

## **Accounting for economic sustainability: environmental, social and governance perspectives**

This special issue, containing an up-to-date collection of scholarly works on environmental, social and governance (ESG) perspectives in accounting, is intended to stand as a reference work for students, academics, policy makers, analysts and professionals in the field. By bringing in inter-disciplinary and multi-disciplinary perspectives and including relevant societal and political dimensions, we hope the publication will find a place on the shelves of major university libraries, policy makers and financial professionals around the globe.

Sustainability accounting addresses a heterogeneous assortment of various activities aiming for the environmental, social and economic sustainability of an organization – and the larger environment at the same time (Lehner, 2016). In these activities, a strong focus on risk management and corporate governance can be identified and is often linked to ethical considerations (Hussain *et al.*, 2018). As sustainability is such a widely recognized, yet still fluid concept regarding its definition, any attempt to understand the phenomenon holistically might need to take into account the interplay between organizational (power) structures and societal values (Lehner *et al.*, 2019; Harrer and Lehner, 2018; Lehner, 2016). This may be additionally relevant because most scholars agree that a match between the proposed value creation of an organization with the norms and values of a larger society leads to a higher legitimacy and reduces reputational and negotiation risks (Deephouse *et al.*, 2017; Thomas and Lamm, 2012).

Both of the said aspects have a positive impact on resource flows and reduce the risk-adjusted cost of capital in turn (Brandstetter and Lehner, 2015). Therefore, a focus on sustainability may well lead to a competitive advantage in addition to achieving the overarching aim of the Brundtland UN commission report: “[...] to meet the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland *et al.*, 1987). These potential commercial benefits of a strong organizational focus on sustainability however can only be fully harvested when properly controlled and managed, and clearly communicated with standardized metrics and reports (Lindgreen *et al.*, 2018). Such a standardization of sustainability reports may also be necessary in order to better fulfill the regulatory requirements concerning the reporting of non-financial information, which have been gradually introduced and expanded in the recent years, with the EU directive 2014/95 being a salient example of these (Pichler and Lehner, 2017).

Looking at existing research – while most scholars agree on the value propositions of a focus on sustainability, few would yet settle on a clear definition (Ben-Eli, 2018), provide clear directions, or even agree on its scope (Hahn *et al.*, 2018). What is more, said standardized instruments and reporting tools that holistically cover the broad concept of sustainability and social value creation are in their early adoption stages, despite massive efforts being put in by standardization boards such as the Sustainability Accounting Standards Board, the Global Reporting Initiative or the Global Impact Investing Network with their IRIS metrics (Lehner, 2016; Kroeger and Weber, 2014). Future research thus needs to deliver insights, which would allow the further fine-tuning of these instruments to the internal needs of organizations throughout their value-creation processes, and likewise, to achieve better transparency to their external stakeholders. Research could also certainly take on a more active role in the dissemination of the corresponding body of knowledge on sustainability accounting and its larger societal relevance to managers and scholars from other fields.



Summing up, while the level of activities and policy interest in various forms of sustainability accounting has been raised in the recent years, details of the inner-workings and motivations for related initiatives have been somewhat neglected so far in the academic literature. As foundations, individual- and group investors, the global internet-crowd, and more and more government agencies have become increasingly interested and willing to support more socially, economically and environmentally sustainable forms of funding and wealth creation, they are thus in dire need for suitable accounting and reporting instruments that include relevant and quantifiable ESG perspectives and allow for rational decision making.

The purposes of the special issue are thus as follows:

- to further clarify the concepts of environmental and social finance, risk and accounting, to examine potential overlaps with existing good corporate governance and CSR structures, and further to explore the impact on performance and market value and by this delineate the boundaries of ESG research; and
- to map out, display and scale the disparate voices, traditions and public and professional communities engaged in ESG accounting research and practice from various contexts and include a discursive perspective.

The large number of submissions of excellent papers for this special issue shows the relevance and societal importance of the topic, and we have carefully selected nine papers out of all these in order to map out the dimensions as described above and provide a comprehensive view on ESG factors. In this, we tried to avoid a cultural bias and especially invited voices from different cultural contexts, with the ultimate goal to explore what the field of accounting can provide to enhance all three, commercial as well as environmental and social sustainability.

The following nine papers have been selected.

