HOW DO FIRMS USE SUSTAINABILITY SIGNALING TO HARVEST A PROFITABLE POSITION?

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SUSTAINABILITY SIGNALING: THE ROAD MAP

- Firms use signals to convey information on their sustainability.
- A firm's strategy dictates its choice of the signal type.
- Signaling mechanisms complement these signal types in bridging the information gaps between firm and its stakeholders.

PRME Principles for Responsible Management Education

HOW DO WE DEFINE SIGNALS?

- Signals are “observable characteristics attached to the individual, subject to manipulation by him” (Spence, 1973, p.357), or
- Signals are activities that are “visible and in part designed to communicate” (Spence, 2002, p.434).
- The signaler must aim to benefit from an action of the signal receiver triggered by the signal (Connelly et al., 2011).
- “High quality sellers must have lower costs for signaling activities” (Spence, 1976, p.592).

✓ **INTENTION**

✓ **VISIBILE**

✓ **BENEFIT**

✓ **COST**

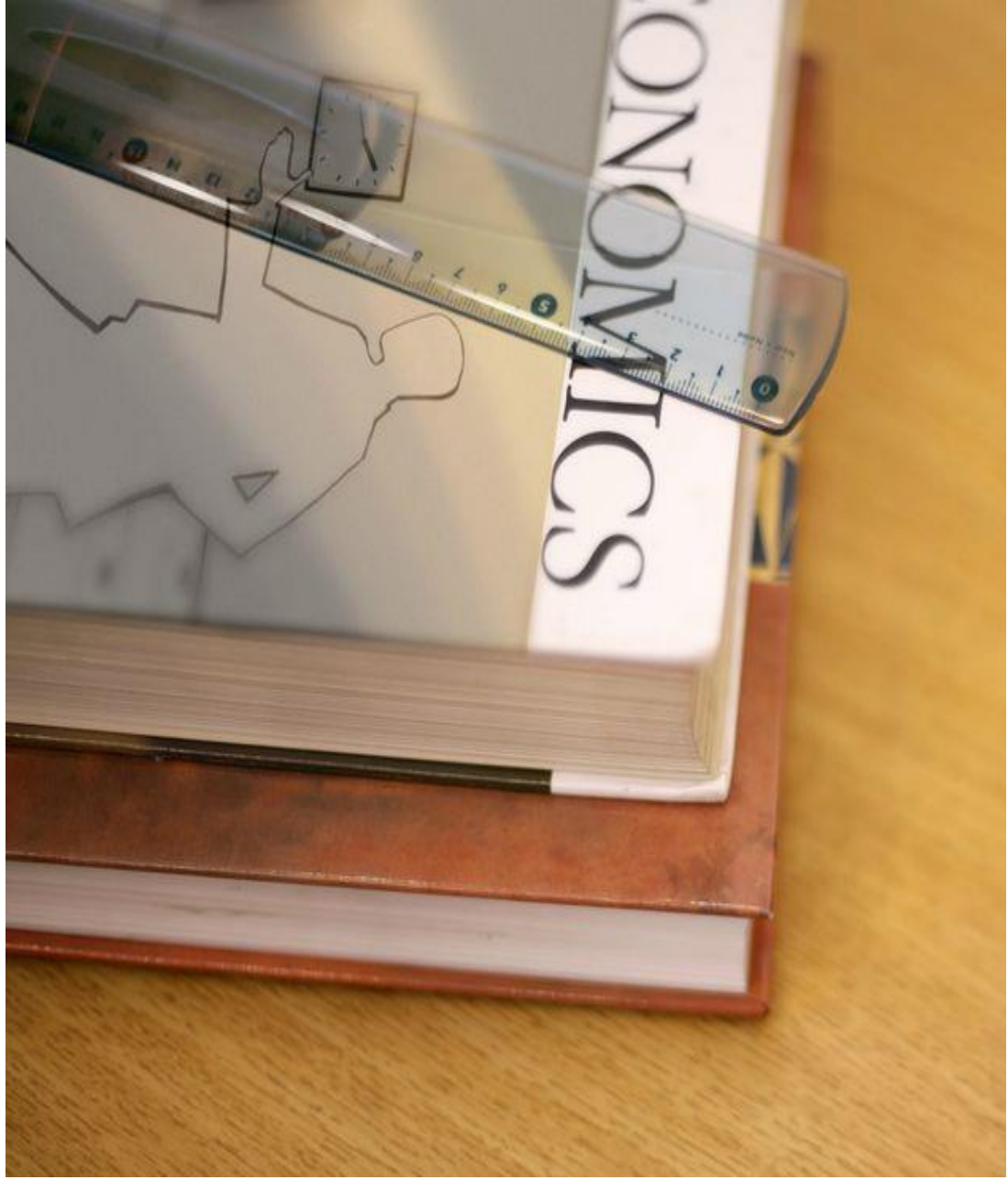
❑Key Assumption: Information Asymmetry

SIGNALING THEORY IN ECONOMICS

- Early roots in Veblen's (1899) book, *The Theory of the Leisure Class*. "Consumption a signal of wealth & status."

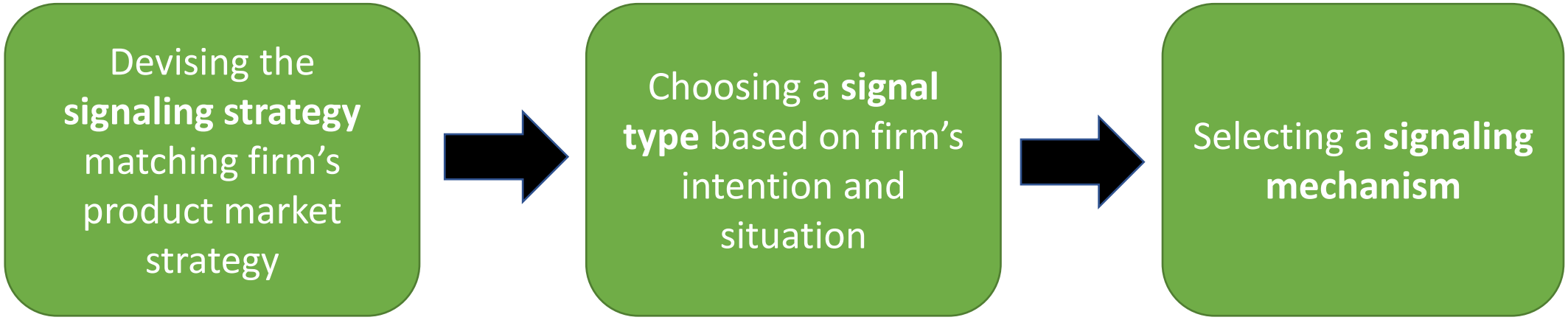
- Akerlof's (1970) work *The Market for Lemons* focuses on the costs of dishonesty i.e. when you "pawn bad wares as good wares" the quality producers exit the market.

- Spence's (1973) seminal work *Job Market Signaling* describes how education serves as the signal of "productivity" of a job market candidate.



SUSTAINABILITY AS A CONTEXT

