

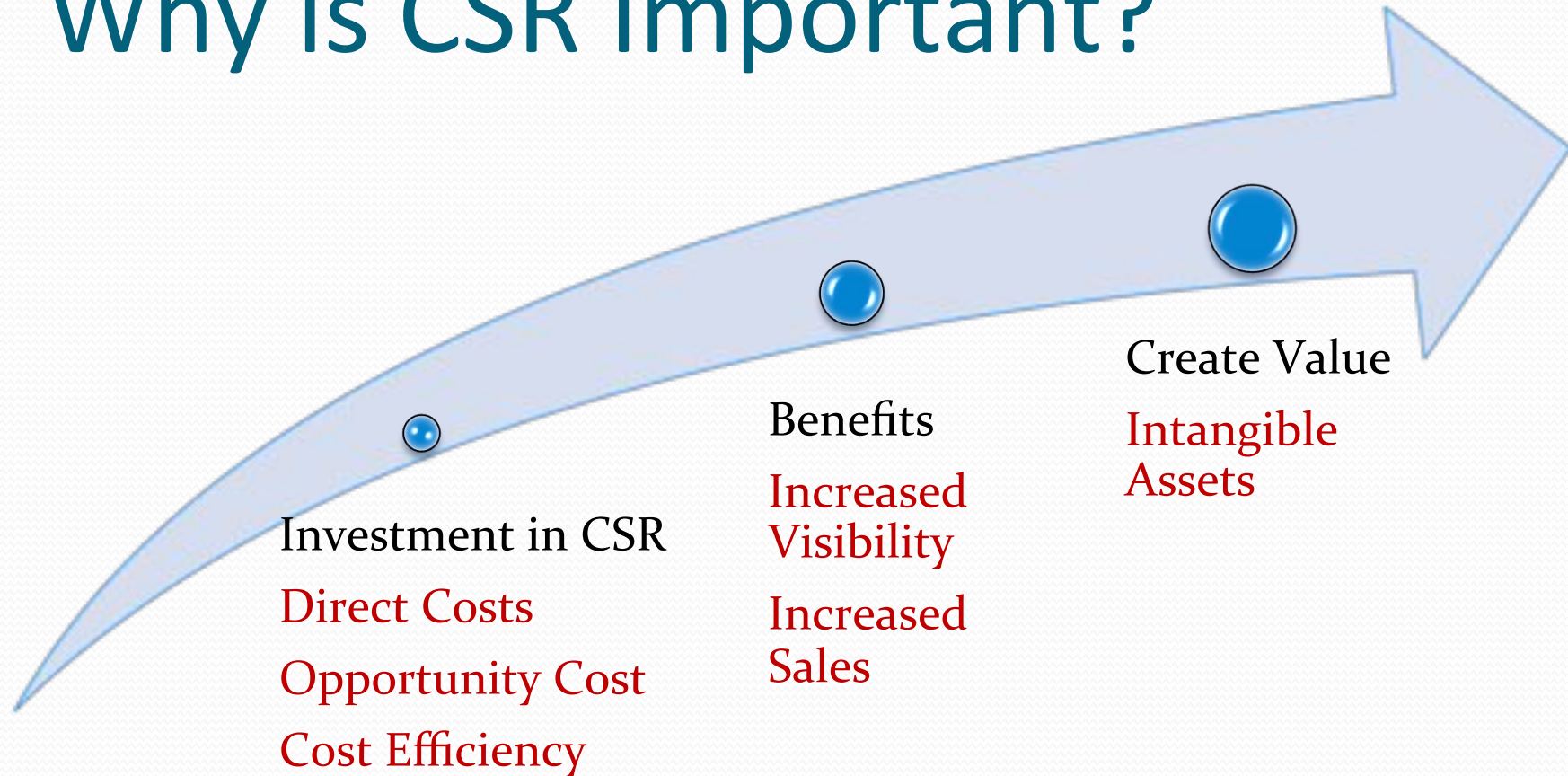
Does Size Matter?

A Higher Dimension Perspective of the
Relationship between CFP and CSR

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Presentation by
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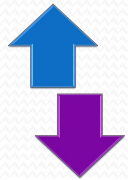
Why is CSR Important?



- The question is:
Does CSR create value?

