Organizational Structure Characteristics’ Influences on International Purchasing Performance in Different Purchasing Locations

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Highlights

- Examine the organizational structure-international purchasing performance link
- Analysis of the moderating role of purchasing locations’ institutional environments
- Data of 195 German manufacturers with 37 different purchasing locations
- Centralization and specialization positively influence purchasing performance
- Links for standardization and specialization are contingent on purchasing location
Motivation and research gap

“Purchasing is one of the last business functions that has the potential for a double digit impact on firm performance when improved or expanded”

Quintens/Pauwels/Matthyssens (2006), p. 178

Yet, it does not find much attention in the international and strategic management literature.

1. Understand organizational structure determinants of success

2. Understand the moderating role of sourcing contexts
Theoretical background

Conceptual model

Effectiveness is a function of the quality of fit

Information processing requirements facing the organization

Contextual factors of the purchasing organization
- Informal institutional context
- Formal institutional context

Information processing capacity of the organizational design

- Centralization
- Standardization/Formalization
- Specialization

Structural characteristics of the purchasing organization

Performance of the purchasing organization

The sample: Main locations

Sample: N=200 purchasers in German firms (industry) engaged in international sourcing (CATI, 20 Minutes)

Methodology: PLS-SEM with multigroup analyses

- Centralization
- Standardization
- Specialization

Formal context:
- (a) Institutional distance
- (b) Institutional quality

Informal context:
- (a) Psychic distance
- (b) Cultural distance

Firm size: control variable

A

B

C

Purchasing Performance

Low
High

# Results: Base model

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Path coefficient</th>
<th>p value</th>
<th>VIF</th>
<th>$R^2$</th>
<th>$f^2$</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralization → IPP</td>
<td>0.13*</td>
<td>0.03</td>
<td>1.05</td>
<td>IPP:0.25</td>
<td>0.02</td>
<td>IPP: 0.10</td>
</tr>
<tr>
<td>Standardization → IPP</td>
<td>0.15</td>
<td>0.11</td>
<td>1.14</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization → IPP</td>
<td>0.40***</td>
<td>0.00</td>
<td>1.13</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size → IPP</td>
<td>-0.11†</td>
<td>0.09</td>
<td>1.00</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size → Firm performance (FP)</td>
<td>0.17*</td>
<td>0.04</td>
<td>1.00</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPP → Firm performance</td>
<td>0.28***</td>
<td>0.00</td>
<td>1.00</td>
<td>FP: 0.10</td>
<td>0.08</td>
<td>FP: 0.05</td>
</tr>
</tbody>
</table>

Notes: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; IPP = international purchasing performance. The values for $R^2$ and $Q^2$ for IPP are given in the first row. The values for $R^2$ and $Q^2$ for firm performance (FP) are given in the last row.

1: Centralization is positively related to international purchasing performance supported
2: Standardization is positively related to international purchasing performance. not supported
3: Specialization is positively related to international purchasing performance. supported
Results: Informal institutional context

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Low cultural distance (n = 65)</th>
<th>High cultural distance (n = 72)</th>
<th>Differences (PLS-MGA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralization → IPP</td>
<td>-0.15 0.45</td>
<td>0.09 0.38</td>
<td>0.25 0.84</td>
</tr>
<tr>
<td>Standardization → IPP</td>
<td>0.18* 0.04</td>
<td>0.12 0.52</td>
<td>0.36* 0.07</td>
</tr>
<tr>
<td>Specialization → IPP</td>
<td>0.16 0.28</td>
<td>0.02* 0.01</td>
<td>0.26* 0.97</td>
</tr>
<tr>
<td>Firm size → IPP</td>
<td>-0.01 0.97</td>
<td>-0.26** 0.01</td>
<td>0.26* 0.08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relationship</th>
<th>IPP → Firm performance</th>
<th>Firm size → Firm performance</th>
<th>IPP R²</th>
<th>Firm performance R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low psychic distant (n = 91)</td>
<td>0.25** 0.00</td>
<td>0.32* 0.02</td>
<td>0.07 0.68</td>
<td></td>
</tr>
<tr>
<td>High psychic distant (n = 49)</td>
<td>0.29** 0.09</td>
<td>0.59*** 0.00</td>
<td>0.31* 0.97</td>
<td></td>
</tr>
</tbody>
</table>

Notes: *p < 0.1; **p < 0.05; ***p < 0.01. For the differences in the PLS-MGA, additionally: *p > 0.1; **p > 0.95; ***p > 0.99. Significant probability levels for the delta in path coefficients depend on the effect’s directionality (significance with low probability numbers implies the first coefficient > the second, and high numbers that the second coefficient > the first). IPP = International purchasing performance.

5: Relation between centralization & performance is stronger in less distant contexts. not supported

6: Relation between standardization & performance is stronger in less distant contexts. supported

7: Relation between specialization & performance is stronger in more distant contexts. supported
Find out more here:
## Hypotheses and empirical support

### Structural characteristics of the purchasing organization

1. **Centralization** is positively related to international purchasing performance. **Supported**

3. **Standardization** is positively related to international purchasing performance. **Not supported**

5. **Specialization** is positively related to international purchasing performance. **Supported**

### Contextual factors of the purchasing organization

2. The positive relation between **centralization** and international purchasing performance is stronger in (a) less distant informal institutional environments, and (b) in formal institutional environments with less uncertainty. **(a) Not supported**

4. The positive relation between **standardization** and international purchasing performance is stronger in (a) less distant informal institutional environments, and (b) in formal institutional environments with less uncertainty. **(a) Supported**

6. The positive relation between **specialization** and international purchasing performance is stronger in (a) more distant informal institutional environments, and (b) in formal institutional environments with high uncertainty. **(a) Supported**

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Discussion: Implications for theory

Information processing theory

(1) Centralization seems to be more advantageous than decentralization (due to lower information costs attached).

(2) Standardization is useful only in specific environmental contexts.

(3) Specialization is the key determinant of purchasing success in any context.

Contingency theory

(5) The effect of centralization on performance does not show a clear cut contingency on the context following the typical Bartlett & Ghoshal sense.

(6) Standardization is highly contingent on the context: It is the feature of choice in less distant environments (both informal and formal) with a high quality of formal institutions.

(7) The importance of specialization even seems to increase in distant formal and informal contexts with a low quality of formal institutions.

The structural characteristics of the purchasing organization have a strong impact on purchasing performance which in turn strongly impacts firm performance.

More attention needs to be devoted to purchasing also from a research perspective.

Find out more here: