



Economic Research-Ekonomska Istraživanja

ISSN: 1331-677X (Print) 1848-9664 (Online) Journal homepage: http://www.tandfonline.com/loi/rero20

Relationship between job satisfaction and organisational performance

Danica Bakotić

To cite this article: Danica Bakotić (2016) Relationship between job satisfaction and organisational performance, Economic Research-Ekonomska Istraživanja, 29:1, 118-130, DOI: <u>10.1080/1331677X.2016.1163946</u>

To link to this article: <u>http://dx.doi.org/10.1080/1331677X.2016.1163946</u>

© 2016 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

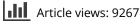


6

Published online: 22 Apr 2016.

_	_
ſ	
L	0
-	

Submit your article to this journal \square





View related articles 🖸

🕨 View Crossmark data 🗹

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=rero20

Routledge Taylor & Francis Group

OPEN ACCESS

Relationship between job satisfaction and organisational performance

Danica Bakotić

Faculty of Economics, University of Split, Split, Croatia

ABSTRACT

The purpose of this study is to explore the link between job satisfaction and organisational performance and to determine if there is an empirically provable relationship between these two variables, and the direction and the intensity of this relationship. Empirical research was conducted on a research sample of 40 large- and medium-sized Croatian companies, with 5806 employees surveyed. The results of this study show the existence of a clear link between employees' job satisfaction and organisational performance in both directions, but with pretty weak intensity. Detailed analysis showed that the connection between job satisfaction and organisational performance and job satisfaction. It could be stated that job satisfaction determines organisational performance, rather than organisational performance determining job satisfaction.

ARTICLE HISTORY

Received 18 November 2013 Accepted 11 March 2015

KEYWORDS

Job satisfaction; employees; organisational performance; company

JEL CLASSIFICATIONS D23; J28; M54; O15

1. Introduction

The purpose of this study is to explore the link between job satisfaction and organisational performance and to determine whether there is there an empirically provable relationship between these two variables and the direction and the intensity of this relationship. Here it is imperative to point out that the relationship between job satisfaction and organisational performance is complex; the research on it is rare; and theoretical and practical studies have not yielded an unambiguous answer to the real nature and strength of the connection between job satisfaction and organisational performance. In fact, some authors have found a positive correlation between job satisfaction and organisational performance (Chan, Gee, & Steiner, 2000; Ellinger, Ellinger, Yang, & Howton, 2002; Huselid, 1995; Koys, 2001; Latif et al., 2015; Mafini & Pooe, 2013), whilst, on the other hand, some have not discovered any statistically significant correlation between these two variables (Daily & Near, 2000; Mohr & Puck, 2007).

Regarding these researchers' results, this article tries to provide an additional contribution to the studying of this relationship with a special accent on the direction of this relationship

CONTACT Danica Bakotić 🖂 danicab@efst.hr

© 2016 The Author(s). Published by Taylor & Francis.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. which means that the focus is on exploring between which two elements the connection is stronger. Is it between job satisfaction and organisational performance, or between organisational performance and job satisfaction?

2. Literature review

In the discussions on organisational success, managers often say that employees' morale is one of the crucial factors for success. Even Napoleon said: 'The effectiveness of the army depends on its size, training, experience and morale, and morale is worth more than all the other factors together.' Focusing on recent times, it could be stated generally that managers want to have satisfied employees who feel good in their workplace; they prefer to work with people who have a positive view of the job. Workers who have a high level of job satisfaction generally love their job; they feel justice in an environment in which they work, and feel that their job gives them some positive features such as variety, challenge, good pay and security, autonomy, pleasant co-workers, etc. Workers who are happy at work will even devote private time to their work activities, they will be creative and committed, they will seek a way to cross any obstacle which might exist in the realisation of their jobs, and they will assist their colleagues and superiors. These workers will have extraordinary performance, and the companies with these kinds of workers will be successful. But, is this always the case? Is job satisfaction such a crucial factor in organisational behaviour? The general answer to this question is 'yes'. However, it is important to emphasise that the relationship between job satisfaction and organisational performance or organisational success is far from simple and direct.

