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Complex Method as a Tool for Analyzing the Fulfilment of Stakeholder Goals: An Empirical Study of Estonian Manufacturing Enterprises

Helje Kaldaru¹, Katrin Tamm²

Abstract: The purpose of this paper is to empirically analyse the fulfilment of primary stakeholder goals in Estonian manufacturing enterprises in different ownership categories, using complex method as a tool for analysis. The empirical analysis is based on balance sheets and financial statement data of Estonian Statistical Office for the period 1996-1999. Four primary stakeholder groups will be examined, such as owners, managers, employees and the society. Based on the comparison of performance indicators in different ownership categories (domestic firms, joint ventures, foreign owned firms), a conclusion can be made that foreign owners seem to follow the stakeholder approach rather than a shareholder view in management decisions, and while in case of domestic enterprises. We observe an opposite situation. The analysis also shows that foreign direct investment inflow in Estonian manufacturing industry has improved the technological level in the industry as a whole. Another feature of the ownership change caused by the inflow of foreign direct investment is that foreign owners tend to change the attitude of local entrepreneurs from shareholder view to that of stakeholders. This arises due to the relatively similar results obtained regarding the fulfilment of primary stakeholder goals in foreign owned firms and joint ventures. This indicates the possibility of local managers to take the stakeholder model over. By now domestically owned firms differ substantially from other categories of firms.

Keywords: stakeholder theory, foreign ownership, corporate governance

Introduction

In literature a debate has emerged regarding a shift of focus in the organisation’s relationships with its various stakeholder groups. Earlier the firm was seen predominantly as an instrument of its owners, meaning that the goal of the firm was to receive higher profits for its shareholders. This approach, referred to as shareholder value perspective and first referenced by Milton Friedman in 1970, is not supported any more. In the last two decades the stakeholder perspective has received many proponents, because the purpose of the organisation cannot be perceived in such a narrow context. According to Charles Handy (1991) the desirable outcome for an organisation’s pursuits is the continued survival of the business in order to maintain its contracts with its various stakeholders.

The main hypothesis of the paper is that domestically owned enterprises are more concentrated on the fulfilment of shareholders interests, but in enterprises with foreign ownership the interests of other stakeholders will also be pursued. This hypothesis has been made, taking into account low degree of social responsiveness of Estonian enterprises, which has arisen due to the lack of knowledge of how to act in a market economy. The transition period has been too short for local entrepreneurs to learn and accept all the principles of market economy. In order to have a good corporate governance system, all related stakeholders, managers and shareholders in particular, need to recognise and perform their roles appropriately (Nestor et al. 2001). Because of the lack of these roles in Soviet period, this cultural shift will take some time. Mass privatisation has

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created a number of private shareholders, who have not yet realized their roles, rights and responsibilities. Often self-interested behaviour is a case.

In Estonian manufacturing industry many structural changes have taken place within the transition period. Reasons for these changes begin with the process of privatisation, followed by a large amount of foreign direct investment (FDI) that has flown into the Estonian economy and caused major ownership changes. Foreign owners have influenced the existing corporate governance system, bringing their own management styles, organisational structures and decision systems with them. We would like to see whether there is some proof to the statement about satisfying stakeholder goals rather than these of shareholders in foreign owned enterprises and to draw some implications of this result to Estonian manufacturing industry as a whole.

In the first part of the paper, a framework for analysing Estonian manufacturing industry will be given. The second part of the paper is dedicated to the description of stakeholder theory as a basis for research. In the third part of the paper the methodology of analysis and description of variables used will be given. In the final part of the paper the results of empirical analysis and conclusions about the fulfilment of stakeholder goals in different enterprise categories will be presented.

Changes in Estonian Manufacturing Industry

Estonian manufacturing industry pervaded many structural changes during the transition period. These changes started in the beginning of 1990s, when Estonian economy was opened to Western countries. The transition process in Estonia mostly followed the “shock therapy” approach, covering many macroeconomic reforms within a short period of time. It was a combination of a liberal trade regime and liberalisation of almost all prices, followed by the country’s introducing its own convertible currency.