CSR-CFP: Ultimately an Empirical Issue

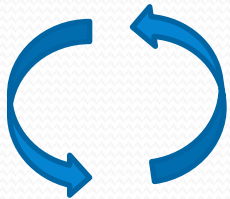
Sign



Benefits outweigh the costs and CSR Creates Value (e.g., Anderson and Frankle, 1980; Belkaoui 1976)

Associated costs are higher and CSR activities destroy value (e.g., Aupperle et al., 1985; Freedman and Jaggi, 1982)

Direction



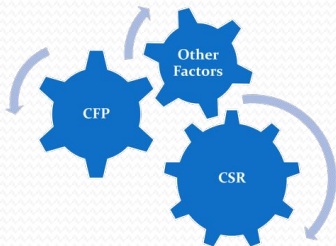
Social Impact: Meet stakeholders' needs **create value** (e.g., Freeman, 1984; Jones, 1995)

Slack Resource: **Only** profitable companies can invest in CSR (e.g., Waddock and Graves, 1997)

Trade-off: CSR costs **decrease** CFP – (Friedman, 1962)

Managerial Opportunism: CSR only when there are no other intangibles (Weidenbaum and Vogt, 1987)

Endogeneity



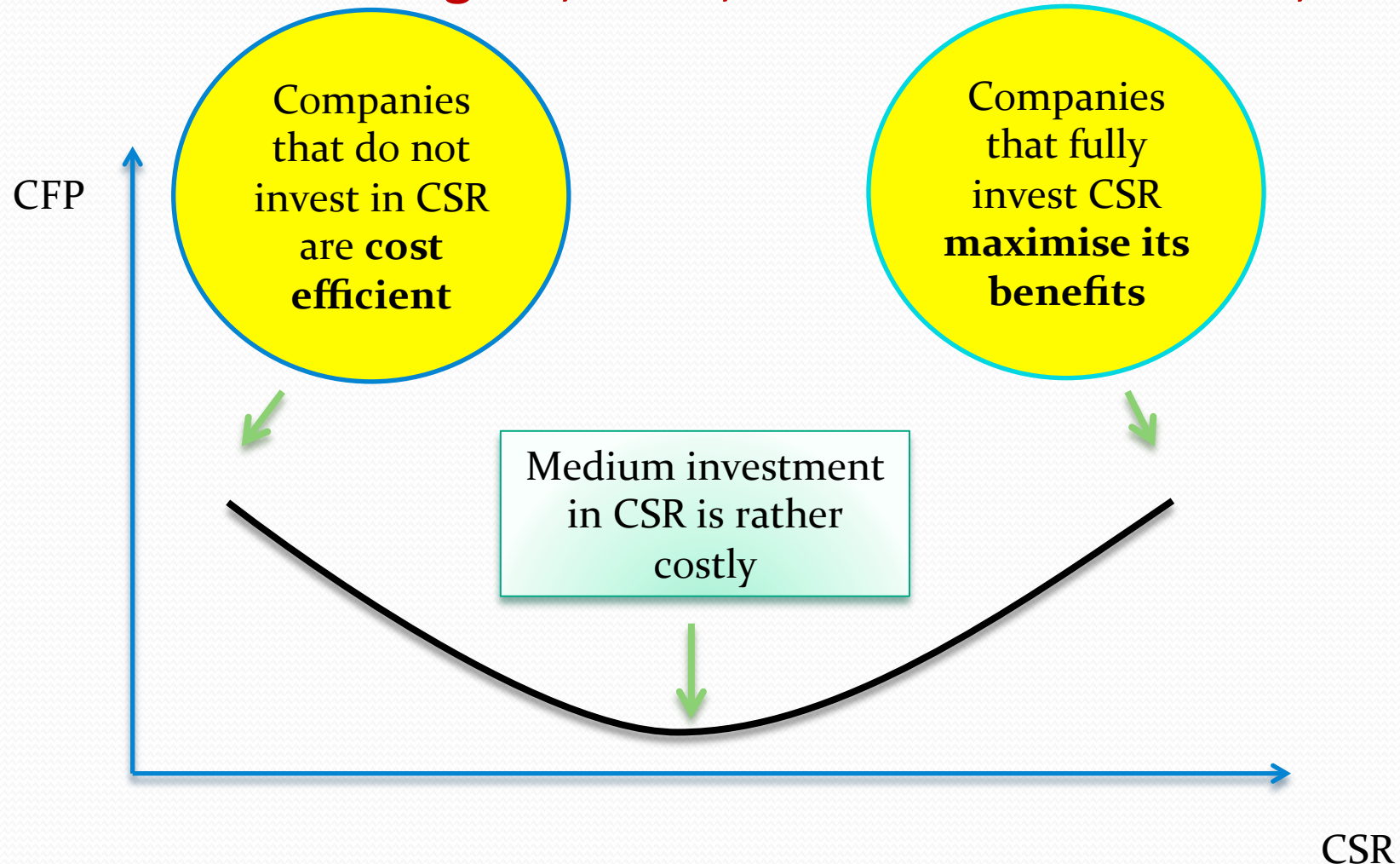
Endogenous: Indirect through intangible assets of innovation, human capital, reputation and culture (Surroca et al., 2010)