### **CSR reporting and assurance legitimacy: a client Assuror Dyad investigation**

Picking up at the effect of sustainability reporting, Hickman and Cote (2019) investigate the difficulties of legitimizing CSR reports to various different stakeholder groups. While CSR reporting and the assurance of CSR reports has become an acknowledged research field (Simnett *et al.*, 2009), it is still in a nascent stage. Hence, following the call from O'Dwyer (2011) and Bebbington and Larrinaga (2014), they conduct semi-structured interviews with CSR related senior management positions in Fortune 200 companies. Their novel findings reveal that, in contrast to what existing literature holds a strong management involvement in CSR reporting does not counteract overall CSR legitimization. They provide evidence implying that the two antagonists in the literature, the management-as-champion of CSR, and a managerial capture need not be mutually-exclusive within a firm when it comes to the creation of shareholder value and stakeholder assurance at the same time. As an outcome, they go on to explain that a CSR supportive management does not de-legitimize the overall reporting and assurance processes for shareholder value.

### **CSR disclosure and debt financing**

In the same context, yet from an external perspective to the organization, Hamrouni *et al.* (2019) evaluates the effect that ESG information in the CSR reports has on the access to debt financing (leverage-ratios). From an investor's perspective, prior literature already highlights the strong correlation between good CSR reporting and performance (Dhaliwal *et al.*, 2011) and significant voices have shown the link of CSR reporting to an enhanced stakeholder engagement as well as reduced opportunistic behavior (e.g. Eccles *et al.*, 2012;

---

Benabou and Tirole, 2010). Hamrouni *et al.* (2019) evaluates the data from listed firms in France with proxies based on Bloomberg's ESG scores. Their novel findings show that leverage-ratios are positively related to CSR disclosure, pointing at an increased tendency for long-term and short-term debt financing when ESG information is disclosed. This further indicates better and less-costly access of external debt financing.

### **Building institutional legitimacy in impact investing: strategies and gaps in financial communication and discourse**

Providing information such as outlined above also enhances the overall transparency and thus reduces information asymmetries in the market. An issue, which Lehner *et al.* (2019) see especially prevalent in the impact investing market, seems to be working at sub-par efficiency. The inherently high uncertainty that reigns this market is found to be due to a lack of track-records of ESG investors and organizations with an overarching social or environmental mission; the insufficient provision of information on social and environmental risks and returns for impact investments (Harji and Jackson, 2012; Saltuk *et al.*, 2011); and the missing clarity in the underlying definitions (Harji and Jackson, 2012; Höchstädter and Scheck, 2015) that keeps regulators from coming up with tailored structures. The authors of this paper further address these gaps and ask how the concept of institutional legitimacy can help better understand the communication strategies of the various actors in the field. Their interesting findings highlight the diverse legitimization strategies in the sustainability reports of the various archetypes of actors and show how these, in turn, impact the flow of financial and non-financial resources.

### **The alignment of global equity and corporate bonds markets with the Paris Agreement – a new accounting framework**

Addressing the financial reporting perspective, more specifically the triangulation of multiple data sources in reported information, Thomä *et al.* (2019) propose a new accounting framework toward a 2° climate scenario under the Paris Climate Agreement (UNFCCC, 2015). The authors identify relevant information sources that yield accounting metrics in the global listed equity and corporate bond market and further propose an overhauled interpretation of Sharpe's (1964) Capital Asset Pricing Model (CAPM). They further suggest that in order to make portfolios ready for a data-based transition toward a lower emissions investment scenario it is of foremost importance to choose correct and valid metrics for the corresponding input and output data (i.e. that the unit of accounting would be required to be consistent with the actual underlying climate data). This contrasts with the traditional CAPM model that focuses on the probability distributions of the underlying financial risk and returns metrics, and requires homogeneous inputs over time.

### **The influence of ESG information on investment allocation decisions: an experimental study in an emerging country**

Looking at the importance of ESG information from a country specific context on Tunisia, Khemir *et al.* (2019) conduct a large-scale field experiment. Following Frimousse *et al.* (2006), who claim that unlike financial communication, communication on social performance of Tunisian companies seems marginal, and Chakroun (2013), who show that voluntary disclosure policy in annual reports of Tunisian firms is seen by analysts as being minimalist; the authors' work shows that indeed, ESG disclosure has become more and more important for investment decisions in Tunisia, and they find that governance and social information has an even greater influence than environmental information when it comes to investments in this specific region.

---

### **Between cost and value: investigating the effects of sustainability reporting on a firm's performance**

Buallay (2019) looks at the relationship between sustainability reporting and at the corresponding financial, operational and market performance by examining 342 financial institutions within 20 countries. Her interesting findings show that while sustainability reporting creates market value through an impact on market performance, it does sometimes even negatively affect financial and operational performance. This creates an exciting paradox that should be tackled further by scholars revisiting for example the cost-of-capital reduction theory (El Ghoul *et al.*, 2011).

