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Competition vs. Profitability

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Abstract

Corporate cultural emphasis on long-term competitiveness as opposed to shorter-term profitability is evaluated in terms of effectiveness in achieving higher profit margins, real profitability, and survival in the long term. Competitive orientation continues to have adverse impact even with a lag of four decades. If supported by further, multivariate analyses, this finding suggests amendments to what has become standard strategic management thinking, perhaps in favor of earlier and more conventional microeconomic focus on profits.

Summary

An empirical analysis of long-term capital profitability benefits from competitive managerial orientation was provided by Armstrong and Collopy (*Journal of Marketing Research*, 1996) for twenty large American firms over a period of three decades following the measure of corporate competitiveness. The current paper extends their analysis of profitability effects of competitive orientation for another decade, and adds the corporate performance measures of profit margin, real sales growth, and corporate survival. It amends their index of after-tax return on equity by adjusting both numerator and denominator for cumulative inflation effects, yielding real capital

profitability measures for each year from 1955 to 1997. (The technique for this adjustment is provided in another SMS 1998 paper on “quantitative case analysis.”) It also adds to competitiveness as an explanatory variable the fundamental capitalistic and technological index of capital intensity.

Results show that even in the long term (four decades later) competitiveness can have detrimental effects upon real capital profitability, upon profit margin, and upon survival, for this diverse-industry set of twenty corporations in comparative analysis. In addition to competitiveness, the capital intensity and technology index of real capital intensity had beneficial effects, at least across the technologically diverse set of firms. The finding is conceptually at odds with Buzzell and Gale's important 1987 PIMS volume, and with most of the time-series analyses to date utilizing quantitative case analysis for single firms. This first step into cross-sectional multivariate analysis using Armstrong and Collopy's set of twenty firms rated as to competitive orientation suggests that additional industry and corporate variables need to be considered. In addition, time-series results for each of the twenty firms will be presented that demonstrate effects of external economic, political, and regulatory factors and of an initial set of internal economic and strategic variables.

Corporate historical comparison for the half century since World War II suggests limitations to benefits from the use of models such as those of Porter (1980), *Competitive Strategy* or of Japanese strategic management in Abegglen and Stalk (1985), *Kaisha*. Further analysis supports Armstrong and Collopy's conclusion that managers should focus on profits rather than on the performance of others. When extended to the criterion of survival, this finding is similar to the conclusion of Toynbee in his study of twenty-one civilizations – that internal limitations rather than external threats are the sources of organizational demise.

Table 1A. Competitor Orientation and Real Return on Equity

No. Firm	Competitor Orientation (1 = low, or profit orient.)	Real Return on Equity, % After Tax (Average of Yearly RRCEs)				
		55-64	65-74	75-84	85-94	94-97
I. Du Pont	1	10.00	6.76	5.07	5.72	7.89
General Electric	1	13.41	10.92	10.35	10.26	12.45
Union Carbide	1	11.14	8.36	5.7	2.82	4.87
Alcoa	2	5.21	4.90	4.30	3.78	4.50
Kennecott	3	4.37	4.47	1.03	—	—
General Motors	4	14.24	11.43	5.94	4.43	7.52
Johns Manville	4	7.90	6.95	5.47	—	—
SONJ/Exxon	6	9.88	9.43	8.39	6.06	6.13
General Foods	6	10.44	9.32	6.91	—	—
US Steel/USX	6	4.51	2.82	1.06	0.65	1.79
Int. Harv./Navistar	6	3.57	3.45	-3.14	—	—
Kroger	8	7.13	5.96	5.94	5.95	—
13, SOIND/Amoco	8	4.10	5.73	7.57	4.81	5.03
Sears	9	11.25	10.06	5.86	4.85	4.83
Goodyear	10	11.41	9.04	4.87	4.26	4.75
Gulf Oil	10	10.63	8.59	6.19	—	—
American Can	10	4.55	3.89	2.65	—	—
Swift	10	1.65	1.31	—	—	—
Great A and P	11	5.02	1.33	-0.27	3.05	-0.16
20. National Steel	11	5.86	5.29	2.04	—	—

Note: Acquired, bankrupt, or poison-pilled where data absent.