Synergy: Positive (Allouche and Laroch, 2005) or negative (Friedman, 1970)

Exogenous (Stanwick and Stanwick, 1998; Orlitzky, 2001)

Asymmetric effect

(Brammer and Millington, 2008; Barnett and Salomon, 2012)



Why Asymmetry is important?

Different (CSR or alternative) strategies should be preferred, depending on which side of the tipping point the company lies different strategies

Reflecting on Literature: CSR-CFP

Asymmetry Further Issues

- Implications
 - CSR-CFP Asymmetric
 - Other factors can affect the shape and direction of the relationship
- No Synergy-Endogeneity
- Limiting Structural Form
- SIC is a latent Concept
- Do not estimate the threshold value

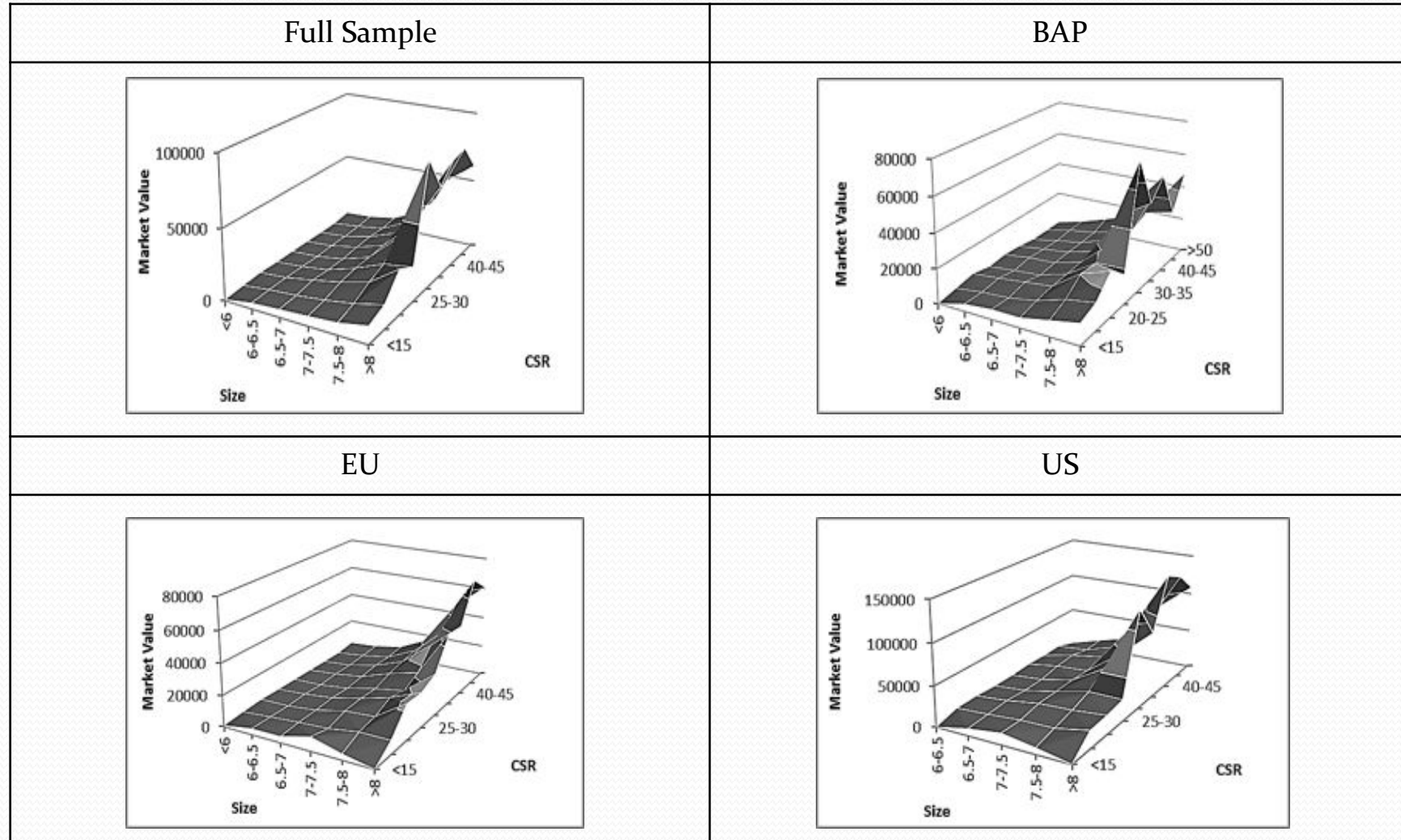
Major Contribution

- Use size to proxy visibility-SIC (Assumption-Limitation)
- Use a latent specification of size to account for firm specific factors
- Use a more flexible specification to account for “adaptability”
- Estimate the “threshold value” per firm

We conduct an empirical investigation on a global sample with Vigeo Ratings

Why Size?

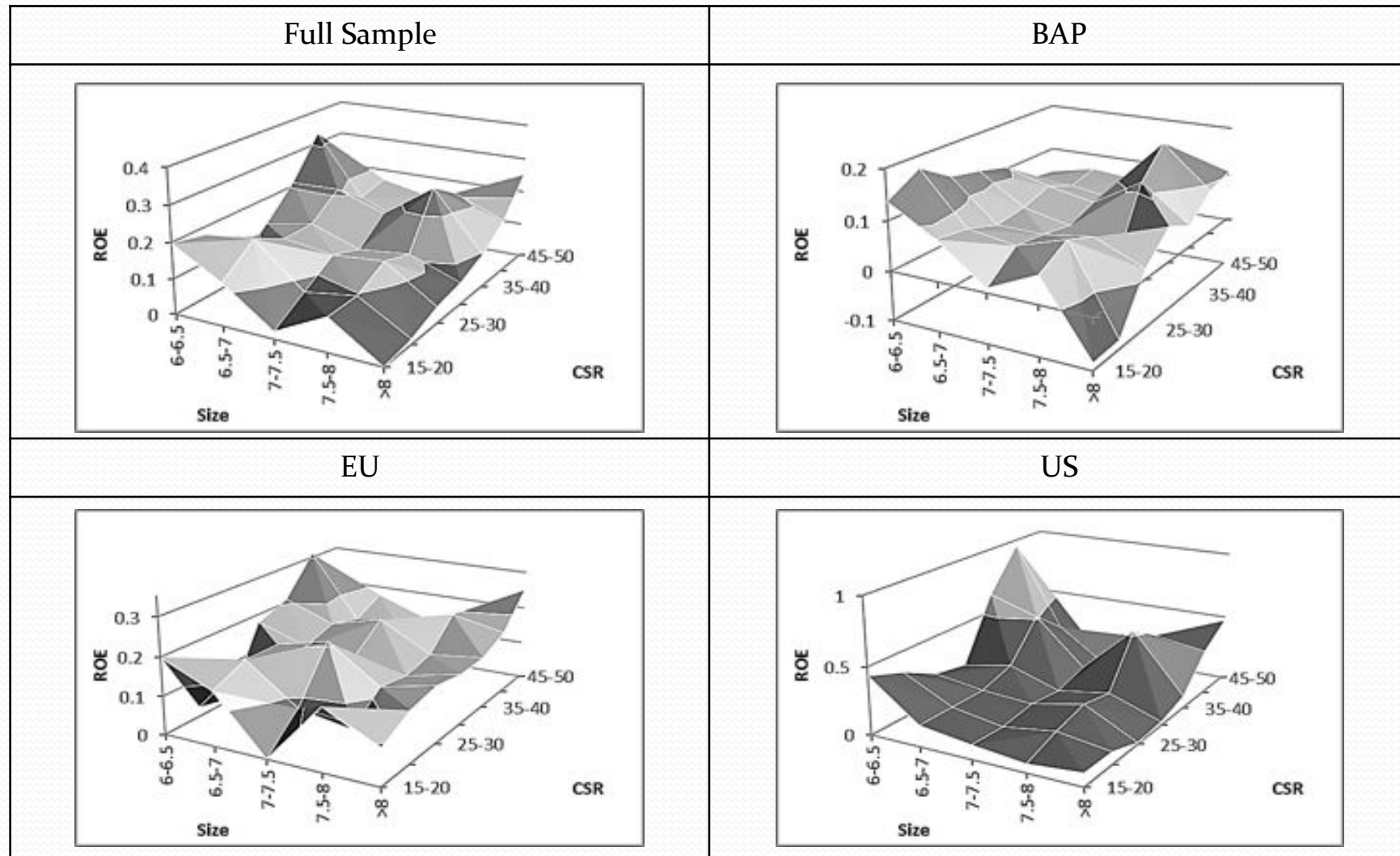
We make the explicit assumption that larger firms exhibit greater visibility.



