

Sustainability asymmetries in buyer-supplier relationships

A chain is only as strong as its weakest link. This is easy to say, but the reality is more complex. New research into sustainability and Strategic Supply Chain Management (SSCM) shows that buyer-supplier relationships are far from straightforward, and differences between buyers' and suppliers' approaches to sustainability can both positively and negatively affect buyers' financial and market performance. Led by professors Maria Montes-Sancho (Universidad Carlos III de Madrid, Spain), Elcio Tachizawa (Universidad Politécnica de Madrid, Spain) and Constantin Blome (Lancaster University Leipzig, Germany), the study looked at 516 US businesses and their relationships with leading suppliers.

Reducing emissions, cutting back waste, efficient use of resources, social responsibility, being seen to be green – sustainability is at the top of most corporate agendas. But delivering on such a wide range of targets is rarely down to a single business. Take manufacturing, for example, in which even a simple supply chain extends from firms that make components, and the manufacturer who makes the product, to the logistics company that delivers the product to sales outlets, and to retailers that sell the finished article.

So, what happens when different members of the supply chain are at different stages of their sustainability journey and/or have different sustainability practices and goals? How do such asymmetries affect buyer companies' corporate performance?

We might expect that asymmetry would negatively affect sales, reputation, and market value. For example, a 2022 report from UK bank Barclays found that 21% of firms cancelled contracts with suppliers on the grounds that they failed to meet the required environmental, social, and governance standards.

However, newly published research by professors Maria Montes-Sancho from Universidad Carlos III de Madrid, Elcio Tachizawa from Universidad Politécnica de Madrid, and Constantin Blome from Lancaster University Leipzig, suggests that non-alignment of buyers' and suppliers' sustainability policies and practices can have positive as well as negative effects on buyers' profitability. In one of the first studies of its kind, Montes-Sancho and her colleagues evaluate the alignment of environmental and social sustainability factors in businesses headquartered in the US.

Legitimacy theory – the theory that an organisation's survival depends not only on market forces but also on its fulfilment of social expectations – provides the background to the study. Organisations want to be seen to conform to accepted standards and rules and believe that this leads to opportunities and stakeholder approval, as well as goodwill in times of crisis.

SUSTAINABILITY IN SENSITIVE SECTORS

The research team specifically wanted to discover how buyer-supplier asymmetries in environmental and social sustainability affect buyer firms' financial and market performance. They also



wanted to know whether it matters if the buyer or the supplier takes the lead on sustainability, and whether asymmetries affect environmental sustainability and social sustainability in different ways.

The study looked at 516 buyer businesses and their leading suppliers in 'sensitive' sectors, identified by the US Small Business Administration or Responsible Business Alliance (RBA). These are sectors that come under increased scrutiny and regulatory pressure, but also those where important concerns about working conditions have arisen over the past years. These sectors are, for example, mining, oil exploration, paper-making, chemicals, petroleum, metals, electronics, and utilities.

Data for the period 2011–2018 was gathered in four areas – emissions reduction, resource reduction, health and safety, and human rights. Sources included annual financial and corporate social responsibility reports, business websites, and reports from governmental agencies and non-governmental organisations. Data also came from reports compiled by media and business data company Bloomberg,

and global business intelligence agency Compustat.

Rigorous statistical techniques were used to analyse the data to determine, for example, what stage businesses were at in the journey from adopting sustainability policies to putting them into practice. The difference between supplier and buyer firms in absolute values was calculated in emissions and use of resources for environmental sustainability, and in human rights and health and safety conditions for social sustainability.

Financial data was studied to calculate return on assets and firm valuation. Return on assets provided information

Differences between buyers' and suppliers' approaches to sustainability can both positively and negatively affect buyers' financial performance.

ASYMMETRY AND MARKET PERFORMANCE

Contrary to previous studies, Montes-Sancho, Tachizawa, and Blome found that buyers' financial and market performance is not always negatively affected by the non-alignment of sustainability policies and practices with suppliers. They suggest that this might be because asymmetry allows each member of the chain to specialise in a specific dimension, so that one business can 'reap the benefit' of another's higher reputation in a given area.

In line with previous research, the study reveals that environmental and social asymmetries have different effects.

For example, asymmetries in environmental sustainability had a positive impact on buyer profitability in the area of

resource reduction but a negative effect on emissions reduction. In addition, asymmetries in social sustainability had a positive effect on performance in the area of health and safety, whereas other impacts were unconfirmed.

The research group suggest that the different impacts of different aspects of environmental and social

Not all dimensions of sustainability are equally important for buyers' corporate performance.

about businesses' capacity to improve performance by increasing profit margins. Firm valuation provided additional information about stakeholders' perceptions. This was calculated according to 'Tobin's Q', a ratio developed by the economist James Tobin that calculates the stock price of a firm by taking into account all publicly available information.





