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Environmental Reporting Quality of Japanese Companies

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- Adams, C. A. (2002). Internal organisational factors influencing corporate social and ethical reporting. *Accounting, Auditing & Accountability Journal*, 15(2), 223–250.
- Adams, C. A. (2004). The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17(5), 731–757.
- Adler, R., Mansi, M., Pandey, R., and Stringer, C. (2017). United Nations decade on biodiversity - a study of the reporting practices of the Australian mining industry. *Accounting, Auditing & Accountability Journal*, 30(8), 1711–1745.
- Aerts, W., Cormier, D., and Magnan, M. (2006). Intra-industry imitation in corporate environmental reporting: an international perspective. *Journal of Accounting and Public Policy*, 25(3), 299–331.
- Al-Tuwaijri, S. A., Christensen, T. E., and Hughes, K. E. (2004). The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. *Accounting, Organizations and Society*, 29(5–6), 447–471.
- Ali, A., and Abdelfettah, B. (2019). Financial disclosure information, board of directors, and firm characteristics among French CAC 40 listed firms. *Journal of the Knowledge Economy*, 10, 941–957.
- Ali, M., Haider, M. B., and Islam, M. T. (2015). Revisiting corporate social disclosure in Japan. In C. Noronha (Ed), *Corporate social disclosure: Critical perspectives in China and Japan* (pp. 201–235). Palgrave Macmillan.
- Amran, A., and Haniffa, R. (2011). Evidence in development of sustainability reporting: a case of a developing country. *Business Strategy and the Environment*, 20(3), 141–156.
- Aoki, K. (2000). Comparing Japanese and American industrial effluent control: a case study of the consequences of contrasting regulatory styles. *Law & Policy*, 22(3 and 4), 319–351.
- Aoyagi, M. (2017). Climate change communication in Japan. In M. C. Nisbet, S. S. Ho, E. Markowitz, S. O'Neill, M. S. Schäfer, and J. Thaker (Eds.), *Oxford research encyclopedia of climate science* (pp. 1–21).
- Arimura, T. H., Kaneko, S., Managi, S., Shinkuma, T., Yamamoto, M., and Yoshida, Y. (2019). Political economy of voluntary approaches: a lesson from environmental policies in Japan. *Economic Analysis and Policy*, 64, 41–53.
- Baalouch, F., Ayadi, S. D., and Hussainey, K. (2019). A study of the determinants of environmental disclosure quality: evidence from French listed companies. *Journal of Management and Governance*, 23(4), 939–971.
- BAC. (2009). *Opinion on the application of International Financial Reporting Standards (IFRS) in Japan (Interim Report)*. Available at: <https://www.fsa.go.jp/en/news/2009/20090701-1/01.pdf> (accessed 4 April 2020)
- Baum, C. F. (2014). *Panel data estimation and forecasting*. Available at <http://www.ncer.edu.au/events/documents/QUT14S2.slides.pdf> (accessed 26 August 2020).
- Bebbington, J., Kirk, E. A., and Larrinaga, C. (2012). The production of normativity: a comparison of reporting regimes in Spain and the UK. *Accounting, Organizations and*

Society, 37(2), 78–94.

