University of Ljubljana

FACULTY OF ECONOMICS

AN IMPORTANCE-PERFORMANCE ANALYSIS OF ECONOMIC, ENVIRONMENTAL AND SOCIAL PERFORMANCE OF TOURISM FIRMS

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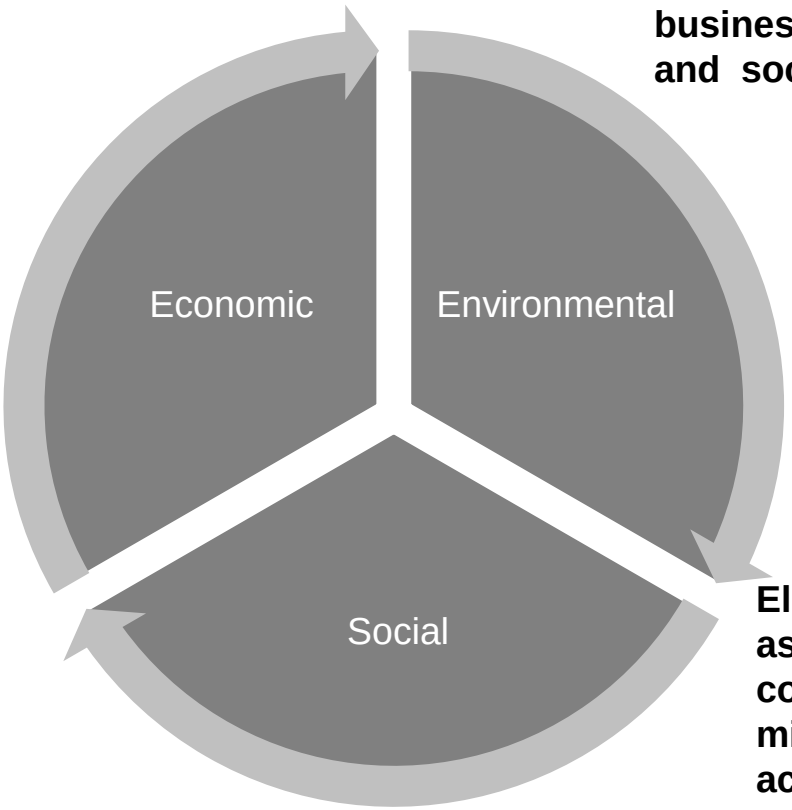
Aims of the paper

1. To explore the importance of economic, environmental and social reporting with regards to the process of long-term strategy planning in tourism and suggest the applicable model.
2. To control for the degree of commitment a firm has towards economic, environmental and social responsibilities.
3. To identify the areas where tourism firms must concentrate in order to sustain their business operations.

Triple Bottom Line – TBL



TBL perspective three forms of capital contribute to business success: financial capital, natural capital and social capital (Dwyer, 2005)

TBL can lead firms and managers to be more transparent with their stakeholders and anticipate mistakes or decide which actions to take in the event of low performance (Dwyer & Faux, 2010).

Elkington (1998) defines TBL more broadly as set of values, issues and processes that companies must address in order to minimise any harm resulting from their activities and to create ECONOMIC, SOCIAL AND ENVIRONMENTAL VALUE.

Triple Bottom Line – TBL

Economic	• Tangable assets • Intangible assets
Environmental	• Natural enviriomnet (all the resources provided to a firm in the form of raw materials, plants and animals, and including climate)
Social	• Firm's relationship with employees, customers, the legal system, local community, as well, as educational, governmental and infrastructural institutions.

Triple Bottom Line – TBL

- **TBL is an under-researched topic in tourism literature.**
- Early studies have provided conflicting results when attempting to relate environmental and firm performance (Mahapatra, 1984; Walley & Whitehead, 1994), most recent studies tend to agree on a positive link between them (Arago´n-Correa, 1998; Dean et al., 1998; Sharma & Vredenburg, 1998; Hillary, 2000; Hills et al., 2004).
- Relationship between the social responsibilities of a particular firm and its financial performance has also been well addressed in the literature (Worell et al., 1991; Hannon & Milkovich, 1996; Waddock & Graves, 1997; Wright & Ferris, 1997). Some studies suggest a negative or neutral relationship between them based other possitive. For recent evidence on the positive relationship between social and financial performance, we refer to Reinartz, Thomas & Kumar (2005).
- There is also an important body of literature relating to financial management and firm efficiency (Bens & Monahan, 2004; Biddle & Hilary, 2006; Bushman & Smith, 2001; Hope & Thomas, 2008). These studies support the argument that strong financial management can improve performance.

