thus, H1 is supported.

Likewise, the coefficients of *IFS* in columns (5) to (11) of *BF* are positive and significant at the 1% level, suggesting that internal financing sources positively affects the access to bank financing in the Indian small business production industry. Thus H2 is supported.

Regardless of individual model specifications, we find significant and positive coefficients of *SRI* and *IFS* suggesting that socially responsible investment and internal financing sources improve the access to bank financing in the Indian small business production industry. This finding remains robust when we consider all control variables together (refer to model specification 11).

The coefficients of *F_SIZE* in columns (2) and (4) of *BF* are positive and significant at the 5% and 10% level, respectively, indicating that firm size positively affects the access to bank financing in the Indian small business production industry. The coefficients of *F_AGE* in columns (2), (6) and (9) of *BF* are negative and significant at the 5%, 5%, and 10% level, respectively, indicating that firm age negatively affects the access to bank financing in the Indian small business production industry. Likewise, the coefficients of *DUAL* in columns (6) and (8) of *BF* are positive and significant at the 10% level, indicating that CEO duality positively affects the access to bank financing in the Indian small business production industry. Similarly, the coefficients of Δ*SPFP* in columns (2), (4), (6), (8), (9) and (11) of *BF* are positive and significant at the 1%, 1%, 5%, 5%, 5% and 5% level, respectively, implying that positive change in small production firm performance positively affects the access to bank financing in the Indian small business production industry.

The coefficients of *O_AGE* in columns (3) and (4) of *BF* are positive and significant at the 10% level, suggesting that owner age positively affects the access to bank financing in the Indian small business production industry. Similarly, the coefficients of *O_EDU* in columns (3), (4), (7), (8), (10), and (11) of *BF* are positive and significant at the 1%, 1%, 1%, 5%, 1% and 5% level, respectively, implying that owner education positively affects the access to bank financing in the Indian small business production industry.

Summary of findings, discussion, conclusion, and recommendations

The results suggest that the access to bank financing is positively associated with socially responsible investment, internal financing sources, change in small production firm performance, and education. Thus, the findings of this study lend some support to the findings of Cheng et al. (2014) related to publicly traded firms in that socially responsible investment improves access to bank financing in the small business production industry. The findings also support the findings of Philosophov and Philosophov (2005) in that internal financing sources increase the chances of access to bank financing.

In summary, socially responsible investment and internal financing sources improve access to bank financing in the small business production industry of India. Socially responsible investment increases the chances of bank financing by $e^{0.752} - 1$, $e^{0.494} - 1$, $e^{0.674} - 1$, and $e^{0.459} - 1$, or 112.12%, 63.88%, 96.21%, and 63.23%, respectively in India. The improvement in the chances of bank financing may be because socially responsible investment reduces agency problems between the firm and its stakeholders such as shareholders, government, and society. The findings of Ramasamy, Ting, and Yeung (2007) also indicated that firms with socially responsible investment may outperform their counterparts when stakeholders value corporate social responsibility.

Internal financing sources reduce chances of bankruptcy; therefore, internal financing sources increase the chances of bank financing by $e^{2.412} - 1$, $e^{1.931} - 1$, $e^{2.116} - 1$, and $e^{1.781} - 1$, or 10.16 time, 5.90 times, 7.30 times, and 4.93 times, respectively in India (see Table 4). While firm size, firm performance, owner age, and owner education increases chances of bank financing, firm age decrease chances of bank financing. This may be because older firms do not pay much attention to the socially responsible investment.

The findings of this study provide a critical policy recommendation suggesting that socially responsible investment can be useful in emerging countries where agency problems between firm and stakeholders such as shareholders, government, and society are high. While the basis of the results rests on small

Table 5
Socially responsible investment, internal financing sources, and access to bank financing