Organisational performance cannot be viewed as a simple sum of individual performances. Although the research results of many studies suggest the existence of positive correlation between job satisfaction and individual performances (Brayfield & Crockett, 1955; Goslin, 2005; Harter, Schmidt, & Keyes, 2003; Iaffaldano & Muchinsky, 1985; Judge, Thoresen, Bono, & Patton, 2001; Locke, 1979; Near, Rice, & Hunt, 1980; Rain, Lane, & Steiner, 1991; Schwab & Cummings, 1970; Tait, Padgett, & Baldwin, 1989; Vroom, 1964; Wright & Cropanzano, 2000), the case with the relationship between job satisfaction and organisational performance is more complex. Organisational performance is influenced by various factors, both internal which the company can influence, and external, which are beyond the company's influence. Attitudes in general and especially job satisfaction really affect organisational behaviour in a number of cases, but not always. This impact is sometimes blocked by the influence of external factors, conditions and circumstances. It would be naive to claim and expect that the impact of job satisfaction on organisational behaviour, and thus on organisational performance, is visible at all times and in all circumstances.

Regarding the studies that address the relationship between job satisfaction and organisational performance, it should be pointed out that the number of studies focused on this connection is much smaller in relation to the number of studies dealing with the relationship between job satisfaction and individual performance. These studies are recent, and give inconsistent results. Some authors have found a positive correlation between job satisfaction and organisational performance (Chan et al., 2000; Chandrasekar, 2011; Ellinger et al., 2002; Harter, Schmidt, & Hayes, 2002; Huselid, 1995; Koys, 2001; Schneider, Hanges, Smith, & Salvaggio, 2003; Zohir, 2007), while some, on the other hand, do not discover any statistically significant correlation between these two variables (Daily & Near, 2000; Mohr & Puck, 2007).

120 👄 D. BAKOTIĆ

More concretely, Ostroff (1992) found that organisations with more satisfied employees tended to be more effective than organisations with dissatisfied employees. Ryan, Schmitt, and Johnson (1996) found out that employee morale was related to subsequent business performance indicators, customer satisfaction sentiments, and turnover ratios. Harter et al. (2002) found positive correlations between employee satisfaction-engagement and the organisational performance measured by productivity, profit, employee turnover, employee accidents, and customer satisfaction. Gould-Williams (2003) suggests that when employees act diligently and have outstanding performance, the organisational performance will be superior. Evans and Jack (2003) showed that employee satisfaction has a positive impact on market performance, which was analysed through earnings per share, and market performance has a significant impact on financial performance. Schneider et al. (2003) found out that higher return on assets (ROA) and higher earnings per share were positively correlated with higher job satisfaction.

Aside from the impact of job satisfaction on organisational performance, the inverse effect also should be examined, i.e. the existence of the impact of organisational success on workers' job satisfaction. However, it should be noted that the degree of identification with organisational success is significantly smaller and much less motivating in comparison with individual success, which is often, even inevitably, followed by different rewards. Organisational success generally does not bring some direct rewards or benefits to a particular worker. Therefore, the question is: Does organisational success have the power to influence or enhance job satisfaction? Studies have not made a clear contribution to the clarification. Namely, Ryan et al. (1996) regarding the opposite relationship between job satisfaction and organisational performance found out that consumer satisfaction influence on morale. Cole and Cole (2005) discovered that organisational performance causes employee satisfaction. In this context, Gross and Etzioni (1985, p. 4) pointed out that 'organisational reality and human happiness go hand and hand'.

Thus, although clear directions of causality in the relationship between job satisfaction and organisational performance remain unresolved, initial evidence has suggested that aggregate employee attitudes have connections with organisational performance outcomes and vice versa; the organisational performance are correlated to job satisfaction. All the evidence suggests that the relationship between job satisfaction and organisational performance is complex and insufficiently researched.