The researchers believe there should be more incentives for firms to work more sustainably across whole supply chains.

sustainability may be due to the fact that environmental sustainability measures such as emissions levels are more easily quantifiable, and therefore easier to compare, than social measures like human rights. In addition, social sustainability may not yet be as high on corporate agendas as environmental sustainability.

Regarding who leads sustainability initiatives, the results suggest that having

On the contrary, concerning resource reduction, only one party may be more directly involved (more often the suppliers), requiring a less coordinated approach. Moreover, buyers' lack of involvement might be seen as less relevant from the customers' perspective. The final result is a product for which the production process has minimised the use of resources and customer perceptions are mostly positive, no matter which party is

The impact of asymmetries between buyer and supplier firms depends on which party is leading the sustainability initiative.

buyer-supplier asymmetry in resource reduction improves buyer profitability, regardless of which party leads the initiative. However, when buyers lag behind suppliers on emissions, it can lead to negative performance.

The researchers suggest that this is because, while resource reduction and emissions reduction are both environmental goals, they are implemented differently. Emissions reduction particularly needs a whole chain-coordinated approach. This activity might also be more visible to the public and may therefore affect a firm's legitimacy, which is directly related to profitability and market value.

leading. Moreover, another effect of resource minimisation may be reduced production costs, which also positively affects profitability.

TAKE-AWAYS FOR MANAGERS

The study suggests that not all dimensions of sustainability are equally important for buyers' corporate performance. Managers may therefore want to prioritise their sustainability targets. For example, aligning with suppliers on emissions reduction may bring market and financial benefits, but aligning on resource reduction may not. This is especially significant in highly competitive markets when firms are constrained by finance and time.

The research also indicates that asymmetries can lead to net positive gains, even if buyer companies have shirked some of their social and environmental responsibilities. The fact that asymmetries in areas such as resource reduction and health and safety can have a positive effect on buyers' financial performance suggests that buyers should concentrate their efforts in their core businesses, rather than attempting to lead supply chain initiatives in these areas, but only when suppliers have reached a minimum level in them.

In contrast, the results imply that in environmental areas such as emissions, buyers should do all they can to reduce asymmetries along supply chains and collaborate to align efforts, for example by establishing common metrics, policies, and goals. Data shows that unbalanced approaches in carbon reduction can harm financial and market performance.

DEMYSTIFYING ASSUMPTIONS

This study provides valuable insights into asymmetries between buyers' and suppliers' environmental and social sustainability policies and practices.

The research investigates the impact of asymmetries on buyers' business performance and demystifies the assumption that symmetry always leads to positive returns. It finds that environmental asymmetries have a significant effect, but social asymmetries are less important.

The impact of asymmetries also depends on which party is leading the sustainability initiative. In addition, it depends on the type of initiative, with emission reduction being the only area where asymmetry negatively affects the buyer firm's performance.

Montes-Sancho, Tachizawa, and Blome argue that their research has implications for policymakers as well as businesses. This includes that there should be more incentives for firms to work more sustainably across whole supply chains. In the current market, it is buyers who mostly benefit when suppliers reduce their consumption of resources. This may lead to some buyers actively seeking asymmetrical relationships, even though they are detrimental to a more sustainable economy.

Behind the Research



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Research Objectives

The researchers set out to analyse how environmental and social sustainability asymmetries in buyer-supplier relationships affect buyers' financial and market performance.

Detail

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Bio

Prof Dr Maria J Montes-Sancho is an associate professor of business at Universidad Carlos III de Madrid. Her interests cover sustainability, supply chain, and digitalisation.

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is an associate professor of operations management at Universidad Politécnic de Madrid. His lines of research focus on the interface between supply chain management and sustainability. Currently, he investigates the effects of digitalisation on the sustainability and transparency of supply chains in their various forms (blockchain, IoT, AI, etc).

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References

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Personal Response

Would you expect the findings to be similar for supply chains in other countries and markets?

Our study examines buyer firms, which can be considered as the 'directors of the orchestra' in the context of the supply chain, and their leading suppliers, both of which are not always located in the same country. In fact, the trend toward global sourcing spreads business operations around the world, with most suppliers and buyers even being on different continents. This makes the management of the supply chain even more complex, which tends to make it tempting to lag behind on sustainability developments. However, as our results show, it could have a negative stakeholder impact in certain sustainability areas. In addition, sustainability awareness in society in general, and customers of products in particular, are both especially salient. Furthermore, given that the younger generations in most countries are paying closer attention to sustainability problems, especially those associated with climate change, we do not expect to find differences between markets.