Larger firms are more likely to invest in CSR
Larger firms are more likely to benefit from CSR

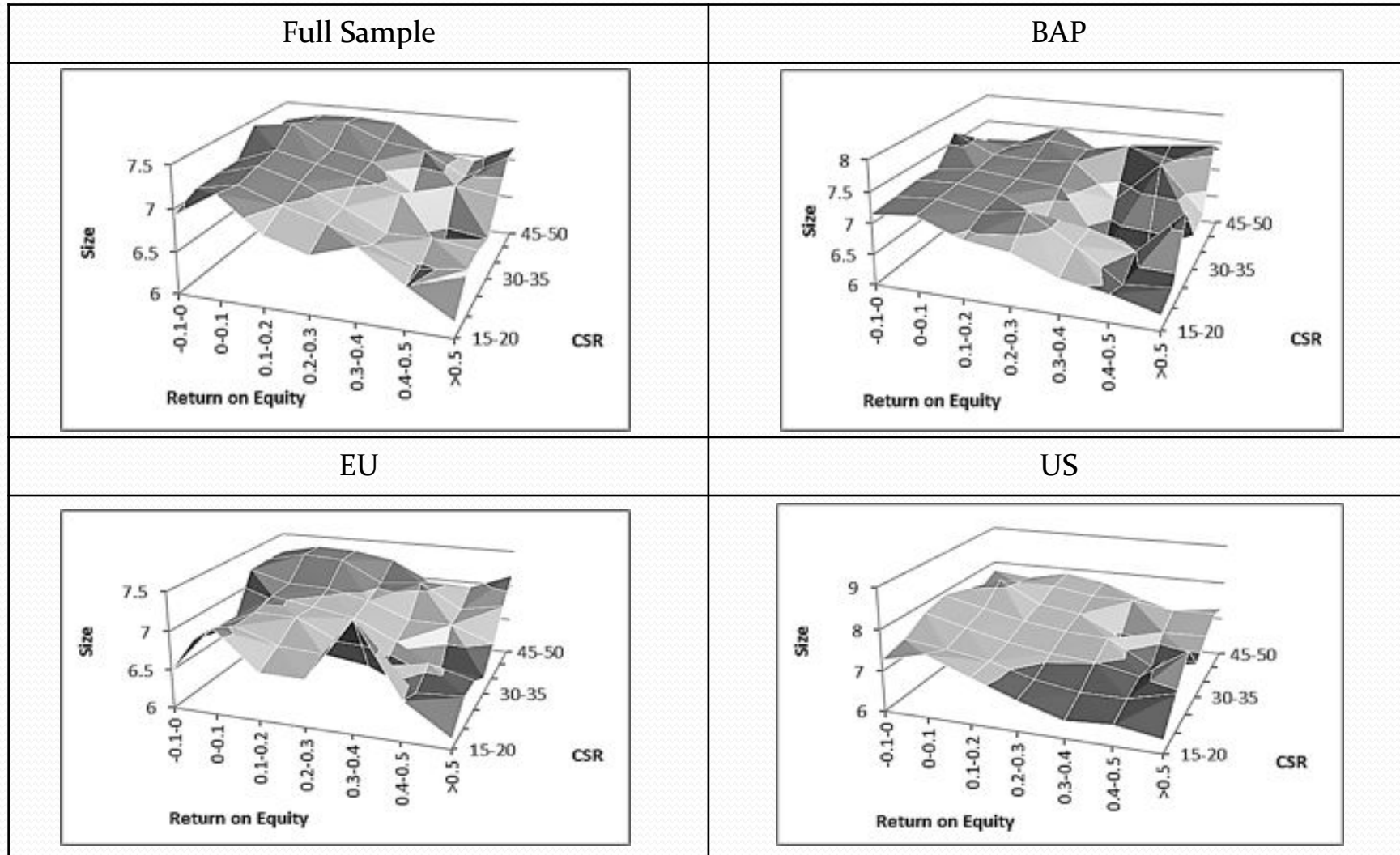
Sample: Vigeo-Financials		ROE	CSR	Size
Full Sample 1997-2012 (7,307 obs)	Mean	0.1456	0.3867	7.2557
	Median	0.1270	0.3883	7.1748
	Maximum	13.44	0.79	9.50
	Minimum	-6.1405	0.0533	4.8840
	Std. Dev.	0.4265	0.1286	0.7450
BAP	Mean	0.0631	0.2726	7.2011
	Median	0.0655	0.2650	7.1228
	Maximum	0.92	0.65	9.41
	Minimum	-1.7967	0.0533	5.7082
	Std. Dev.	0.1720	0.1076	0.6107
EU	Mean	0.1523	0.4291	7.2083
	Median	0.1352	0.4433	7.1118
	Maximum	13.44	0.79	9.50
	Minimum	-6.1405	0.0900	4.8840
	Std. Dev.	0.4259	0.1223	0.7916
US	Mean	0.1843	0.3371	7.4426
	Median	0.1469	0.3317	7.3690
	Maximum	12.29	0.60	9.36
	Minimum	-5.8376	0.1183	6.1116
	Std. Dev.	0.5361	0.0870	0.6480