Table 1B. Competitor Orientation and Return on Sales (Margin)

No. Firm	Competitor Orientation (1 = low, or profit orient.)	Return on Sales, % After Tax (Average of Yearly ROSs)				
		55-64	65-74	75-84	85-94	94-97
I. Du Pont	1	19.19	10.10	5.12	5.82	7.88
General Electric	1	5.58	4.62	6.37	7.35	8.73
Union Carbide	1	10.38	7.43	5.32	3.63	10.84
Alcoa	2	6.93	6.49	5.48	4.61	4.94
Kennecott	3	15.77	13.59	3.11	—	—
General Motors	4	8.47	6.88	3.66	2.99	3.59
Johns Manville	4	7.10	6.61	5.09	—	—
SONJ/Exxon	6	9.53	8.36	5.21	5.84	6.03
General Foods	6	5.25	5.18	3.52	—	—
US Steel/USX	6	7.26	4.72	1.86	.85	3.33
Int. Harv./Navistar	6	3.94	2.83	-4.64	—	—
Kroger	8	1.16	.95	.94	.91	—
13, SOIND/Amoco	8	7.67	9.22	7.38	6.86	7.58
Sears	9	4.86	5.10	3.82	2.83	3.50
Goodyear	10	4.70	4.50	2.87	2.96	3.57
Gulf Oil	10	12.06	10.45	4.70	—	—
American Can	10	4.15	3.29	2.20	—	—
Swift	10	.68	.58	—	—	—
Great A and P	11	1.02	.72	-.09	1.65	-.07
20. National Steel	11	690	579	1.38	—	—

Note: Acquired, bankrupt, or poison-pilled where data absent.

Table 1C. Competitor Orientation and Capital Intensity (Real)

No. Firm	Competitor Orientation (1 = low, or profit orient.)	Capital Intensity, 1992 \$ per Employee (Real Return on Equity per Employee) in thousands				
		55-64	65-74	75-84	85-94	94-97
1. Du Pont	1	205	172	191	267	340
2. General Electric	1	32	35	62	117	211
3. Union Carbide	1	96	99	131	236	1,008
4. Alcoa	2	109	150	228,	253	179
5. Kennecott	3	309	343	445	—	—
6. General Motors	4	57	69	92	111	110
7. Johns Manville	4	69	90	113	—	—
8. SONJ/Exxon	6	241	363	538	846	1,236
9. General Foods	6	101	96	100	—	—
10. US Steel/USX	6	126	152	240	566	786
11. Int. Harv./Navistar	6	87	79	126	—	—
12. Kroger	8	34	35	110	189	—
13. SOIND/Amoco	8	375	463	637	771	968
14. Sears	9	37	45	63	68	87
15. Goodyear	10	29	43	56	72	100
16. Gulf Oil	10	270	401	559	—	—
17. American Can	10	93	98	128	—	—
18. Swift	10	72	100	—	—	—
19. Great A and P	11	317	41	71	71	58
20. National Steel	11	138	162	179	—	—

Note: Acquired, bankrupt, or poison-pilled where data absent.

Table2A. Pearson Correlation of Real Return on Equity and Return on Sales with Competitor Orientation and Capital Intensity (using all available data for then-surviving firms)

	Competitor Orientation		Capital Intensity			
Real Return on Equity (RROE)	COMPOR	CI55-64	CI65-74	CI75-84	CI85-90	CI94-97
55-64	-.34	-.23	-.19	-.26	-.44	-.23
65-74	-.33	-.06	-.01	-.07	-.17	-.06
75-84	-.26	.09	.16	.17	.20	.26
85-90	-.28	-.03	-.03	-.03	-.12	-.15
94-97	-.63*	.02	-.03	-.05	-.09	-.06
Return on Sales (OS)	COMPOR	CI55-64	CI65-74	CI75-84	CI85-90	CI94-97
55-64	-.56*	.65**	.55*	.48*	.29	.33
65-74	-.45*	.78**	.73**	.69**	.52	.52
75-84	-.40	.37	.40	.37	.39	.40
85-90	-.49	-.57	.55	.49	.36	.29
94-97	-.73*	.39	.31	.26	.25	.51

