Accounting Standards & Earnings Management

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Stanford University Graduate School of Business

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DISCLOSURE TOPICS
AGENDA

Decide what to disclose after you've seen the signal.

Choose the rule according to which you're going to disclose before you've seen the signal.

Manipulate the signal and/or report

Information is endogenous

OPTIMAL ACCOUNTING STANDARDS
AND THEIR LESS AMBITIOUS VERSION

Optimal accounting standards in a society

Optimal accounting standards in a market

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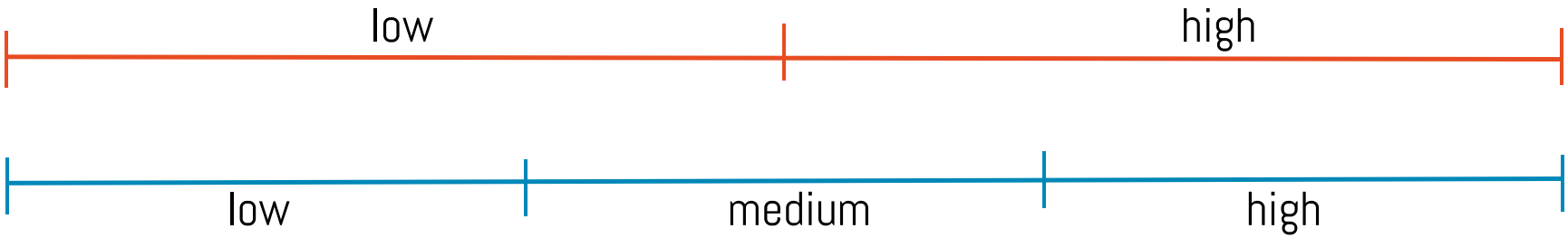
IMPOSSIBILITY OF NORMATIVE ACCOUNTING STANDARDS

DEMSKI 1973

Loosely: The only thing we can say is that finer information systems are preferred in single agent settings.

Example: two information systems



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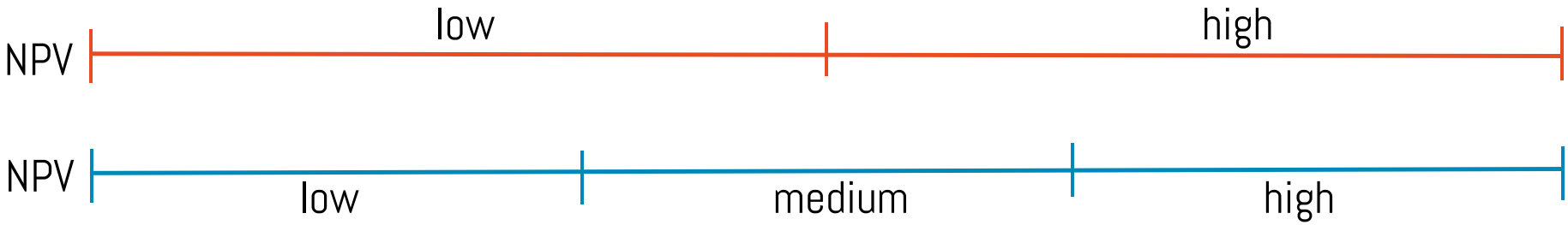

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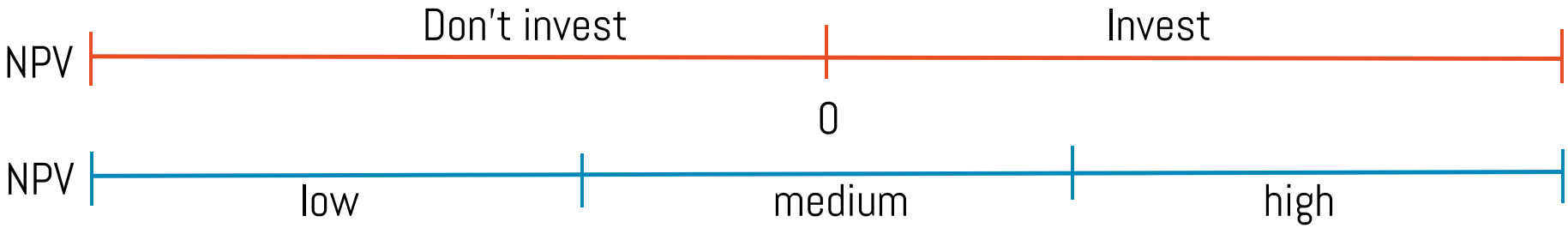