Sample Initial Observations I



CSR and CFP is variant across a third dimension

Sample Initial Observations II



Direction of link is not clear

Model

$$\{ \blacksquare ROE_{lit} = (\alpha_{l0} + \alpha_{l0,p} \sum_{i=1}^p I_{lit}) + \alpha_{l1} SIZE_{lit} + \alpha_{l2} \uparrow CSR_{lit} + \alpha_{lq} \sum_{i=1}^q CV_{lit} +$$

- We investigate endogeneity, direction, causality
- $\alpha_{l2} \uparrow$ measures asymmetry
- The latent specification for size allows for multiple factors to be considered “current status”

I

- Fixed Effects (Industry, Country, Year)

CV

- Control Variables: Account for firm specific effects, such as Investment in Intangibles, solvency, liquidity, etc.

Asymmetry in 3D

$$a_{2t}^* = a_{2t}^{low} (1 / (1 + e^{\gamma_{t0} + \gamma_{t1} SIZE_{it} + s_{it}})) + a_{2t}^{high} (1 - 1 / (1 + e^{\gamma_{t0} + \gamma_{t1} SIZE_{it} + s_{it}}))$$

- This specification
 - Is flexible enough to accommodate various shapes (increasing, decreasing, concave/convex, exponential, logarithmic, etc.)
 - Provides an estimate of the threshold value for every firm (and/or country, year, etc.)
 - Is highly extendable (more/different threshold variables,, more states, different transition function, etc.)

Empirical Findings I: Different Measures of CFP

	ROE	CSR	Size	P/B	CSR	Size	ROA	CSR	Size
ROE		0.0215	-0.2222		0.2603	-0.0308		0.1137	-0.7861
(P/B, ROA)		(6.46)	(-14.21)		(11.74)	(-13.09)		(5.60)	(-8.19)
CSR-low	-0.1388		2.4626	-0.0833		2.4523	-0.1243		2.4704
(CSR)	(-3.02)		(18.19)	(-3.36)		(17.28)	(-3.09)		(18.19)
CSR-high	0.1266			0.2122			0.1192		
	(2.16)			(9.93)			(2.00)		
γ_0	0.4735			0.4501			0.4658		
	(3.19)			(7.36)			(3.49)		
γ_1	-0.0383			-0.0485			-0.0383		
	(-22.26)			(-9.59)			(-22.32)		
Size	-0.1124	0.1125		-0.0451	0.1120		-0.0109	0.1123	
	(-12.48)	(17.98)		(-15.54)	(17.28)		(-7.43)	(18.89)	