The first important factor causing changes in manufacturing industry, as well as in the economy as a whole, was privatisation of state-owned enterprises, which started in 1991. Fast privatisation process, beginning with the so-called pilot privatisation on the case-by-case basis and followed by a medium- and large-scale privatisation in 1993-996, attracted a large amount of foreign capital to flow into the Estonian economy. As privatisation was launched in the form of international tenders, which allowed an equal access to all bidders, there were no obstacles for foreign investors to buy local state-owned enterprises (Varblane 2001).

The interest of foreign investors to buy Estonian enterprises was quite high both during and after the privatisation process. Among other Central and Eastern European countries, in 1999 Estonia got the third place after Hungary and Czech Republic according to the level of FDI per capital (Table 1).

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>2339</td>
<td>1147</td>
<td>4453</td>
<td>2275</td>
<td>2173</td>
<td>2036</td>
<td>1944</td>
<td>17838</td>
<td>1766</td>
</tr>
<tr>
<td>Czech R.</td>
<td>654</td>
<td>869</td>
<td>2562</td>
<td>1428</td>
<td>1300</td>
<td>2720</td>
<td>5108</td>
<td>15645</td>
<td>1519</td>
</tr>
<tr>
<td>Estonia</td>
<td>162</td>
<td>215</td>
<td>202</td>
<td>151</td>
<td>267</td>
<td>581</td>
<td>306</td>
<td>1966</td>
<td>1404</td>
</tr>
<tr>
<td>Latvia</td>
<td>44</td>
<td>213</td>
<td>178</td>
<td>382</td>
<td>522</td>
<td>356</td>
<td>300</td>
<td>2024</td>
<td>843</td>
</tr>
<tr>
<td>Poland</td>
<td>1715</td>
<td>1875</td>
<td>3659</td>
<td>4498</td>
<td>4908</td>
<td>6356</td>
<td>6500</td>
<td>29500</td>
<td>763</td>
</tr>
<tr>
<td>Slovenia</td>
<td>113</td>
<td>128</td>
<td>176</td>
<td>186</td>
<td>321</td>
<td>165</td>
<td>83</td>
<td>1283</td>
<td>642</td>
</tr>
<tr>
<td>Lithuania</td>
<td>31</td>
<td>31</td>
<td>73</td>
<td>152</td>
<td>355</td>
<td>926</td>
<td>486</td>
<td>2064</td>
<td>558</td>
</tr>
<tr>
<td>Slovak R.</td>
<td>168</td>
<td>250</td>
<td>202</td>
<td>330</td>
<td>177</td>
<td>566</td>
<td>330</td>
<td>2023</td>
<td>375</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>40</td>
<td>105</td>
<td>90</td>
<td>109</td>
<td>505</td>
<td>537</td>
<td>739</td>
<td>2167</td>
<td>264</td>
</tr>
<tr>
<td>Romania</td>
<td>94</td>
<td>341</td>
<td>419</td>
<td>263</td>
<td>1215</td>
<td>2031</td>
<td>961</td>
<td>5401</td>
<td>240</td>
</tr>
</tbody>
</table>

Source: EBRD Transition Report, 2000
As a result of the privatisation process, the biggest amount of FDI was located in manufacturing industry (Table 2). As far as the importance of manufacturing industry in Estonian economy is concerned, the share of manufacturing in GDP was around 20–21% in the beginning of privatisation process, after which it decreased to 17% in 1999 and stabilised in 2001 on 18% level (Estonian Statistical Office, 2001). Despite the slight decrease, manufacturing industry still has an important role to play in the Estonian economy.

