Board characteristics and environmental performance in Indonesian family business

Tri Damayanti* and Haninun Haninun

Faculty of Economics and Business,
Department of Accounting,
University of Bandar Lampung,
Jl. Z.A Pagar Alam No. 26, Labuhan Ratu,
Bandar Lampung, 35142, Indonesia
Email: damayanti.latif@gmail.com
Email: haninun@ubl.ac.id
*Corresponding author

Lindrianasari Lindrianasari

Faculty of Economics and Business,
Department of Accounting,
University Lampung,
Jl. Prof. Soemantri Brojonegoro,
No. 1 Gedong Meneng
Bandar Lampung, 35142, Indonesia
Email: sari_170870@yahoo.com

Aminah Aminah and
Nurdiawansyah Nurdiawansyah

Faculty of Economics and Business,
Department of Accounting,
University of Bandar Lampung,
Jl. Z.A Pagar Alam No. 26, Labuhan Ratu,
Bandar Lampung, 35142, Indonesia
Email: aminah@ubl.ac.id
Email: nurdiawansyah.iwan@gmail.com

Abstract: This study investigates the impact of board characteristics on environmental performance in listed Indonesian family companies. We analysed 130 listed family firms using unbalanced panel method. Results reveal that board characteristics do not affect environmental performance, i.e., agency problem II. Environmental performance is a strategic non-financial issue, and it has several consequences, including external stakeholders and costs. Environmental performance is also not influenced by family ownership. This finding is important in the international market because many Indonesian family businesses deal with several foreign investors and international business.

Keywords: environmental strategy; management family decision and incentives; family coalition.

Reference to this paper should be made as follows: Damayanti, T., Haninun, H., Lindrianasari, L., Aminah, A. and Nurdiawansyah, N. (2020) 'Board characteristics and environmental performance in Indonesian family business', *Int. J. Trade and Global Markets*, Vol. 13, No. 1, pp.106–117.

Biographical notes: Tri Damayanti graduated her Master of Accounting in the Economics and Business Faculty of the Accounting Department from Lampung University in June 2017. She is active as a lecturer and researcher in the Department of Accounting, University of Bandar Lampung. Her research topic is in the areas of corporate governance, family business and corporate social responsibility. She has published her papers at the *Tazkia Islamic Finance and Business* (TIBR), *Review of Integrated Business and Economics Research* (RIBER) and *International Journal of Scientific and Technology Research* (IJSTR).

Haninun Haninun obtained her Master of Accounting in the Economic Faculty of the Accounting Department from Lampung University in June 2010; since 10 September 2015, she enrolled as a Doctoral student at the Lampung University in Lampung and since 16 September 2013, she is active as a Secretary of the Studies Centre of the Accounting and Finance Development at the University of Bandar Lampung. Her research topic is in the area of corporate social responsibility. She has published her papers at the *Science Journal Lahore*, *Review of Integrated Business and Economics Research* (RIBER), *International Journal of Trade and Global Markets*, *Indonesian Journal of Sustainability Accounting and Management* and the *Indonesian Journal of Accounting and Finance*.

Lindrianasari Lindrianasari is a Professor of Accounting in the University of Lampung. She completed her Master's and Doctoral Degrees in Accounting Science from the University of Gadjah Mada, Indonesia. She conducted the sandwich program at the Australia National University (funding by ADB and Indonesia Government) to strengthen research methodology capability under the supervision of Greg Sheiler (2005) and Mark Wilson (2011). Her research topics are in the area of corporate governance and environmental accounting. She has published her papers at the *Management Research Review*, *Journal of Global Business Advancement*, *Indonesian Journal of Accounting Research*, *Journal of Indonesian Economic and Business* and *Corporate Ownership and Control Journal* and *International Journal of Monetary Economics and Finance* and *Indonesian Journal of Sustainability Accounting and Management*.

Aminah Aminah graduated her Master of Accounting in the Economics and Business Faculty of the Accounting Department from Lampung University. She is active as a Lecturer and researcher in the Department of Accounting, University of Bandar Lampung. Her research topic is in the area of public sector accounting and management accounting. She has published her papers at the *Review of Integrated Business and Economics Research* (RIBER), *International Conference on Law, Business and Governance* and *Indonesian Finance Association Conference*, *International Journal of Monetary Economics and Finance* and *International Journal of Scientific and Technology Research* (IJSTR).

