

Private finance for sustainable development

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Chapter 12

Private finance for sustainable development

Abstract: Private financing is an important aspect of sustainable finance for economic development and financial inclusion. Various forms of private sector financing need to be mobilised to achieve environmentally or socially sustainable outcomes as well as the United Nations' Sustainable Development Goals (SDGs). Strategically leveraging public finance through systemic change and stimulating private investment are both necessary to achieve a paradigm shift in the global economy (Clark, Reed, and Sunderland 2018). In the absence of the private sector progress will remain insufficient. A wide variety of impediments to incentivising private sector engagement persists. For private finance to make a positive contribution, fundamental systemic modifications and policy reforms are required to ensure that sustainable socioeconomic development happens within planetary boundaries (Steffen et al. 2015). This chapter consequently explores the unlocking of private sector finance to fulfil sustainability goals. However, not all is well in the private realm. Green bonds, while an innovative vehicle for investment, are problematic and wealth generation continues to be propped up by extreme poverty at the base of the economic pyramid. While new technologies, such as blockchain, offer a way forward for those at the base, progress will be limited unless and until the activities of all sectors are recognised and valued to the same extent as business as society emerges from the COVID-19 pandemic.

Keywords: artificial intelligence, base of the economic pyramid, green bonds, informal economy, private finance, voluntary sector, COVID-19

Background: Private finance and its role in achieving sustainability

The private financial sector is in control of significant power and resources to direct finance towards economic wealth creation that can meet public interest needs for long-term sustainability and social wellbeing. Mobilisation of economic and corporate constituents takes place within certain boundaries, national and institutional structures in the system of financial regulation and corporate law. The European Union (EU) mainstreaming agenda in sustainable finance, for instance, aims for ambitious outcomes, resulting from the simultaneous reorientation of investors as well as their investee companies and the prioritising of sustainable objectives. Private enterprises can optimise stakeholder' wealth, socioenvironmental responsibility and

fulfilment of SDGs (Chiu 2021). The private sector has thus been set the challenge of responding positively in support of the SDGs while at the same time acting in the interests of its stakeholders (Wynn and Jones 2020).

Corporate sustainability has become an increasingly important business imperative and if companies make contributions meaningfully to the SDGs, they will certainly need to integrate their achievements into their reporting processes. Corporations can be affected by resource constraints and may lack the managerial or structural capacity to respond to the sustainability challenges (Przychodzen and Przychodzen 2018). However, strategic innovations by corporations can develop a culture that may internalise new sustainability challenges positively and effectively (Fellnhofer 2017). Further, organisations can be externally influenced by stakeholder perceptions, industry trends and network collaborations in determining strategic and operational reforms to meet sustainability challenges (Frishammar and Parida 2019). A diverse approach and deliberate policy leadership can help achieve sustainability objectives effectively (Dudfield 2019).

The private sector is both a potential partner and key player and can contribute to development objectives in multiple ways for the achievement of the SDGs, such as stimulating healthy habits and job creation, providing investment opportunities and sharing the resources and knowledge required to shape innovative solutions to global” challenges (Killick and Wachenfeld 2015). Castro (2004) sought to lay the foundations for a more radical theory of sustainability by questioning the very possibility of sustainable development under neoliberalism and arguing that economic growth” relies upon the continuing and inevitable exploitation of both natural and social capital. These potentially irreconcilable objectives have resulted in trade-offs that may ultimately compromise environmental protection (Bernstein 2001). This has led to calls for a reorientation of capitalism”, with an emphasis on quality, rather than quantity, a shift, which it is argued, is underway, but continually challenged by the dominance of the single bottom line ideology of profit maximisation and cost-externalisation (Cadman, Eastwood, et al. 2015).

Competition between varieties of capitalism notwithstanding, the SDGs have given new impetus to sustainability with a shift from viewing sustainability as a cost centre to recognising it as an opportunity (Clark, Reed, and Sunderland 2018). Private investment flows in this context may require public sector interventions and support. As in many nations, public sector resources are scarce and spread across many competing commitments, they need to be used judiciously and strategically to leverage sufficient private flows. At the same time, the involvement of the business community in the Millennium Development Goals was limited as they were aimed at emerging countries. However, with the arrival of the SDGs, sustainability is gradually shifting from the corporate sidelines into the mainstream (PricewaterhouseCoopers 2015).