- Beck, A. C., Campbell, D., and Shrivess, P. J. (2010). Content analysis in environmental reporting research: enrichment and rehearsal of the method in a British – German context. *The British Accounting Review*, 42(3), 207–222.
- Ben-Amar, W., and Zeghal, D. (2011). Board of directors' independence and executive compensation disclosure transparency. *Journal of Applied Accounting Research*, 12(1), 43–60.
- Borghei, Z., Leung, P., and Guthrie, J. (2016). The nature of voluntary greenhouse gas disclosure – an explanation of the changing rationale Australian evidence. *Meditari Accountancy Research*, 24(1), 111–133.
- Botosan, C. A. (2004). Discussion of a framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39(3), 289–295.
- Bowring, M. A. (2000). De/constructing theory: a look at the institutional theory that positivism built. *Journal of Management Inquiry*, 9(3), 258–270.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage Publications.
- Braam, G., Uit de Weerd, L., Hauck, M., and Huijbregts, M. (2016). Determinants of corporate environmental reporting: the importance of environmental performance and assurance. *Journal of Cleaner Production*, 129, 724–734.
- Brammer, S., and Pavelin, S. (2006). Voluntary environmental disclosures by large UK companies. *Journal of Business Finance & Accounting*, 33(7), 1168–1188.
- Brown, N., and Deegan, C. (1998). The public disclosure of environmental performance information—a dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research*, 29(1), 21–41.
- Buhr, N., and Freedman, M. (2001). Culture, institutional factors and differences in environmental disclosure between Canada and the United States. *Critical Perspectives on Accounting*, 12(3), 293–322.
- Burritt, R. L., Christ, K. L., and Omori, A. (2016). Drivers of corporate water-related disclosure: evidence from Japan. *Journal of Cleaner Production*, 129, 65–74.
- Campbell, D. (2004). A longitudinal and cross-sectional analysis of environmental disclosure in UK companies — a research note. *The British Accounting Review*, 36(1), 107–117.
- CDSB. (2018). *CDSB Framework for Reporting Environmental Information, Natural Capital and Associated Business Impacts*. Available at: https://www.cdsb.net/sites/default/files/cdsb_framework_2.1.pdf (accessed 4 April 2020)
- Chapple, W., and Moon, J. (2005). Corporate social responsibility (CSR) in Asia: a seven-country study of CSR web site reporting. *Business and Society*, 44(4), 415–441.
- Chauvey, J. N., Giordano-Spring, S., Cho, C. H., and Patten, D. M. (2015). The normativity and legitimacy of CSR disclosure: evidence from France. *Journal of Business Ethics*, 130(4), 789–803.
- Chelli, M., Durocher, S., and Richard, J. (2014). France's new economic regulations: insights from institutional legitimacy theory. *Accounting, Auditing & Accountability Journal*, 27(2), 283–316.

- Cho, C. H., Michelon, G., and Patten, D. M. (2012). Impression management in sustainability reports: an empirical investigation of the use of graphs. *Accounting and the Public Interest*, 12(1), 16–37.
- Cho, C. H., Michelon, G., Patten, D. M., and Roberts, R. W. (2015). CSR disclosure: the more things change ... ? *Accounting, Auditing & Accountability Journal*, 28(1), 14–35.
- Cho, C. H., and Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: a research note. *Accounting, Organizations and Society*, 32(7–8), 639–647.
- CICA. (1994). *Reporting on environmental performance*. Toronto: Canadian Institute of Chartered Accountants.
- Clarkson, P. M., Li, Y., Richardson, G. D., and Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327.
- Clarkson, P. M., Li, Y., Richardson, G. D., and Vasvari, F. P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122–144.
- Comyns, B. (2016). Determinants of GHG reporting: An analysis of global oil and gas companies. *Journal of Business Ethics*, 136(2), 349–369.
- Comyns, B. (2018). Climate change reporting and multinational companies: insights from institutional theory and international business. *Accounting Forum*, 42(1), 65–77.
- Comyns, B., and Figge, F. (2015). Greenhouse gas reporting quality in the oil and gas industry: a longitudinal study using the typology of “Search”, “Experience” and “Credence” information. *Accounting, Auditing & Accountability Journal*, 28(3), 403–433.
- Contrafatto, M. (2014). The institutionalization of social and environmental reporting: an Italian narrative. *Accounting, Organizations and Society*, 39(6), 414–432.
- Cowen, S. S., Ferreri, L. B., and Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based analysis. *Accounting, Organizations and Society*, 12(2), 111–122.
- Crabtree, B. F., and Miller, W. L. (1999). Using codes and code manuals: a template organizing style of interpretation. In B. F. Crabtree and W. L. Miller (Eds.), *Doing Qualitative Research* (2nd ed., pp. 163–177). California: Sage Publications.
- Criado-Jiménez, I., Fernández-Chulián, M., Husillos-Carqués, F. J., and Larrinaga-González, C. (2008). Compliance with mandatory environmental reporting in financial statements: the case of Spain (2001–2003). *Journal of Business Ethics*, 79(3), 245–262.
- CSR report review, compliant with international standards-environmental information disclosure, still reluctant [in Japanese]. (2009, October 1). *Nikkei Sangyo Shimbun*, p. 2.
- D’Amico, E., Coluccia, D., Fontana, S., and Solimene, S. (2016). Factors influencing corporate environmental disclosure. *Business Strategy and the Environment*, 25(3), 178–192.
- Davis, M., and Johnston, J. (2009). Conflict of interest in four professions: a comparative analysis. In *Conflict of Interest in Medical Research, Education, and Practice* (pp. 302–357). National Academies Press.
- de Villiers, C., and Alexander, D. (2014). The institutionalisation of corporate social