Table 2

<table>
<thead>
<tr>
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<th></th>
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<th></th>
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<td>Manufacturing</td>
<td>45</td>
<td>51</td>
<td>45</td>
<td>24</td>
<td>36</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>26</td>
<td>15</td>
<td>24</td>
<td>36</td>
<td>9</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Transport, shortage and communications</td>
<td>0</td>
<td>21</td>
<td>11</td>
<td>3</td>
<td>25</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Finance</td>
<td>8</td>
<td>2</td>
<td>7</td>
<td>27</td>
<td>16</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td>Real estate, rental and business activities</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Bank of Estonia, 2001

FDI inflow has caused major changes in ownership structures of Estonian manufacturing enterprises. In order to examine the role of foreign ownership in Estonian manufacturing industry, both the share of foreign owned enterprises in total number of enterprises and their share in the total capital of manufacturing industry should be investigated (see Figure 1).

The Figure indicates that during 1995-1999 the number of enterprises with foreign ownership constituted 24-30% of the total number of enterprises in the industry, but their share in the total capital of the industry amounted to 46-64% in different years. However, recently there has
appeared a slight tendency for domestic enterprises to increase their share in total capital (Estonian Statistical Office 2001).

Basis for Research: Stakeholder Theory

Stakeholder theory was first worked out by Freeman in 1984, when his book “Strategic management: A stakeholder approach” was published. Freeman regards stakeholders as any individuals or groups that can affect or be affected by the achievement of the organisation’s objects (Freeman 1984). A more thorough definition of a stakeholder was given by Crainer (1995): “stakeholder is someone who has a real or psychological stake in an organisation and who has significant dealings with it”. Primary stakeholder groups are those who have an essential role to play in corporation’s survival and continuing success. Shareholders, managers, employees, customers, suppliers, creditors and the local community belong to this group. Secondary stakeholder groups are defined as those who influence or affect, or are influenced or affected by, the corporation, but they are not engaged in transactions with the corporation and are not essential for its survival. The media and a wide range of special interest groups are considered as secondary stakeholder groups according to this definition (Clarkson 1995).

One of the core issues of stakeholder theory is the fulfilment of stakeholder goals. In this sense stakeholder theory is often contrasted to shareholder theory, where the main task for managers is to satisfy first of all the goals of the shareholders (owners). At the same time, stakeholder approach suggests an equal fulfilment of the goals of any stakeholder groups (Greenwood 2001). This is not an easy task, because stakeholder goals are different and are often in conflict with one another. Below we will give an overview of the most important goals for primary stakeholder groups.

As far as shareholders are concerned, they are interested in gaining higher profits, because increasing profits will usually lead to bigger dividend payments. Employees would certainly like to earn more money, in order to improve their standard of living. Customers are waiting for high quality products to be provided with the lowest possible price. Managers, as well as any other stakeholder groups, are first of all interested in increasing their personal income. Because managers’ wages are often dependent on enterprise performance, we may assume that one of their interests is to improve the most important performance indicators of the firm. Banks and other lending institutions, which can be considered as creditors of the firm, are interested in higher solvency and liquidity levels of the firm, in order to guarantee the timely payback of the loans. The main expectation of the local community is to increase the overall wealth of the society. Enterprises can provide essential support with creating new working places and value-added regarding this issue.

As mentioned before, it is quite difficult to fulfil all these goals simultaneously. It is upon the importance of the particular stakeholder group and its impact on the enterprise, as well as on the behaviour of decision-makers, which goals will be best satisfied. Mohr (1973) stated that commonly chief executives are able to impose their wills upon much of the behaviour of their organisation. Thus, managers as direct decision-makers are better off regarding the existing opportunities of self-interested behaviour. Another question is, whether managers will use these opportunities or not. The latter will depend on the significance of corporate social responsibility in corporate decision making. There are different approaches to social responsibility, but four main categories taken into account are the following (Carroll 1979):

– economic responsibilities – a business institution has a responsibility to produce goods and services that society wants and to sell them at a profit;
– legal responsibilities – society expects business to fulfil its economic mission within the framework of legal requirements;
– ethical responsibilities – society expects business to follow additional behaviours and activities that are not necessarily codified into law;
– discretionary responsibilities – society has no clear-cut message for business. They are left to individual judgement and choice.
Hence, social responsibility of an enterprise encompasses economic, legal, ethical and discretionary expectations that society has of organisations at a given point in time. While two first categories are quite concrete and easy to follow, the fulfilment of both ethical and discretionary responsibilities depends much upon managers’ reasonable judgements and attitudes. In literature, the most common opinion is that managers should take all responsibilities (Clarkson 1995). Authors of this paper suggest that social responsibility should be shared by different stakeholder groups in the firm.