### **Interactive visualization of big data in the field of accounting: a survey of current practice and potential barriers for adoption**

Taking on a technology driven, cognitive perspective, Perkhofer *et al.* (2019) look at the importance of using interactive visualizations (Janvrin and Weidenmeier-Watson, 2017) to make meaning of big data in accounting (Falschlunger, Lehner, Treiblmaier and Eisl, 2016). As correct management decision making is vital for the economic sustainability of a company and the vast abundance of available information makes it harder than ever to discern the relevant bits and pieces from background noise this has become a serious issue. Especially, the level of aggregation and the cognitive load the processing of the data causes (Falschlunger, Lehner and Treiblmaier, 2016) is in focus, when the authors research and discuss how future management reports need to provide a certain level of interaction between the data and the diverse audience. With their research, they follow and contribute to important streams in the visualization (Hirsch *et al.*, 2015), accounting information systems (Dilla *et al.*, 2010) and accounting education (Janvrin *et al.*, 2014) communities. They find that the lack of knowledge and experience regarding new visualization types and interaction techniques, and the often sole focus on Excel as a visualization tool can be identified as the main barriers, while the use of multiple data sources and the gradual implementation of further software tools can be seen as main drivers for the adoption of interactive visualizations.

### **Board composition and corporate risk taking: a review of listed firms from Germany and the USA**

This study focuses on the important governance question of board independence. In his paper, Younas *et al.* (2019) looks at the proportion of independent directors on a board and examines the effects of this board composition on (excessive) corporate risk taking. More precisely, his research attempts to determine whether an increase in the proportion of independent directors mitigates corporate risk taking, by controlling for either a one-tier and two-tier board system. Several studies have already examined the relationship between corporate governance and firm performance (Gompers *et al.*, 2003; Bhagat and Bolton, 2008) before, however, few studies combine board independence and unhealthy corporate risk taking. Therefore, this paper provides early empirical evidence that an increase in the proportion of independent directors is indeed associated with less unhealthy corporate risk taking. The results corroborate global and continued efforts to strengthen the diversity and independence of corporate boards and to improve the effectiveness of audit committees to curb unhealthy corporate risk taking.

### **Understanding IFRS adoption: consideration of the institutional dimension through a behavioral context**

Taking on a developing country perspective, Riahi and Khoufi (2019) try to discern the main behavioral factors that could affect the decision of adopting IFRS in developing countries.

With this paper, they respond to the lack of research into behavioral aspects of accounting while they firmly ground their hypotheses in the institutional theory. They take in the level of global innovation, the traces of normative, mimetic and coercive isomorphism, and the degree of accounting conservatism as variables for their hypotheses' development. Using multi-variate logistic regressions, they subsequently identify salient influential factors concerning the adoption of IFRS and discuss the role of the World Bank or the International Monetary Fund as drivers of a coercive isomorphism. In addition, they demonstrate once again the usefulness of neo-institutional theory for accounting research and provide further insights from a policy-making perspective (Bealing *et al.*, 1996).

With these nine papers we sincerely hope to further the field by providing novel insights and inspiring research directions. It is the guest-editors' strong belief that research needs to be much more aware of the dynamic interplay between context and theory and by that transcend the traditional structure- and agency framing, and all the time more acknowledging the specific context of the findings when it comes to theory building. We believe that the selected papers follow this approach and build theory, and we are therefore proud to provide you with a multi-perspective spectrum of contributions to the emerging field of sustainability accounting that connects to the ongoing discourse and further demonstrates the broad scope of the *Journal of Applied Accounting Research*.

You are invited to enjoy the varied voices in this compilation, be inspired by their context-aware approaches and subsequently submit your own perspectives for a future issue. Let us engage and enhance the field together!