Nurdiawansyah Nurdiawansyah graduated his Master of Accounting in the Economics and Business Faculty of the Accounting Department from Lampung University in July 2017. He is active as a Lecturer and Researcher in the Department of Accounting, University of Bandar Lampung. His research topic is in the area of corporate social responsibility and green accounting. He has published his papers at the *Review of Integrated Business and Economics Research* (RIBER), *International Conference on Law, Business and Governance* and *Indonesian Finance Association Conference*.

This paper is a revised and expanded version of a paper entitled 'Board characteristics and environmental performance in Indonesian family business' presented at *SIBR-Hong Kong, 2018, Conference on Interdisciplinary Business and Economics Research*, Hong Kong, 29–30 September, 2018.

1 Introduction

Environmental issue is important for firms because it – although non-financial and voluntary – can influence management strategies. Berrone and Gomez-Mejia (2009) asserted that high environmental performance can create low operating costs and access to several resources and increase customer and employee interest.

In Indonesia, several pollution cases involving firm operations have occurred (e.g., Lapindo mud, haze in Sumatra Island, oil spill in Balik Papan, East Kalimantan, industrial waste and marine pollution from ship fires). The Ministry of Environment of Indonesia (KLH) implemented Rule Nos. 7/2014, which states that every firm is responsible for its activities with environmental effects. The consequences of the environmental failure caused by manufacturing activities are punishment and a fine of at least Rp3 billion and a maximum of Rp9 billion. In 2015, the Supreme Court of Indonesia ordered PT. Kallista Alam, a palm oil company, to disburse \$26 million (£21 million) in fines and reparations for its cut-and-burn practices in the Tripa peat swamp region (Aba and Maria, 2017). Infringement of and irresponsibility towards environmental issues cause legal and economic consequences.

For regulating firm operations related to environmental issues, KLH issued a program to assess the effort of people responsible for the business or activity in controlling environmental pollution or damage. The program also evaluates the management of hazardous and toxic waste materials called PROPER (KLH, 2014). PROPER assessment consists of documents regarding

- the performance summary of environmental management
- environmental management system
- energy efficiency, reduce; reuse; recycle (3R) of B3 (hazardous and toxic materials) waste
- 3R non-solid B3 waste
- emission reduction water efficiency
- biodiversity community empowerment (KLH, 2014).

Another motivation for research is to find how family ownership addresses uncertainty in currency crisis. Family ownership also deals with international market because many listed Indonesian family businesses are supported by foreign investors and multinational markets in terms of exportation and importation. Lindrianasari et al. (2017) found that company export level is relevant to environmental quality certification. Zacarías et al.

(2017) proposed an entrepreneurship model to decompose firms, thus enabling industry residues to transform into commercial products in multinational companies in Monterrey (Mexico). They claimed that externality market failures deal with industry residues. Withisuphakorn (2018) found that CSR is verified as a valuable investment option.

Researchers conducted several environmental accounting studies. Gunardi et al. (2016) found that company size, profitability and public stick ownership influence CSR reporting, but leverage and liquidity do not influence such reporting. Malarvizhi and Matta (2016) argued that no relationship exists between environmental disclosure and firm performance in India. Haninun et al. (2018) reported that environmental performance and disclosure positively affect financial performance in Indonesia.

Listed family companies in Indonesia are dominant at approximately 51% (PWC, 2014). They contribute approximately 25% of GDP (PWC, 2014). The contribution and financial and non-financial performance of Indonesian family businesses on GDP motivate us to investigate this field. In 2014–2016, the economic performance of Indonesia decreased. Lemmon and Lins (2003) highlighted that crisis period is captured as an exogenous factor, which is significantly lowered to obtain return of investment opportunities.