The SDGs can be productively incorporated into business strategy and operations. Companies need to emphasise the importance of the creativity, strategic skills and global reach they bring to the SDGs and the continuing need to integrate the SDGs into corporate management strategies (Wynn and Jones 2020). Those that embrace the challenge to decarbonise their manufacturing operations, whether in response to regulation (or the threat of regulation) or market opportunities, invariably discover ways to improve their operations in the process. These discoveries can potentially enhance a company's ability to produce better products, through redesign, efficiency gains, as well as improved manufacturing processes. In doing so, a company can transform itself and reshape its industry sector (Hart 2013).

Ceres (2016), in proposing a roadmap for sustainability, suggested that the financial services sector also plays a key role in promoting sustainable financing and in supporting the move to a sustainable economy, via its influence on capital across global markets. Few financial services companies have demonstrated their commitment to sustainability. The challenge for today's financial businesses is to address sustainability in such a way that they meet the current and future expectations of their customers, employees, communities and the environment, across both the public and private sectors (Garetti and Taisch 2012). Companies within the financial services sector have begun to publicly report on how they plan to address a range of environmental, social and governance (ESG) challenges (Cadman 2011; Cadman 2012). Other companies, however, seem to be slow to commit themselves publicly to such targets as those contained within the SDGs.

Another important sector for private financing whose contribution to sustainable development is essential is the information and technology sector. Information and communications technologies are playing a significant role in facilitating the SDGs and this role undoubtedly gets greater approaching 2030. In addition, the outbreak of COVID-19 has provided an expanded role for Information and communications technology (ICT) in the economy. Unfortunately, the role of ICT in achieving the SDGs was largely overlooked by policymakers in the formulation of the SDGs (Unwin 2015) and is not mentioned in any of the 17 SDGs and only four of the 169 targets. Sachs et al. (2015) demonstrated the potential of ICT to drive progress on the SDGs in four major areas namely, financial services, education, health and energy and climate change. The ICT industry sees the SDGs as a major new business opportunity but the role and the impact of the ICT industry in contributing to the SDGs differ in various parts of the world (Wynn and Jones 2020). Nonetheless, ICTs are evolving in developing countries from being specialist tools to day-to-day utilities, with digital mediation emerging as the dominant mechanism for economic, political and cultural development, via distributed ledger technologies, electronic contracts and blockchain, to name but a few examples.

There are several examples of previously unsustainable private sector industries embracing sustainability objectives. The automotive sector has gradually incorporated SDGs into its business strategy and operations and developed evolving sustainability

strategies. Petroleum or diesel engine-operated motor vehicles are being replaced by automated driving and electrification, transforming engine efficiency. Fuel efficiency regulations in countries like Japan and the United States are lending further impetus to change. Japanese automobile manufacturers are now leading actors in manufacturing fuel-efficient vehicles. Net-zero carbon power systems require yet further technological innovation and low-carbon fuels such as hydrogen are also becoming increasingly available, although more are needed (International Energy Agency 2020). It is not easy to eliminate emissions from specific subsectors and engage with consumers to ensure public acceptance and energy affordability at the same time. Total CO₂ emissions would need to fall by around 45% from 2010 levels by 2030. In addition, since 2020, due to the pandemic, there have been declines in global energy demand, energy-related CO₂ emissions, energy investment, oil as well as oil and coal consumption. Renewables, on the other hand, have been less affected than other fuels (International Energy Agency 2020) – an unforeseen transformative impact of COVID-19.