- responsibility reporting. *British Accounting Review*, 46(2), 198–212.
- de Villiers, C., and van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organizations and Society*, 31(8), 763–781.
- Deegan, C. (2017). Twenty five years of social and environmental accounting research within Critical Perspectives of Accounting: hits, misses and ways forward. *Critical Perspectives on Accounting*, 43, 65–87.
- Deegan, C. (2019). Legitimacy theory. *Accounting, Auditing & Accountability Journal*, 32(8), 2307–2329.
- Deegan, C., and Gordon, B. (1996). A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research*, 26(3), 187–199.
- Deegan, C., and Rankin, M. (1996). Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted successfully by the Environmental Protection Authority. *Accounting, Auditing & Accountability Journal*, 9(2), 50–67.
- Deegan, C., and Shelly, M. (2014). Corporate social responsibilities: alternative perspectives about the need to legislate. *Journal of Business Ethics*, 121(4), 499–526.
- Dierkes, M., and Preston, L. E. (1977). Corporate social accounting reporting for the physical environment: a critical review and implementation proposal. *Accounting, Organizations and Society*, 2(1), 3–22.
- Dimaggio, P. J., and Powell, W. W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Doi, T. (1973). The Japanese patterns of communication and the concept of amae. *Quarterly Journal of Speech*, 59(2), 180–185.
- Doi, T. (1986). *The anatomy of self (MA Harbison, Trans)*. Tokyo: Kodansha International.
- Dowling, J., and Pfeffer, J. (1975). Organizational legitimacy: social values and organizational behavior. *The Pacific Sociological Review*, 18(1), 122–136.
- Endo, K. (2020). Corporate governance beyond the shareholder – stakeholder dichotomy: lessons from Japanese corporations’ environmental performance. *Business Strategy and the Environment*, 29(4), 1625–1633.
- “Environmental accounting” industry is paying attention, introducing IBM Japan, etc. - Calculating cost effectiveness [in Japanese]. (1998, December 23). *Nihon Keizai Shimbun*, p. 11.
- EU. (1993). Council Regulation (EEC) No 1836/93 of 29 June 1993 Allowing Voluntary Participation by Companies in the Industrial Sector in a Community Eco-management and Audit Scheme. *Official Journal of the European Communities*, L168, 36, 1–53.
- Fallan, E., and Fallan, L. (2009). Voluntarism versus regulation: lessons from public disclosure of environmental performance information in Norwegian companies. *Journal of Accounting & Organizational Change*, 5(4), 472–489.
- FASB. (2010). *Statement of Financial Accounting Concepts No. 8: Conceptual Framework for Financial Reporting*. Available at: https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176157498129

(accessed 4 April 2020)

- FEE. (2000). *Towards a Generally Accepted Framework for Environmental Reporting*. Available at: https://www.accountancyeurope.eu/wp-content/uploads/Paper_Towards_a_Generally_Accepted_Framework_for_Environmental_Reporting173200561425.pdf (accessed 4 April 2020)
- Fernández-Gago, R., Cabeza-García, L., and Nieto, M. (2018). Independent directors' background and CSR disclosure. *Corporate Social Responsibility and Environmental Management*, 25(5), 991–1001.
- Fifka, M. S., and Drabble, M. (2012). Focus and standardization of sustainability reporting - a comparative study of the United Kingdom and Finland. *Business Strategy and the Environment*, 21(7), 455–474.
- Forker, J. J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research*, 22(86), 111–124.
- Freedman, M., and Jaggi, B. (2005). Global warming, commitment to the Kyoto Protocol , and accounting disclosures by the largest global public firms from polluting industries. *The International Journal of Accounting*, 40(3), 215–232.
- Freedman, M., and Jaggi, B. (2011). Global warming disclosures: impact of Kyoto protocol across countries. *Journal of International Financial Management and Accounting*, 22(1), 46–90.
- Freeman, R. E. (1984). *Strategic Management*. London: Pitman Publishing Inc.
- Frost, G. R. (2007). The introduction of mandatory environmental reporting guidelines: Australian evidence. *Abacus*, 43(2), 190–216.
- FSA. (2019a). Announcement of “revision of audit standards (exposure draft)”, “revision of interim auditing standards (exposure draft)” and “revision of quarterly review standards (exposure draft)” [in Japanese]. Available at: <https://www.fsa.go.jp/news/30/sonota/20190531.html> (accessed 4 April 2020)
- FSA. (2019b). *Principles regarding the disclosure of narrative information (provisional translation)*. Available at: <https://www.fsa.go.jp/en/news/2019/20190606-3/01.pdf> (accessed 4 April 2020)
- Fujitsu Research Institute. (n.d.). Japan. Available at: <https://www.reportingexchange.com/mapsearch> (accessed 4 April 2020)
- GAO. (2004). Environmental disclosure. In *GAO-04-808: Report to Congressional Requesters*. Available at: <https://www.gao.gov/products/GAO-04-808> (accessed 16 June 2018)
- Gnanaweera, K. A. K., and Kunori, N. (2018). Corporate sustainability reporting: linkage of corporate disclosure information and performance indicators. *Cogent Business & Management*, 5(1), 1423872.
- Gray, R. (1990). *The greening of accountancy: the profession after pearce*. London: Certified Accountants Publications.
- Gray, R., Adams, C. A., and Owen, D. (2014). *Accountability, social responsibility and sustainability: accounting for society and the environment*. Pearson Education Limited.
- Gray, R., Kouhy, R., and Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing*