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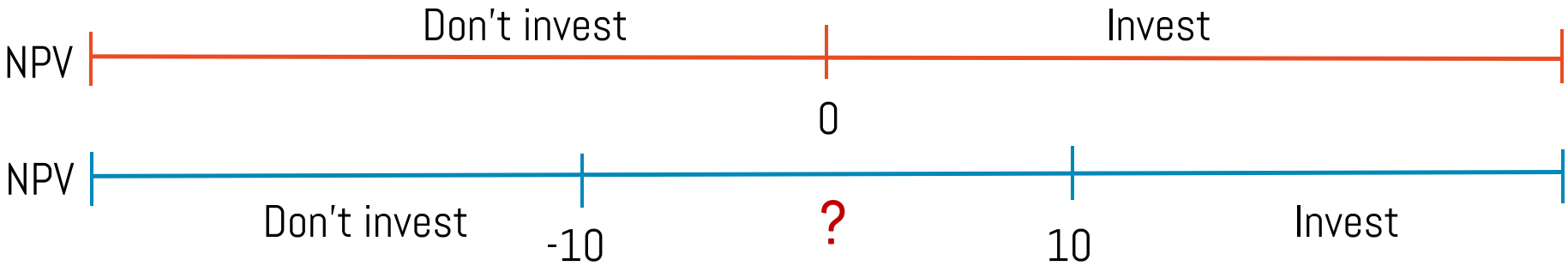

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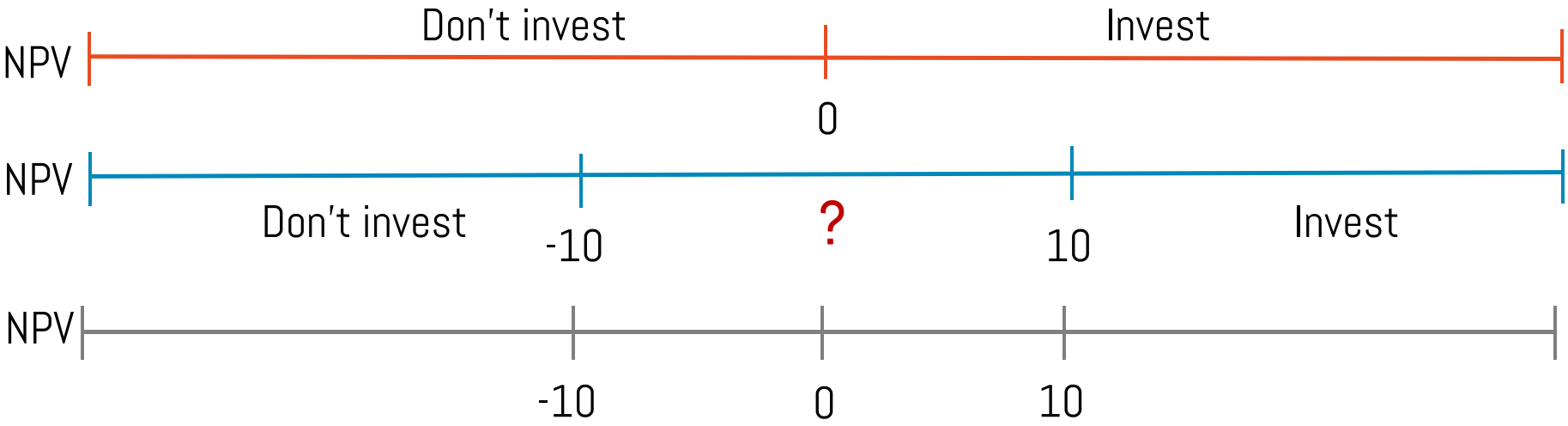