Dependent variables = BF

Variables	BF(1)	BF(2)	BF(3)	BF(4)	BF(5)	BF(6)	BF(7)	BF(8)	BF(9)	BF(10)	BF(11)
SRI	0.752**	0.494**	0.674**	0.459**					0.347*	0.456**	0.329*
	(5.66)	(3.40)	(4.77)	(3.02)					(2.17)	(2.98)	(2.02)
IFS					2.412**	1.931**	2.116**	1.781**	1.795**	1.863**	1.659**
					(8.39)	(5.94)	(6.76)	(5.16)	(5.41)	(5.72)	(4.70)
F_SIZE		0.459*		0.324†		0.128		0.101	0.128		0.093
		(2.58)		(1.67)		(0.65)		(0.49)	(0.65)		(0.45)
F_AGE		−0.345*		−0.231		−0.340*		−0.175	−0.297†		−0.134
		(−2.34)		(−1.25)		(−2.21)		(−0.92)	(−1.90)		(−0.70)
DUAL		0.383		0.414		0.536†		0.664†	0.459		0.570
		(1.30)		(1.20)		(1.73)		(1.87)	(1.45)		(1.58)
ΔSPFP		0.602**		0.497**		0.488*		0.403*	0.415*		0.330*
		(4.08)		(3.17)		(3.12)		(2.51)	(2.59)		(2.00)
O_AGE			1.256†	1.389†			0.973	1.073		0.835	0.981
			(1.70)	(1.75)			(1.17)	(1.27)		(1.03)	(1.17)
O_EDU			0.848**	0.627**			0.594**	0.503*		0.563**	0.489*
			(5.01)	(3.41)			(3.30)	(2.60)		(3.08)	(2.52)
O_EXP			−0.150	−0.133			−0.389	−0.284		−0.334	−0.277
			(−0.52)	(−0.39)			(−1.20)	(−0.78)		(−1.05)	(−0.77)

(*continue on next page*)

Table 5: (*continued*)

Variables	BF(1)	BF(2)	BF(3)	BF(4)	BF(5)	BF(6)	BF(7)	BF(8)	BF(9)	BF(10)	BF(11)
FEM			0.585	0.354			0.133	−0.102		0.164	−0.065
			(1.52)	(0.78)			(0.33)	(−0.22)		(0.39)	(−0.14)
Constant	0.998**	−4.847†	−5.439*	−9.650*	−0.532*	−1.436	−4.151	−5.615	−1.390	−3.540	−5.136
	(7.42)	(−1.88)	(−2.13)	(−2.46)	(−2.57)	(−0.52)	(−1.47)	(−1.33)	(−0.50)	(−1.26)	(−1.22)
N	319	319	319	319	319	319	319	319	319	319	319
χ^2-test	35.93**	75.07**	71.29**	90.39**	80.22**	100.81*	96.45**	109.27**	105.47**	105.46**	113.34**
Pseudo R^2	0.094	0.196	0.186	0.236	0.209	0.263	0.252	0.285	0.275	0.275	0.296

Notes: † $p<0.10$, * $p<0.05$, and ** $p<0.01$; Dependent variable includes access to bank financing (*BF*). Dependent variable includes socially responsible investment (*SRI*), internal financing sources (*IFS*), firm size (*F_SIZE*), firm age (*F_AGE*), CEO duality (*DUEL*), change in small production firm performance (Δ*SPFP*) owner age (*O_AGE*), owner education (*O_EDU*), owner experience (*O_EXP*), and owner is female (*FEM*).

production firms located in India, the findings may also be applicable to similar entities of other emerging markets.

Since the findings of this study show that perceived socially responsible investment positively impacts the bank financing, socially responsible investment favors both the firm and stakeholders such as shareholders, government, and society. Since socially responsible investment helps reduce social concerns and at the same time helps improve the chances of growth and prosperity of small production firms, we strongly recommend to have a corporate policy for the socially responsible investment. Socially responsible investment should be increased by the small production firms. Indian government should also support socially responsible investment by granting low interest loans and by providing subsidies to the production firms.

MANAGERIAL IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Managerial Implications

The higher level of perceived valuation of socially responsible investment and internal financing sources indicate a higher level of perceived access to bank financing and vice versa.

Limitations

This is a co-relational study that investigates the association between socially responsible investment and access to bank financing, and association between internal financing sources and access to bank financing. There is not necessarily a causal relationship between the two. The findings of this study may only be generalised to firms similar to those that were included in this research.

This study is limited to perceptions and judgments that asked for responses from fixed format, set-question survey tools. The respondents were unable to provide additional input because a survey questionnaire was used to collect data. The sample size is also small. A mail/drop-off survey data collection method contributed to a low response rate or response error. Some favorable techniques such as including postage-paid mail, sending a cover letter, providing a deadline for returning the survey, and promising anonymity were applied in order to increase the response rate.

Future Research

The generalisability of results and implications of this study also require further research of both a quantitative and qualitative nature, conducted not only in other Indian regions but also in other countries. Future study can improve the methodological focus and framework by collecting data from a larger number of firms.