3. Methodological consideration

The main objective of this study was to investigate the relationship between job satisfaction and organisational performance in both directions, and to determine which relationship is stronger, the one between job satisfaction and organisational performance, or between organisational performance and job satisfaction. Related to this, the conceptual model has been developed which was the basis for empirical research (see Figure 1).

As is evident from Figure 1, the one part of the conceptual model refers to job satisfaction, which is observed under the influence of factors that affect this work attitude and which are shown on the left side of the model. These factors are: nature of work, opportunities for advancement, posibility of further education, leadership, co-workers, direct supervisors, salary, position in the company, working conditions, permanent employment and

working hours. However, the most important link presented in the conceptual model is the link between job satisfaction and organisational performance which is analysed through financial indicators, which are shown in Figure 1 (right-hand side). Financial indicators that were selected for this analysis are: total asset turnover, current asset turnover, revenues over expenses ratio, ROA, return on equity (ROE), ROCE (Return on Capital Employed), revenue per employee, earnings before taxes per employee, labour costs per employee, index BEX. Besides the relationship between job satisfaction and organisational performance, this conceptual model predicts the existence of a reverse connection or the connection between organisational performance and job satisfaction.

Based on the above presented model the main research hypothesis of this article was identified.

Research hypothesis. There is a positive statistically significant relationship between job satisfaction and organisational performance.

Trying to perform the analysis of job satisfaction as a variable that was explored on an individual level, and organisational performance which was investigated at the firm level, the empirical research of this article focused on two levels of observation. One was an individual or a worker, because the analysis of job satisfaction assumed questioning each individual worker about his/her job satisfaction, and the other level was the company-level which implied the analysis of its organisational performance. The logic of this individual variable -organisational variable relationship was in the premise that job satisfaction of each employee could influence the enhancement of organisational performance. The thought that followed was that the sum of job satisfaction of all employees in one observed company could define organisational performance of that same company.

The research sample included 40 large- and medium-sized Croatian companies with 5806 employees surveyed. At first sight, the research sample of 40 companies seemed a small one, but regarding the research topic which connected two very sensitive dimensions, job satisfaction and organisational performance, it could be stated that the sample size was adequate. Much other relevant research into job satisfaction or some other aspect of

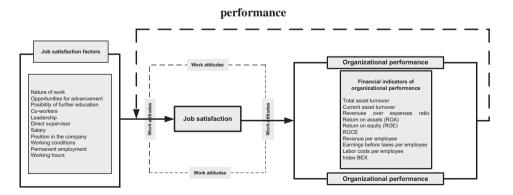


Figure 1. Conceptual model of relationship between job satisfaction and organisational performance. Source: created by the author.

organisational behavioural was conducted on a much smaller sample (Bender, Donohue, & Heywood, 2005; Bendre & Heywood, 2006; Herzberg, Mausner, & Snyderman, 1959; O'Connor, 2007; Santhapparaj & Alam, 2005; Sharma & Jyoti, 2010; Sy, Tram, & O'Hara, 2006). Additionally, it was important to state that this research sample was representative regarding organisational performance, because it included the companies at different levels of organisational performance. Namely, regarding the composite BEX (Business Excellence Index) index as an indicator of the total business performance, 51.3% of companies from the sample were 'good companies' (BEX>1), 38.5% of companies needed some improvements (0 < BEX < 1), while 10.2% of them had a threatened existence (BEX<0). In the context of the representativeness of the research sample regarding the number of employees who participated in this research, it is important to point out that all employees in each company were surveyed (except those who were on long sick leave).

The data about job satisfaction was collected via questionnaire¹ in which 11 factors of job satisfaction were tested based on a Likert 5-item scale where 1 = very dissatisfied and 5 = very satisfied. These factors are: nature of work, top management, co-workers, supervision, promotion, pay, status, working conditions, training and development, job security, and working hours. The overall job satisfaction was determinate as an average value of the satisfaction of these factors.