& *Accountability Journal*, 8(2), 47–77.

- Gray, R., Owen, D., and Adams, C. (1996). *Accounting and accountability: changes and challenges in corporate social and environmental reporting*. Prentice Hall.
- Gray, R., Owen, D., and Adams, C. (2009). Some theories for social accounting?: a review essay and a tentative pedagogic categorisation of theorisations around social accounting. In M. Freedman and B. Jaggi (Eds.), *Sustainability, Environmental Performance and Disclosures (Advances in Environmental Accounting & Management, Volume 4)* (pp. 1–54). Emerald Group Publishing Limited.
- GRI. (2016). *Sustainability Reporting Standards*. Available at: <https://www.globalreporting.org/standards/gri-standards-download-center/> (accessed 4 April 2020)
- Gul, F. A., and Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and Public Policy*, 23(5), 351–379.
- Hackston, D., and Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–108.
- Hahn, R., and Kühnen, M. (2013). Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21.
- Haley, J. O. (1991). *Authority without power: Law and the Japanese paradox*. New York: Oxford University Press.
- Hayashi, J. (2014). Determinants of CSR disclosure for Japanese corporations – Analyzing the attributes of participating companies in GRI Guidelines. *Japan Society for Business Ethics Study*, 21, 235–244.
- Henriques, I., and Sadorsky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *The Academy of Management Journal*, 42(1), 87–99.
- Higashida, A., and Chentong, Z. (2018). Factors influencing corporate GHG emissions disclosure focusing on Japanese electric appliances industry. *Research in Corporate Social Accounting and Reporting*, 30, 1–15.
- Higashida, A., Kokubu, K., and Kawahara, C. (2005). Information Disclosure and Regulatory Factors in Environmental Reports of Japanese Companies: Focusing on Analysis of Environmental Reports Issued in 2003. *Social Accounting Research*, 17, 29–38.
- Higgins, C., and Larrinaga, C. (2014). Sustainability reporting: insight from institutional theory. In J. Bebbington, J. Unerman, and B. O'Dwyer (Eds.), *Sustainability Accounting and Accountability* (2nd ed., pp. 273–285). London: Routledge.
- Higgins, C., Milne, M. J., and van Gramberg, B. (2015). The uptake of sustainability reporting in Australia. *Journal of Business Ethics*, 129(2), 445–468.
- Hillman, A. J., Cannella, Jr, A. A., and Paetzold, R. L. (2000). The resource dependence role of corporate directors: strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–256.
- Ho, L. C. J., and Taylor, M. E. (2007). An empirical analysis of triple bottom-line reporting and its determinants: evidence from the United States and Japan. *Journal of International Financial Management & Accounting*, 18(2), 123–150.

- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *The Stata Journal*, 7(3), 281–312.
- Holland, L., and Foo, Y. B. (2003). Differences in environmental reporting practices in the UK and the US : the legal and regulatory context. *The British Accounting Review*, 35, 1–18.
- IASB. (2010). *Conceptual Framework for Financial Reporting 2010*. London: IFRS Foundation.
- ISO. (2017). *The ISO survey of management system standard certifications: ISO 14001- environmental management systems - requirements with guidance for use*. Available at <https://www.iso.org/the-iso-survey.html> (accessed 16 June 2018)
- Iwata, K., Arimura, T., and Takenouchi, H. (2008). Developments in corporate environmental disclosure: building a database of environmental reports and CSR reports [in Japanese]. *Sophia Economic Studies*, 53(1), 31–44.
- JACD. (2019). *The survey of corporate governance survey of listed companies* [in Japanese]. Available at <https://www.jacd.jp/news/opinion/cgreport.pdf> (accessed 26 August 2020)
- Japan Exchange Group. (2020). Voluntary application of IFRS (current and scheduled). available at: <https://www.jpx.co.jp/english/listing/others/ifrs/> (accessed 4 April 2020)
- JFS. (2003). Environmental reporting, expanding in quality, quantity, and application. *JFS Newsletter No.5*. Available at https://www.japanfs.org/en/news/archives/news_id027753.html (accessed 26 August 2020)
- Joh, S. W., & Jung, J. Y. (2012). The effects of outside board on firm value in the emerging market from the perspective of information transaction costs. *Asia-Pacific Journal of Financial Studies*, 41(2), 175-193.
- Johnson, R. A., and Greening, D. W. (1999). The effects of corporate governance and institutional ownership types on corporate social performance. *The Academy of Management Journal*, 42(5), 564–576.
- JPX. (2015). *Japan's corporate governance code*. Available at <https://www.jpx.co.jp/english/news/1020/b5b4pj000000jvvr-att/20150513.pdf> (accessed 26 August 2020)
- JPX. (2018). *Japan's corporate governance code*. Available at <https://www.jpx.co.jp/english/news/1020/b5b4pj000000jvvr-att/20180601.pdf> (accessed 26 August 2020)
- Kagan, R. A. (2000). Introduction: comparing national styles of regulation in Japan and the United States. *Law & Policy*, 22(3 and 4), 225–244.
- Kamath, R. (2010). *ESG Practices across Developed Markets: Comparison of Trends across Americas, Europe, and Asia*. Available at: <https://www.thomsonreuters.com/content/dam/openweb/documents/pdf/tr-com-financial/report/esg-practices-across-developed-markets.pdf> (accessed 16 June 2018)
- Kawahara, N. (2017). Current trends and challenges in sustainability reporting practices in Japan - Literature review. *Journal of Business Studies*, 64(2), 113–142.
- Kitora, Y. (2006). The effect of corporate strategic attitudes toward social responsibility activities and individual investors on the quality of CSR reports by Japanese companies. *Journal of Environmental Conservation Engineering*, 35(11), 839–847.