The next motivation is how family ownership combines with its control behaviour in this economic condition. Family ownership deals with management to adjust its decision to control shareholder goals. Berrone et al. (2010) stated that family businesses are mostly influenced by controlling families in their preferred strategy agendas that balance economic and socio-emotional goals. These agendas also focus on meeting legal requirements and implementing pollution controls. In family businesses, environmental strategy is part of the management decision, which is managed by controlling shareholders through management entrenchment. Sharma (2000) argued that family firm management may pursue environmental strategies to avoid legal sanctions and create image reputation for stakeholders. This research is different from previous works that do not explore board characteristics, which may affect the management decision regarding environmental issues.

Our study contributes to explain the mechanism of board characteristics in environmental decisions, which are reflected in firm performance. Moreover, this research explains the impact of controlling shareholders in the family business model.

2 Conceptual framework

2.1 Resource dependence theory

Pfeffer and Salancik (1978) mentioned that resource dependence theory suggests that directors with diverse resources, long-term experiences, intellectual capital and expertise in their fields can give better information, advice and access to many resources for firm strategies than their counterparts.

Hillman and Dalziel (2003) argued that the board has two functions:

- monitor
- facilitator.

The board must ensure that the board acts according to shareholder interest in the family firm model, indicating the coalition of agents and principals because of familiness as the form of agency problem II (Tokarczyk, 2007). The board should also access information and other resources as a practice of resource dependence theory. Kassinis and Vafeas (2006) argued that one of the board duties is to design environmental strategy so that the importance of diverse board resources for facing environmental issues can increase.

2.2 Agency theory

Jensen and Meckling (1976) argued that agency theory explains the difference of agent and principal interests. It also drives agent and principal conflicts. Wolfenzon (1999) debated their idea and mentioned that agency problem I is not greater than agency problem II in concentrated ownership. Wolfenzon (1999) claimed that dispersed ownership creates many kinds of interests but cannot influence individually as great as in concentrated ones. Wolfenzon's (1999) argument protects minority shareholders in the concentrated ownership system. This agency problem is called agency problem II, in which agent and principal conflicts are minimised by reducing various interests. Conflicts of controlling and minority shareholders rise when voting rights are implied. These conflicts infer the weakness of the concentrated ownership system. In this research object, ownership characteristics rely on the concentrated model, which creates agency problem II.

2.3 Stakeholder theory

Freeman (1984) argued that the previous goal of firms was to make money from shareholders. However, such firms also had to satisfy the need of their stakeholders. Mitchel et al. (2011) stated that in prioritising stakeholders who influence firms, family businesses feature exhaustive family member involvement. This approach led to different goals and behaviours in family businesses than in non-family businesses. Such goals and behaviours were mostly altered by stakeholder power, legitimacy and importance.

2.4 Family board and environmental performance

Rodrigue et al. (2013) argued that firms with proactive orientation strategies increase environmental performance. Iatridis (2013) found a positive relationship between board characteristics and environmental profiles because boards represent resource provision and their role on environmental strategies. Neubaum et al. (2012) suggested that family-controlled businesses are effective in encompassing demands from their internal and external stakeholders. Family businesses also display higher investments in proactive environmental practices than non-family businesses (Berrone et al., 2010; Sharma and Sharma, 2011). Agency problem II states that family involvement in management focuses on the direction of controlling shareholders. Family involvement may contribute to raise competitive advantages for the institution through high social responsibility and financial resource by reducing costs of environmental issues and then obtaining economic sustainability and longevity (Tokarczyk et al., 2007).

H_1: Family ownership has a positive impact on environmental performance.

2.5 Educational background or environmental expertise of board management and environmental performance

De Viller et al. (2017) found that the lack of knowledge and resources in board structures cause difficulty in realising environmental performance. Implementation cost increases with complex director networks and experiences when environmentally efficient production technology is further learned (Homroy and Slechten, 2018). Agrawal and Knoeber (2001) argued that directors with legal background are advantageous because of their high-cost environmental legal consequences. Therefore, boards with law experts are expected to monitor environmental practices and create better environmental performance than those without such experts.