Complex Method and Variables Used to Assess Stakeholder Satisfaction

In the empirical part of the paper we will use complex method worked out by Šeremet (1974) and further developed by Mereste (1987). The method can be used to make a thorough analysis of economic activities of an enterprise, as it enables to include many different indicators into the analysis. It is possible to include into the complex analysis several blocs indicating different issues such as decisions about production, sales, employment of resources, profitability, efficiency etc. As a result, the general performance indicators will be obtained (Mereste 1987). The choice of preliminary indicators depends on the research purpose, which in our case is to determine the performance indicators for assessment of stakeholder goals. With the help of complex method it is possible to investigate the reasons for determination of general performance ratios in case of each stakeholder groups. The latter enables us to show what are the main factors causing the differences in fulfilment of stakeholder goals between different enterprise categories.

Next we will search for performance indicators in order to measure the fulfilment of stakeholder goals. In our analysis, annual financial data on Estonian manufacturing enterprises, collected by Estonian Statistical Office, will be used. The period for analysis is 1996–1999 and enterprises will be divided into three categories according to the share of foreign ownership as follows:

1) enterprises with a foreign share 0–9% – domestic;
2) enterprises with a foreign share 10–89% – joint ventures;
3) enterprises with a foreign share 90–100% – foreign.

In the analysis, shareholders, managers, employees and local community will be taken into consideration. In order to find performance indicators related to certain stakeholder goals, we assume that shareholders’ main goal is to increase profits, managers try to maximise sales, employees’ goal is to get higher wages and local community’s interest is to create new working places and value-added. Thus, we may say that net profits, net sales, wage and number of employees are the most essential indicators for the analysis. Additionally, we have to take into consideration that enterprises are of different size and their resources are different. As capital can be considered the most important resource for an enterprise, it is necessary to include a capital indicator into the analysis, too. Capital resources are to be estimated by fixed assets. As a result, we got five performance indicators to be included into the system of performance ratios – net profit, net sales, fixed assets, average wage, and number of employees. The indicator of value-added will be explored separately.

The main principle of building the system of ratios is to begin with more final indicators (Mereste 1987). In our case we start from net profits, which are followed by net sales, fixed assets, and wage and end up with the number of employees. After dividing all indicators by one another, we get a five times five matrices consisting of 25 ratios as presented in Tab. 3.

Not all ratios can be used for the following analysis. In order to determine, in which categories certain stakeholder groups are best off, we use three basic ratios for three stakeholder groups. After that the ratios having an influence on the formation of basic ratios will be exploited, using formulas given by Mereste (1987). These ratios reflect the main reasons for explored differences between different enterprise groups.
Table 3
System of performance ratios

<table>
<thead>
<tr>
<th>Performance measures</th>
<th>Net profit (π)</th>
<th>Net sales (S)</th>
<th>Fixed assets (FA)</th>
<th>Wage (W)</th>
<th>Employees (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profit (π)</td>
<td>1</td>
<td>S/π</td>
<td>FA/π</td>
<td>W/π</td>
<td>E/π</td>
</tr>
<tr>
<td>Net sales (S)</td>
<td>π/π</td>
<td>1</td>
<td>FA/S</td>
<td>W/S</td>
<td>E/S</td>
</tr>
<tr>
<td>Fixed assets (FA)</td>
<td>π/FA*</td>
<td>S/FA*</td>
<td>1</td>
<td>W/FA</td>
<td>E/FA</td>
</tr>
<tr>
<td>Wage (W)</td>
<td>π/W</td>
<td>S/W</td>
<td>FA/W</td>
<td>1</td>
<td>E/W</td>
</tr>
<tr>
<td>Employees (E)</td>
<td>π/E</td>
<td>S/E</td>
<td>FA/E</td>
<td>W/E*</td>
<td>1</td>
</tr>
</tbody>
</table>

