



FINANCIAL PERFORMANCE AND DIVERSIFICATION STRATEGY OF INDIAN BUSINESS GROUPS

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Diversification Strategy

- Diversification is a movement by a business organization into a wider field of products.
- **Objectives** - *Growth, Stability, & Flexibility*
- **Types** - *Related; Linked; & Unrelated;*



Questions usually faced by the head of a Organization:

- ❖ Is success/failure a random phenomenon?
- ❖ What strategies create value?
- ❖ Whether diversified organizations are better performers than specialized ones?
- ❖ Whether diversification leads to an increase in performance of the organization?



Business Groups

Groups are -

- Formally independent firms (or affiliates)
- Single administrative & financial control
- Owned by trusts/families/foundations

Bound together

- by equity cross-ownership; and
- common board membership



Group-level Studies

Affiliates' decisions are taken as

- a single decision making unit
- in the aggregate interest of the group

We also observe

- Member firms helping each other
- Conflicts of interest between shareholders

So, a business groups performance depends on its strategy



Indian Economy...

Pre 1985 Era

- ☀ Preference for conglomerate form of growth over others - MRTP Act.

Period 1985-91

- ☀ Industrial deregulation policy; No government approval required for select sectors.

Post 1991 Era

- ☀ Setting up market based institutions; Import & Foreign capital restrictions decrease.



Groups Diversification Issues

Decisions shifted from being 'policy' driven

- ✉ To what extent should the business houses portfolio be diversified?
- ✉ How should it allocate resources in the portfolio constituents?
- ✉ Should the portfolio constituents be in related areas?



Motivation

- ☐ Limited research in developing economies.
- ☐ Little research on diversification-performance of business groups
- ☐ Lack of empirical work exploring business groups aggregate performance with their characteristics
- ☐ To check for applicability of existing theories.
- ☐ Effect of liberalization & policy changes on group characteristics & their performance



Questions usually faced by head of a Group:

- ❖ Is success/failure a random phenomenon?
- ❖ Whether diversified groups are better performers than specialized groups?
- Find plausible answers to such questions

Research Problem

Study will evaluate diversification strategy and performance linkage of large Indian business groups.



Empirical Studies

Firm Level Studies

- Studies performed in developed countries
- Most found negative/neutral relationship
- Some found curvilinear relationship
- Some found positive relationship

Business Group Studies

- Chang & Choi (1988), Khanna & Palepu (1998)
- Compared affiliate firms with unaffiliated firms



Explanations in Literature

- ➡ Internal capital markets
- ➡ Scope economics
- ➡ Related diversification advantages
- ➡ Portfolio diversification
- ➡ Market power view
- ➡ Top management skills
- ➡ Costs of diversified operation
- ➡ Conglomerates risk disinclination
- ➡ Business group and agency problems



The Indian Context

Khanna and Palepu (1999)

- Found a quadratic relation between size, diversification of a group and its aggregate group performance.
- No 'diversification discount' existed.

But

- Results were not very robust.
- Work on aggregate performance was not exhaustive.

