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Competition vs. Profitability

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Competition vs. Profitability

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.

Disciplines
Business | Marketing

Comments
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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

<table>
<thead>
<tr>
<th>No. Firm</th>
<th>Competitor Orientation (1 = low, or profit orient.)</th>
<th>Real Return on Equity, % After Tax (Average of Yearly RRCEs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>55-64</td>
</tr>
<tr>
<td>l. Du Pont</td>
<td>1</td>
<td>10.00</td>
</tr>
<tr>
<td>General Electric</td>
<td>1</td>
<td>13.41</td>
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<tr>
<td>Union Carbide</td>
<td>1</td>
<td>11.14</td>
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<tr>
<td>Alcoa</td>
<td>2</td>
<td>5.21</td>
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<tr>
<td>Kennecott</td>
<td>3</td>
<td>4.37</td>
</tr>
<tr>
<td>General Motors</td>
<td>4</td>
<td>14.24</td>
</tr>
<tr>
<td>Johns Manville</td>
<td>4</td>
<td>7.90</td>
</tr>
<tr>
<td>SONJ/Exxon</td>
<td>6</td>
<td>9.88</td>
</tr>
<tr>
<td>General Foods</td>
<td>6</td>
<td>10.44</td>
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<tr>
<td>US Steel/USX</td>
<td>6</td>
<td>4.51</td>
</tr>
<tr>
<td>Int. Harv./Navistar</td>
<td>6</td>
<td>3.57</td>
</tr>
<tr>
<td>Kroger</td>
<td>8</td>
<td>7.13</td>
</tr>
<tr>
<td>13, SOIND/Amoco</td>
<td>8</td>
<td>4.10</td>
</tr>
<tr>
<td>Sears</td>
<td>9</td>
<td>11.25</td>
</tr>
<tr>
<td>Goodyear</td>
<td>10</td>
<td>11.41</td>
</tr>
<tr>
<td>Gulf Oil</td>
<td>10</td>
<td>10.63</td>
</tr>
<tr>
<td>American Can</td>
<td>10</td>
<td>4.55</td>
</tr>
<tr>
<td>Swift</td>
<td>10</td>
<td>1.65</td>
</tr>
<tr>
<td>Great A &amp; P</td>
<td>11</td>
<td>5.02</td>
</tr>
<tr>
<td>20. National Steel</td>
<td>11</td>
<td>5.86</td>
</tr>
</tbody>
</table>

Note: Acquired, bankrupt, or poison-pilled where data absent.
<table>
<thead>
<tr>
<th>No. Firm</th>
<th>Competitor Orientation (1 = low, or profit orient.)</th>
<th>Return on Sales, % After Tax (Average of Yearly ROSs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Du Pont</td>
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<td>General Electric</td>
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<td>6.93</td>
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<td>Kennecott</td>
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<td>Johns Manville</td>
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<td>7.10</td>
</tr>
<tr>
<td>SONJ/Exxor</td>
<td>6</td>
<td>9.53</td>
</tr>
<tr>
<td>General Foods</td>
<td>6</td>
<td>5.25</td>
</tr>
<tr>
<td>US Steel/USX</td>
<td>6</td>
<td>7.26</td>
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<tr>
<td>Int. Harv./Navistar</td>
<td>6</td>
<td>3.94</td>
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<tr>
<td>Kroger</td>
<td>8</td>
<td>1.16</td>
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<tr>
<td>13, SOIND/Amoco</td>
<td>8</td>
<td>7.67</td>
</tr>
<tr>
<td>Sears</td>
<td>9</td>
<td>4.86</td>
</tr>
<tr>
<td>Goodyear</td>
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<td>4.70</td>
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<tr>
<td>Gulf Oil</td>
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<td>12.06</td>
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<tr>
<td>American Can</td>
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<td>4.15</td>
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<tr>
<td>Swift</td>
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<td>.68</td>
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<tr>
<td>Great A and P</td>
<td>11</td>
<td>1.02</td>
</tr>
<tr>
<td>20. National Steel</td>
<td>11</td>
<td>690</td>
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</table>

Note: Acquired, bankrupt, or poison-pilled where data absent.
Table 1C. Competitor Orientation and Capital Intensity (Real)

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

Note: Acquired, bankrupt, or poison-pill ed where data absent.
Table 2A. 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)