Fama and Jensen (1983) suggested that board of directors' decision-making is initially tasked with monitoring and advising senior management. Thus, directors with environmental experience can narrow information gap between agents and principals (Pfeiffer and Salancik, 1978). Laux and Laux (2009) recommended the expertise of directors who focus on environmental performance and are supported to do most of their work related to environmental strategies. Kroll et al. (2008) argued that the appropriate experience and expertise of boards in environmental issues are positively linked to good environmental performance.

H_2: Educational background/environmental expertise of board management positively influences environmental performance.

Table 1 describes variable definition in this research.

Table 1 Variable definition

Variable	*Code*	*Description*	*Source(s)*
		Dependent	
Environmental performance	PROPER	Average score of PROPER achieved by each family firm	KLH
		Independent	
Family board	FAMBOARD	Percentage of family members who serve as top management (e.g., CEO and directors)	AR
Board with education background related to environmental issues/environmental expertise	ENVBOARD	Binary variable with a score of 1 for the presence of board with educational background related to environmental issues or having any expertise in environmental responsibility, 0 for others	AR
		Control	
Family ownership	OWN	Percentage of ownership by family members	AR, ICMD
Leverage	LEV	Ratio of total debt and total assets	FR

FR: Financial Report, ICMD: Indonesia Capital Market Directory, AR: Annual Report, KLH: Ministry of Environment of Indonesia.

2.6 Research framework

Environmental performance is the dependent variable in this study. The independent variables are family involvement in ownership and in management. We also employed control variables, such as profitability and leverage. On the basis of the conceptual framework, we set up the econometrics model for this research as follows:

$$\text{PROPER} = \alpha + \beta_1\text{FAMBOARD}_{it} + \beta_2\text{ENVBOARD}_{it} + \beta_3\text{LEV}_i + \beta_4\text{OWN}_{it} + \varepsilon_i$$

3 Methodology

We observed 135 listed PROPER-family observations (n = 42 for 2014, n = 41 for 2015, and n = 52 for 2016). We deduced firms with incomplete data (n = 2 for 2014, n = 2 for 2015, and n = 1 for 2016), resulting in 130 observations. Finally, we analysed all data using unbalanced panel by EViews Software version 9.0. Table 2 explains the fields of our samples.

Table 2 Fields of samples

	2014		*2015*		*2016*	
Description	*Frequency*	*%*	*Frequency*	*%*	*Frequency*	*%*
Agriculture	7	17.5	6	15.38	10	18.37
Manufacture	29	72.5	30	76.92	37	2.04
Real estate and property	1	2.5	1	2.56	1	73.47
Service	2	5	1	2.56	1	2.04
Others	1	2.5	1	2.56	2	4.08
Total	*40*	*100*	*39*	*100*	*51*	*100*

Source: Data observed

4 Result and analysis

Using unbalanced panel for 2014–2016 observation years, we analysed 130 listed Indonesian family companies.

Given the results in Panels A, B and C, we had to select between fixed effect model and common effect model. In the Chow test, fixed effect is more appropriate than the common effect. Therefore, we employed the fixed effect model.

Table 4 presents the descriptive statistics and multivariate regression using the panel data method. Panel E is a multivariate regression that employs the unbalanced panel method. After considering the proper model analysis, we found that adjusted R-square is 0.306336. The analysis also reveals that the model in this study is reliable, with the dependent variable having 30–63% capability of explaining independent variables. In addition, family board (FAMBOARD) and board with environmental background or expertise (ENVBOARD) have no significant effect on environmental performance as proven by the probability values of 0.3808 and 0.3274, respectively (more than α value 0.005). The findings reject H_1 and H_2. *T*-statistic informs that both have negative signs. Table 3 explains output of Chow, Hausman, and Lagrange Multiplier test.

Table 3 Output of Chow, Hausman, and Lagrange multiplier test

Panel A			
Redundant fixed effects test			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.053661	(54, 71)	0.0023
Cross-section Chi-square	122.299391	54	0.0000
Panel B			
Correlated random effects – Hausman test			
Equation: Untitled			
Test cross-section random effects			
Test summary	Chi-Square Statistic	Chi-Square d.f.	Prob.
Cross-section random	7.799112	4	0.0992
Panel C			
	Cross-section	Time	Both
Breusch-Pagan	1.191471	0.072995	1.264466
	(0.2750)	(0.7870)	(0.2608)

Source: Output of statistical analysis using EViews 9.0

Our control variables are family ownership (OWN) and leverage (LEV). OWN has no significant effect, with a probability value of 0.1372 (more than α value 0.005). LEV has a negative significant effect, with a probability value of 0.0427.