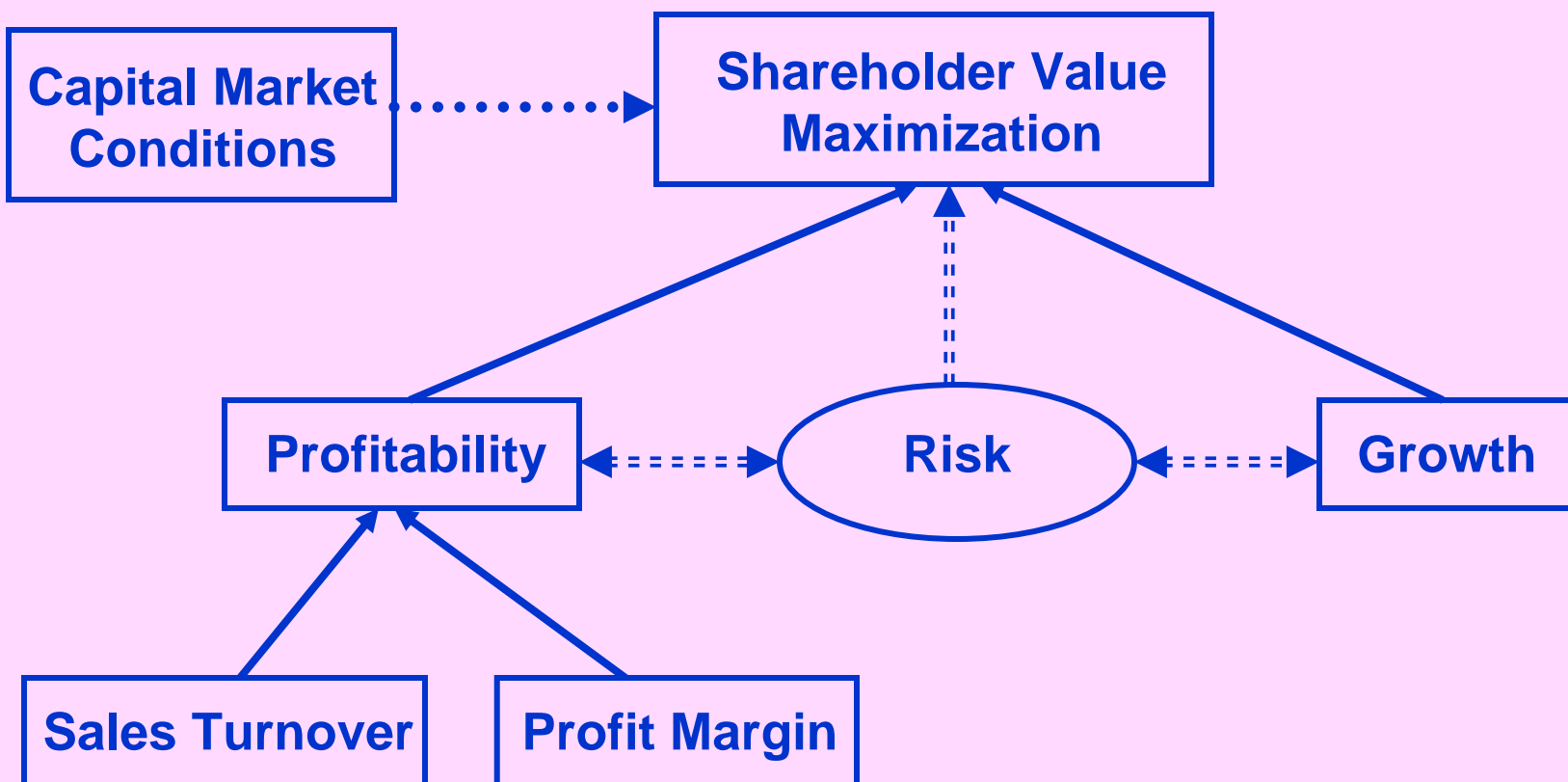


Framework

- Groups aggregate performance and its characteristics
- Indian business groups diversification and aggregate value relation
- Financial performance: Constituents of shareholder value



Performance Dimensions





Research Methodology

Data Sources - CMIE, BSE, other sources.

Sample and Size - 240 large business groups
(owned > 45% of market capitalization)

Excluded Groups - with < 10 years existence;
foreign groups; government owned groups;
turnover < Rs. 5 Crores; negative net worth;
data not available



Time Span of Study

- ☞ 12-year period from 1987-99
- ☼ Period 1 (1987-91): Pre-liberalization, Industrial deregulation
- ☼ Period 2 (1991-95): Post-liberalization, Industrial Growth
- ☼ Period 3 (1995-99): Post-liberalization, Industrial Slow-down



Performance Measures

- Shareholder Value: Tobin's Q ratio, PBV ratio
- Growth: AGRTA
- Profitability: CFM, ROA, ROCE, RONW
- Profitability Components: NPM, STA
- Risk: VROA, VROCE



Diversification Measures

Continuous

- ✘ Eliminates need to use a cutoff
- ✘ Provides more meaningful information
- ◆ Montgomery's and Palepu's 2-digit and 3-digit SIC-based measures