<table>
<thead>
<tr>
<th>Competitor Orientation</th>
<th>Capital Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real Return on Equity (RROE)</strong></td>
<td><strong>COMPOR CI55-64 CI65-74 CI75-84 CI85-90 CI94-97</strong></td>
</tr>
<tr>
<td>55-64</td>
<td>-.34</td>
</tr>
<tr>
<td>65-74</td>
<td>-.33</td>
</tr>
<tr>
<td>75-84</td>
<td>-.26</td>
</tr>
<tr>
<td>85-90</td>
<td>-.28</td>
</tr>
<tr>
<td>94-97</td>
<td>-.63*</td>
</tr>
<tr>
<td><strong>Return on Sales (OS)</strong></td>
<td><strong>COMPOR CI55-64 CI65-74 CI75-84 CI85-90 CI94-97</strong></td>
</tr>
<tr>
<td>55-64</td>
<td>-.56*</td>
</tr>
<tr>
<td>65-74</td>
<td>-.45*</td>
</tr>
<tr>
<td>75-84</td>
<td>-.40</td>
</tr>
<tr>
<td>85-90</td>
<td>-.49</td>
</tr>
<tr>
<td>94-97</td>
<td>-.73*</td>
</tr>
</tbody>
</table>

* Signif. LE .05  ** Signif. LE .01  (2-tailed)
Table 2b. 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)

<table>
<thead>
<tr>
<th>Real Return on Equity (RROE)</th>
<th>Competitor Orientation</th>
<th>Capital Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMPOR</td>
<td>CI55-64</td>
</tr>
<tr>
<td>55-64</td>
<td>-.34</td>
<td>-.45</td>
</tr>
<tr>
<td>65-74</td>
<td>-.29</td>
<td>-.18</td>
</tr>
<tr>
<td>75-84</td>
<td>-.41</td>
<td>.27</td>
</tr>
<tr>
<td>85-90</td>
<td>-.32</td>
<td>.00</td>
</tr>
<tr>
<td>94-97</td>
<td>-.63*</td>
<td>-.02</td>
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<tr>
<td>Return on Sales (OS)</td>
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<td></td>
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<tr>
<td>55-64</td>
<td>-.64*</td>
<td>.47</td>
</tr>
<tr>
<td>65-74</td>
<td>-.52</td>
<td>.72*</td>
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<tr>
<td>75-84</td>
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<td>.56</td>
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<td>85-90</td>
<td>-.46</td>
<td>.53</td>
</tr>
<tr>
<td>94-97</td>
<td>-.73*</td>
<td>.39</td>
</tr>
</tbody>
</table>

* 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

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

RROE6574 = 8.132 – 0.285 CompOr, where Rsq = 10.07%
  \( t = -1.47 \)
  \( (p = 0.79, \text{ 1-tailed}) \)

RROE7584  No regression equation

RROE8590  No regression equation

RROE9497 = 8.332 – 0.545 CompOr, Where Rsq = 40.13%
  \( t = -2.46 \)
  \( (p = .036) \)

Return on Sales

ROS5564 = 7.889 + 0.0000280 CI5564 – 0.672 CompOr, where Rsq = 67%
  and adj. Rsq = 64%
  \( t = 4.37 \)
  \( t = 3.66 \)
  \( (p = .0004) \)
  \( (p = .002) \)

ROS6574 = 5.806 + 0.0000193 CI6574 – 0.454 CompOr, where Rsq = 75%
  and adj. Rsq = 72%
  \( t = 6.10 \)
  \( t = 3.84 \)
  \( (p = .00005) \)
  \( (p = .001) \)

ROS7584 = 4.098 - 0.329 CompOr – 0.00000588 CI7584, where Rsq = 32%
  and adj. Rsq = 72%
  \( t = -2.04 \)
  \( t = 1.93 \)
  \( (p = .058) \)
  \( (p = .07) \)

ROS8590 = 5.523 – 0.298 CompOr, where Rsq = 24.48%
  \( t = -1.80 \)
  \( (p = .10) \)

RO9497 = 7.050 -0.546 CompOr + 0.00000288 CI0407, where Rsq = 70.%
  and adj. Rsq = 63%
  \( t = 3.41 \)
  \( t = 2.10 \)
  \( (p = .01) \)
  \( (p = .07) \)