* Note: Ratios in bold are basic ratios in the context of the present analysis, referring to the fulfillment of the goals of shareholders, managers and employees.

Fulfilment of Stakeholder Goals in Estonian Manufacturing Enterprises

The starting point of the analysis is to calculate all performance ratios presented in Table 3. The calculations have been made for all of the three ownership categories and the results are presented in the following Table 4. Based on these results a comparison about the fulfillment of stakeholder goals according to three main stakeholder groups in three ownership categories can be made. Analysis about the local community goals will be done separately.

Table 4
Performance ratios in different ownership categories

<table>
<thead>
<tr>
<th>Performance measures</th>
<th>Ownership</th>
<th>Net profit (π)</th>
<th>Net sales (S)</th>
<th>Fixed assets (FA)</th>
<th>Wage (W)</th>
<th>Employees (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profit (π)</td>
<td>Domestic</td>
<td>41.68</td>
<td>6.58</td>
<td>5.83</td>
<td>0.131</td>
<td></td>
</tr>
<tr>
<td>JV</td>
<td>36.49</td>
<td>15.36</td>
<td>3.89</td>
<td>0.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>65.20</td>
<td>24.34</td>
<td>7.69</td>
<td>0.137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net sales (S)</td>
<td>Domestic</td>
<td>0.024</td>
<td>0.158</td>
<td>0.140</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>JV</td>
<td>0.027</td>
<td>0.421</td>
<td>0.107</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>0.015</td>
<td>0.373</td>
<td>0.118</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets (FA)</td>
<td>Domestic</td>
<td>0.152</td>
<td>6.34</td>
<td>0.887</td>
<td>0.020</td>
<td></td>
</tr>
<tr>
<td>JV</td>
<td>0.065</td>
<td>2.38</td>
<td>0.253</td>
<td>0.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>0.041</td>
<td>2.68</td>
<td>0.316</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage (W)</td>
<td>Domestic</td>
<td>0.171</td>
<td>7.15</td>
<td>1.13</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td>JV</td>
<td>0.257</td>
<td>9.38</td>
<td>3.95</td>
<td>1</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>0.130</td>
<td>8.48</td>
<td>3.17</td>
<td></td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Employees (E)</td>
<td>Domestic</td>
<td>7.63</td>
<td>318.06</td>
<td>50.20</td>
<td>44.50</td>
<td></td>
</tr>
<tr>
<td>JV</td>
<td>14.51</td>
<td>529.44</td>
<td>222.83</td>
<td>56.44</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>7.31</td>
<td>476.81</td>
<td>177.96</td>
<td></td>
<td>56.20</td>
<td></td>
</tr>
</tbody>
</table>


In order to assess the fulfillment of a shareholder’s main goal, we have to look at the ratio of net profits to fixed assets. Table 4 clearly indicates that the ratio is considerably higher in case of domestic enterprises. There is a tendency of decreasing return on assets when the share of foreign capital increases, as the ratio is the lowest in enterprises with majority foreign ownership.
These preliminary results indicate that in domestic enterprises, shareholders’ goals are best fulfilled.