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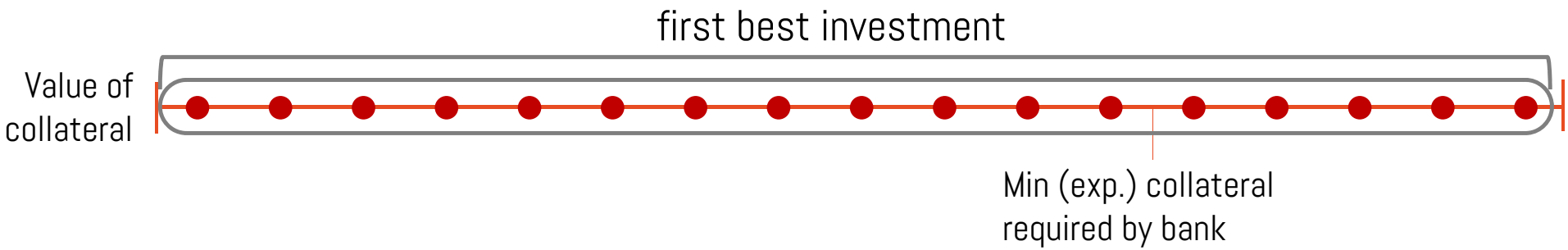
WHY THE FINENESS CRITERIA FAILS IN MULTI-AGENT SETTINGS

GOEX & WAGENHOFER (SIMPLIFIED)

Bank loan with collateral to finance positive NPV project



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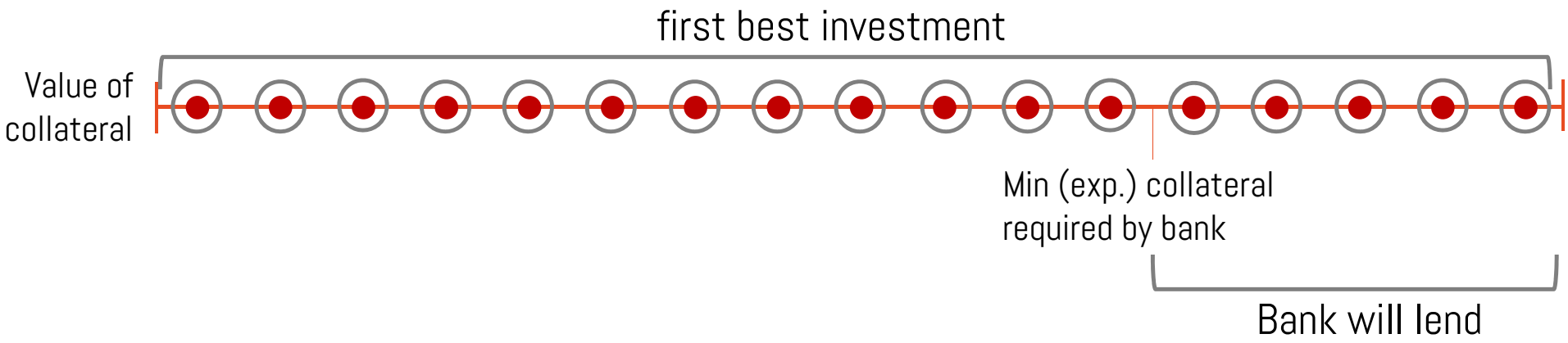