Similarly, the tourism industry can play a major role in contributing to the SDGs to promote a healthy environment (see Chapter Twenty-Four). Even the marketing and media industries have identified the importance to accommodate, if not yet fully embracing sustainability (Wynn and Jones 2020). Furthermore, the transition to a sustainable new principle has become a burgeoning advertising theme in the marketing and media industries and a new wave of creative agencies and practitioners has arisen in a time when the global advertising industry has encountered increasing criticism for promoting unsustainable consumerism (Mokoena et al. 2021). Pharmaceutical companies, according to Wynn and Jones (2020), have also adopted a more inclusive approach to the SDGs, recognising the value and need for partnerships. Eccles (2018) has suggested that the biotechnological and pharmaceutical industries are particularly important for progressing many of the SDGs, although a substantial variation in SDGs is observed within the healthcare sector, especially in developing countries. Antimicrobial resistance to drugs has also increased in recent years, increasing the significance of the pharmaceutical industry in advancing SDG3 (good health and wellbeing).

Retailers are the major actors between primary producers and consumers. These intermediaries also play a vital role in promoting more sustainable patterns of consumption. In Europe, the European Commission (2022) has recognised that retailers are in a singularly powerful position to drive sustainable consumption through their daily interactions with consumers and their partnerships with suppliers. The energy industry is in a similar position to contribute to the SDGs, although there are some tensions between immediate shareholder value and more altruistic aspirations. Wynn and Jones (2020) have noted that whatever companies might state regarding their alignment to SDGs, contradictions between their intent, action and impact remain.

In summary, meeting the SDGs can only be achieved if the private sector works alongside national governments, the United Nations system and other international

institutions. It is often difficult for a single company or any single sector or industry alone to deliver a low-carbon future. Everyone, from consumers to corporations to governments, needs to take responsibility. Even a challenge as complex as climate change can be met and addressed if private sector works collectively (Hart 2013).

Shared value model and agency theory on sustainable behaviour of private institutions

Shared value can be understood as those corporate policies and practices that stimulate the competitiveness of a company while simultaneously enhancing socio-economic conditions in the communities where it operates (Kramer and Porter 2011). This concept is important since businesses are continually having to defend themselves from the economic, social and environment-related claims and objections of stakeholders and shareholders (Steurer et al. 2005). Maintaining good stakeholder relations is an essential element of corporate practice, while sustainability itself is should be seen as making an important contribution to stakeholder theory (Wheeler, Colbert, and Freeman 2002). There are some weaknesses and shortcomings in the shared value model, however, as it can overlook the tensions between social and economic goals and does not always take into account business compliance challenges. It is also difficult to portray corporate responses concerning environmental and social problems as arising solely from good stakeholder relations, but rather as a consequence of continuous struggles between corporate bodies and their stakeholders (Crane et al. 2014). Whatever the cause, or origin, of corporate behaviour change, it is encouraging to see the greening of business practice at all levels, from the regional to the global, from certifying timber to emissions trading (Cadman and Hume 2012; Cadman, Hume, et al. 2015).

The use of executive stock options has long been encouraged by economists as a means of aligning the interests of managers with those of the firm's shareholder (Hirshleifer and Suh 1992; Hemmer, Kim, and Verrecchia 1999) and could be equally applied to changing sustainability-related behaviour. A large fraction of these remuneration packages come in the form of equity-based pay (van der Zee 2012). Equity-based compensation aligns the interests of managers with those of the shareholders. Agency theory argues that the outcome of a firm is visible on the observable indicators of performance (Holmström 1979). Agency problems arise when the interests of managers differ substantially from those of shareholders. It is impossible to build every action a manager should take in every possible scenario into their contract, so shareholders delegate some decision-making authority to the manager. However, the actions of managers cannot be judged and need not always be in the best interest of the shareholders, as managers are also rational human beings. Agency theory predicts that the interests of shareholders and managers will become more aligned when an executive's compensation package is linked to firm performance (Jensen and

Meckling 1976). Few studies disagree with the significant positive relationship between executive compensation and firm performance. When managers alter the payment setting process the relationship between executive pay and performance can be weakened (Bebchuk and Fried 2003). Consequently, building sustainability into contractual obligations and binding it to executive performance and remuneration methods could play a significant role in enhancing private sector support for, and implementation of, the SDGs.