In addition, family board and education or environmental expertise of board management have no impact on environmental performance in Indonesian family businesses. Families involved in board management do not affect environmental performance because familiness has influenced their decision. Damayanti et al. (2018) added that such families act as a coalition, which focuses on the direction of controlling shareholders. In currency crisis, controlling shareholders prefer to maximise their private benefit by maximising monetary benefit through their ownership in the stock market (Damayanti et al., 2018).

Chua et al. (1999) argued that dominant coalition of familiness-agents and principals is potentially sustainable across generations. Chua et al. (1999) stated that family involvement in business has several consequences. Eddleston and Kellermanns (2007) found that dysfunctionality in business occurs because of negative family involvement. The degree and tenacity of conflicts among family members are intensified because they have different visions and goals. Hillman and Dalziel (2003) noted that corporate strategies and programs are influenced by director involvement. Eisenhardt (1989) asserted that environmental issues are unpalatable to risk-averse managers. Hence, they may be reluctant to allocate costs that cannot give them private benefits. Moreover, to obtain high environmental performance, the management needs additional investments (Berrone and and Gomez-Mejia, 2009), which are controlled by principals.

Table 4 Descriptive statistics and multivariate regression using least square panel data

Panel D					
	PROPER	*FAMBOARD*	*ENVBOARD*	*OWN*	*LEV*
Mean	2.910897	21.31660	0.523077	54.11595	48.04977
Median	3.000000	16.66667	1.000000	55.53000	47.49576
Maximum	4.000000	75.00000	1.000000	97.20000	124.2964
Minimum	2.000000	0.000000	0.000000	12.05000	6.618702
Std. dev.	0.385435	21.09807	0.501399	20.86754	20.62631
Samples	130				

Panel E				
Variable	*Coefficient*	*Std. error*	*t-Statistic*	*Prob.*
C	3.139003	0.429545	7.307746	0.0000
FAMBOARD	−0.004250	0.004820	−0.881866	0.3808
ENVBOARD	−0.112560	0.114149	−0.986077	0.3274
LEV	−0.012272	0.005948	−2.063218	0.0427
OWN	0.009444	0.006281	1.503427	0.1372
R-squared	0.618216		Adjusted R-squared	0.306336
F-statistic	1.982226		S.E. of Regression	0.321016
Prob. (F-statistic)	0.003106		Sum squared resid	7.316622

Source: Output of statistical analysis using EViews 9.0

The environmental education or expertise of board management do not influence environmental performance given the power of controlling shareholders and familiness as the practice of agency problem II. As a control variable, family involvement in ownership shows an insignificant effect on environmental performance. Sciascia and Mazzola (2008) argued that family involvement in ownership and in management is given adequate attention because it influences firm strategies.

From stakeholder perspectives in the family business mode, family is one of the most influenced stakeholders, which control firms to satisfy internal and external stakeholders. Although family power dominates family firm decision, family firms do not deny that costs may affect their financial performance. Leverage impact on environmental performance is negatively significant, implying that increasing leverage decreases firm image. Increasing leverage may occur by avoiding environmental regulations. Controlling shareholders do not involve leverage incentives. Risk-averse management behaviour is the reason leverage is considered.

5 Conclusion

In family businesses, agency problem II is a key factor, as it drives controlling shareholders to strongly influence management decision regarding environmental issues. Stakeholder approach in the context of family business also posits family as the most powerful stakeholder who can influence the management decision. In the fluctuative economic situation, controlling shareholders are also motivated to make entrenchment. Directing the focus of control management to environmental decisions is difficult for these shareholders. Nevertheless, the management still addresses environmental issues. The finding in leverage variable indicates that the management practices risk-averse behaviour, produces efficient cost, and follows the direction of controlling shareholders.

Furthermore, we must understand how the management and controlling shareholders perceive environmental issues. The model must explore several factors beyond this research.

