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#### Seminars to Advance Cumulative Knowledge

#### The association between supply chain structure and transparency: A large-scale empirical study

Jury Gualandris, Annachiara Longoni, Davide Luzzini & Mark Pagell

Journal of Operations Management

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#### Overview

- Moderator:
- Presenting author:
- Depth discussant:
- Breadth discussant:
- Impact discussant
- Q&A

Mike Barnett Jury Gualandris Kevin Dooley Vivek Soundararajan Gonzalo Canteros-Paz

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#### **Jury Gualandris**

#### Presenting Author

Associate Professor Ivey Business School Western University









#### **Question 1**

# What problem or issue does this paper address?





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#### Answer 1

# The challenges of developing transparency in extended supply chains

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#### **Question 2**

# What have prior studies overlooked about this problem or issue?



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#### Answer 2

Conceptualizing supply chain transparency as a collective outcome that systematically associates with the structural characteristics of the supply chain



#### **Question 3**

# What is the paper's focal research question?







#### Answer 3

# What is the association between supply chain structure and supply chain transparency?





#### **Question 4**

# What is the paper's primary answer to this focal research question?

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#### **Answer 4**

Supply chain density has a positive association with supply chain transparency, supply chain clustering has a negative effect, and supply chain geographical heterogeneity has a positive effect.

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#### **Question 5**

Why is the paper's methodology appropriate for answering the focal research question?

Н

It allowed us to efficiently and accurately map a sufficiently large number of extended supply chains and describe several of their organizational characteristics, thus achieving adequate statistical power and mitigating several sources of endogeneity



#### **Question 6**

What concerns did reviewers/editor raise about the paper's methodology?



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#### Answer 6

Correlational studies are difficult to publish because they do not support causal inference. However, our methods and setting mitigated endogeneity and helped us to convince the reviewer team.

**Question 7** 

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Why is your empirical setting appropriate for answering the focal research question?

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R

ESG disclosures are of great concern to stakeholders, are relevant to competitive advantage, assumes a collective perspective, and are observable & measurable

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#### **Question 8**

What concerns did reviewers/editor raise about the paper's empirical setting?

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They asked us to provide an array of robustness checks and to clearly delineate the boundary conditions. They also pushed us to consider a configurational study.



#### **Question 9**

# What does this paper leave unanswered about its focal research question?



**Answer 9** Other structural dimensions, and the intervening mechanisms that explain the association between supply chain structure and transparency

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#### **Question 10**

# What would you do differently if you started the paper over again?

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#### Answer 10

The first round of review was especially challenging because we tried to force one lens on the phenomenon (i.e., collective action theory), when instead the breadth of structural dimensions considered in the paper as well as its level of analysis required to combine complementary perspectives and mechanisms



#### **Kevin Dooley**

#### Depth Discussant

Distinguished Professor Carey School of Business Arizona State University



# E P T Н

#### **Question 1**

### What theories or phenomenon does this paper most directly inform?

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How likely it is that a buyer's suppliers will engage in ESG disclosure, and how supply network structure can create incentives or barriers to disclosure or data sharing.

E P T H

#### **Question 2**

How specifically does this paper advance understanding of these theories or phenomena?

E

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This paper is a rare example where cause and effect are argued for beyond the buyer-supplier dyad. It is much better aligned with complexity science interpretations of supply networks

#### **Question 3**

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# What other studies are most consistent with this paper's findings?

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E

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Н

The authors do a good job of citing the relevant studies within their hypotheses development.





#### **Question 4**

### What other studies cause you to question the paper's findings?



E

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Η

The positive impact of heterogeneity was surprising. I can believe the empirical outcome, but I'm not sure I agree on the logic of "why" posed in the alternate H3.

 $\left| \right\rangle$ E P H

#### **Question 5**

# What is the best way to validate this paper's findings?



E

P

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H

This would not be easy. There's a reason so many researchers use Bloomberg data – but supply network data could be created via a different means to obtain supply networks with more representation of smaller firms

#### **Question 6**

E

P

Τ

H

What relevant mechanisms remain unknown about this paper's theories or phenomena?

E

H

The final causal link is unobserved (and unobservable using this type of research design) – namely, how exactly does a focal company perceive its surrounding network and how does that perception influence a decision to disclose or not?
Ε

P

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How would you refine the research question to study these unknown mechanisms?

#### Answer 7

E

Probably case studies could help supplement this "how" question. For example, currently many organizations are adopting science-based GHG targets. Is this a supply network dynamic, an industry sector dynamic, or an investor influence event? Engagement in the New Plastics Economy Global Commitment or the US Plastics Pact are other case examples that are current.

What empirical settings would be most useful to study these unknown mechanisms?

Ε

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Answer 8

#### See response above.

E

P

P

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#### What methods would be most useful to study these unknown mechanisms?

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Answer 9

#### See response above.

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Ε P T H

#### **Question 10**

#### What difficulties will scholars face in further advancing this area of study?

#### Answer 10

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H

Empirically, it is very difficult to obtain supply network data, and the methods needed for advanced graph theoretic metrics can be sophisticated, without much support from existing statistical programs.