- From Polanyi's (1944) double movement to counter marketization to Friedman's (1970) argument "profit maximization is the core social responsibility of businesses" - conflicting views on firm sustainability.
- Firms compete to be tagged as "green" (Bansal & Roth, 2000; Orsato, 2006) because now firms can gain competitive advantage by signaling sustainability (Porter & Kramer, 2006).
- Firms now use sustainability accounting standards like SASB (Sustainability Accounting Standards Board), GRI (Global Reporting Initiative), to signal sustainability.



THE SUSTAINABILITY SIGNALING FRAMEWORK

THREE STEPS

1) **Selecting Signaling Strategy:** Differentiation, cost leadership or strategic similarity.

2) **Choosing Signal Type:** Credible, deceptive or no-signal.

3) **Finalizing Signaling Mechanism:** Direct, indirect, both or none.

STEP 1: SELECTING THE SIGNALING STRATEGY

- **Differentiation** (Porter, 1980): Firms compete based on higher, differentiated quality of their products. Likely signaling strategy – Differentiate through credible sustainability signals

- **Cost Leadership** (Porter, 1980): Firms compete based on low cost of similar or standardized products. Likely signaling strategy – Economize on sustainability costs by decoupling and cheap talk

- **Strategic Similarity** (Caves & Porter, 1977; Dess & Davis, 1984): Firms pursuing similar strategies form strategic groups within an industry and tend to collude in terms of pricing and other strategic moves. Likely signaling strategy – Abstain from signaling

STEP 2: CHOOSING THE SIGNAL TYPE

In this research, the classification of signal types is based on the intention of firms and their situation at the time of signaling.