To analyse the formation of net profits to fixed assets ratio, in order to clarify the possible reasons for differences in different ownership groups, we have to turn to complex method again. The method implies that all ratios in the system can be calculated as the multiplication of other ratios. According to this, net profits to assets ratio can be calculated as follows:

\[
\frac{\pi}{FA} = \frac{\pi}{S} \times \frac{S}{W} \times \frac{W}{E} \times \frac{E}{FA}.
\]  

(1)

The ratio can be derived from Table 4. Results for different ownership categories are as follows:

- **Domestic:** \(\frac{\pi}{FA} = 0.024 \times 7.15 \times 44.5 \times 0.02 = 0.152\)
- **Joint venture:** \(\frac{\pi}{FA} = 0.027 \times 9.38 \times 56.44 \times 0.004 = 0.065\)
- **Foreign:** \(\frac{\pi}{FA} = 0.015 \times 8.48 \times 56.2 \times 0.006 = 0.041\)

Comparing the formation of profits to fixed assets ratio in different ownership categories leads to the conclusion that the main reason for domestic enterprises to have a much higher ratio arises from the ratio of employees to fixed assets. The ratio indicates that domestic enterprises have much smaller size of fixed assets. This forces them to hire more employees, instead of using costly technologies. Thus, we may conclude that there is a technological gap for domestic enterprises, compared to both joint ventures and enterprises with majority foreign ownership.

In addition, the resulted difference can be explained by the fact that the required rate of return is higher in domestic enterprises, and also because owners are closer, both in physical and cultural sense, having thus better opportunities for control. Another explanation could arise from the concept of social responsibility treated in the previous part of the paper and referring to the inability (or low ability) of local owners to realise their roles, responsibilities and obligations correctly.

Next the fulfilment of managers’ goals, estimated by the sales to fixed assets ratio, will be taken into consideration. As indicated in Table 4, the ratio is substantially higher in domestic enterprises. In case of joint ventures and foreign enterprises the ratio only amounts to 38–42% of that in domestic enterprises. In domestic enterprises the amount of net sales exceeds the amount of fixed assets by more than six times, whereas in enterprises with foreign share the difference is approximately 2.5 times. This indicates that domestic enterprises are able to produce much more sales for one unit of fixed assets. Consequently, in domestic enterprises the goals of managers seem to be better fulfilled than in foreign owned enterprises.

Let us now investigate deeper reasons for the appeared result by deriving the sales to fixed assets ratio from other ratios presented in Table 4. The ratio can be calculated as follows:

\[
\frac{S}{FA} = \frac{S}{\pi} \times \frac{\pi}{W} \times \frac{W}{FA}.
\]  

(2)

In order to see the differences in formation of the ratio, the calculations for each group will be made as follows:

- **Domestic:** \(\frac{S}{FA} = 41.68 \times 0.171 \times 0.887 = 6.34\)
- **Joint venture:** \(\frac{S}{FA} = 36.49 \times 0.257 \times 0.253 = 2.38\)
- **Foreign:** \(\frac{S}{FA} = 65.2 \times 0.13 \times 0.316 = 2.68\)


Obviously, there are two indicators having a bigger impact on differences in the formation of sales to fixed assets ratio (sales to profits and wage per unit of fixed assets). We will get quite surprising results when it comes to the comparison of sales to profits ratio, as this enables to compare directly the fulfilment of the goals of owners and managers (sales referring to managers and profits referring to owners). The higher ratio of foreign enterprises reflects their concentration on bigger sales, rather than higher profits, the opposite situation characterising domestic firms. Thus, the preliminary conclusion about domestic enterprises fulfilling their managers’ goals better than foreign firms does not hold. If we take the other indicator, wage to fixed assets ratio, then the impact on final ratio is even bigger. As we can see, the ratio is much higher in domestic enterprises, owning to the fact that the amount of fixed assets is considerably smaller in these enterprises, but as they are forced to hire many employees due to the technological gap, then the relative wage cost is quite high.

As far as the fulfilment of employees’ goals is concerned, the ratio of wage per employee should be taken into consideration. From Table 4 it appears that employees of joint ventures and foreign enterprises earn higher wages. In domestic enterprises, wage per employee amounts to less than 80% of that in enterprises with foreign share. Therefore it is possible to conclude that the goals of employees are better fulfilled in foreign owned firms and we may consider this as a proof for foreign owned enterprises to be more concentrated on stakeholder approach in their management decisions.