Non-continuous Measures

- ◆ Rumelt's categorization scheme



Control Variables

- ⊗ Age: Year of incorporation
- ⊗ International diversification: International trade-to-sales ratio
- ⊗ Industry fixed effects: Dominant 2-digit SIC industry dummy
- ⊗ Leverage: Long-term debt-to-equity ratio
- ⊗ Long-term solvency: Working capital ratio
- ⊗ Net Exports: Net exports-to-sales ratio



...Control Variables

⊗ Ownership:

- Domestic institutional investors stake;
- Foreign investors stake; and
- Promoters (insider) stake;

⊗ Short-term solvency: Current ratio

⊗ Size: Market capitalization, sales and total assets



Functional Form

Performance =

f(product diversification, size, leverage,
solvency ratios, ownership variables,
geographical diversification, net exports,
age, industry fixed effects)





Profile of the Groups

Name of the Variable	Mean		
	1987-91	1991-95	1995-99
Growth in Total Assets	52.91	64.14	8.26
Net Profit Margin	4.08	5.84	1.27
Return on Assets	7.37	7.71	4.75
Sales Turnover Ratio	1.11	0.96	0.87
Modified Tobin's Q Ratio	1.20	1.56	1.08
Age of the Group	45.71		
Montgomery's 2-digit SIC	0.34	0.39	0.42
Montgomery's 3-digit SIC	0.45	0.52	0.54
Total Assets (in Rs. Crores)	271	700	1534



Main Results

NEGATIVE RELATION

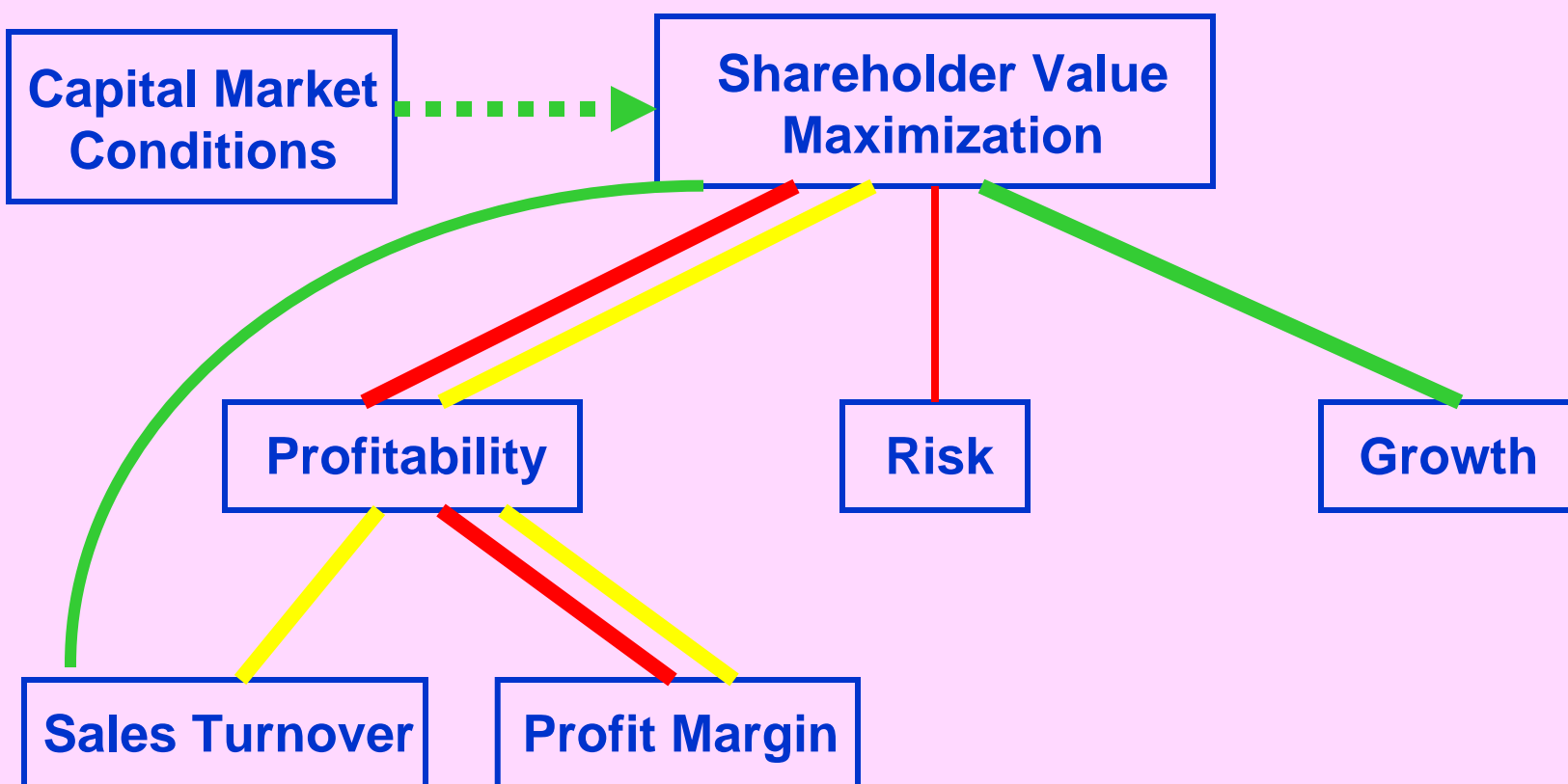
- Value Creation - Diversification (all periods)
- Profitability - Diversification (all periods)*
- Profit Margin - Diversification (period 1 & 2)
- Sales Turnover - Diversification (period 2 & 3)
- Growth - Diversification (period 3)