**Othmar M. Lehner and Theresia Harrer**

## References

- Bealing, W.E., Dirsmith, M.W. and Fogarty, T. (1996), "Early regulatory actions by the SEC: an institutional theory perspective on the dramaturgy of political exchanges", *Accounting, Organizations and Society*, Vol. 21 No. 4, pp. 317-338.
- Bebbington, J. and Larrinaga, C. (2014), "Accounting and sustainable development: an exploration", *Accounting, Organizations and Society*, Vol. 39 No. 6, pp. 395-413.
- Benabou, R. and Tirole, J. (2010), "Individual and corporate social responsibility", *Economica*, Vol. 77 No. 305, pp. 1-19.
- Ben-Eli, M.U. (2018), "Sustainability: definition and five core principles, a systems perspective", *Sustainability Science*, Vol. 13 No. 5, pp. 1337-1343.
- Bhagat, S. and Bolton, B. (2008), "Corporate governance and firm performance", *Journal of Corporate Finance*, Vol. 14 No. 3, pp. 257-273.
- Brandstetter, L. and Lehner, O.M. (2015), "Opening the market for impact investments: the need for adapted portfolio tools", *Entrepreneurship Research Journal*, Vol. 5 No. 2, pp. 87-107.
- Brundtland, G.H., Khalid, M. and Agnelli, S. (1987), *Our Common Future*, United-Nation, New York, NY.
- Buallay, A. (2019), "Between cost and value: investigating the effects of sustainability reporting on a firm's performance", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 481-496.
- Chakroun, R. (2013), "Family control, Board of Directors' independence and extent of voluntary disclosure in the annual reports: case of Tunisian Companies", *Journal of Business Studies Quarterly*, Vol. 5 No. 1, pp. 22-34.
- Deephouse, D.L., Bundy, J., Tost, L.P. and Suchman, M.C. (2017), "Organizational legitimacy: six key questions", *The SAGE Handbook of Organizational Institutionalism*, Sage, Thousand Oaks, CA, pp. 27-54.
- Dhaliwal, D., Li, O.Z., Tsang, A.H. and Yang, Y.G. (2011), "Voluntary non-financial disclosure and the cost of equity capital: the case of corporate social responsibility reporting", *The Accounting Review*, Vol. 86 No. 1, pp. 59-100.

- Dilla, W., Janvrin, D.J. and Raschke, R. (2010), "Interactive data visualization: new directions for accounting information systems research", *Journal of Information Systems*, Vol. 24 No. 2, pp. 1-37.
- Eccles, R., Ioannou, I. and Serafeim, G. (2012), "The impact of a corporate culture of sustainability on corporate behavior and performance", working paper, Harvard Business School, Harvard University Press, Cambridge, MA, May 9.
- El Ghoul, S., Guedhami, O., Kwok, C.C. and Mishra, D.R. (2011), "Does corporate social responsibility affect the cost of capital?", *Journal of Banking & Finance*, Vol. 35 No. 9, pp. 2388-2406.
- Falschlunger, L., Lehner, O. and Treiblmaier, H. (2016), "InfoVis: 'the impact of information overload on decision making outcome in high complexity settings'", *Proceedings of the 2016 SIG HCI. AIS Electronic Library (AISeL)*, pp. 1-5.
- Falschlunger, L., Lehner, O., Treiblmaier, H. and Eisl, C. (2016), "Visual representation of information as an antecedent of perceptive efficiency: the effect of experience", *IEEE Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS)*, pp. 668-676.
- Frimousse, S., Mansouri, N. and Peretti, J.M. (2006), "La performance sociale et la légitimité institutionnelle", *27<sup>ème</sup> Congrès de l'Association Francophone de Comptabilité, Tunis, April 18*.
- Gompers, P., Ishii, J. and Metrick, A. (2003), "Corporate governance and equity prices", *The Quarterly Journal of Economics*, Vol. 118 No. 1, pp. 107-156.
- Hahn, T., Figge, F., Pinkse, J. and Preuss, L. (2018), "A paradox perspective on corporate sustainability: descriptive, instrumental, and normative aspects", *Journal of Business Ethics*, Vol. 148 No. 2, pp. 235-248.
- Hamrouni, A., Boussaada, R. and Farhat Toumi, N.B. (2019), "Corporate social responsibility disclosure and debt financing", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 394-415.
- Harji, K. and Jackson, E.T. (2012), *Accelerating Impact: Achievements, Challenges and What's Next in Building the Impact Investing Industry*, The Rockefeller Foundation, New York, NY.
- Harrer, T. and Lehner, O.M. (2018), "Entrepreneurial discourse from a critical feminist perspective", *British Academy of Management Proceedings, Vol. 2018*, pp. 2-26.
- Hickman, L.E. and Cote, J. (2019), "CSR reporting and assurance legitimacy: a client Assuror Dyad investigation", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 372-393.
- Hirsch, B., Seubert, A. and Sohn, M. (2015), "Visualisation of data in management accounting reports", *Journal of Applied Accounting Research*, Vol. 16 No. 2, pp. 221-239.
- Höchstädter, A.K. and Scheck, B. (2015), "What's in a name: an analysis of impact investing understandings by academics and practitioners", *Journal of Business Ethics*, Vol. 132 No. 2, pp. 449-475.
- Hussain, N., Rigoni, U. and Orij, R.P. (2018), "Corporate governance and sustainability performance: analysis of triple bottom line performance", *Journal of Business Ethics*, Vol. 149 No. 2, pp. 411-432.
- Janvrin, D.J. and Weidenmeier-Watson, M. (2017), "'Big data': a new twist to accounting", *Journal of Accounting Education*, Vol. 38, pp. 3-8.
- Janvrin, D.J., Raschke, R.L. and Dilla, W.N. (2014), "Making sense of complex data using interactive data visualization", *Journal of Accounting Education*, Vol. 32 No. 4, pp. 31-48.
- Khemir, S., Baccouche, C. and Ayadi, S. (2019), "The influence of ESG information on investment allocation decisions: an experimental study in an emerging country", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 458-480.
- Kroeger, A. and Weber, C. (2014), "Developing a conceptual framework for comparing social value creation", *Academy of Management Review*, Vol. 39 No. 4, pp. 513-540.
- Lehner, O., Harrer, T. and Quast, M. (2019), "Building institutional legitimacy in impact investing: strategies and gaps in financial communication and discourse", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 416-438.
- Lehner, O.M. (2016), *Routledge Handbook of Social and Sustainable Finance*, Routledge, Oxford.