Slovenian tourism









Data and method

- 2009 FELU team of experts developed a model for measuring the performance of the hospitality industry based on the TBL business approach.
- Developing high quality indicators was an enormous challenge and difficult task.
- Relevant body of literature was found in accounting-based research (Vnaclay, 2004, Lamberton, 2005, Archel et al., 2008, Deegan, 2007, Ho & Taylor, 2007, O'Donovan &Gibson, 2007).
- The researchers examined the set of sustainability indicators suggested by: the United Nations World Tourism Organisation (UNWTO 2004), the European Commission (EC TSG 2007), the United Nations Environment Programme (UNEP & UNWTO 2005) and the Uniform System of Accounts for the Lodging Industry (USALI 2006).
- Additionally, they examined annual reports of international hotel : Acccor, Scandic, Choise, Marriot International, Intercontinental Hotel Group, Wyndham Worldwide, Hilton.

Data and method

- Lists of financial, marketing and environmental and socio-political indicators have been sent to all participating FELU experts.
- Then, with the help of two round Delphi method these lists of indicators have been discussed, operationalised and finalised to a list of 69 indicators, again according to the importance evaluation of all 10 Delphi participants.
- The first electronic questionairre has been tested in personal interviews with three managers from a different hotel firms, corrected for suggestions and finalised, all 69 indicators have been included.

Data and method

THE FIRST PART OF THE RESEARCH

- Hotel financial and marketing managers were then asked to indicate the importance of each indicator for measuring performance in the hospitality industry on a Likert scale (1 - not important; 5 - very important).
- The online survey was carried out from 10 March to 10 June 2009 and supported by online and telephone reminders.
- All hotel companies registered in Slovenia (124) were included in the research and 59 usable questionnaires were collected, representing a 48 percent response rate.

After considering the research results, the evaluation framework was revised, highlighting the 33 most important indicators that should be used to measure hotel performance (10 in the economic pillar, 10 in the environmental pillar and 13 in the social pillar).

Data and method

THE SECOND PART OF THE RESEARCH

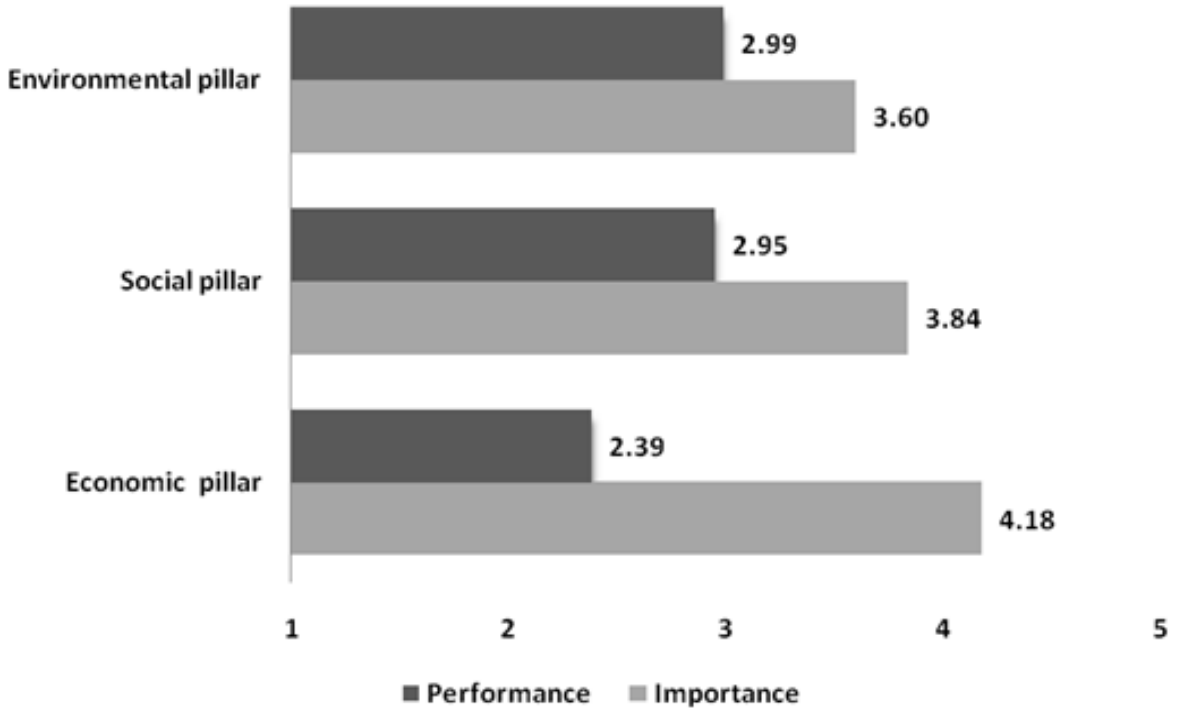
- In 2010, the study was repeated.
- Hotel managers were asked to evaluate their performance regarding the 33 indicators that were perceived as the most important.
- The respondents again measured their performance on a five-point Likert scale (1 – well below the target; 5 – well above the target).
- Data were collected through an online questionnaire in October 2010.
- In total, 62 hotel companies answered the questionnaire, representing 50 percent of the total population of companies in the Slovenian hospitality industry.

Data and method

- In this paper, we combine the results of the two studies within an Importance-Performance Analysis (IPA) framework.
- The IPA framework has steadily gained in popularity among social science researchers. It has been used widely in tourism and hospitality (Evans & Chon, 1989; Go & Zhang, 1997; Oh & Parks 1997; Oh 2001; Hudson et al., 2004; Zhang & Chow, 2004; Enright & Newton 2004; Dwyer et al 2011).
- We also used factor analysis to see are there any sub-groups within the each pillar.

Results

Figure: Means of Importance and Performance for Economic, Environmental and Social performance



Factor analysis

- We performed three separate factor analyses. Indicators of hotel importance were factor analysed using principal component analysis with an orthogonal VARIMAX rotation.
- In the first, 10 indicators of hotel economic performance were included, in the second we included 10 indicators of environmental performance and, finally, in the third we included 13 indicators of social performance.
- The concern we had to address before applying the data reduction techniques (factor analysis) is our relatively small sample size.

Factor analysis

The literature supports two general recommendations in terms of the minimum sample size in factor analysis:

1) The number of observations – the literature overview provided inconsistent recommendations. Gorsuch (1983), Kline (1979) and MacCallum et al. (1999) set out the rule of 100 cases. Hutcheson & Sofroniou (1999) claim the appropriate sample size is no less than 150 cases, while (Guilford, 1954) stated that a sufficient sample should be at least 200 cases. The highest upper limit was set by Comrey & Lee (1992) who suggested: 100 cases is poor, 200 cases is fair, 300 cases is good, 500 cases is very good and 1,000 or more cases is excellent; and
2) The cases-to-variable ratio –at least 20 cases per variable (Hair et al., 1995), at least 10 cases per variable (Nunnally, 1978) through to at least 5 cases per variable (Bryant & Yarnold, 1995).

Factor analysis

- This is why we believe that significant attention should be paid to the quality of factor analysis results. The methodological guidelines point out that in an acceptable factor analysis the following should be satisfied:

1) the high communality of the variables – all greater than 0.6 or the mean level of communality must be at least 0.7 (MacCallum et al., 2001);
2) a sufficient degree of over determination of the factor – a minimum of 3 variables per factor is a critical limit (McDonald & Krane, 1979);
3) high factor loadings – greater than 0.80 is a very good loading condition, the level of 0.60 is a moderate loading condition, and a very poor one is at the level of 0.40 (Velicer & Fava, 1998); conditions are satisfied.

Factor analysis

4) good model fit defined in terms of the population root mean squared residual (RMSR= 0.00; 0.03; 0.06, respectively, correspond to a perfect, good, and fair model fit in the population) (Preacher & MacCallum, 2002).

Preacher & MacCallum (2002: 160) noted "As long as communalities are high, the number of expected factors is relatively small, and model error is low (a condition which often goes hand-in-hand with high communalities), researchers should not be overly concerned about small sample sizes."