NOTES

1. Agency theory was pioneered by Jensen and Meckling (1976).
2. The eigenvalues of the five principal components are 4.237, 0.525, 0.085, 0.079, and 0.074, and the corresponding variances are 84.730%, 10.509%, 1.709%, 1.577%, and 1.474%, respectively with Cronbach's alpha of 0.954. As a result, *SRI* index is constructed using the first component. Factors that have eigenvalues greater than one are included in the construction of the component (Kaiser, 1960).
3. The eigenvalues of the three principal components are 2.729, 0.189, and 0.083, and the corresponding variances are 90.961%, 6.286%, and 2.753%, respectively with Cronbach's alpha of 0.950. As a result, *SPFP* index is constructed using the first component. Factors that have eigenvalues greater than one are included in the construction of the component (Kaiser, 1960).
4. Production firms face numerous conflicts with society and government (Heyder & Theuvsen, 2012); therefore, we chose these firms for our study.
5. Bank financing is a binary variable; therefore, we used logistic regression method.
6. George and Mallery (2003) provide the following rules of thumb for Cronbach's alpha values: > 0.90 excellent, > 0.80 good, > 0.70 acceptable, > 0.60 questionable, > 0.50 poor, and < 0.50 unacceptable (p. 231).
7. The lowest tolerance is 0.422 and the highest VIF is 2.369 indicating that multicollinearity is not a serious issue.

REFERENCES

Ang, J. S. (1991). Small business uniqueness and the theory of financial management. *Journal of Small Business Finance, 1*(1), 1–13.

Arjalies, D. (2010). A social movement perspective on finance: How socially responsible investment mattered. *Journal of Business Ethics*, *92*(1), 57–78. https://doi.org/10.1007/s10551-010-0634-7

Bengtsson, E. (2008). A history of Scandinavian socially responsible investing. *Journal of Business Ethics*, *82*(4), 969–983. https://doi.org/10.1007/s10551-007-9606-y

Benabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica, 77*(305), 1–19. https://doi.org/10.1111/j.1468-0335.2009.00843.x

Bancel, F., & Mittoo, U. R. (2011). Financial flexibility and the impact of the global financial crisis: Evidence from France. *International Journal of Managerial Finance*, *7*(2), 179–216. https://doi.org/10.1108/17439131111122157

Bhaird Mac an, C., & Lucey, B. M. (2010). Determinants of capital structure in Irish SMEs. *Small Business Economics*, *35*(3), 357–375. https://doi.org/10.1007/s11187-008-9162-6

Bowerman, B. L., Schermer, J. A., Johnson, A. M., O'Connell, R. T., & Murphee, E. S. (2014). *Business statistics in practice* (3rd edition). Ontario, Canada: McGraw-Hill Ryerson Limited.

Brimble, M., Vyvyan, V., & Ng, C. (2013). Belief and investing: Preferences and attitudes of the faithful. *Australasian Accounting Business and Finance Journal*, *7*(1), 23–41. https://doi.org/10.14453/aabfj.v7i1.3

Chen, C. H. (2011). The major components of corporate social responsibility. *Journal of Global Responsibility*, *2*(1), 85–99. https://doi.org/10.1108/20412561111128546

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, *35*(1), 1–23. https://doi.org/10.1002/smj.2131

Coco, G., & Pignataro, G. (2012). Unfair credit allocations. *Small Business Economics, 41*(1), 241–251. https://doi.org/10.1007/s11187-012-9422-3

Dhaliwal, D., Li, O. Z., Tsang, A. H., & Yang, Y. G. (2011). Voluntary non-financial disclosure and the cost of equity capital: The case of corporate social responsibility reporting. *Accounting Review*, *86*(1), 59–100. https://doi.org/10.2308/accr.00000005

George, D. & Mallery, P. (2003). *SPSS for windows: A simple guide and reference*. 11.0 Update, (4th ed.). Boston: Allyn & Bacon.

Ghosal, S. & Ray, A. (2015). Farmers facing crop losses may end up in private moneylenders' grip. Retrieved 6 November 2016 from http://economictimes.indiatimes.com/news/economy/agriculture/farmers-facing-crop-losses-may-end-up-in-private-moneylenders-grip/articleshow/47622980.cms

Gill, A., Mand, H. S., Obradovich, J., & Mathur, N. (2015). Factors affecting ethical sources of external debt financing for Indian agribusiness firms. *Corporate Ownership and Control, 13*(1), 435–445. https://doi.org/10.22495/cocv13i1c4p2

Heyder, M. & Theuvsen, L. (2012). Determinants and effects of corporate social responsibility in German agribusiness: A PLS model. *Agribusiness*, *28*(4), 400–420. https://doi.org/10.1002/agr.21305

Huck, S. W. (2008). *Reading Statistics and Research* (5th ed.). Boston - New York: Pearson Educational Inc., Allyn and Bacon.