Role of government policy in supporting private finance for sustainable development and technology

Continuing robust policy support is critical to achieving the levels of adoption necessary to successfully address SDGs. Market forces will not support technology adoption at the scale needed in the absence of policies to support private sector development, resulting in market failure. By providing a policy framework supportive of innovation and by removing barriers, the government has considerable leverage to encourage the private sector to deploy essential capital and technical capacity to scale up the economy. Leveraging private sector finance provides a good initial indication of the strength of the sustainability-related market signals, and the adaptability and potential effectiveness of sustainability policies. Policies that provide permanent and continuous incentives on an economy-wide basis, exert stronger leverage, as opposed to those which provide a temporary incentive or affect a limited segment of the economy. For example, a one-time grant to a specific firm favours that particular firm and does not provide an incentive for multiple actors within an industry. In contrast, a carbon tax applied economy-wide incentivises all firms to reduce emissions.

Governments should therefore adopt policies that complement desirable business characteristics, particularly regarding new technologies for combatting human-caused environmental problems such as climate change, desertification and deforestation. The EU and China have both set aggressive goals for increasing renewable energy and the adoption of clean energy technologies, which are supported by legislation providing financial incentives (Hart 2013). The EU has adopted ambitious new targets to curb climate change, with a pledge to make them legally binding. Under a new law agreed between Member States and the EU Parliament, the bloc will cut carbon emissions by at least 55% by 2030, compared with 1990 levels (BBC 2021). Despite being the world's biggest emitter, China is the biggest energy financier and biggest market, so its decisions play a major role in shaping how the rest of the world progresses with its transition away from the fossil fuels that are threatening the world climate. China has introduced various policies which aim to hit peak emissions before 2030 and for carbon neutrality by 2060. The current technological shift from the research and development stage toward commercialisation will require a change in the types of

policies governments create to finance technological development. Ultimately, while it is the government that makes these policy settings, it is the private sector that must implement them.

There have been multiple – albeit highly fragmented – efforts that ought to instil some optimism within the financial system that public and private initiatives are arising to help businesses transition to a sustainable footing. The Alliance for Financial Inclusion, the Green Infrastructure Investment Coalition, the Principles for Responsible Investment, the Principles for Sustainable Insurance, the Sustainable Banking Network, the Green Bond Principles, the Sustainable Stock Exchanges Initiative and the United Nations Environment Programme Finance Initiative, are just some of a few examples of standards for corporate responsibility (Hart 2013; Waddock 2008; Cadman and Maraseni 2014). However, the fragmented nature of these actions only further perpetuates the disconnect between various industries, even within the same sector, as well as current policy and legislation (Clark, Reed, and Sunderland 2018). The focus of international discourse and policy discussions should therefore make efforts to tap into private capital to address root causes creating current conditions that incentivise resource depletion and fail to recognise the true economic value of natural capital.

Overview of chapters

Tackling the conditions that have resulted in economic systems incompatible with Earth systems could address the catastrophic implications of the current business-as-usual trajectory – although this is an extremely difficult endeavour, particularly in developing countries with weak political environments. In their chapter ‘Green bonds: at the crossroads between finance, law, environment, and society’ Tomaso Ferrando and colleagues investigate one of the latest financial instruments set to occupy an increasing role in financing the transition towards a green economy. Green Bonds (also referred to in Chapter One) are a new form of raising debt and are increasingly being promoted throughout the world as a low-cost and appealing way for public and private actors to access liquidity to finance activities or projects that contribute to climate change mitigation and adaptation (see Part 4 for a closer examination of climate finance). The more recent popularity of green bonds is exemplified by the central role attributed to them in the European Green Deal and by the establishment of a European taxonomy and standards (see Chapter Two), which aim to define the boundaries of what can be considered a green bond and thus provide investors and borrowers with a recognition of their commitment to greening the economy. In addition to the escalating climate emergency, the COVID-19 pandemic and the ensuing global recession have heightened mainstream political, academic and business interest in the role of private finance for green growth.