Strong Endogeneity

Variant

U-Shape

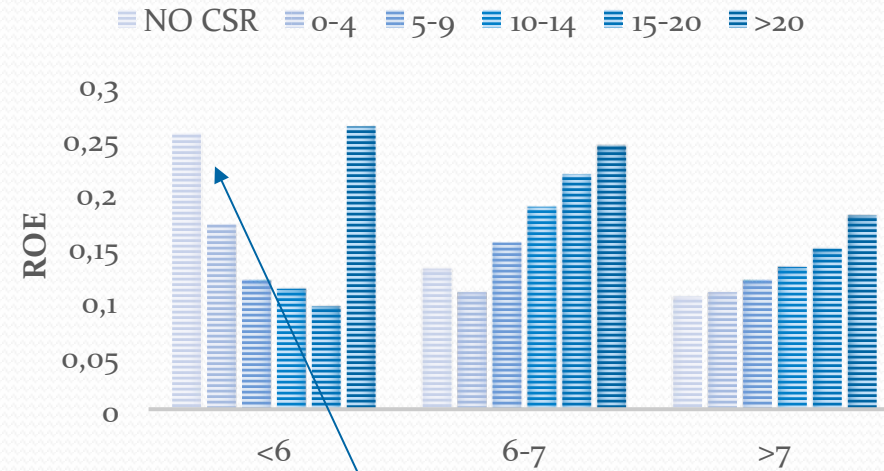
Size reduces the threshold

Empirical Findings II: Across Sample

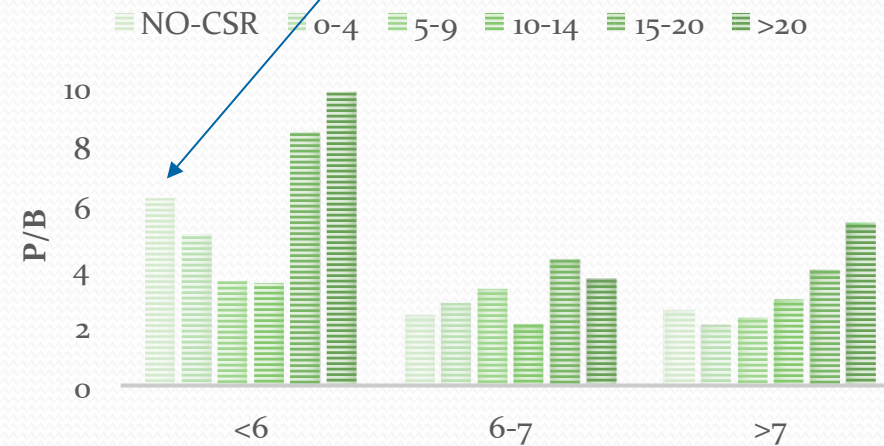
	ROE	CSR	Size	ROE	CSR	Size	ROE	CSR	Size
ROE		0.0102	-0.2263		0.0181	-0.1925		0.0219	-0.2164
(P/B, ROA)		(0.52)	(-12.81)		(3.12)	(-14.04)		(7.05)	(-19.53)
CSR-low	-0.0120		0.9374	-0.1280		2.5580	-0.2071		3.9774
(CSR)	(-1.38)		(7.47)	(-2.62)		(16.24)	(-3.49)		(29.49)
CSR-high	0.0205			0.1145			0.3241		
	(1.39)			(2.55)			(3.22)		
γ_0	0.4812			0.4681			0.4615		
	(4.17)			(3.02)			(2.92)		
γ_1	-0.0102			-0.0365			-0.0437		
	(-1.71)			(-9.83)			(-31.17)		
Size	-0.0326	0.0538		-0.1088	0.1375		-0.2366	0.1109	
	(-2.81)	(7.52)		(-9.70)	(15.74)		(-7.52)	(19.31)	
	BAP			EU			US		

Robustness I: “KLD” and “No vs 0 CSR”

