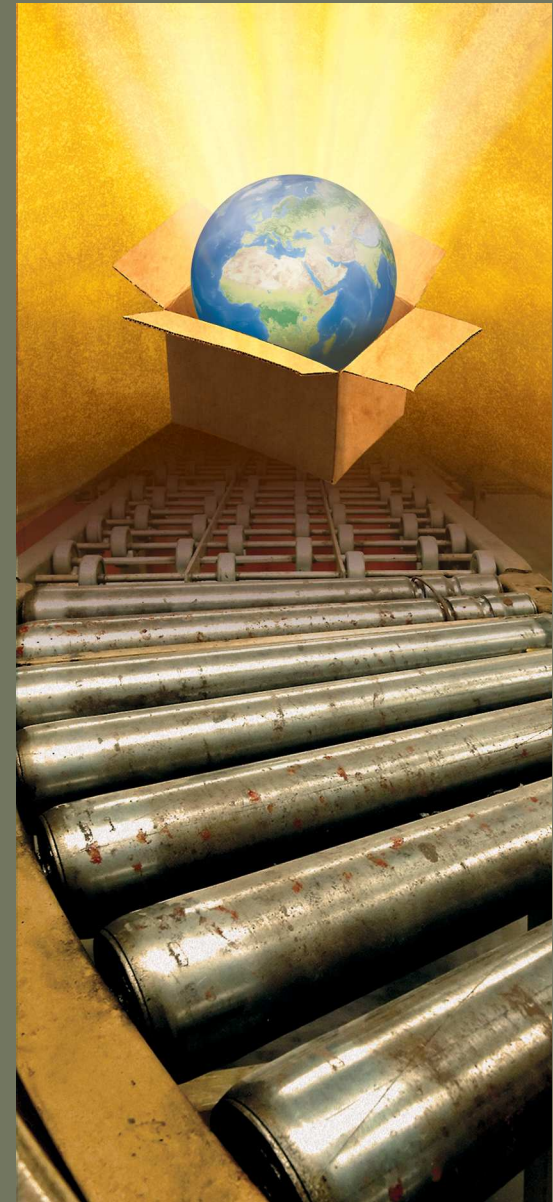


# Efficiency Meets Responsibility: Configuring an Accountable and Responsible Supply Chain

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# The Global Food Supply Chain

USA: High fructose corn syrup, wheat flour (produced & milled), whole grain oats, sunflower oil, strawberry puree, cellulose, red dye #40

CHINA: Vitamin & mineral supplements (B1, B2, iron, folic acid), honey

ITALY: Malic acid

INDIA: Guar gum

EUROPE: Citric acid

PHILIPPINES: Carageenan

DENMARK: Lecithin (soy)

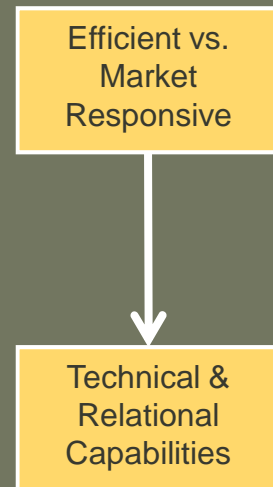
SCOTLAND: Sodium alginate



Source: Business Week

# Supply Chain Configuration and Performance

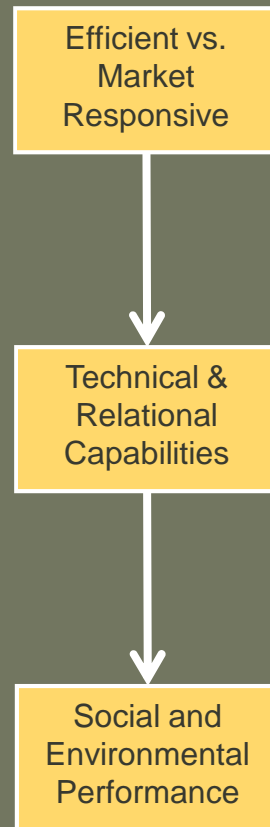
- Fisher's (1997) distinction
  - **Physically efficient** supply chains for markets with highly predictable demand for functional products
  - **Market responsive** supply chains for markets with unpredictable demand for more customized products
- Firms will develop technical and relational capabilities to support their supply chains
  - Process vs. product improvement
  - Supplier evaluation vs. supplier development



# Configuration and Social and Environmental Performance

- The implications of using either an efficient or responsive supply chain configuration for social and environmental performance are not clear
- Limited research suggests that strong technical and relational capabilities are valuable to both social and environmental performance
  - Christmann (2000)
  - Pil and Rothenberg (2003)
  - Vachon and Klassen (2008)
- Findings from this research do not map easily onto the physically efficient/market responsive framework