- Kokubu, K. (2004). Current status and development direction of environmental reports [in Japanese]. In K. Kokubu and K. Hirayama (Eds.), *Corporate environmental reporting in Japan* (pp. 9–21). Japan: Energy Conservation Center.
- Kokubu, K., Nashioka, E., Saio, K., and Imai, S. (2003). Two governmental initiatives on environmental management accounting and corporate practices in Japan. In M. Bennett, P. M. Rikhardsson, and S. Schaltegger (Eds.), *Environmental Management Accounting—Purpose and progress* (pp. 89–113). Dordrecht: Springer.
- Kokubu, K., Noda, A., Onishi, Y., and Shinabe, T. (2001). Determinants of environmental report publication in Japanese companies. *The third Asia Pacific interdisciplinary research in accounting conference in association with Accounting, Auditing & Accountability Journal*, (July).
- Kolk, A. (1999). Evaluating corporate environmental reporting. *Business Strategy and the Environment*, 8(4), 225–237.
- Kolk, A. (2005). Environmental reporting by multinationals from the Triad: convergence or divergence? *Management International Review*, 45(1), 145–146.
- Komura, K. (2009). Consider the spread of sustainability report in Japan [in Japanese]. *Journal of the Japan Association for Social and Economic System Studies*, 30, 89–95.
- KPMG. (2002). *KPMG international Survey of Corporate Sustainability Reporting 2002*. KPMG Global Sustainability Services.
- KPMG. (2005). *KPMG international survey of corporate social responsibility reporting 2005*. KPMG International.
- KPMG. (2008). *KPMG international Survey of Corporate Responsibility Reporting 2008*. KPMG International.
- KPMG. (2011). *International Survey of Corporate Responsibility Reporting 2011*. KPMG International.
- KPMG. (2013). *The KPMG survey of corporate responsibility reporting 2013*. KPMG International.
- KPMG. (2015). *Currents of change: the KPMG survey of corporate responsibility reporting 2015*. KPMG International.
- KPMG. (2017). *The road ahead: the KPMG survey of corporate responsibility reporting 2017*. KPMG International.
- KPMG, GRI, UNEP, and Centre for Corporate Governance in Africa. (2013). *Carrots and Sticks*. Available at: <https://www.globalreporting.org/resourcelibrary/Carrots-and-Sticks.pdf> (accessed 4 April 2020)
- KPMG, GRI, UNEP, and Centre for Corporate Governance in Africa. (2016). *Carrots and Sticks*. Available at: <https://assets.kpmg/content/dam/kpmg/pdf/2016/05/carrots-and-sticks-may-2016.pdf> (accessed 4 April 2020)
- Laine, M. (2009). Ensuring legitimacy through rhetorical changes?: a longitudinal interpretation of the environmental disclosures of a leading Finnish chemical company. *Accounting, Auditing & Accountability Journal*, 22(7), 1029–1054.
- Large companies disclose the impact of climate change-risk tolerance, persuasiveness required [in Japanese]. (2019, March 22). *Nikkei Sangyo Shimbun*, p. 7.
- Lawrence, T., Suddaby, R., and Leca, B. (2011). Institutional work: refocusing institutional

- studies of organization. *Journal of Management Inquiry*, 20(1), 52–58.
- Leca, B., and Naccache, P. (2006). A critical realist approach to institutional entrepreneurship. *Organization*, 13(5), 627–651.
- Lee, K.-H. (2017). Does size matter? Evaluating corporate environmental disclosure in the Australian mining and metal industry: a combined approach of quantity and quality measurement. *Business Strategy and the Environment*, 26(2), 209–223.
- Lessem, R. (1977). Corporate social reporting in action: an evaluation of British, European and American practice. *Accounting Organizations and Society*, 2(4), 279–294.
- Llena, F., Moneva, J. M., and Hernandez, B. (2007). Environmental disclosures and compulsory accounting standards: the case of Spanish annual reports. *Business Strategy and the Environment*, 16(1), 50–63.
- Mata, C., Fialho, A., and Eugénio, T. (2018). A decade of environmental accounting reporting: what we know? *Journal of Cleaner Production*, 198, 1198–1209.
- Mather, P., and Ramsay, A. (2007). Do board characteristics influence impression management through graph selectivity around CEO changes? *Australian Accounting Review*, 17(42), 84–95.
- Matsushita and Sharp are in the top 5. (2004, August). *Nikkei ESG*, 98–101.
- Meyer, J. W., and Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Michelon, G., and Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*, 16(3), 477–509.
- Michelon, G., Pilonato, S., and Ricceri, F. (2015). CSR reporting practices and the quality of disclosure : An empirical analysis. *Critical Perspectives on Accounting*, 33, 59–78.
- Mitchell, R. K., Agle, B. R., and Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- MOE. (2012). *Environmental Reporting Guideline (Fiscal Year 2012 Version)*. Available at: <https://www.env.go.jp/en/policy/economy/erg2012.pdf> (accessed 16 June 2018)
- Moll, J., Burns, J., and Major, M. (2006). Institutional theory. In Z. Hoque (Ed.), *Methodological issues in accounting: theories and methods* (pp. 183–205). London: Spiramus.
- Nakagawa, T. (2000). Administrative informality in Japan: governmental activities outside statutory authorization. *Administrative Law Review*, 52(1), 175–211.
- NAMC. (2019). *GPIF commissioned research : study of ESG information disclosure*. Available at https://www.gpif.go.jp/en/investment/research_2019_full_EN.pdf (accessed 26 August 2020)
- Narita, Y. (1968). Administrative guidance. *Law in Japan*, 2, 45–79.
- OECD. (2015). *G20/OECD principles of corporate governance*. Available at https://www.oecd-ilibrary.org/governance/g20-oecd-principles-of-corporate-governance-2015_9789264236882-en (accessed 26 August 2020)
- Okabe, M. (2009). Corporate governance in Japan: evolution, policy measures, and future issues corporate governance in Japan : evolution, policy measures, and future issues. In