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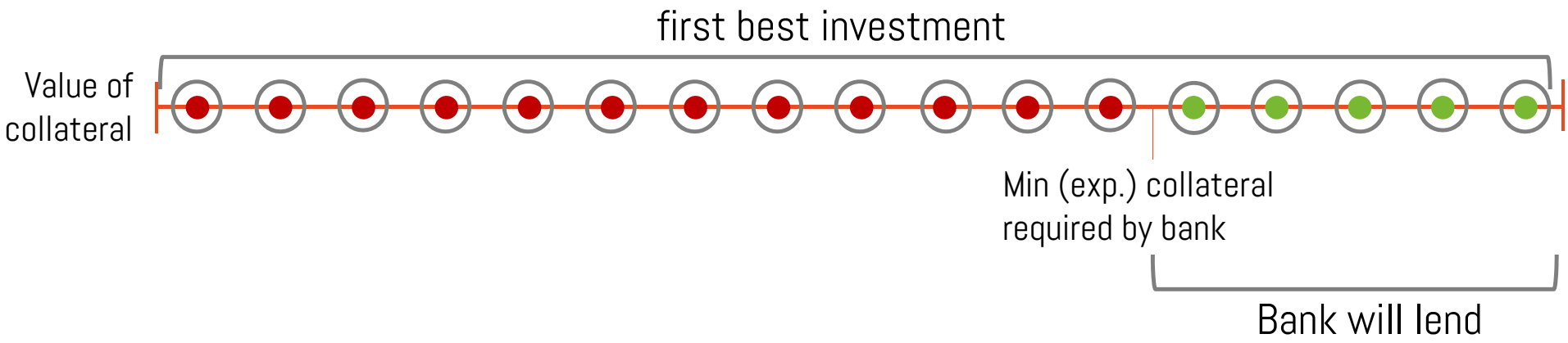

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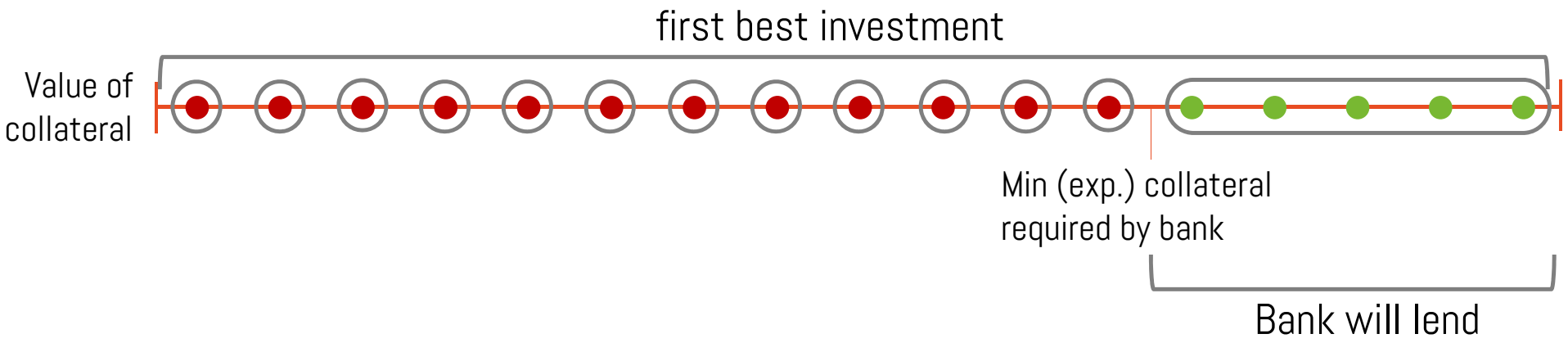

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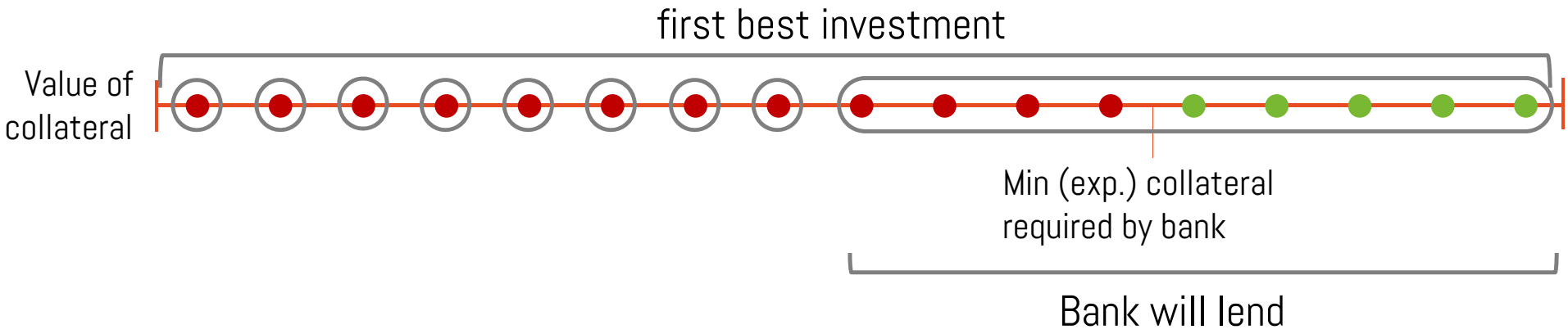