# Supply Chain Configuration and Performance



# Defining Responsibility and Accountability

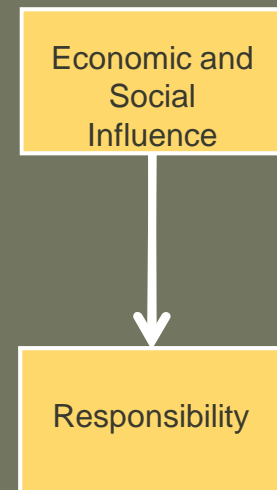
- **Responsibility:** the extent to which firms (and managers) **cause** actions to occur
- **Accountability:** the extent to which firms (and managers) are required or expected to **justify** their decisions and actions to stakeholders
- To be accountable is to be required to answer for outcomes **regardless** of the degree of responsibility
- Combinations of responsibility and accountability define the level of concern and challenge for companies

# Stakeholder Exposure from the Supply Chain: Responsibility and Accountability

		Responsibility	
		Low	High
Accountability	Low	I Inconsequential	II Emergent
	High	III Demanding	IV Foundational

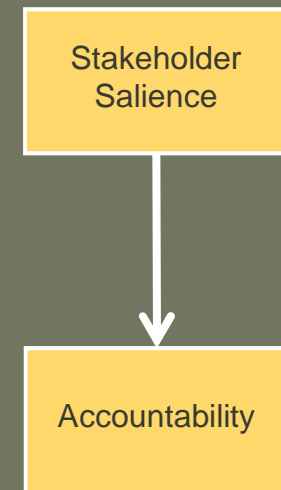
# Determining Responsibility in the Supply Chain

- The key variable that creates responsibility is *influence*
- To the extent that a company wields economic influence over its supply chain partners, its responsibility for outcomes rises
  - Dependency asymmetry (Pfeffer and Salancik, 1978)
  - Information asymmetry (Porter, 1980)
- To the extent that a company enjoys social influence over its supply chain partners, its responsibility for outcomes rises
  - Trust development (Zaheer, McEvily, Perrone 1998)
  - Reputation spillovers (Dyer and Nabeoka, 2000)



# Determining Accountability in the Supply Chain

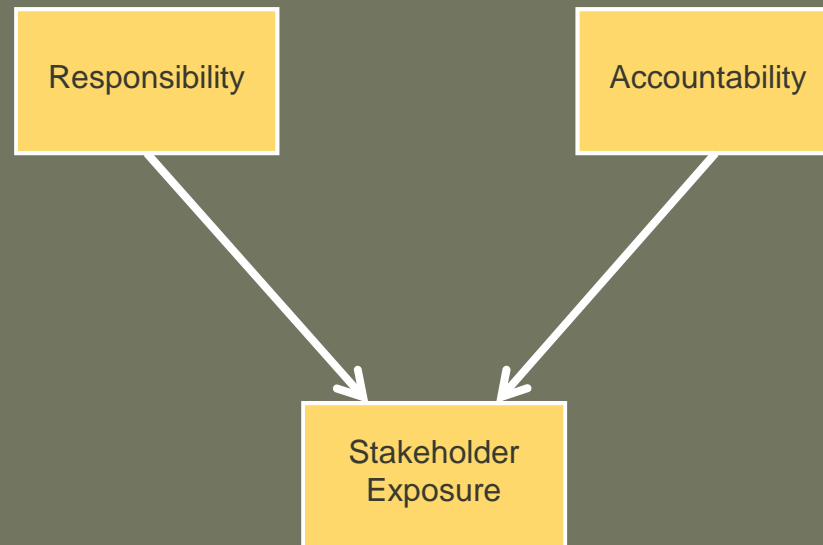
- The key variable that creates accountability is ***stakeholder salience***
- Salience is derived from three stakeholder variables (Mitchell, Agle, and Wood, 1997)
  - Power
  - Legitimacy
  - Urgency
- As all three variables rise, so does salience
- There are strategies (e.g., collaboration) that can reduce stakeholder salience