The data about organisational performance was collected through another questionnaire which contained questions about the financial information of each company over a two-year period; for the year in which the analysis of job satisfaction was conducted, and for the previous year. The questionnaire was completed by the chief accountant of each company. On the base of collected financial information, 10 financial indicators of organisational performance were calculated. These indicators were: total asset turnover², current asset turnover³, revenues over expenses ratio⁴, return on assets⁵, return on equity⁶, ROCE⁷, revenue per employee, earnings before taxes per employee, labour costs per employee, and index BEX⁸. The choice of these indicators depends on the research topic (Dotson & Allenby, 2010; Gursoy & Swanger, 2007; Jing & Li, 2008; Škerlavaj, Štemberger, Škrinjar, & Dimovski, 2007). However, today, many authors question the exclusive reliance on financial indicators as the only criterion of organisational performance determination, highlighting that these indicators are predominantly used for reporting, rather than to analyse the successful implementation of the strategy and determining the future direction of company development (Ghalayini & Noble, 1996; Neely, 1999; Niven, 2007; Wade & Recardo, 2001). The organisational performance could also be determined by modern performance measurement approaches or models which are developed in order to include and balance the multidimensional aspects of a company's performance, no matter whether they are quantitative or qualitative ones (Brown, 1996; Cross & Lynch, 1989; Fitzgerald, Johnston, Brignall, Silvestro, & Voss, 1991; Kaplan & Norton, 1992; Keegan, Eiler, & Jones, 1989). However, there are no clear guidelines or directions which modern performance measurement approach or model should be used in order to compare different companies which are often of different size and belong to different industries. Because of this fact, many researchers in their empirical research give priority to financial indicators of organisational performance (Choi, Kwak, & Choe, 2010; Flamholtz & Hua, 2002; Gerhart & Milkovich, 1990; Huselid, 1995; Munoz-Bullon & Sanchez-Bueno, 2010; O'Boyle, Rutherford, & Pollack, 2010; Rechner & Dalton, 1991; Snow & Hrebiniak, 1980; Schulte, Ostroff, Shmulyian, & Kinicki, 2009; Xing, 2009). Financial indicators have the same way of calculation regardless of the company size or industry in which they belong, so they facilitate the research realisation, analysis of the results and generation of the conclusions. Because of these reasons, financial indicators were selected as predictors of organisational performance in this research.

The collected data was analysed using the software package SPSS.

4. Research results

The empirical results of this research provided new insight into the analysis of the relationship between job satisfaction and organisational performance. This relationship was analysed in both directions, which means that the correlation between job satisfaction and organisational performance was tested in the way that these two variables were examined in the same year. By this it was attempted to find out if job satisfaction had some impact on organisational performance. Furthermore, the correlation between job satisfaction and organisational performance was tested in the way that the organisational performance was explored in the previous year and job satisfaction in the next year. By this it was attempted to find out does organisational success cause enhancement in job satisfaction.

Concerning the data about job satisfaction and organisational performance for the same year, statistical analysis showed the existence of statistically significant positive correlations between job satisfaction and some financial indicators of organisational performance. These correlations are presented in Table 1.

Statistically significant positive correlation between job satisfaction and financial indicators of organisational performance was apparent in the case of four financial indicators among the 10 used in the analysis. These financial indicators were ROE, revenue per employee, labour costs per employee and index BEX. All defined correlations were of low intensity, but despite this, it could be concluded that there was a positive relationship between job satisfaction and organisational performance. The low intensity of correlations was expected because it was obvious that there were many different factors inside or outside of companies which had much direct and stronger impact on organisational performance than job satisfaction. It is important to point out that the existence of statistically significant positive correlation between job satisfaction and index BEX (which is a composite indicator

		(1)	(2)	(3)	(4)
(1) Job satisfaction	Pearson Correlation Sig. (1-tailed) N				
(2) ROE	Pearson Correlation Sig. (1-tailed) N	.395* .006 40			
(3) Revenue per employee	Pearson Correlation Sig. (1-tailed) N	.443** .002 40	.430** .003 40		
(4) Labour costs per employee	Pearson Correlation Sig. (1-tailed) N	.407** .005 40	.481** .001 40	.383** .007 40	
(5) BEX	Pearson Correlation Sig. (1-tailed) N	.326* .022 39	.931** .000 39	.387** .007 39	.459** .002 39

 Table 1. Statistically significant correlations between job satisfaction and financial indicators of organisational performance.