In order to identify the main reasons for the explored differences, a derivation of the wage per employee ratio will be made as follows:

\[
\frac{W}{E} = \frac{W}{\pi} \times \frac{\pi}{FA} \times \frac{FA}{E}. \tag{3}
\]

The results for different enterprise groups are listed below:

Domestic: \( \frac{W}{E} = 5,83 \times 0,152 \times 50,2 = 44,5 \);  
Joint venture: \( \frac{W}{E} = 3,89 \times 0,065 \times 222,83 = 56,44 \);  
Foreign: \( \frac{W}{E} = 7,69 \times 0,041 \times 177,96 = 56,2 \).

The main indicators causing differences in formation of the final ratio for different groups of enterprises are the ratios of profits to fixed assets and fixed assets per employee. As seen earlier, domestic enterprises have considerably higher profits to fixed assets ratio, but at the same time a 3,5 to 4,4 times lower ratio of fixed assets per employee. Therefore, the essential factor providing the lower wage per employee is technological gap, which was discussed before.

To evaluate the fulfilment of the goals of the local community, we can use two indicators. Firstly, the number of employees as a proxy for creation of working places can be investigated; secondly, the value-added created by an enterprise can be observed. The calculations have been made based on the Estonian Office Database of Manufacturing Industry and the results are presented in Table 5.
Table 5

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Domestic enterprises</th>
<th>Joint ventures</th>
<th>Foreign enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>158</td>
<td>169</td>
<td>190</td>
</tr>
<tr>
<td>Value-added (USD)</td>
<td>790</td>
<td>1332</td>
<td>1264</td>
</tr>
</tbody>
</table>


The indicator of value-added has been computed as the difference between net sales and total costs plus the sum of labour costs and depreciation. Table 4 illustrates that in case of enterprises with foreign share the goals of the local community are much better fulfilled, because in domestic enterprises the average number of employees is 158, whereas in foreign enterprises the number is 190. Both joint ventures and majority foreign owned firms can create 1.6 to 1.7 times more value-added than domestic enterprises. As the difference between domestic and foreign enterprises is smaller regarding the number of employees (1-2 times), we may consider foreign enterprises to work more efficiently.

Results of the analysis are briefly presented in Fig. 2. The Figure indicates that both profits to assets ratio and sales to assets ratio are substantially higher in domestically owned enterprises than in enterprises with foreign ownership. Although one of the main reasons for this result could be the technological backwardness of domestic enterprises, it also suggests that these enterprises first of all follow the goals of shareholders and managers as owners of most control rights, rather than the goals of other primary stakeholders.

Fig. 2. Comparative results for different enterprise categories: a reflection of stakeholder satisfaction

Higher wages and value-added of joint ventures and foreign owned firms clearly show that these enterprises better fulfil the expectations and goals of employees and the society.

Conclusion

The analysis leads to the final conclusion that domestic enterprises seem to be more concentrated on fulfilling the goals of shareholders, but at foreign enterprises the interests of other primary stakeholders are also taken into account. Regarding the usage of stakeholder versus shareholder view, domestic enterprises substantially differ from joint ventures and majority foreign
owned enterprises. The latter two categories are quite close to each other. Estonian domestic enterprises in manufacturing industry do not have enough capital to buy costly technologies and therefore have to use more labour force in the production process. The latter creates considerable constraints for these enterprises to follow the stakeholder view, as the resources are scarce. Foreign owned enterprises have better technologies and thus also better opportunities to increase efficiency. To sum it up, the analysis shows that FDI inflow in Estonian manufacturing industry has improved the technological level in the industry as a whole. Another feature of the ownership changes caused by the foreign direct investment inflow is that foreign owners tend to change the attitude of local entrepreneurs from shareholder view to that of stakeholders. This arises from the fact that in case of joint ventures the situation is relatively similar to foreign owned firms.

References