Green bonds are not only popular at the European level, but they are also increasingly issued by public and private actors in the Global South. At the crossroad between law, finance, society, and the environment, green bonds raise important questions about the consequences of adapting mainstream financial responses, that is, debt, to address the ongoing ecological crisis. Although still representing a small fraction of the global debt market, green bonds have experienced exponential growth with a significant diversification of issuers, relying mainly on financial arguments regarding the existence of a *greenium*: those who issue green bonds and those who invest in green bonds. As debt instruments whose proceeds are previously earmarked to environmentally beneficial projects, one central dimension of green bonds is the regulation of eligible green assets, with relevant standards being set at a transnational, private, self-regulatory level that, nonetheless, does not and should not forego public involvement. The background activity that precedes the landing of global standards in local contexts is important, as are the institutional aspects associated with the creation and expansion of green bonds, such as taxation.

Using concrete examples, the authors discuss the ways in which green bonds operate on the ground and the problems that can arise when local players (public or private) borrow green capital from the market in an unequal global economy and a context of intense political and environmental contestation. This bottom-up approach to the real life of green bonds is used to flag existing gaps in the scholarly discourse and to suggest that researchers pay more attention to green debt as a mechanism to finance the transition to a greener economy. The authors conclude that there are both possibilities and limits to relying on green bonds for the construction of a green and just future. In an attempt to counterbalance mainstream literature that praises almost any intervention that contributes to action on climate change, they explicitly question the role of the financial sector in supporting decarbonisation and the forms of debt instruments used.

Chris Dembek and Jodi York in their chapter 'Investing in sustainable business models at the base of the pyramid' explain how the SDGs were developed collaboratively by diverse stakeholders to secure a better, more sustainable future for everyone. The SDGs present sustainable development as the ability to meet basic human needs, while maintaining natural capital and slowing climate change – and these form the basis to empowering stakeholders in their implementation of the goals overall. The authors note that progress in one aspect of sustainable development, should it come at the expense of another, is temporary and illusory. The current unsustainable production and consumption patterns of wealthy countries are propped up by extreme poverty at the base of the economic pyramid (BoP), which forces people to make short-term, survival-based decisions with profoundly negative long-term environmental consequences to meet their basic needs. Post-COVID, the reinforcing cycle of extreme poverty and environmental degradation will only accelerate unless BoP business models take an innovative approach to facing the challenge.

Business models have long been a powerful tool for harnessing enterprise as an engine for poverty alleviation and will continue to do so in a green post-COVID recovery. Now more than ever, investments made to address extreme poverty through private enterprise must be made to embed environmental sustainability and climate resilience rather than simply reinforcing unsustainable patterns. For some years, private companies of all sizes have sought to develop business models that create shared or mutual value by generating profits while engaging the BoP as suppliers or employees. More recently development finance institutions have been directly supporting enterprises in developing countries through various initiatives and these approaches have often failed to deliver their intended outcomes, sometimes even creating significant harm for those they purported to help. This is because traditional short-term profit maximisation rarely addresses the underlying causes of poverty but has a high likelihood of reinforcing unsustainable development and environmental pollution that will disproportionately affect poor communities.

Responding to the need to promote and support the development of business models that effectively alleviate poverty in sustainable ways, the authors provide guidance for investors on how to assess BoP business models and choose those that are likely to alleviate poverty sustainably. They use the recent systems theory-based analysis of three types of sustainable BoP business models to provide insights into aspects such as poverty alleviation mechanisms, growth mechanisms and potential sustainability risks. Drawing on these insights they establish the requirements for investment and provide a framework to match the different types of capital with the right BoP initiatives and models.

Focussing on the world's second-most populous nation, Arnab Bose, Seema Sharma, and Amarender Reddy discuss the problem-solving capabilities of emerging financial technologies in their chapter 'AI and blockchain for sustainable development in India.' While artificial intelligence and blockchain are not without risks, their adaptability to decentralised and distributed networks, communities and businesses make them particularly suitable for India. While the country's Human Development Index value has increased considerably since the 1990s due to economic liberalisation and the inflow of private capital in various aspects of the economy, COVID-19 has taken a heavy toll on the nation's wellbeing.

