SOFT FACTORS HAVE AN EMPIRICALLY TESTIFIABLE EFFECT ON RATING GRADE

T. Laufer

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Abstract


The conclusions herein contain the summary of the results of an empirical survey in proof of the effects of soft factors on corporate rating grade.

In the effort, three different software applications have been used. By means of the applications, the soft factors in corporate ratings previously identified in a related effort have been assessed for their impacts. That means all other applicable soft factors have been treated in a neutral manner.

As a result based on assessments supplied by the three applications, weighted effect has been determined of soft factors, allowing to compile priority charts for the deployment of the factors as a targeted marketing tool. The charts also include the respective positive and a negative effects of hard factors.

There are no scientifically proven links between marketing tools and effects thereof on corporate rating.

The logical existence – though still not sustained by empirical data – of such links can be concluded from the fact that successful deployment of marketing tools promotes quantitative success of the enterprise as such. Hence the values of hard factors improve via marketing tools, which in turn promotes improvement in rating grades driven by the hard components.

There is no scientific proof – beyond the above indirect causal link – of direct effects of the marketing tools on rating grade. That means the specific effects still remain scientifically unexplored of the different soft factors identified as marketing tools on total corporate rating grade.

MATERIALS AND METHODS

In a preceding related effort in the form of an online survey among banks, the soft factors considered in rating procedures had been identified. The factors can be comprised in reference to Grüter, G./Springer, K.1 as follows:
• Information policy.
• Human resources management.
• Corporate management.
• Organisation and quality.
• Corporate market status.

The empirical data obtained provide insight into the marketing tools considered by banks in rating processes. In order to supply a scientific proof in the present effort that the marketing tools positively affect corporate rating grade, each of the marketing tools has been verified separately for effects on total and/or partial rating grade. This has been implemented in follow-up to the selection of three software applications for the purpose by means of separate calculations of changes in value of the selected marketing tools and effects thereof on total corporate rating grade.

In the selection of rating software to use, a key criterion has been for the prospective applications to constitute a representative sample of rating processes in use worldwide. For the choice, the market studies by Romeike and Wehrspohn\(^2\) from 2004, published in 2005, have been used as reference.

The following software applications have been chosen:

- C-Cockpit;
- Rating leicht gemacht, and
- IHK-Win-Rating.

The combination of the three software solutions ensured a sufficient range of data compliant with the scientific principle.

### Comparability Criteria

In performing the assessments and in order to make the assessment results comparable, the standardised response options regarding soft factors in each application have been converted to six rating levels (based on school rating grades, here from 1 (best) to 6 (worst)).

Where an application does not provide a sufficiently detailed rating scale for a specific marketing tool previously identified to the above criteria in the empirical survey, the next closest grade has been chosen. In cases where the classification scale is less precise than needed for the sake of comparability, only clearly matchable grades have been considered.

In this context, the following conversion key applies:

#### Classification

- best or very good: 1.00
- partly complied with or satisfactory: 3.00
- non-existent or not complied with: 6.00

Questions not relevant to the data gathering effort but essential to processing by means of the software used have been assigned a standard grade of 3.00.

### Quantification of the Results Supplied by Software Applications

The results supplied by the software used were to be made comparable. Accordingly, all the evaluation results were projected on a comparison scale with 100 grades.

For quantification purposes\(^3\), the value of 100 on the scale was defined to represent the best and the value of 1 the worst possible result respectively.

The quantification was implemented by employing as reference/comparison value the total rating grade based on the evaluation scheme applied by Standard & Poors. For necessary precision and comparability, the rating grades were projected on the scale from 1 to 100.

Using the scale from 1 to 100 with grade AAA equal to 100 presuming a linear curve, 8 intermediate grades were defined corresponding to grades in the original rating scheme.

That means the grades below the top grade in the Standard & Poors rating scheme equaling the value of 100 on the classification scale were scaled to the 99/8 formula, or to length units of 12.375 each on the scale. In the transition, the value of 1 corresponds to grade C in the original classification. A mathematical quantification of the relation with the probability of default\(^4\) was intentionally left out in the effort as the aim behind the proof has been a quantified measure of relevance to value.