#### Vivek Soundararajan

#### Breadth Discussant

Senior Lecturer School of Management University of Bath

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B R E A T H

#### **Question 1**

#### What theories or phenomena in your discipline does this paper most directly inform?

B R E T H

#### Answer 1

#### Supply chain transparency, institutional theory, collective action theory, and social identity theory

B R E A H

#### **Question 2**

How specifically does this paper advance understanding of these theories or phenomena?

B R E A H

#### Answer 2

It offers more clarity on the conditions when suppliers and extended suppliers contribute to supply chain transparency. The paper also offers a nuanced understanding of these theories in the context of collective action by extended stakeholders.

B R E A H

#### **Question 3**

# What other studies in your discipline are most consistent with this paper's findings?

B R Ε T H

#### Answer 3

## The paper draws on interdisciplinary sources already.

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## What other studies in your discipline cause you to question this paper's findings?

B R E  $\left| \right\rangle$ T H

#### **Answer 4**

The positive association with heterogeneity was surprising & requires further exploration. The effect of clustering was also unique. I used to think only of intracluster effects and no inter-cluster effects.



### What is the best way to validate this paper's findings?



B R E  $\left| \right\rangle$ H

#### Answer 5

Qualitatively through a very large-scale study. Quantitatively, the database they use is common and anyone with access to the database and required skills can validate the results.

B R E A T H

#### **Question 6**

#### What relevant mechanisms remain unknown about this paper's theories or phenomena?

B R E 47 H

#### Answer 6

Institutional effects on supplier transparency. Focal firms' relationship with suppliers and supplier reciprocity. The role of supply chain and social intermediaries in improving supply chain transparency. The role of industry associations in improving supply chain transparency. Bottom-up local initiatives aimed at supply chain transparency.

B R E A  $\square$ T H

#### **Question 7**

How would you refine the research question to study these unknown mechanisms?

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B R E T H

#### Answer 7

I would focus on the 'how' and 'why' questions related to supply chain transparency and topics suggested above.

B R Ε A  $\square$ T H

#### **Question 8**

What empirical settings would be most useful to study these unknown mechanisms?

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B R E T H

#### Answer 8

### Global supply chains of specific products; e.g., garments.



B R E A Ĩ H

#### **Question 9**

#### What methods would be most useful to study these unknown mechanisms?

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B R E A  $\mathbb{D}$ T Н

#### Answer 9

### Case studies and ethnographies.



B R E A  $\square$ T H

#### **Question 10**

#### What difficulties will scholars face in further advancing this area of study?

B R E H

#### Answer 10

Suppliers and focal firms are not very open to sensitive topics such as transparency. So, access to actors and field sites is difficult. Geographically dispersed supply chain research requires a diverse team with local knowledge and expertise.



#### **Gonzalo Canteros-Paz**

#### Impact Discussant

#### Vice President Global Supply & GSC Strategy Colgate-Palmolive

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## What practical problem or issue does this paper most directly address?



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#### Answer 1

It address the difficulties firms face to increase transparency across supply chains and tries to find if supply chain structure has a significant effect on this

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C

How does this paper help managers understand how to address this problem or issue?

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#### Answer 2

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It provides a starting point to managers on where to invest resources to address transparency concerns and be able to respond to inquiries internally and externally. It provides a framework to make relevant decisions to map and model their supply networks for insights that can be acted upon in geographical and membership decisions.

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#### Are any parts of the paper unnecessarily confusing or jargony?



#### Answer 3

Math, variable definition, considerations, and conclusions need to be properly explained and they are. To be more effective in a corporate environment and be able to reach busy professionals in the areas that manage transparency in focal firms, it will be important to develop a summarized, friendly version that can be shared and communicated more easily.

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## In what ways are the findings consistent with what happens in practice?



#### $\mathbb{M}$







#### Answer 4

There is consistency on the finding that denser and more interconnected supply chains facilitate more transparency. Similarly expected was the negative effect of clustering

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# In what ways are the findings not consistent with what happens in practice?



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A

#### Answer 5

I expected supply chain industrial heterogeneity to have an effect in facilitating transparency, given the sharing of knowledge and standards and learnings that can be moved from one industry to another, especially through vendors and customers establishing policy and needs for disclosure. Institute for Corporate

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C

# What specifically does this paper overlook about the realities of this problem or issue?

#### Answer 6

Some of the realities not considered could be the firm's ESG program's maturity and the relative size of each one of these companies, as well as how to connect all this with the influence that regulations and enforcement can have on supply chain structure, contracts, and supply relationships

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How would you revise the research question to make the study more practical?



P

A

#### Answer 7

How to increase supply chain transparency by understanding supply chain structure and relationships?

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C

What other empirical setting would allow a more realistic assessment of this problem or issue?

#### Answer 8

This is an appropriate empirical setting to assess this problem. ESG disclosure is measurable and can be observed from available records and it is increasingly needed for internal and external reporting

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**Question 9** 

#### What other papers or books have helped you to understand this problem or issue?

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#### **Answer 9** Some examples are: MIT Supply Chain Special Reports, Deloitte "The Path to Supply Chain Transparency", etc. Mostly drawing from professional experience and the paper itself.

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#### **Question 10**

## What related issues do you think would benefit from further academic study?



#### Answer 10

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Analyze not only the effect on transparency/visibility for firms that supply chain structure provides, but also the benefits for the firms that transparency provides. Thinking on how technologies like Blockchain could have an impact on supply chain transparency.



#### **Questions from audience**

#### **Discussant follow-ups**