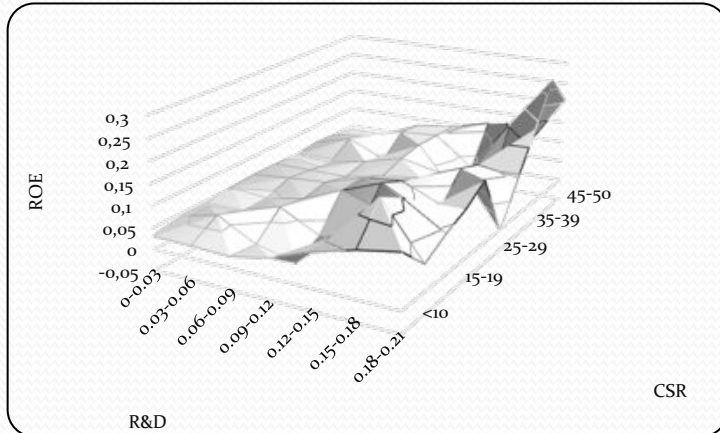
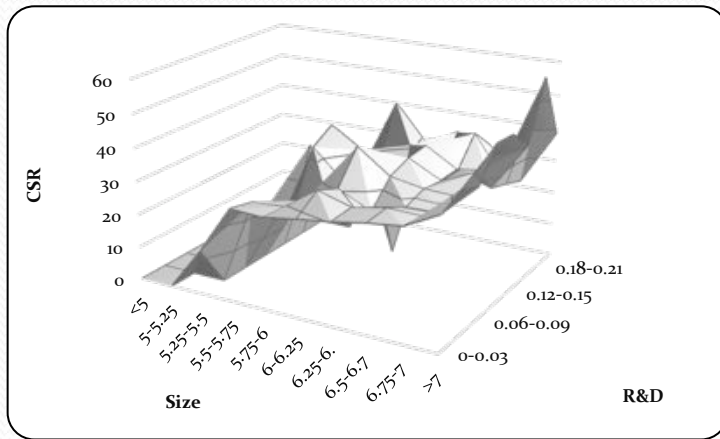
	ROE	CSR	Size
ROE		0.0124	-0.1617
(P/B, ROA)		(4.11)	(-13.86)
CSR-low	-0.1615		3.7978
(CSR)	(5.01)		(17.94)
CSR-high	0.2180		
	(2.82)		
γ_0	0.3044		
	(2.42)		
γ_1	-0.0473		
	(-28.26)		
Size	-0.1367	0.0954	
		0.0124	-0.1617



No CSR is better than low CSR for small firms



Robustness II: “R&D” and “Extension”



- R&D contributes to competitive advantage and thus, to CFP
- R&D decreases the marginal impact of CSR on CFP
 - This is reduced when a 3D (size) is introduced

	ROE	CSR	Size	ROE	CSR	Size
ROE		0.0180	-0.2013			0.0113
		(5.38)	(-12.93)			(3.44)
CSR-low	-0.1570		2.3834		-0.1209	
(CSR)	(-2.90)		(16.50)		(-4.14)	
CSR-high	0.1059				0.1933	
	(2.46)				(2.19)	
Y₀	0.4471				0.1003	
	(2.97)				(2.73)	
Y₁	-0.0295				-0.0169	
	(-15.09)				(-3.67)	
Y₂	0.3757				0.1997	
	(3.51)				(4.30)	
Size	-0.1050	0.1098			-0.1207	0.0983
	(-10.93)	(16.66)			(-3.84)	(15.52)
R&D	0.1577	0.0681			0.1939	0.0263
	(4.94)	(2.68)			(5.07)	(2.05)
	“Vigeo”			“KLD”		

Conclusions

CSR and CFP in 3D

- We introduce a higher dimension in the relationship between CSR and CFP
- We allow firm specific factors to affect this relationship
- We proxy the “current status” of the firm with a latent specification of size
- We propose a “flexible” and “extendable” specification for asymmetry and endogeneity

Size affects the CSR-CFP

- Size seems to affect when the marginal impact of CSR on CFP turns positive (visibility-SIC)
- The U-shaped relationship seems to consist of monotonic/”variant shape” relationships

Implications for Managers & Investors

- The model identifies the “tipping point”/threshold value “per firm”
 - Managers: can use it to find an “optimal strategy”. In some cases they might need to manage other firm specific factors prior to CSR
 - Investors: They can use it to identify suitable investments or evaluate (management) strategic decisions.

Thank You

Any Questions?