- Lindgreen, A., Hirsch, B., Vallaster, C. and Yousofzai, S. (2018), *Measuring and Controlling Sustainability*, Routledge, Oxford.
- O'Dwyer, B. (2011), "The case of sustainability assurance: constructing a new assurance service", *Contemporary Accounting Research*, Vol. 28 No. 4, pp. 1230-1266.
- Perkhofer, L., Hofer, P., Walchshofer, C., Plank, T. and Jetter, H.-C. (2019), "Interactive visualization of big data in the field of accounting: a survey of current practice and potential barriers for adoption", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 497-525.
- Pichler, K. and Lehner, O.M. (2017), "European commission – new regulations concerning environmental and social impact reporting", *ACRN Oxford Journal of Finance and Risk Perspectives*, Vol. 6 No. 1, pp. 1-54.
- Riahi, O. and Khoufi, W. (2019), "Understanding IFRS adoption: consideration of the institutional dimension through a behavioral context", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 543-570.
- Saltuk, Y., Bouri, A. and Leung, G. (2011), "Insight into the impact investment market", J.P. Morgan Social Finance Research, JP-Morgan, London.
- Sharpe, W.F. (1964), "Capital asset prices: a theory of market equilibrium under conditions of risk", *Journal of Finance*, Vol. 19 No. 3, pp. 425-442.
- Simnett, R., Vanstraelen, A. and Chua, W.F. (2009), "Assurance on sustainability reports: an international comparison", *The Accounting Review*, Vol. 84 No. 3, pp. 937-967.
- Thomä, J., Hayne, M., Hagedorn, N., Murray, C. and Grattage, R. (2019), "The alignment of global equity and corporate bonds markets with the Paris Agreement – a new accounting framework", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 439-457.
- Thomas, T.E. and Lamm, E. (2012), "Legitimacy and organizational sustainability", *Journal of Business Ethics*, Vol. 110 No. 2, pp. 191-203.
- UNFCCC (2015), "Adoption of the Paris Agreement", *21st Conference of the Parties, December 12, Paris*, United Nations Framework Convention on Climate Change, p. 21.
- Younas, Z.I., Klein, C., Thorsten Trabert, T. and Zwergel, B. (2019), "Board composition and corporate risk taking: a review of listed firms from Germany and the USA", *Journal of Applied Accounting Research*, Vol. 20 No. 4, pp. 526-542.

### Further reading

- Markowitz, H.M. (1952), "Portfolio selection", *Journal of Finance*, Vol. 7 No. 1, pp. 77-91.
- Shiller, R.J. (2017), "Narrative economics", *The American Economic Review*, Vol. 107 No. 4, pp. 967-1004.
- Thomä, J., Murray, C. and Hayne, M. (2017), "Out of the fog: quantifying the alignment of Swiss pension funds and insurances with the Paris Agreement", available at: [www.transitionmonitor.com/wp-content/uploads/2017/1](http://www.transitionmonitor.com/wp-content/uploads/2017/1) (accessed May 20, 2019).
- Thomä, J., Dupré, S., Hayne, M., Weber, C., Hassan, F. and Fulton, M. (2015), "Assessing the alignment of portfolios with climate goals", available at: [http://2degrees-investing.org/IMG/pdf/2dportfolio\\_v0\\_small.pdf](http://2degrees-investing.org/IMG/pdf/2dportfolio_v0_small.pdf) (accessed January 15, 2018).