Economic development in India confronts various inefficiencies in processes and system designs, referred to as micro-inefficiencies, which in the aggregate make the SDGs very difficult to achieve. The pandemic has highlighted the bureaucratic and systemic malaise in policy and governance and has exacerbated the crises in air quality, waste management and the inequalities suffered by those existing within the informal economy.

Against this background, new age technologies like AI and blockchain offer exciting possibilities to accelerate India's goals for sustainable development, with better forecasting and cost-effective tools for governance and management across

various fields. The authors confront these challenges and present a framework for the effective management of AI- and blockchain-associated risks in the Indian context, particularly in the light of COVID-19. They put forward a range of methods for effective decentralised decision-making, comment on the nature and sources of finance to enable the transition to these technologies in India and provide a way out of the pandemic, to attain sustainable development.

In a stimulating chapter, ‘Valuing civil society environmental engagement,’ Tony Bradley questions traditional economic theory about what really counts in the so-called advanced countries. Although some thinkers have questioned whether the marketisation of social life has gone too far, the general assumption that Western economies are, essentially, market economies has gone relatively unchallenged. Yet, in reality, a significant amount of action on the environment, for example, has its origins in the voluntary sector. He makes the case for the recognition of the activity of households and civil society in conserving the environment and natural capital, that is, activity which takes place outside markets, price mechanisms and the formal economy. In 2014, for example, according to the UK Office of National Statistics, this non-market production was worth more than GBP 1 billion in value, or equivalent to over 60% of Gross Domestic Product – yet this activity was virtually invisible to conventional economics.

The application of measures for valuing the environmental related core economy and household production has hardly begun. While increasing attention is being paid to the valuations of natural capital and ecological services, little attention has been paid to the valuation of non-market environmental volunteering and action. The increasing use of satellite accounts to measure the value of domestic, informal, community-based and volunteer production has made it possible to estimate the levels of value to market economies – somewhere between 35 and 70% of GDP, according to the methodologies used to calculate these valuations. The chapter examines a range of dimensions of environmental core economic activity, including membership and time given to environmental groups, green activism, informal nature-based recreation and sport, non-market green household production, in the spheres of green energy, transport and food, unpaid work to mitigate the effects of climate and biodiversity crises, and the health benefits and savings to the NHS of informal environmental activity within the UK. The author concludes by looking at UK data on the contribution of radical environmental action to community resilience during the COVID-19 pandemic. This raises important questions over the connection of valuing environmental engagement in respect of overall sustainable development in society as a whole.

This chapter, and those which precede it, lend weight to the argument that informal, emerging, economies have a lot to teach the developed world about sustainability and post-COVID recovery.