Also -

- Risk - Diversification (positive, period 1)

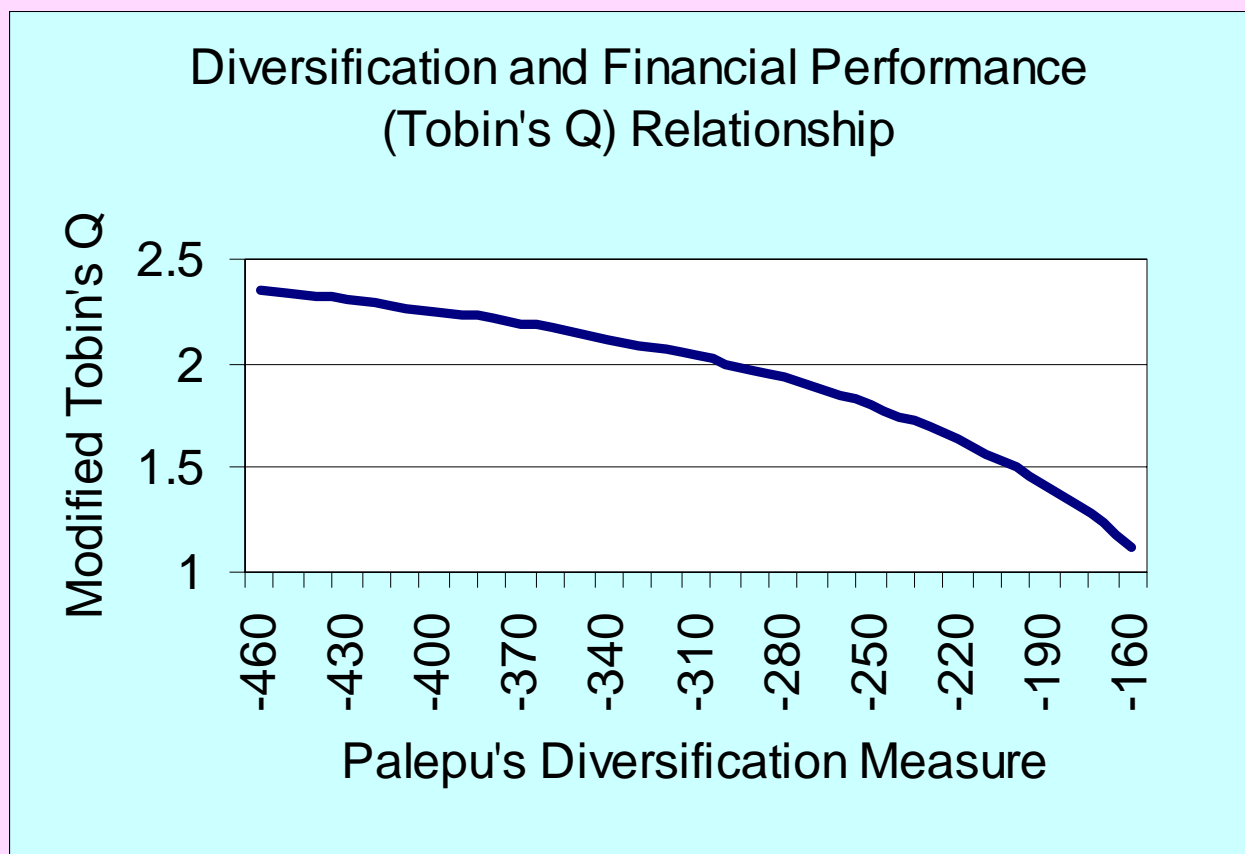


What drove the relation?





More... Results





Main Results... Discussion

Highly diversified groups had.....

1987-91

less margins

1995-99

less sales turnover

'The different competitive conditions during different periods driving the result'





Main Results... Discussion

Possible Reasons:

Highly diversified groups with their multi-segmental operations had

- poor economies of scale*
- poor market power*
- higher overheads
- hidden costs of diversification
- sub-optimal reallocation of resources
 - invest more in non-core segments



Main Results... Discussion

Other probable reasons:

- Existence of '*diversification discount*'
 - leads to increase in cost of capital
 - which further leads to....less profitability
- Highly diversified groups dominated under performing industries
 - leading to cross-subsidization
- Small sized groups diversified fast
 - without attaining required economies



Other Results... Discussion

Value/Profitability-Size (positive, all periods) ^

- As Size ↑, Financial Clout ↑
- As Size ↑, Market Power ↑
- As Size ↑, More Opportunities ↑
- As Liberalization ↑, Larger Capacities Benefit





Other Results... Discussion

Risk-Size (negative, all periods)

- Previous slide points



Other Results... Discussion

Value/Profit/Growth-International Diversification
(positive, period 1 & 2);

Value/Profit - Net Exports (positive, period 3)

Possible Reasons:

- Exporters benefit from state sops
- Exploited their capabilities in broader markets
- Learning's might lead to more local profits
- Importers cashed in on closed door policy



Other Results... Discussion

Risk-Leverage (positive, all periods)

- As Debt ↑, Financial Risk ↑

Value/Profitability/Growth-Age (negative, initial period)

- Probably old business groups could not cope with the changed scenario immediately
- So adapted late to policy changes



Robustness of the Results

- ◆ Multiple Measures, More Control Variables and Longer Time Frame
- ◆ Using Ownership Variables
 - Domestic Institutional, Foreign*, & Insider*
- ◆ Using Rumelt's Diversification Categories
- ◆ Controlling Industry Fixed Effects



Thank You



Rumelt's Category Distribution

Category	1987-91	1991-95	1995-99
Single	52	33	20
Dominant Constrained	36	36	33
Dominant Linked	14	22	25
Dominant Unrelated	34	37	46
Related	21	23	23
Unrelated	73	88	93





Sample Regression Results

- $TOBIN1 = 0.913^{***} - 0.202M31^{***} + 0.068CR1^{***} - 0.276WCM1^{***} - 0.001NETEXP1 + 0.007DERATIO1 + 0.087LNMC1^{***} + 0.002INTDIV1^* - 0.002AGE^{***}$

Adj. R Square = 0.264

- $CFM1 = 7.316^{***} - 1.835M31^* + 1.609CR1^{***} - 5.356WCM1^{***} - 0.001NETEXP1 - 1.072DERATIO1^{***} + 0.357LNMC1^* + 0.033INTDIV^* - 0.024AGE^{**}$

Adj. R Square = 0.379



More... Sample Results

- $TOBIN3 = 0.631^{***} - 0.470M33^{***} + 0.015CR3 - 0.302WCM3^{***} + 0.005NETEXP3^{**} + 0.011DERATIO3 + 0.186LNMC3^{***} - 0.001INTDIV3 - 0.001AGE$

Adj. R Square = 0.301

- $CFM3 = 1.111 - 1.728M33 + 0.691CR3^{***} - 2.618WCM3^{**} - 0.018NETEXP3 - 1.737DERATIO3^{***} + 1.216LNMC3^{***} - 0.004INTDIV - 0.008AGE$

Adj. R Square = 0.421