- **Credible Signal** (Toms, 2002; Davila et al., 2003): When firms good at environmental sustainability convey this message to their stakeholders, the signals sent are “credible”.

- **Deceptive Signal** (Kracher & Johnson, 1997; Piccolo et al., 2018): When firms attempt to hide their limited/inferior environmental performance by exaggeration and cheap talk, the signals sent are “deceptive”.

- **No-Signal** (Spence, 1973, 2002): When firms choose not to signal, either due to sub-standard environmental performance or to avoid raising the bar for others in a strategic group of the industry they operate in, “no signal” is sent.

STEP 3: FINALIZING SUSTAINABILITY SIGNALING MECHANISMS

❑ **DIRECT SIGNALS** (Signal receiver knows the signaler is the firm itself)

- Advertising/ Marketing campaigns
- Releasing annual CSR reports showing adherence to third party accounting standards and guidelines (e.g. SASB and GRI)
- Disclosing the information about sustainability endeavors on Securities and Exchange Commission (SEC) 10K forms

❑ **INDIRECT SIGNALS** (Signal receiver assumes firm is not the signaler)

- Third party ranking/rating agencies (e.g. KLD and SAM)
- Third party "verified" certifications like ISO 14001.
- Paid editorial news reports and television news studio appearances

❑ **BOTH**

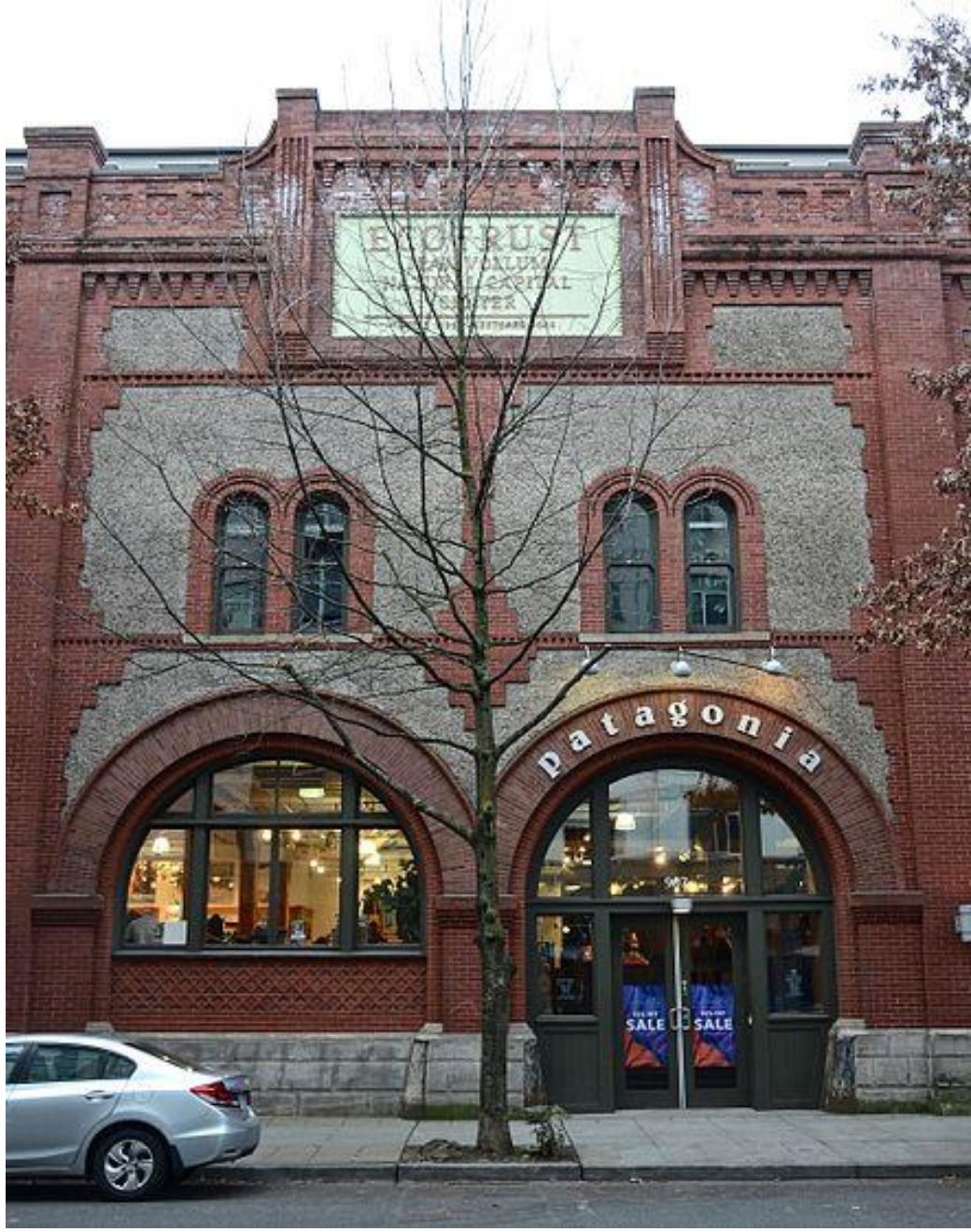
❑ **NONE**

SUSTAINABILITY SIGNALING: AN EXAMPLE

- Retailer Patagonia makes upscale outdoor apparels and travel items.
- Clothes are designed to last long and are costly.
- The company is known for its environmental sustainability efforts.

What do you think is Patagonia's:

1) Sustainability signaling strategy,
2) chosen signal type, and
3) the signaling mechanism(s) it uses?



Answer to the question on Patagonia

1) Sustainability signaling strategy – Differentiation as the product itself is differentiated and has uniquely sustainable features,

2) chosen signal type – Credible signals as they have succeeded in making their product sustainable, and

3) the signaling mechanism(s) – Both direct and indirect because Patagonia is both B-certified (direct signaling mechanism) and has several positive ratings by third parties (indirect signaling mechanism).

HYPOTHESES

- Porter's (1980) first generic strategy of **differentiation** links with firms that walk the extra mile to make their operations/ products sustainable to differentiate themselves from the rest.
- **Resource based view** states that firms acquire and accumulate valuable resources and capabilities to differentiate themselves for competitive advantage (Barney, 1991)