* Signif. LE .05

** Signif. LE .01 (2-tailed)

Table2b. Pearson Correlation of Real Return on Equity and Return on Sales with Competitor Orientation and Capital Intensity (using data only for the 11 firms surviving intact to 1997)

	Competitor Orientation	Capital Intensity				
Real Return on Equity (RROE)	COMPOR	CI55-64	CI65-74	CI75-84	CI85-90	CI94-97
55-64	-.34	-.45	-.46	-.49	-.35	-.23
65-74	-.29	-.18	-.15	-.16	-.19	-.06
75-84	-.41	.27	.30	.29	.21	.26
85-90	-.32	.00	.01	-.01	-.01	-.15
94-97	-.63*	-.02	-.03	-.06	-.10	-.06
Return on Sales (OS)						
55-64	-.64*	.47	.31	.23	.26	.33
65-74	-.52	.72*	.65*	.58	.53	.53
75-84	-.57	.56	.53	.50	.38	.40
85-90	-.46	.53	.51	.47	.34	.27
94-97	-.73*	.39	.31	.26	.25	.50

* Signif.. LE .05

** Signif. LE .01 (2-tailed)

Table 3. Regression Equations of Real Return on Equity and Return on Sales upon Competitor Orientation and Capital Intensity (using all available data from then-surviving firms)

Real Return on Equity

$$\begin{aligned} \text{RROE5564} &= 10.1234 - 0.361 \text{ CompOr, where Rsq} = 11.89\% \\ &t = -1.56 \\ &(p = .05, 1\text{-tailed}) \end{aligned}$$

$$\begin{aligned} \text{RROE6574} &= 8.132 - 0.285 \text{ CompOr, where Rsq} = 10.07\% \\ &t = -1.47 \\ &(p = 0.79, 1\text{-tailed}) \end{aligned}$$

RROE7584 No regression equation

RROE8590 No regression equation

$$\begin{aligned} \text{RROE9497} &= 8.332 - 0.545 \text{ CompOr, Where Rsq} = 40.13\% \\ &t = -2.46 \\ &(p = .036) \end{aligned}$$

Return on Sales

$$\begin{aligned} \text{ROS5564} &= 7.889 + 0.0000280 \text{ CI5564} - 0.672 \text{ CompOr, where Rsq} = 67\% \\ &\hspace{15em} \text{and adj. Rsq} = 64\% \\ &t = 4.37 \quad t = 3.66 \\ &(p = .0004) \quad (p = .002) \end{aligned}$$

$$\begin{aligned} \text{ROS6574} &= 5.806 + 0.0000193 \text{ CI6574} - 0.454 \text{ CompOr, where Rsq} = 75\% \\ &\hspace{15em} \text{and adj. Rsq} = 72\% \\ &t = 6.10 \quad t = 3.84 \\ &(p = .00005) \quad (p = .001) \end{aligned}$$

$$\begin{aligned} \text{ROS7584} &= 4.098 - 0.329 \text{ CompOr} - 0.00000588 \text{ CI7584, where Rsq} = 32\% \\ &\hspace{15em} \text{and adj. Rsq} = 72\% \\ &t = -2.04 \quad t = 1.93 \\ &(p = .058) \quad (p = .07) \end{aligned}$$

$$\begin{aligned} \text{ROS8590} &= 5.523 - 0.298 \text{ CompOr, where Rsq} = 24.48\% \\ &t = -1.80 \\ &(p = .10) \end{aligned}$$

$$\begin{aligned} \text{RO9497} &= 7.050 - 0.546 \text{ CompOr} + 0.00000288 \text{ CI0407, where Rsq} = 70.\% \\ &\hspace{15em} \text{and adj. Rsq} = 63\% \\ &t = 3.41 \quad t = 2.10 \\ &(p = .01) \quad (p = .07) \end{aligned}$$