

Diversification or Desynchronicity: an Organizational Portfolio Perspective to Risk Reduction

- <u>Xuefeng Shao</u>- School of Management, University of New South Wales, Australia
- Jane Qiu- School of Management, University of New South Wales, Australia
- Nanfeng Luo- School of Labor and Human Resources, Renmin University, China

Motivation

- Reducing corporate risk is important!
- Diversification studies: Diversity → risk reduction (Andersen, Denrell, & Bettis, 2007; Maurer, 2011)
- Organisational Portfolio Analysis: Synchronization
 Compensation → risk reduction (Donaldson, Charlier, and Qiu; 2012)

Research Gap:

Limited large-scale analysis to examine whether diversification or Synchronization Compensation could reduce corporate risk



Theory

A model of theoretical development





Methodological Approach

| Objective | To examine the hypothesis that desynchronicity, rather than diversification, could explain risk reduction |
|--|--|
| Data collection | COMPUSTAT business segment data Choosing the firms which have sufficient segment data between 2002-2011 |
| Sample firms and alternative operationalisatio ns of financial performance | Sales data: 737 companies with completed segment for risk and desynchronicity calculation ROA data: 332 companies with completed segment for risk and desynchronicity calculation |
| Data Analysis | Multivariate analysis (i.e. regression) |



Results for corporate risk

Diversification Groups in relation to Risk Mean Test

| | Difference between means | Simultar 95% confider limits | neous nce | Comparisons significant at the 0.10 level are indicated by [†] | | |
|----------------------|-----------------------------|---------------------------------------|--------------|---|--|--|
| UD – RD | 0.09 | -0.07 | 0.24 | | | |
| UD – Dominate | 0.08 | -0.07 | 0.23 | | | |
| UD – Single | -0.12 | -0.36 | 0.125 | | | |
| RD – Dominate | -0.004 | -0.13 | 0.12 | \frown | | |
| RD – Single | -0.20 | -0.43 | 0.02 | | | |
| Dominate – Single | -0.20 | -0.42 | 0.02 | | | |

| Variables | Model1 | | Model2 | | Model3 | | Model4 | |
|----------------------------|-------------|--------|-----------|--------|--------------------|----------|-------------|--------|
| | CV of Sales | | SD of ROA | | ∆ CV of ROA | | ∆ SD of ROA | |
| Entropy diversification | -0.05 | (0.06) | -0.05 | (0.15) | -0.18 | (0.12) | -0.16 | (0.21) |
| B-H diversification | -0.12 | (0.11) | -0.08 | (0.25) | -0.39 [†] | (0.22) | -0.46 | (0.40) |
| Desynchronicity | -0.18*** | (0.02) | -0.36*** | (0.06) | -0.19*** | * (0.01) | -0.32*** | (0.04) |



Contributions

- The first study that develops the measure of desynchronicity, to operationalize the theoretical framework of OPA.
- Indicating diversification might not be the key factor for risk reduction
- Providing empirical evidence that supports a negative desynchronicity-risk relationship.



Thank you !