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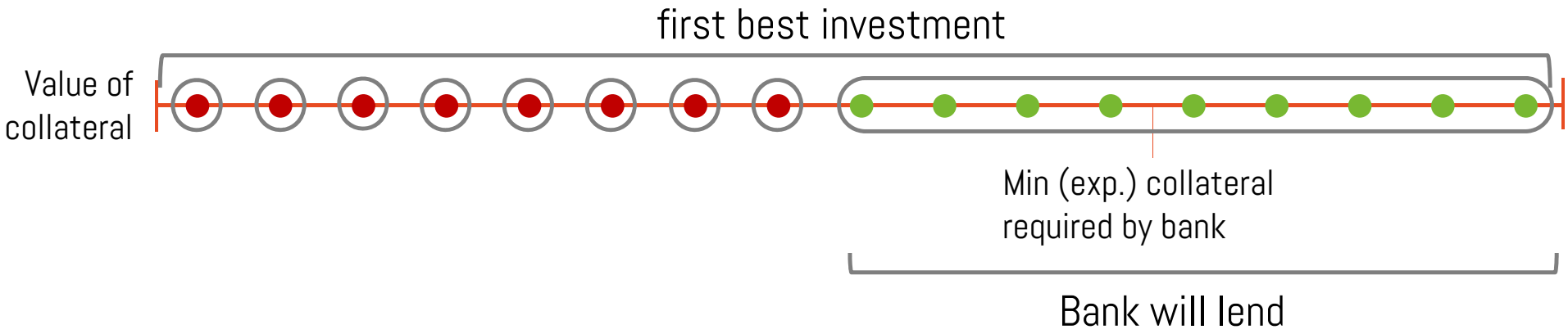

Lower of cost or market

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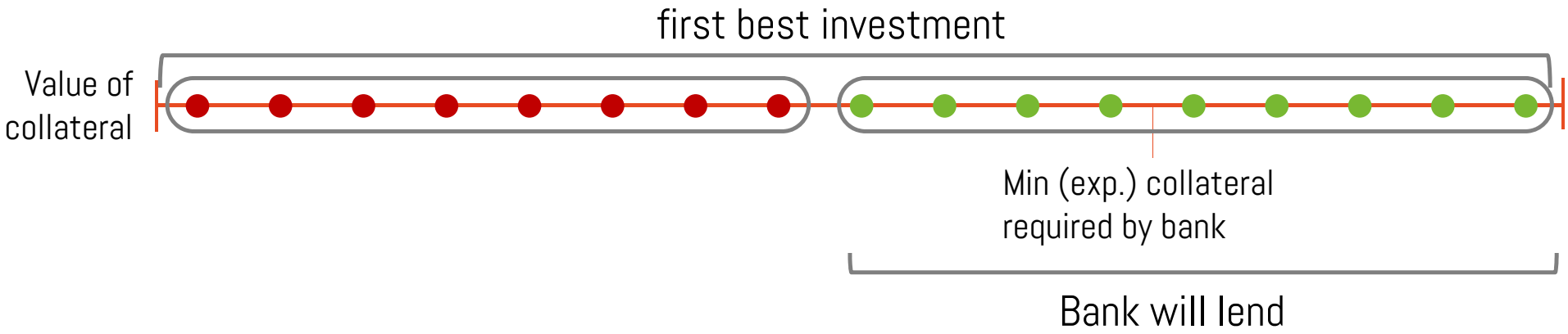

Lower of cost or market

or

Qualitative disclosure?

