Linking Performance Management System with Organisational Performance: a Case Study of the Indonesian Customs and Excise Administration

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Purpose

To investigate the impact of the Balanced Scorecards (BSC) implementation as performance management system on organisational performance.

Research setting

This research used data from 12 Customs and Excise offices within Directorate General of Customs and Excise of Indonesia.

Originality/value

❖ This study serves as the first attempt to provide empirical evidence of a BSC-organisational performance association within public-sector organisations study using longitudinal data of organisational performance that helps further analysis of the possible impact (before and after) of the BSC implementation
❖ This paper employs two data variables for the organisational performance originated from 12 responding Customs and Excise offices which arguably provides more solid representative of organisational performance (OP) compared to perceptive performance measures.
The state revenue collection is a key performance indicator (KPI) describing the strategic objective of optimum state revenue collection. This objective is located at the stakeholder perspective layer. On the same strategy map, the customer satisfaction index functions as a KPI of the strategic objective of high customer satisfaction, located at the customer perspective layer.

Optimum state revenue collection is one of the ultimate goals of the twelve responding organisations, and the achievement of this goal is supported by all of the organisations’ other strategic objectives. The achievement of optimal state revenue collection, in fact, represents the primary purpose of the organisations’ efforts.

With regard to the customer satisfaction index, assessing this factor is imperative for each of the customs and excise organisations as it represents the degree of satisfaction of all customers (importers, exporters, manufacturers, traders and other related government agencies).
**Design/methodology/approach**

- **Panel data regression**: Panel data regression was used in order to evaluate the impact of implementing BSC during two different time periods: before and after BSC implementation. The dependent variable included in this method was state revenue collection.

- **Growth curve analysis**: Growth curve modelling has the ability to analyse longitudinal data, although the period of data availability did not include the period before BSC implementation. The growth curve analysis used data from customer satisfaction indices as dependent variable.
Results

Panel data regression

<table>
<thead>
<tr>
<th>Exogenous variable</th>
<th>Fixed effects</th>
<th>Random effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC usage</td>
<td>0.41 (0.12) ‡</td>
<td>0.41 (0.12) ‡</td>
</tr>
<tr>
<td>Size</td>
<td>0 (omitted)</td>
<td>1.30 (1.47)</td>
</tr>
</tbody>
</table>

Note: Reported are coefficients (standard error). Significance: *10% or less; †5% or less; ‡1% or less

Growth curve modelling of customer satisfaction index

BSC implementation across the twelve CEOs had a positive (0.41) and significant effect on state revenue collection

BSC implementation across the twelve CEOs showed a positive and significant association (0.07) effect with customer satisfaction index

<table>
<thead>
<tr>
<th>CS Index</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>0.07</td>
<td>0.03‡</td>
</tr>
<tr>
<td>Size</td>
<td>-0.33</td>
<td>0.17*</td>
</tr>
</tbody>
</table>

Note: Reported are coefficients (standard error). Significance: *10% or less; †5% or less; ‡1% or less
This study is consistent with (Hoque and James 2000; Braam and Nijssen 2004; Davis and Albright 2004; de Geuser et al. 2009), which stated that BSC usage as PMS has a positive association with organisational performance.

This empirical evidence could probably be used as a justification for policy makers in public sector organisations to implement the BSC as performance management system.

This study is not without limitations. One limitation that is available is that the limited data coverage of before the implementation of new PMS system. Hence, future study of the same topic with longer period of longitudinal data before the implementation would possibly provide more stronger justification. Besides that, it will be interesting to see the results when the study covers Customs and Excise Administration in more than one country.
Thank you
Terima kasih

Any questions, comments or suggestions?

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