Jacobson, T., Linde, J., & Roszbach, K. (2005). Credit risk versus capital requirements under Basel II: Are SME loans and retail credit really different? *Journal of Financial Services Research, 28*(1–3), 43–75. https://doi.org/10.1007/s10693-005-4356-4

Jensen, M. & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Joeveer, K. (2013). What do we know about the capital structure of small firms? *Small Business Economics, 41*(2), 479–501. https://doi.org/10.1007/s11187-012-9440-1

Kaiser, H. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20*(1), 141–151. https://doi.org/10.1177/001316446002000116

Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, *39*(1), 31–36. https://doi.org/10.1007/BF02291575

Lahiri, R. (2012). Problems and prospects of micro, small and medium enterprises (MSMEs) in India in the era of globalization. *International Conference on Interplay of Economics, Politics and Society for Inclusive Growth organized by Royal College of Thimphu, Bhutan,* 15 and 16 October, pp. 1–11. Retrieved 27 February 2017 from https://www.rtc.bt/Conference/2012_10_15/6-RajibLahiri-MSMEs_in_India.pdf

Lamont, O., Polk, C., & Saa-Requejo, J. (2001). Financial constraints and stock returns. *Review of Financial Studies*, *14*(2), 529–554. https://doi.org/10.1093/rfs/14.2.529

Mason, R. D., Lind, D. A., & Marchal, W. G. (1991). *Statistics: An introduction* (3rd ed.). San Diego, CA: Harcourt Brace Jovanovich, Inc.

Mill, G. A. (2006). The maturing of socially responsible investment: A review of the developing link with corporate social responsibility. *Journal of Business Ethics*, *63*(2), 131–148. https://doi.org/10.1007/s10551-005-2410-7

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance*, *39*(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Nambiar, P. & Chitty, N. (2014). Meaning making by managers: Corporate discourse on environment and sustainability in India. *Journal of Business Ethics*, *123*(3), 493–511. https://doi.org/10.1007/s10551-013-1848-2

Osei-Assibey, E., Bokpin, G. A., & Twerefou, T. K. (2012). Microenterprise financing preference: Testing POH within the context of Ghana's rural financial market. *Journal of Economic Studies*, *39*(1), 84–105. https://doi.org/10.1108/01443581211192125

Pereira, F. H. & Sassi, R. J. (2012). Rough sets and principal components analysis: A comparative study on customer database attributes selection. *African Journal of Business Management, 6*(1), 3822–3828.

Philosophov, L.V. & Philosophov, V. L. (2005). Optimization of a firm's capital structure: A quantitative approach based on a probabilistic prognosis of risk and time of bankruptcy. *International Review of Financial Analysis*, *14*(2), 191–209. https://doi.org/10.1016/j.irfa.2004.06.010

Podsakoff, P. & Organ, D. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531–544. https://doi.org/10.1177/014920638601200408

Ramasamy, B., Ting, H. W., & Yeung, M. C. Y. (2007). Does it pay to be good in developing countries? The relationship between CSR and financial performance in Malaysia. *Asian Academy of Management Journal of Accounting & Finance, 3*(1), 21–36.

Renneboog, L., Horst, J. T., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance*, *32*(9), 1723–1742. https://doi.org/10.1016/j.jbankfin.2007.12.039

Sandhu, N., Hussain, J., & Matlay, H. (2012). Barriers to finance experienced by female owner/managers of marginal farms in India. *Journal of Small Business and Enterprise Development*, *19*(4), 640–655. https://doi.org/10.1108/14626001211277442

Scott, W. R. (1994). Institutional analysis: Variance and process theory approaches. In W. R. Scott, & J. W. Meyer (Eds.), *Institutional environments and organizations: Structural complexity and individualism* (pp. 81–99). Thousand Oaks, CA: Sage.

Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.

Star, M. (2008). Socially responsible investment and pro-social change. *Journal of Economic Issues*, *42*(1), 51–73. https://doi.org/10.1080/00213624.2008.11507114

Stein, J. (2003). Agency, information, and corporate investment. In G. Constantinides, M. Harris, & R. Stulz, (eds). *Handbook of the economics of finance* (pp. 111–166) Amsterdam, The Netherlands: Elsevier. https://doi.org/10.1016/S1574-0102(03)01006-9

The Economist. (May, 2013). Lenders of the last resort; Indian banks. Retrieved 10 March 2017 from http://search.proquest.com/docview/1355931646?OpenUrlRefId=info:xri/sid:primo&accountid=14739

Tsai, W. H., Chou, W. C., & Hsu, W. (2009). The sustainability balanced scorecard as a framework for selecting socially responsible investment: An effective MCDM model. *Journal of the Operational Research Society*, *60*(10), 1396–1410. https://doi.org/10.1057/jors.2008.91

Turker, D. (2008). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, *85*(4), 411–427. https://doi.org/10.1007/s10551-008-9780-6

Uyar, A. & Guzelyurt, M. K. (2015). Impact of firm characteristics on capital structure choice of Turkish SMEs. *Managerial Finance*, *41*(3), 286–300. https://doi.org/10.1108/MF-01-2014-0016

Wahyudi, I. (2014). Default risk analysis in micro, small, and medium enterprises: Does debt overhang theory occur? *Asian Academy of Management Journal of Accounting & Finance*, *10*(1), 95–131.

Wang, Y. & Berens, G. (2015). The impact of four types of corporate social performance on reputation and financial performance. *Journal of Business Ethics*, *131*(2), 337–359. https://doi.org/10.1007/s10551-014-2280-y

Wu, F., Guan, Z., & Myers, R. (2014). Farm capital structure choice: Theory and an empirical test. *Agricultural Finance Review*, *74*(1), 115–132. https://doi.org/10.1108/AFR-08-2012-0041

Zehir, C., Acar, A. Z., & Tanriverdi, H. (2006). Identifying organizational capabilities as predictors of growth and business performance. *The Business Review, 5*(2), 109–116.

Zinga, M. T., Augusto, M. A., & Ramos, M. E. (2013). Family involvement, agency cost of debt financing, and small firm performance: research agenda. *Revista de Empresa Familiar*, *3*(1), 21–30.

APPENDIX A

Survey questionnaire

1) Where do you obtain financing from?
   ☐ Bank(s) ☐ Private lending institutions

2) Do you have adequate internal (personal and family) financing sources to invest in new venture?
   ☐ No ☐ Yes

3) Please indicate average sales (Rupees) of the firm per year:
   ☐ 0 – 500,000 ☐ 500,001 – 1,000,000 ☐ 1,000,001 – 2,000,000
   ☐ 2,000,001 – 3,000,000 ☐ 3,000,001 or more

4) Please indicate the age of your firm:
   Firm Age: _____ Years

5) Is the owner the chairperson of the directors (decision makers) in the firm?
   ☐ Yes ☐ No

6) Please indicate the age of the owner/director/CEO:
   Age of the Owner/Director/CEO: _____ Years

7) Please indicate the highest level of the owner's/director's/CEO's education:
   ☐ High school or less ☐ College diploma ☐ Bachelor's degree
   ☐ Master's degree ☐ PhD degree or more

8) Please indicate the number of years the owner/director/CEO has been involved in this business:
   Owner/Director/CEO Experience: _____ Years

9) Please indicate the gender of the owner/director of the firm:
   ☐ Male ☐ Female

10) Socially Responsible Investment

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My firm avoids investing in the new ventures that produce alcohol.	☐	☐	☐	☐	☐
My firm avoids investing in the new ventures that produce tobacco.	☐	☐	☐	☐	☐
My firm avoids investing in the new ventures that produce weapons.	☐	☐	☐	☐	☐
My firm makes well-planned investments to avoid environmental degradation.	☐	☐	☐	☐	☐
My firm makes socially responsible investment to create a better life for future generations.	☐	☐	☐	☐	☐

11) Small Production Firm Performance

	Gone down a lot	Gone down a little	Stayed approximately the same	Gone up a little	Gone up a lot
On the average, over the last 3 years in what direction and to what degree do you perceive the net profit margin changed?	☐	☐	☐	☐	☐
On the average, over the last 3 years in what direction and to what degree do you perceive the return on investment changed?	☐	☐	☐	☐	☐
On the average, over the last 3 years in what direction and to what degree do you perceive the cash flow from operations changed?	☐	☐	☐	☐	☐