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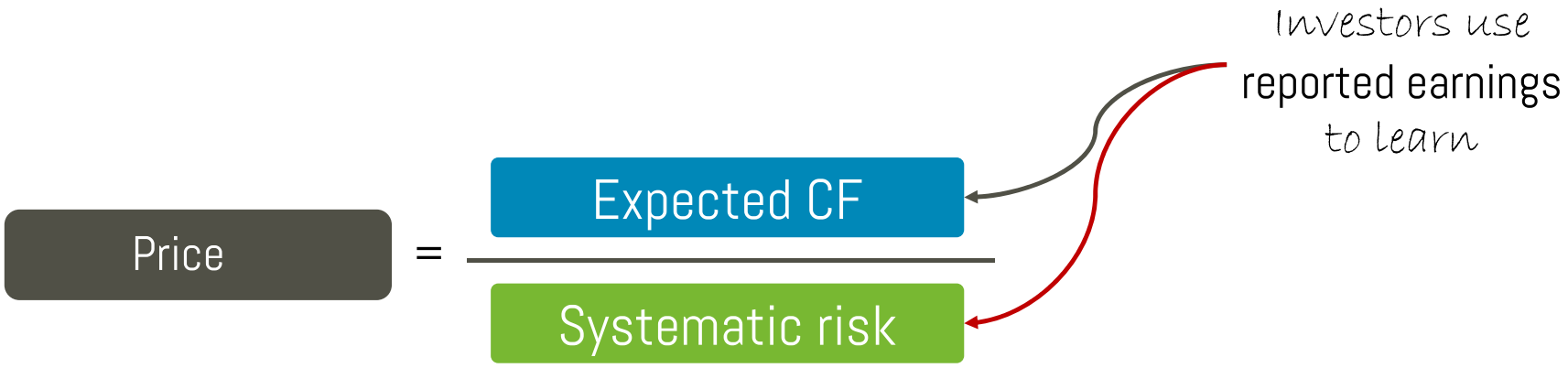
BEYER & SMITH (2021)

PREMISE

Learning about Risk-factor Exposures from Earnings:
Implications for Asset pricing and Manipulation



BEYER & SMITH (2021)
SETUP

- Factor structure of earnings

$$\tilde{e}_{1i} = \tilde{a}_{1i} + \tilde{b}_i \times \tilde{f}_{e1}$$
$$\tilde{e}_{2i} = \tilde{a}_{2i} + \tilde{b}_i \times \tilde{f}_{e2}$$

where $\tilde{f}_{et} = \int \tilde{e}_{ti} di$.

- Factor exposure remains the same across the two periods
- Investors are risk-averse and well diversified
- Investors use $\tilde{e}_{1i}$ to learn about expected future performance $\tilde{e}_{2i}$ and systematic risk $\tilde{\beta}_i$
- Normal distributions + CARA utility functions → factor structure of prices

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EQUILIBRIUM

- Factor structure of prices

β

Expected return of market portfolio

$$P_{1i}(e_1) = e_1 + E[\tilde{a}_{i2}|e_1] + E[\tilde{b}_i|e_1] \times (f_{e1} - \rho \times \sigma^2_{fe2})$$

- Non-normal part is idiosyncratic
- Expectations are linear
- For a given market performance, a firm's price is linear in its earnings

$$P_{1i}(e_1) = p_{0i}(f_{e1}) + p_{1i}(f_{e1}) \times e_{i1}$$

- Concept of ERC is well-defined: $p_{1i}(f_{e1})$

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EQUILIBRIUM

	Economic downturn	Economic upswing
Higher earnings indicate…	…**higher** future exp. performance → Stock price **increases**	…**higher** future exp. performance → Stock price **increases**
	…**lower** systematic risk → Stock price **increases**	…**higher** systematic risk → Stock price **decreases**
	→ Overall, stock price **increases by "a lot"** when earnings increase	→ Overall, Stock price **increases by "less"** when earnings increase
	$ERC_{downturn}$ >	$ERC_{upswing}$