Source: Research results.

				Revenues over				Revenue	Earnings before		
Job satisfaction factor		Total asset turnover	Current asset turnover	expenses ratio	ROA	ROE	ROCE	per em- ployee	taxes per employee	Labour costs per employee	BEX
Nature of work	Pearson Correlation Sig. (1-tailed) N										
Opportunities for	Pearson Correlation					.389**		.391**		.265*	.311*
advancement	Sig. (1-tailed)					.007		900.		.049	.027
	Z					40		40		40	39
Posibility of fur-	Pearson Correlation					.510**		.445**		.407**	.445**
ther education	Sig. (1-tailed)					000		.002		.005	.002
	Z					40		40		40	39
Leadership	Pearson Correlation					.500**		.454**		.0408**	.351*
	Sig. (1-tailed)					.001		.002		.005	.014
	Z					40		40		40	39
Co-workers	Pearson Correlation					.0542**		.430**		.309*	.465**
	Sig. (1-tailed)					000		.003		.028	.002
	Z					39		39		39	38
Direct supervisors	Pearson Correlation					.492**		.399**			.388**
	Sig. (1-tailed)					.001		.005			.007
	Z					40		40			39
Salary	Pearson Correlation			.342*		.361*		.301*	.337*	.511**	.371*
	Sig. (1-tailed)			.015		.011		.030	.017	000	.010
	Z			40		40		40	40	40	39
Position in the	Pearson Correlation					.312*		.333*			
company	Sig. (1-tailed)					.025		.018			
	Z					40		40			
Working condi-	Pearson Correlation			.305*				.451*	.306*	.461**	
tions	Sig. (1-tailed)			.028				.002	.028	.001	
	Z			40				40	40	40	
Permanent	Pearson Correlation	476**	499**		443**		.333*	.341			
employment	Sig. (1-tailed)	.001	000		.002		.018	.016			
	Z	40	39		30		39	40			
Working hours	Pearson Correlation										
	Sig. (1-tailed)										
	z										

whose calculation is based on several relevant aspects of the business performance that are crucial for its success) additionally supported the above stated conclusion about the positive relationship between job satisfaction and (financial indicators of) organisational performance. On the basis of this analysis, it could be affirmed that companies with more satisfied workers were more successful.

In order to enhance this analysis, the correlations between different job satisfaction factors and financial indicators of organisational performance were also calculated and presented in Table 2.

From Table 2, the statistically significant correlations between different job satisfaction factors and financial indicators of organisational performance can be seen. Most of the job satisfaction factors were connected to four indicators of organisational performance. These indicators were ROE, revenue per employee, labour cost per employee and index BEX. The discovered correlations were mainly of low intensity, in few cases, medium. From these results it could be concluded that the impact of majority of job satisfaction factors on organisational performance existed. These results were in accordance to the results presented in Table 1 which additionally supported the assertion about the impact of job satisfaction on organisational performance. This also could suggest that the management needed to carefully observe and influence each job satisfaction factor in order to enhance organisational performance.

Analysing the inverse relationship, which implies the influence of organisational performance on job satisfaction, statistically significant correlations between financial indicators of organisational performance and job satisfaction were also discovered. These correlations are presented in Table 3.