- F. J. L. Iturriaga (Ed.), *Codes of good governance around the world* (pp. 485–522). New York: Nova Science Publishers.
- Ong, T., and Djajadikerta, H. G. (2018). Corporate governance and sustainability reporting in the Australian resources industry: an empirical analysis. *Social Responsibility Journal*, 16(1), 1–14.
- Orito, Y., and Murata, K. (2008). Socio-cultural analysis of personal information leakage in Japan. *Journal of Information, Communication and Ethics in Society*, 6(2), 161–171.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, 10(4), 297–308.
- Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting, Organizations and Society*, 27(8), 763–773.
- Patten, D. M., and Zhao, N. (2014). Standalone CSR reporting by U.S. retail companies. *Accounting Forum*, 38(2), 132–144.
- Peters, G. F., and Romi, A. M. (2014). Does the voluntary adoption of corporate governance mechanisms improve environmental risk disclosures? Evidence from greenhouse gas emission accounting. *Journal of Business Ethics*, 125(4), 637–666.
- Porter, T., and Ronit, K. (2006). Self-Regulation as Policy Process : The multiple and criss-crossing stages of private rule-making. *Policy Sciences*, 39(1), 41–72.
- Ramanathan, K. V. (1976). Toward a theory of corporate social accounting. *The Accounting Review*, 51(3), 516–528.
- Rao, K. K., Tilt, C. A., and Lester, L. H. (2012). Corporate governance and environmental reporting: an Australian study. *Governance: The International Journal of Business in Society*, 12(2), 143–163.
- Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, 88(2), 351–366.
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: an application of stakeholder theory. *Accounting Organizations and Society*, 17(6), 595–612.
- Rupley, K. H., Brown, D., and Marshall, R. S. (2012). Governance, media and the quality of environmental disclosure. *Journal of Accounting and Public Policy*, 31(6), 610–640.
- Saka, C., and Burritt, R. (2003). Environmental accounting in Japan – recent evidence. *Journal of the Asia Pacific Centre for Environmental Accountability*, 9(4), 4–10.
- Sakawa, H., and Watanabel, N. (2020). Institutional ownership and firm performance under stakeholder-oriented corporate governance. *Sustainability*, 12(3), 1–21.
- Sato, E., Matsuda, K., and Carducci, B. J. (2018). A factor analytical investigation of the Japanese translation of the Cheek- Buss Shyness Scale in support of the three-component model of shyness. *Personality and Individual Differences*, 124, 160–167.
- Schaede, U. (1999). *Self-regulation and the sanctuary strategy : competitive advantage through domestic cooperation by Japanese firms*. Available at: <https://academiccommons.columbia.edu/doi/10.7916/D82Z1D2J> (accessed 7 May 2020)
- Schrader, A. (2019). Sustainability reporting across Asia: trends and challenges. Available at: <https://www.conference-board.org/blog/sustainability/Asia-Sustainability-Reporting-Trends> (accessed 13 July 2020)