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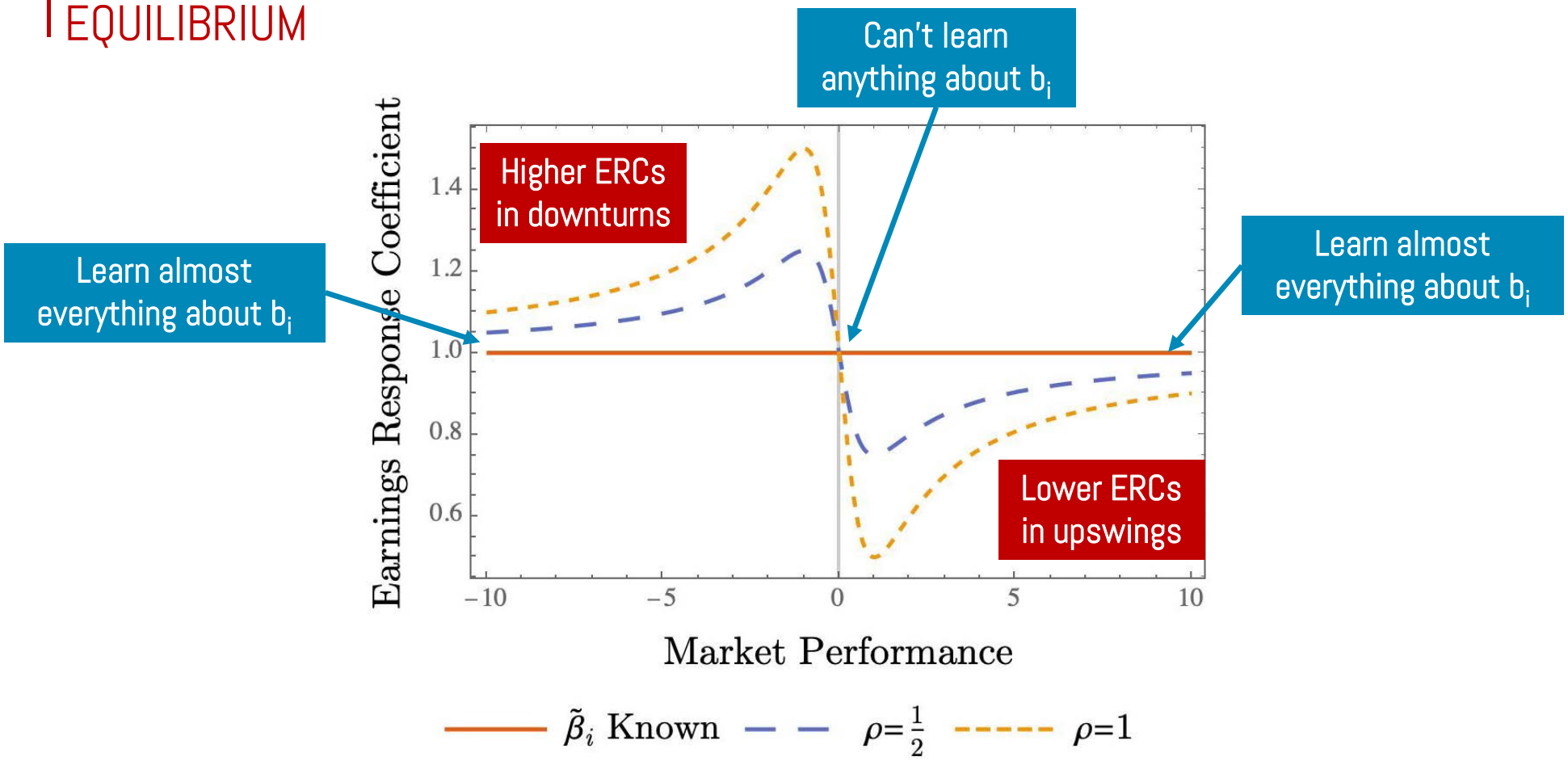
EQUILIBRIUM



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EQUILIBRIUM: EARNINGS MANIPULATION

	Economic downturn	Economic upswing
	$ERC_{downturn}$ >	$ERC_{upswing}$
Earnings manipulation	**Stronger** incentives to manipulate	**Weaker** incentives to manipulate
	Greater cost of earnings manipulation	**Lower** cost of earnings manipulation
	Lowers firm values **by a lot**	**Lowers** firm values **by not that much**
	Difference between aggregate value in downturns and upswings **increases** → Higher systematic risk	


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