- **Signaling theory** explains how sending signals may help signalers differentiate themselves from others (Spence, 1973)
- With sustainable operations and good environmental performance, firms can use sustainability as a resource to send a superior signal using both direct and indirect signaling mechanisms to gain financial advantage (Ndofor & Levitas, 2004).

H1a: Firms send credible sustainability signals using multiple signaling mechanisms to differentiate themselves for competitive advantage.

H1b: Firms that send credible sustainability signals are likely to outperform firms that do not signal sustainability.

HYPOTHESES

- Porter's (1980) second generic strategy, **cost leadership**, links with the profit maximizing firms that choose profits over social responsibility (Friedman, 1970; Wu et al., 2020).
- Intuitively, such firms are poor at sustainability and expected to prevent signaling that as negative signals do not exist unless unintended (Connelly et al., 2011)
- However, choosing not to signal may invite attention of regulators (Bénabou, & Tirole, 2010) and is a competitive disadvantage. Thus, they use indirect mechanisms to signal deceptively. [Recall Akerlof (1970)]
- They deflect attention with **cheap talk** (Farrell & Rabin, 1996) and send **deceptive signals by decoupling** (Fiss & Zajac, 2006).

H2a: Firms send deceptive sustainability signals by decoupling and cheap talking to gain competitive advantage.

H2b: Firms that send deceptive sustainability signals are likely to outperform firms that do not signal sustainability.

HYPOTHESES

- **Strategic similarity** (Caves & Porter, 1977) of firms in terms of resource dependence, and/or structural similarity make them demarcate boundaries within which they operate.
- Such firms opt for no-signaling as they goal is not to differentiate but move along with the strategic group. However, it is necessary to follow the minimum mandatory regulations explained by the industry standards.
- Bansal and Roth (2000) explain how firms in highly regulated industries like oil and gas follow work in groups and their cohesiveness prevents them from sending differentiating signals which could result in raising the bar for others in the group, thus dissuaded.

H3a: Firms that follow minimal environmental regulation to legitimize do not signal sustainability.

H3b: Firms that do not signal sustainability are likely to underperform firms that send superior signals.

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THANK YOU

Questions?