References

Aba, E. and Maria, B.St. (2017) *A Fightback Against the Perpetrators is Underway, But Litigation is Proving Unappealing and Burdensome for Victims*, 4 Februari, Retrieved in https://www.theguardian.com/global-development-professionalsnetwork/2017/feb/04/indonesian-air-pollution-death-justice

Agrawal, A. and Knoeber, C.R. (2001) 'Do some outside directors play a political role?', *Journal of Law and Economics*, Vol. 44, pp.179–198.

Berrone, P. and Gomez-Mejia, L.R. (2009) 'Environmental performance and executive compensation: and integrated agency-institutional perspective', *Academy of Management Journal*, Vol. 52, pp.103–126.

Berrone, P., Cruz, C., Gomez-Mejia, L.R. and Larraza-Kintana, M. (2010) 'Socioemotional wealth and corporate responses to institutional pressures: do family-controlled firms pollute less', *Administrative Science Quarterly*, Vol. 55, No. 1, pp.82–113.

Chua, J.H., Chrisman, J.J. and Sharma, P. (1999) 'Defining the family business by behavior', *Entrepreneurship Theory and Practice*, Vol. 23, No. 4, pp.19–39.

Damayanti, T., Lindrianasari, Komalasari, A., Dewi, F.G. and Gamayuni, R.R. (2018) 'Entrechment effect and financial performance in Indonesia family companies', *Review of Integrated Business and Economics Reseach* (*RIBER*), Vol. 7, No. S2, pp.152–166.

De Villers, C., Naiker, V. and Van Staden, C.J. (2017) 'The effect of board characteristics on firm environmental performance', *Journal of Management*, Vol. 37, No. 6, pp.1636–1663.

Eddleston, K. and Kellermanns, F.W. (2007) 'Destructive and productive family relationships: a stewardship theory perspective', *Journal of Business Venturing*, Vol. 22, No. 4, pp.545–565.

Eisenhardt, K.M. (1989) 'Agency theory: an assessment and review', *Academy of Management Review*, Vol. 14, No. 1, pp.57–74.

Freeman, R.E. (1984) *Strategic Management: A Stakeholder Approach*, Pitman, Boston, MA.

Gunardi, A., Febrian, E. and Aldrin, H. (2016) 'The implementation of firm-specific characteristics on disclodure: the case of Indonesia', *International Journal of Monetary Economics and Finance*, Vol. 9, No. 4, pp.379–387.

Haninun, H., Lindrianasari, L. and Denziana, A. (2018) 'The effect of environmental performance and disclosure on financial performance', *International Journal of Trade and Global Markets*, Vol. 11, Nos. 1–2, pp.138–148.

Hillman, A.J. and Dalziel, T. (2003) 'Boards of directors and firm performance: integrating agency and resource dependence perspectives', *Academy of Management Review*, Vol. 28, pp.383–396.

Homroy, S. and Slechten, A. (2018) 'Do board expertise and network board affect environmental performance?', *Journal of Business Ethic*, Vol. 146, pp.1–24.

Iatridis, G.E. (2013) 'Environmental disclosure quality: evidence on environmental performance, corporate governance and value relevance', *Emerging Markets Review*, Vol. 14, pp.55–75.

Jensen, M. and Meckling, W. (1976) 'Theory of the firm: managerial behavior, agency cost, and ownership structure', *Journal of Financial Economics*, Vol. 3, pp.305–360.

Kassinis, G. and Vafeas, N. (2006) 'Stakeholder pressures and environmental performance', *Academy of Management Journal*, Vol. 49, pp.145–159.

Kementrian Lingkungan Hidup (KLH/Ministry of Environment of Indonesia) (2014) *Peraturan Menteri Lingkungan Hidup Republik Indonesia Nomor 7 Tahun 2014 Tentang Kerugian Lingkungan Hidup Akibat Pencemaran Dan/Atau Kerusakan Lingkungan Hidup*, Retrieved in www.menlh.go.id/

Kroll, M., Walters, B.A. and Wright, P. (2008) 'Board vigilance, director experience, and corporate outcomes', *Strategic Management Journal*, Vol. 29, pp.363–382.