Hence the quantification can be held essentially as follows: Tab. I.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>best or very good</td>
<td>1.00</td>
</tr>
<tr>
<td>partly complied with or satisfactory</td>
<td>3.00</td>
</tr>
<tr>
<td>non-existent or not complied with</td>
<td>6.00</td>
</tr>
</tbody>
</table>

The results obtained with the software applications have been applied to the different hard factors with positive and negative values.

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RESULTS
Assessment has been performed separately for each marketing tool identified in the empirical survey. In the process, the results obtained with the three software applications have been correlated in the form of tables.

The classification grades for hard factors were split into good, fair, and poor. Soft factors were indicated in grades on a scale from 1 to 6 corresponding to the school grade system. In the follow-up step of the examination, the effects on the respective rating grade were identified of the different soft factors identified in the survey among banks and rating agencies.

All non-separately treated soft factors in all the surveys have been assigned a rating grade of 3.00 in determining the effects of the marketing tools in focus of the effort.

The summary in the form of tables comprised all the extracted and quantified values. For each marketing tool, the assessment has been summarized in correlation with hard factors with good, fair, and poor values. For the summaries, the mean values have been used of the results supplied by all the software applications at hard predefined values assigned different weighting.

The mean values are provided in the respective row in the table. For the values, arithmetic mean was chosen as no multimodal\(^5\) or highly asymmetric distribution applied.

Based on the results of the empirical survey and statistical assessment of gathered data, positive effects in connection with the null hypothesis can be summarised as follows: Tab. III.

The findings confirm that the different marketing tools actually affect rating grade but also the different extent of the effects.

DISCUSSION AND CONCLUSION
Consequently, a proof has been supplied that the relative weight of the effect on rating grades differs between the marketing tools explored for the different hard factors.

While for hard factors with good values, the most significant positive effect has been identified for

| II: Examination – Sample assessment table in follow-up to the data gathering effort |
|---------------------------------|-----------------|-----------------|-----------------|
| Marketing Criterion Identified  | Good            | Fair            | Poor            |
| Schneck                         |                 |                 |                 |
| IHK Rating                      |                 |                 |                 |
| Haufe                           |                 |                 |                 |
| Mean Value                      |                 |                 |                 |

<table>
<thead>
<tr>
<th>III: Examination – Confirmed effects and result summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Tool</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Information Policy</td>
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<tr>
<td>Human Resources Management</td>
</tr>
<tr>
<td>Enterprise Management</td>
</tr>
<tr>
<td>Organisation and Quality</td>
</tr>
<tr>
<td>Market Status</td>
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</tbody>
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<table>
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<tr>
<th>IV: Examination – Summary of effects at positive causal relationship</th>
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<tbody>
<tr>
<td>Hard Factor Values</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>Fair</td>
</tr>
<tr>
<td>Poor</td>
</tr>
</tbody>
</table>

the marketing tool of organisation and quality, for hard factors with fair values it is the market status tool and for hard factors with poor values the information policy tool.

The most significant negative effect for hard factors with best and fair values has been identified with the marketing tool of information policy while for hard factors with poor values with the tool of organisation and quality.

In summary, a conclusion applies that all the marketing tools explored have either positive or negative effect on rating grade. “This amounts to an empirical proof that marketing tools have both positive and negative effects on corporate rating grade.” The most significant effects for firms within the context of the null hypothesis are associated with the marketing tools of information policy and organisation and quality.

Consequently, rating grade can be best improved within the context of hard factors with good values by improvements in organisation and quality while for the same factors, poor information policy will drag down the rating grade significantly.

**SUMMARY**

Soft rating factors have weighting effects on the rating score of a company. They can be used as a tool to manage the scoring. Selected charts show the effect of separated soft factors on the companies rating and the charts also include the respective positive and a negative effects of hard factors.

**REFERENCES**


Address
PhDr. Thomas Laufer, Ústav marketingu a obchodu, Mendelova univerzita v Brně, Zemědělská 1, 613 00 Brno, Česká republika, email: xlaufer@node.mendelu.cz