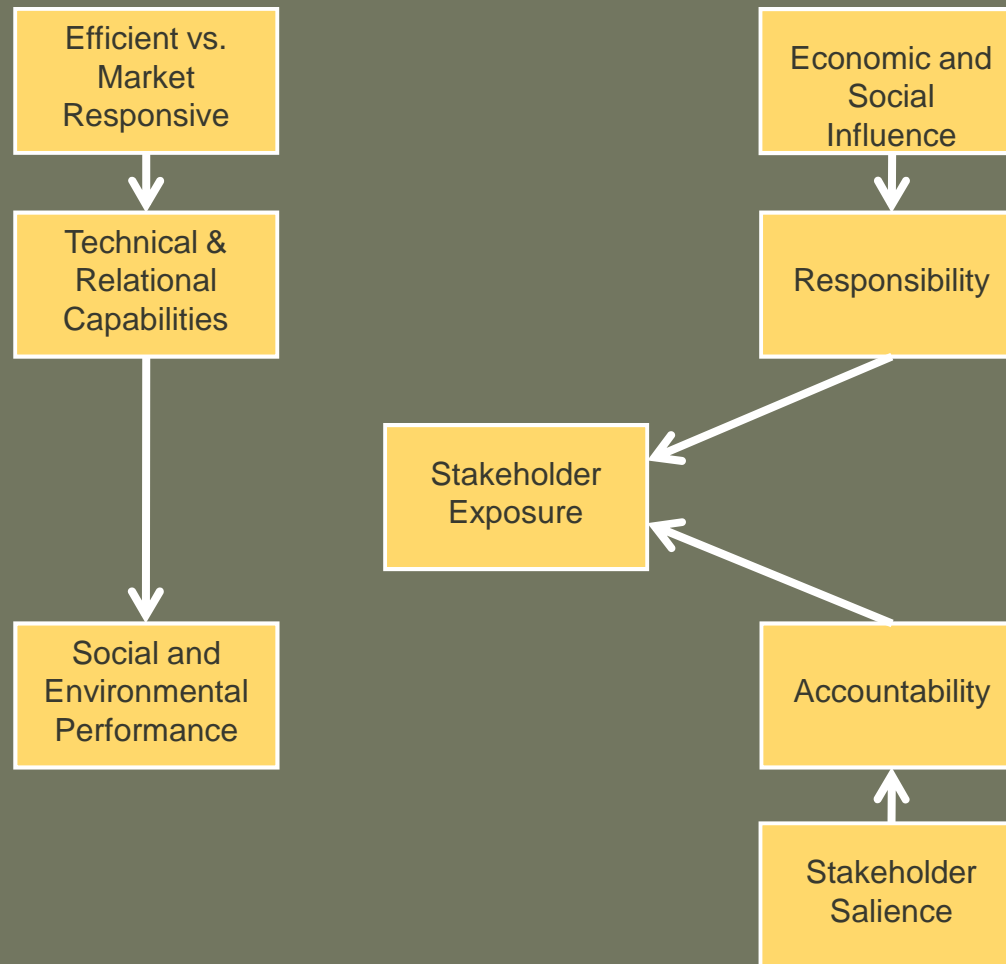
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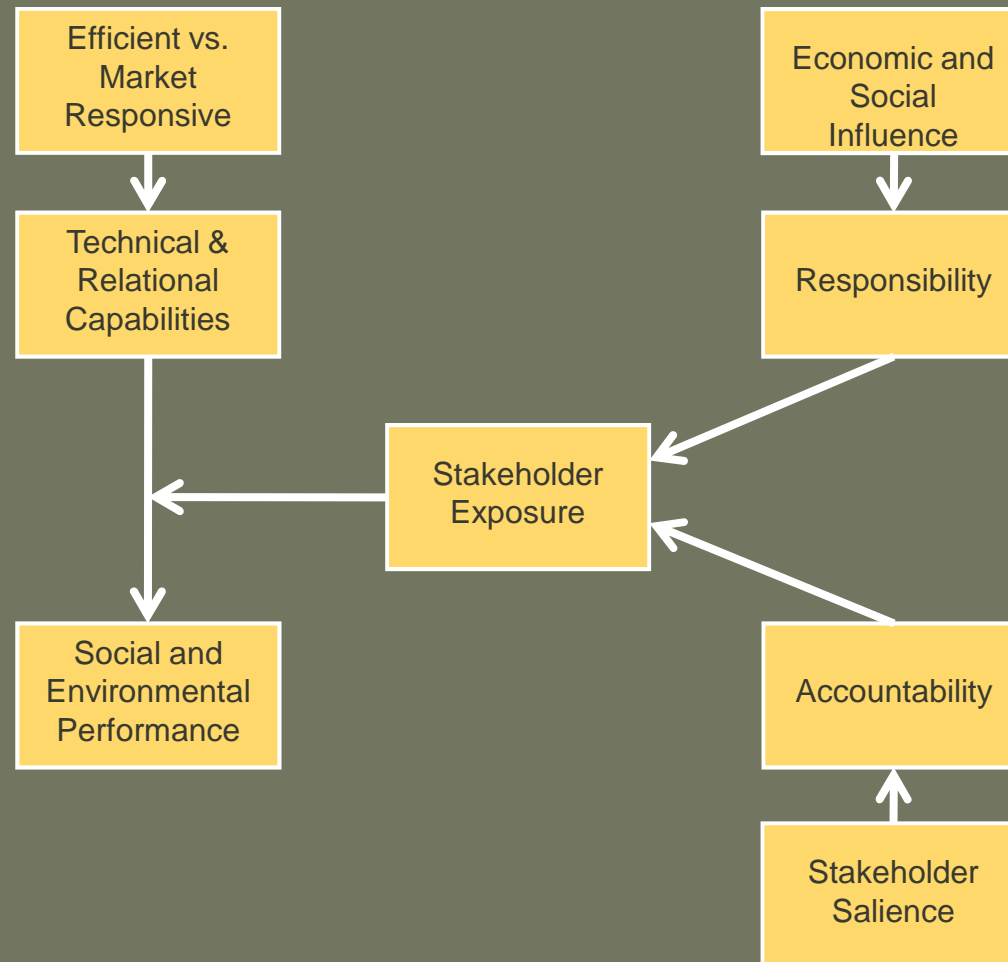
# Responsibility and Accountability Drive Stakeholder Exposure