Laux, C. and Laux, V. (2009) 'Board committees, CEO compensation, and earnings management', *The Accounting Review*, Vol. 84, pp.869–891.

Lemmon, M. and Lins, K. (2003) 'Ownership structure, corporate governance, and firm value: evidence from east Asian financial crisis', *Journal of Finance*, Vol. 58, No. 4, pp.1445–1468.

Lindrianasari, Kufepaksi, M. and Yuztitya, A. (2017) 'Environmental asset, environmental quality, and the number of exports', *Review of Integrative Business and Economics Research*, Vol. 6, No. 2, pp.205–216.

Malarvizhi, P. and Matta, R. (2016) 'Link between corporate environmental disclosure and firm performance – perception or reality?', *Review of Integrative Business and Economics Research*, Vol. 5, No. 3, pp.1–34.

Neubaum, D.O., Dibrell, C. and Craig, J.B. (2012) 'Balancing natural environmental concerns of internal and external stakeholders in family and nonfamily businesses', *Journal of Family Business Strategy*, Vol. 3, No. 1, pp.28–37.

Pfeffer, J. and Salancik, G.R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*, Harper and Row, New York.

Rodrigue, M., Magnan, M. and Cho, C.H. (2013) 'Is environmental governance substantive or symbolic? an empirical investigation', *Journal of Business Ethics*, Vol. 114, No. 1, pp.07–129.

Sciascia, S. and Mazzola, P. (2008) 'Family involvement in ownership and management: exploring nonlinear effects on performance', *Family Business Review*, Vol. 21, No. 4, pp.331–345.

Sharma, P. and Sharma, S. (2011) 'Drivers of proactive environmental strategy in family firms', *Business Ethics Quarterly*, Vol. 21, pp.309–334.

Sharma, S. (2000) 'Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy', *Academy of Management Journal*, Vol. 43, pp.681–697.

Tokarczyk, J., Hansen, E., Green, M. and Down, J. (2007) 'A resource based view and market orientation theory examination of the role of 'familiness' in family business success', *Family Business Review*, Vol. 20, pp.17–31.

Withisuphakorn, P. (2018) 'Relationship between CSR and financial performance: the first comparative study on listed companies in Thailand and the USA', *International Journal of Economic Policy in Emerging Economies (IJEPEE)*, Vol. 11, No. 4, pp.367–377.

Wolfenzon, D. (1999) *A Theory of Pyramidal Ownership*, University of Michigan Business School, Ann Arbor, Michigan.

Zacarías, M.A.V., Aguiñaga, E. and Elías, A.L. (2017) 'Sustainable entrepreneurship in industrial ecology: the cheese case in Mexico', *International Journal of Trade and Global Markets*, Vol. 10, No. 1, pp.19–27.

Bibliography

Almeida, H.V. and Wolfenzon, D. (2006) 'Theory of pyramidal ownership and family business group', *The Journal of Finance*, Vol. 59, No. 6, pp.2637–2680.

Bansal, P. and Hunter, T. (2003) 'Strategic explanations for the early adoption of ISO 14001', *Journal of Business Ethics*, Vol. 46, pp.289–299.

Bansal, P. and Roth, K. (2000) 'Why companies go green: a model of ecological responsiveness', *Academy Management Journal*, Vol. 43, No. 4, pp.717–736.

Baumoel, D. (2012) 'Stakeholder map for family business: a comprehensive model for assessing and planning family enterprise', *FFI Global Conference*, 17–20 October, Brussels.

Delmas, M. and Toffel, M. (2004) 'Stakeholders and environmental management practices: an institutional framework', *Business Strategy and the Environment*, Vol. 13, pp.209–222.

La Porta, R., Lopez-De-Silanes, F. and Shleifer, A. (2000) 'Investor protection and corporate governance', *Journal of Financial Economics*, Vol. 58, pp.3–27.

Mitchell, R.K., Agle, B.R., Chrisman, J.J. and Spence, L.J. (2011) 'Toward a theory of stakeholder salience in family firms', *Business Ethics Quarterly*, Vol. 21, No. 2, pp.235–255.