References

- BBC. 2021. 'Climate Change: EU to Cut Co₂ Emissions by 55% by 2030', *BBC News*, 21 April. <<https://www.bbc.com/news/world-europe-56828383>> [Accessed 6 February 2022].
- Bebchuk, Lucian Arye, and Jesse M. Fried. 2003. 'Executive Compensation as an Agency Problem', *Journal of Economic Perspectives*, 17 (3), 71–92.
- Bernstein, Steven. 2001. *The Compromise of Liberal Environmentalism* (New York: Columbia University Press).
- Cadman, Tim. 2012. 'The Legitimacy of ESG Standards as an Analytical Framework for Responsible Investment.' in W. Vandekerckhove, J. Leys, K. Alm, B. Scholtens, S. Signori and H. Schäfer (eds.), *Responsible Investment in Times of Turmoil* (Springer), pp. 35–53.
- Cadman, Tim, and Margee Hume. 2012. 'Developing Sustainable Governance Systems for Regional Sustainability Programmes and 'Green' Business Practices: The Case of 'Green' Timber.' in Marco Tortora (ed.), *Sustainable Systems and Energy Management at the Regional Level: Comparative Approaches* (Hershey, PA: IGI Global), pp. 365–82.
- Cadman, Tim, Margee Hume, Tek Maraseni, and Federico Lopez-Casero. 2015. 'Developing Sustainable Governance Systems at the Regional Level: The Case of Emissions Trading.' in Ken D. Thomas (ed.), *Handbook of Research on Sustainable Development and Economics* (Hershey, PA: IGI Global), pp. 248–66.
- Cadman, Tim, and Tek Maraseni. 2014. 'Addressing the Participation Gap in Institutional Investment: An Assessment Framework and Preliminary Results.' in James P. Hawley, Andreas G.F. Hoepner, Keith L. Johnson, Joakim Sandberg and Edward J. Waitzer (eds.), *Cambridge Handbook of Institutional Investment and Fiduciary Duty* (Cambridge UK: Cambridge University Press), Chapter 35.
- Cadman, Timothy. 2011. 'Evaluating the Governance of Responsible Investment Institutions: An Environmental and Social Perspective', *Journal of Sustainable Finance and Investment*, 1 (1), 20–29.
- Cadman, Timothy, Lauren Eastwood, Federico Lopez-Casero Michaelis, Tek Narayan Maraseni, Jamie Pittock, and Tapan Sarker. 2015. *The Political Economy of Sustainable Development: Policy Instruments and Market Mechanisms* (Edward Elgar Publishing).
- Castro, Carlos J. 2004. 'Sustainable Development: Mainstream and Critical Perspectives', *Organization and Environment*, 17 (2), 195–225.
- Ceres. 2016. *The Ceres Roadmap for Sustainability: A Strategic Vision and Practical Framework for Sustainable Corporations in the 21st Century Economy*, <https://www.ceres.org/sites/default/files/2018-02/ceres-rfs-8.5x11-rd7-v1-1-sm_updated.pdf> [Accessed 6 February 2022].
- Chiu, Iris HY. 2021. 'Regulating Sustainable Finance in Capital Markets: A Perspective from Socially Embedded Decentered Regulation', *Law and Contemporary Problems*, 84 (1), 75–93.
- Clark, Robyn, James Reed, and Terry Sunderland. 2018. 'Bridging Funding Gaps for Climate and Sustainable Development: Pitfalls, Progress and Potential of Private Finance', *Land Use Policy*, 71, 335–46.
- Crane, Andrew, Guido Palazzo, Laura J Spence, and Dirk Matten. 2014. 'Contesting the Value of "Creating Shared Value"', *California Management Review*, 56 (2), 130–53.
- Dudfield, Oliver. 2019. 'Sdp and the Sustainable Development Goals.' in Holly Collison, Simon C. Darnell, Richard Giulianiotti and P. David Howe (eds.), *Routledge Handbook of Sport for Development and Peace* (London: Routledge), pp. 116–27
- Eccles, Robert G. 2018. 'The Importance of the Healthcare Sector to the Sustainable Development Goals', *Forbes*, July 1, 2018. <<https://www.forbes.com/sites/bobeccles/2018/07/01/the-importance-of-the-healthcare-sector-to-the-sustainable-development-goals/?sh=349a000c67a3>> [Accessed 6 February 2022].