# An Integrated Model of Stakeholder Exposure, Capabilities, and Social and Environmental Performance



# An Integrated Model of Stakeholder Exposure, Capabilities, and Social and Environmental Performance



# Propositions – Efficient Supply Chains

- Innovative process improvements boost environmental performance (Geffen and Rothenberg, 2000).
- Technical capabilities in process improvement are complementary with environmental initiatives (Christmann, 2000).
- P1: As the degree of responsibility increases for a firm in an efficient supply chain, superior process improvement capabilities are associated with better social and environmental performance.

# Propositions – Efficient Supply Chains

- The role of information is critical when a firm is being held accountable.
- Evaluation practices (audits, certifications, etc.) are part of careful evaluation (Petersen, Handfield, and Ragatz, 2005).
- Strong evaluation practices involve monitoring and oversight, which promote and enforce greater social and environmental performance.
- P2: As the degree of accountability increases for a firm in an efficient supply chain, superior supplier evaluation capabilities are associated with better social and environmental performance.

# Propositions – Efficient Supply Chains

- The ability to fashion effective contracts is critical to eliciting desired social and environmental performance.
- The process of forging contracts contributes to a common understanding of goals and promotes communication (Reuer and Ariño, 2007; Mayer and Teece, 2008).
- Without contracts, suppliers are less motivated to live up to social and environmental commitments.
- P3: As the degree of responsibility and accountability jointly increase for a firm in an efficient supply chain, superior contracting capabilities are associated with better social and environmental performance.

# Propositions – Responsive Supply Chains

- In responsive supply chains, there is more likely to be demand pull for improved social and environmental performance.
- Collaboration with suppliers creates value (von Hippel, 1988; Petersen, Handfield, and Ragatz, 2005).
- This collaboration and mutual learning (Tunisi and Zanfei, 1998) means that the focal firm is in a better position to create positive change where it is responsible.
- P4: As the degree of responsibility increases for a firm in a responsive supply chain, superior product improvement capabilities are associated with better social and environmental performance.

# Propositions – Responsive Supply Chains

- Responsive supply chains are frequently associated with brand names, and this attracts the interest of stakeholders (Chatterjee and Levine, 2006; Hendry, 2006).
- Therefore, externally-oriented activities are key.
  - Stakeholder engagement (Sharma, et al, 2007)
- Communication with stakeholders is critical and is itself a valuable capability (Klassen and Vachon, 2003).
- P5: As the degree of accountability increases for a firm in a responsive supply chain, superior external reporting capabilities are associated with better social and environmental performance.

# Propositions – Responsive Supply Chains

- When both responsibility and accountability are high, firms must motivate partners while communicating improvements to stakeholders.
- Here, supplier development is critical...
  - Maintains goodwill (Krause, Handfield, and Tyler, 2007)
  - Promotes information relay (King, 2007)
  - Sets stage for information gathering and activist involvement
- P6: As the degree of responsibility and accountability jointly increase for a firm in a responsive supply chain, superior supplier development capabilities are associated with better social and environmental performance.

# Implications for Research

- Efficiency as a necessary but not sufficient condition for supply chain effectiveness
- Supply chain responsibility as a differentiator and a source of competitive advantage
- The firm boundary question when social and environmental issues are introduced into decisions
- Getting beyond the efficient/responsive dichotomy
- Measuring stakeholder management
- Finding a place for stakeholder collaboration in strategies for supply chains

# Implications for Practice

- Managers must be aware of the dynamic and unpredictable nature of stakeholder relations
- Firms must build capabilities to manage stakeholders
- Supplier selection becomes more significant
- Firms must develop an accounting system and metrics for social and environmental performance
- Geographic and cultural distance exacerbates all of these challenges
- Creating social and environmental sensitivity is a major recruitment and training issue

Thank you!

Feedback is welcome !