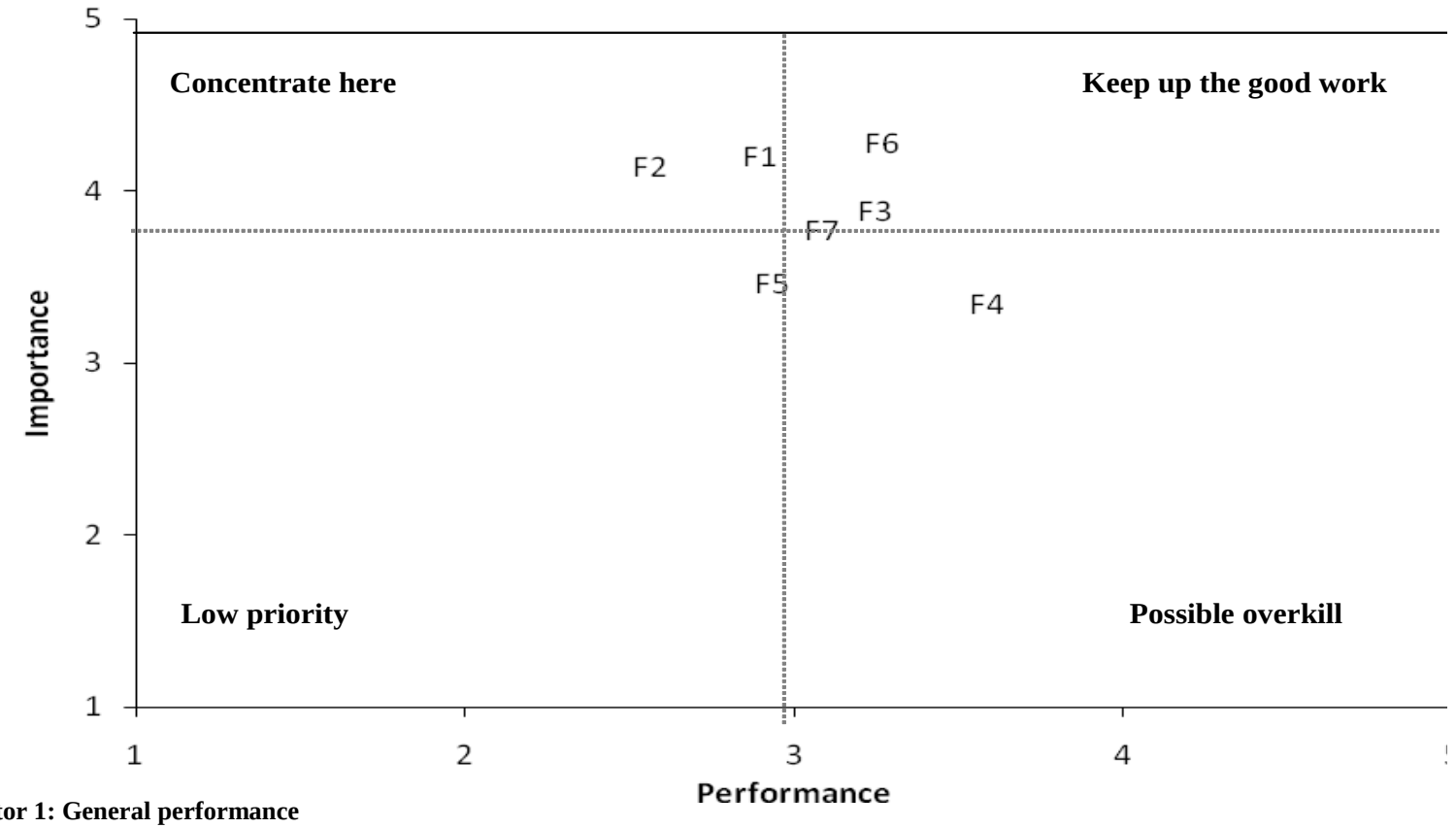
In our case, all of the above stated conditions are satisfied.

Factor analysis - Results

ECONOMIC PILLAR	ENVIRONMENTAL PILLAR	SOCIAL PILLAR
• General performance	• Environmental activities related to use of resources	• Relationship with the local community
• Hotel-specific performance	• Environmental awareness	• Relations with customers
		• Relations with employees

Importance-Performance Grid

Figure 3: Importance-Performance Analysis Grid



Factor 1: General performance
Factor 2: Hotel-specific performance
Factor 3: Environmental activities related to use of resources
Factor 4: Environmental awareness
Factor 5: Relationship with the local community
Factor 6: Relations with customers
Factor 7: Relations with employees

Contribution

- Sustainability discussion on micro level
- Methodology
- Factors analysis results
- Case of emerging tourism destination

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Comments and questions

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