- European Commission. 2022. *Retail Forum*, <<https://ec.europa.eu/environment/industry/retail/about.htm>> [Accessed 6 February 2022].
- Fellnhofer, Katharina. 2017. 'Drivers of Innovation Success in Sustainable Businesses', *Journal of Cleaner Production*, 167, 1534–45.
- Frishammar, Johan, and Vinit Parida. 2019. 'Circular Business Model Transformation: A Roadmap for Incumbent Firms', *California Management Review*, 61 (2), 5–29.
- Garetti, Marco, and Marco Taisch. 2012. 'Sustainable Manufacturing: Trends and Research Challenges', *Production Planning and Control*, 23 (2-3), 83–104.
- Hart, Craig. 2013. *Climate Change and the Private Sector: Scaling up Private Sector Response to Climate Change* (New York: Routledge).
- Hemmer, Thomas, Oliver Kim, and Robert E Verrecchia. 1999. 'Introducing Convexity into Optimal Compensation Contracts', *Journal of Accounting and Economics*, 28 (3), 307–27.
- Hirshleifer, David, and Yoon Suh. 1992. 'Risk, Managerial Effort, and Project Choice', *Journal of Financial Intermediation*, 2 (3), 308–45.
- Holmström, Bengt. 1979. 'Moral Hazard and Observability', *The Bell Journal of Economics*, 74–91.
- International Energy Agency. 2020. *World Energy Outlook, 2020*, <https://www.iea.org/reports/world-energy-outlook-2020> [Accessed 6 February 2022].
- Jensen, Michael C, and William H Meckling. 1976. 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics*, 3 (4), 305–60.
- Killick, N, and M Wachenfeld. 2015. 'State of Play: Business and the Sustainable Development Goals: Mind the Gap—Challenges for Implementation', *London: Institute for Human Rights and Business*, IHRB State of Play Series: Volume Four.
- Kramer, Mark R, and Michael Porter. 2011. 'Creating Shared Value', *Harvard Business Review*, 89 (1/2), 62–77.
- Mokoena, Alistair, Johannes Jürgens Prinsloo, Remigiusz Gawlik, and Theuns Pelser. 2021. 'A Framework for the Sustainability of Advertising Agencies in an Emerging Economy: The Case of South Africa', *Journal of Marketing Communications*, 1–21.
- PricewaterhouseCoopers. 2015. *Making It Your Business: Engaging with the Sustainable Development Goals*, (London: PwC), <https://www.pwc.com/gx/en/sustainability/SDG/SDG%20Research_FINAL.pdf> [Accessed 6 February 2022].
- Przychodzen, Wojciech, and Justyna Przychodzen. 2018. 'Sustainable Innovations in the Corporate Sector—the Empirical Evidence from IBEX 35 Firms', *Journal of Cleaner Production*, 172, 3557–66.
- Sachs, J.D., V. Modi, H. Figueroa, M.M. Fantacchiotti, K. Sanyal, F. Khatun, S.L. Ramos, E. Grunewald-Weidman, M.P. Scharp, and A. Shah. 2015. *ICT and SDGs: How Information and Communications Technology Can Achieve the Sustainable Development Goals*, (New York: Earth Institute and Ericsson), <<https://www.ericsson.com/assets/local/news/2016/05/ict-sdg.pdf>> [Accessed 6 February 2022].
- Steffen, Will, Katherine Richardson, Johan Rockström, Sarah E Cornell, Ingo Fetzer, Elena M Bennett, Reinette Biggs, Stephen R Carpenter, Wim De Vries, and Cynthia A De Wit. 2015. 'Planetary Boundaries: Guiding Human Development on a Changing Planet', *Science*, 347 (6223), 1259855-1-10.
- Steurer, Reinhard, Markus E Langer, Astrid Konrad, and André Martinuzzi. 2005. 'Corporations, Stakeholders and Sustainable Development I: A Theoretical Exploration of Business–Society Relations', *Journal of Business Ethics*, 61 (3), 263–81.
- Unwin, T 2015 'ICTs and the Failure of the Sustainable Development Goals' *Tim Unwin's Blog* <<https://unwin.wordpress.com/2015/08/05/icts-and-the-failure-of-the-sustainable-development-goals/>> [Accessed 6 February 2022]

- van der Zee, Sjoerd. 2012. *The Relationship between Religious Beliefs, Equity-Based Remuneration and Firm Performance*, Tilburg University, 50pp.
- Waddock, Sandra. 2008. 'Building a New Institutional Infrastructure for Corporate Responsibility', *Academy of Management Perspectives*, 22 (3), 87–108.
- Wheeler, D, B Colbert, and RE Freeman 2002 *Focusing on Value: Reconciling Corporate Social Responsibility Academy of Management* (Denver, US: Sustainability and a Stakeholder Approach in a Network World)
- Wynn, Martin, and Peter Jones. 2020. 'The Sustainable Development Goals, the ICT Industry and ICT4D Research.' in Tay Keong Tan, Milenko Gudić and Patricia M. Flynn (eds.), *Struggles and Successes in the Pursuit of Sustainable Development* (New York: Routledge), pp. 84–95.