- Scott, W. R. (1995). *Institutions and organizations. foundations for organizational science*. London: Sage Publication.
- Shiono, H. (1982). Administrative guidance in Japan (gyosei-shido). *International Review of Administrative Sciences*, 48(2), 239–246.
- Smith, J., Adhikari, A., and Tondkar, R. H. (2005). Exploring differences in social disclosures internationally: a stakeholder perspective. *Journal of Accounting and Public Policy*, 24(2), 123–151.
- Solomon, A. (2000). Could corporate environmental reporting shadow financial reporting? *Accounting Forum*, 24(1), 30–55.
- Tauringana, V., and Chithambo, L. (2015). The effect of DEFRA guidance on greenhouse gas disclosure. *The British Accounting Review*, 47(4), 425–444.
- TCFD. (2017). *Recommendations of the task force on climate-related financial disclosures*. Available at <https://www.fsb-tcf.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf> (accessed 26 August 2020)
- Thijssens, T., Bollen, L., and Hassink, H. (2015). Secondary stakeholder influence on CSR disclosure : an application of stakeholder salience theory. *Journal of Business Ethics*, 132(4), 873–891. 3
- Thornton, P. H., Ocasio, W., and Lounsbury, M. (2015). The institutional logics perspective. In R. Scott and S. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences: an interdisciplinary, searchable, and linkable resource* (pp. 1–22). John Wiley & Sons, Inc.
- Tran, H. (2018). Differences in corporate social responsibility disclosure between Japan and the USA. *Journal of Asian Business and Economic Studies*, 25(1), 67–85.
- Trotman, K., and Bradley, G. W. (1981). Associations between social responsibility disclosure and characteristics of companies. *Accounting, Organizations and Society*, 6(4), 355–362.
- Ueda, R. (2015). *How is corporate governance in Japan changing? Developments in listed companies and roles of institutional investors*. Available at https://www.oecd-ilibrary.org/how-is-corporate-governance-in-japan-changing_5jrw7j3s37hh.pdf (accessed 26 August 2020)
- Ullmann, A. A. (1985). Data in search of a theory: a critical examination of the relationships among social performance, social disclosure, and economic performance of U. S. firms. *The Academy of Management Review*, 10(3), 540–557.
- UNEP/SustainAbility. (1994). *Company environmental reporting: a measure of the progress of business and industry towards sustainable development*. Available at: <https://wedocs.unep.org/handle/20.500.11822/27889> (accessed 27 July 2019)
- UNEP. (2015). *Raising the bar – advancing environmental disclosure in sustainability reporting*. Available at: <https://www.unenvironment.org/resources/report/raising-bar-advancing-environmental-disclosure-sustainability-reporting> (accessed 4 April 2020)
- van Staden, C. J., and Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review*, 39(3), 197–210.
- Volden, C., and Wiseman, A. E. (2012). *Governmental regulation and self-regulation*. Available at: http://www.vanderbilt.edu/csdi/events/prvtgov_wiseman.pdf (accessed 7

May 2020)

- Wagatsuma, H., and Rosett, A. (1983). Cultural attitudes towards contract law: Japan and the United States compared. *UCLA Pacific Basin Law Journal*, 2(1–2), 76–96.
- Wanderley, L. S. O., Lucian, R., Farache, F., and De Sousa Filho, J. M. (2008). CSR information disclosure on the web: a context-based approach analysing the influence of country of origin and industry sector. *Journal of Business Ethics*, 82(2), 369–378.
- WBCSD. (2019). *Corporate and Sustainability Reporting Trends in Japan*. Available at https://docs.wbcsd.org/2019/02/Corporate_and_sustainability_reporting_trends_in_Japan.pdf (accessed 26 August 2020)
- Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organizations and Society*, 7(1), 53–63.
- WRI, and WBCSD. (2004). *The greenhouse gas protocol: a corporate accounting and reporting standard*. Available at: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf> (accessed 26 August 2020)
- Yamagami, T., and Kokubu, K. (1991). A note on corporate social disclosure in Japan. *Accounting, Auditing & Accountability Journal*, 4(4), 32–39.
- Yamagami, T., and Tomimasu, K. (1993). The Japanese Valdez Society and environmental auditing research group. *Social and Environmental Accountability Journal*, 13(1), 16–16.
- Yashiro, N. (2016). Regulatory coherence: the case of Japan. In D. Gill and P. Intal, Jr (Eds.), *The development of regulatory management systems in east asia: country studies* (pp. 27–113). Economic Research Institute for ASEAN and East Asia (ERIA).
- Yook, K.-H., Song, H., Patten, D. M., and Kim, I.-W. (2017). The disclosure of environmental conservation costs and its relation to eco-efficiency : evidence from Japan. *Sustainability Accounting, Management and Policy Journal*, 8(1), 22–24.
- Yoshikawa, T., and McGuire, J. (2008). Change and continuity in Japanese corporate governance. *Asia Pacific Journal of Management*, 25(1), 5–24.
- Zeng, S. X., Xu, X. D., Yin, H. T., and Tam, C. M. (2012). Factors that drive Chinese listed companies in voluntary disclosure of environmental information. *Journal of Business Ethics*, 109(3), 309–321.
- Zhang, J. Q., Zhu, H., and Ding, H. (2013). Board composition and corporate social responsibility : an empirical investigation in the post Sarbanes-Oxley era. *Journal of Business Ethics*, 114(3), 381–392.
- Zona, F., Zattoni, A., & Minichilli, A. (2013). A contingency model of boards of directors and firm innovation: the moderating role of firm size. *British Journal of Management*, 24(3), 299-315.