Statistically significant positive correlations between financial indicators of organisational performance and job satisfaction were discovered in the cases of four out of 10 financial indicators. These indicators were: total assets turnover, revenue per employee, labour costs per employee and earrings before taxes per employee. Although all discovered correlations were of low intensity, the existence of the link between organisational performance and job satisfaction was confirmed. The low intensity of these correlations could be also explained by other stronger influences on job satisfaction which might be connected to workers' personal

		(1)	(2)	(3)	(4)
(1) Job satisfaction	Pearson Correlation				
	Sig. (1-tailed)				
	N				
(2) Total asset turnover	Pearson Correlation	.301*			
	Sig. (1-tailed)	.030			
	N	40			
(3) Revenue per employee	Pearson Correlation	.444**	.385*		
	Sig. (1-tailed)	.002	.007		
	N	40	40		
(4) Labour costs per employee	Pearson Correlation	.400**	.046	.411**	
	Sig. (1-tailed)	.005	.389	.004	
	N	40	40	40	
(5) Earnings before taxes per employee	Pearson Correlation	.288*	.119	.252	.641**
	Sig. (1-tailed)	.036	.232	.058	.000
	N	40	40	40	40

 Table 3. Statistically significant correlations between financial indicators of organisational performance and job satisfaction.

Source: Research results.

characteristics and other factors in an individual working and living environment which had stronger and more direct impact on his/her job satisfaction than organisational success.

Comparing these correlations with correlations presented in Table 1 it could be noted that these were even of lower intensity, and the correlation with index BEX did not exist. This could imply that the relationship between organisational performance and job satisfaction was weaker than the relationship between job satisfaction and organisational performance and that primary way of influence is going from the job satisfaction to organisational performance.

5. Concluding remarks

Job satisfaction is an extremely complex concept that is influenced by different factors, or more accurately by a group of factors that often have interwoven impact. As a result, studies that have dealt with the relationship between job satisfaction and other concepts have often given inconsistent results, especially in the case of the analysis of the relations between job satisfaction and organisational performance (Chan et al., 2000; Chandrasekar, 2011; Daily & Near, 2000; Ellinger et al., 2002; Evans & Jack, 2003; Gould-Williams, 2003; Harter et al., 2002; Huselid, 1995; Koys, 2001; Mohr & Puck, 2007; Ostroff, 1992; Ryan et al., 1996; Schneider et al., 2003; Zohir, 2007). The results of this study confirmed the conclusions of other papers dealing with this topic about the existence of clear link between employees' job satisfaction and organisational performance in both direction, but with pretty weak intensity.

Detailed analysis showed that the connection between job satisfaction and organisational performance was stronger than the connection between organisational performance and job satisfaction. It could be stated that job satisfaction more strongly determines organisational performance than organisational performance determines job satisfaction. To support this claim, the research results of this article showed that there was an impact of the majority of job satisfaction factors on organisational performance.

This is logical, considering that organisational success is something that workers generally have no opportunity to concretely realise, or directly feel the positive effects of. Successful companies are not obliged to give employees any additional benefits or benefits arising from organisational success. In fact, workers often receive the same salary and other forms of compensation, regardless of how much a company is successful. This argument may explain the weak relationship between organisational performance and job satisfaction.

Finally, it is important to note that this study makes a significant contribution to the observing link between job satisfaction and organisational performance in both directions, whereby it is particularly important to emphasise the contribution of observing the link between organisational performance and job satisfaction, which is world-wide still unexplored. In addition, the conclusions of this study could be used as a basis for new research.

5.1 Research limitations

Understanding research limitations and their possible impact on the results and conclusions is necessary for better understanding the problems investigated.

The first limitation is related to the research sample. This research was carried out in 40 companies that decided to participate in the empirical research. Considering that the research problem of this study is very specific because it examines two very sensitive dimensions of company's operations – job satisfaction and the company's efficiency, it was difficult to attract a larger number of companies to this research. As a result, the companies belonging to a particular industry could not be used as a control variable. Therefore, it is necessary to hold some reservations about the representativeness of the research sample, especially when it comes to some general conclusions. However, in comparison to other studies in this field, it should be noted that this study is very valuable since it included the examination of 5806 employees, which is very respectable.

The next limitation refers to the analysis of organisational performance, in which only traditional (financial) indicators of organisational performance were used. Consequently, the weak correlation between job satisfaction and organisational performance in both directions could be explained by narrowed performance measurement. If the organisational performance was observed through optional ways of behaviour, such as mutual assistance, motivation and cooperation; what the literature means by the concept of organisational citizenship behaviour which increases both individual and organisational performance or by some other 'soft' measures of organisational performance; then the correlation between job satisfaction and organisational performance might have been shown to be stronger. But, on the other hand, the application of 'soft' of qualitative measures complicates comparison between companies.

And finally, the question is how much time needs to pass for the effects of job satisfaction on organisational performance to become notable, or conversely, in what time do workers identify with the company's success so that they increase their job satisfaction. This issue is related to the existence of time lag. In this article, job satisfaction is analysed within a single year, while the organisational performance is analysed over a two-year period. However, for a more complete analysis, job satisfaction and organisational performance should be monitored and analysed over a longer period of time in order to discover a possible time lag in their interference and to get a clearer picture of the connection between these two variables.

Notes

- 1. This questionnaire is taken from consulting group AT Adria d.o.o. Besides the questions about the satisfaction of each job satisfaction factor the questionnaire includes questions about employees' gender, age, education, position in the company and tenure, but those questions were not subject of this analysis.
- 2. Total asset turnover = Total revenues/Total assets.
- 3. Current asset turnover = Total revenues/Current asset.
- 4. Revenues over expenses ratio = Total revenues/Total expenses.
- 5. Return on assets (ROA) = (Earnings before taxes + Interest expenses)/Total assets.
- 6. Return on equity (ROE) = Net income/Equity.
- 7. ROCE = (Net income/Total assets) Short term liabilities.
- BEX = 0,388ex1 + 0,579ex2 + 0,153ex3 + 0,316ex4; where: ex1 = (Earnings before taxes + Interest expenses)/Total assets; ex2 = Earnings before taxes/Equity*Cost of capital (interest rate); ex3 = (Current assets Short term liabilities)/Total assets; ex4 = 5*(Earnings before taxes + Amortisation)/Total liabilities.

Disclosure statement

No potential conflict of interest was reported by the author.

References

- Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender segregation. *Oxford Economic Papers*, *57*, 479–496.
- Bendre, K. A., & Heywood, J. S. (2006). Job satisfaction of the highly educated: the role of gender, academic tenure, and earnings. *Scottish Journal of Political Economy*, 53, 253–279.
- Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. *Psychological Bulletin*, *52*, 396–424.
- Brown, M. G. (1996). *Keeping score: using the right metrics to drive world-class performance*. New York, NY: Quality Resources.
- Chan, K. C., Gee, M. V., & Steiner, T. L. (2000). Employee happiness and corporate financial performance. *Financial Practice and Education*, 10, 47–52.
- Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International Journal of Enterprise Computing and Business Systems*, *1*, 1–16.
- Choi, J. S., Kwak, Y. M., & Choe, C. (2010). Corporate social responsibility and corporate financial performance: Evidence from Korea. *Australian Journal of Management*, *35*, 291–311.
- Cole, L. E., & Cole, M. S. (2005). *Employee satisfaction and organisational performance: A summary of key findings from applied psychology*. Retrieved February 15, 2015, from http://www.Teammax. net/files/LiteratureReview.pdf
- Cross, K. F., & Lynch, R. L. (1989). The SMART way to sustain and define sucess. *National Productivity Review*, 8, 23–33.
- Daily, C. M., & Near, J. P. (2000). CEO satisfaction and firm performance in family firms: Divergence between theory and practice. Social Indicators Research, 51, 125–170.
- Dotson, J. P., & Allenby, G. M. (2010). Investigating the strategic influence of customer and employee satisfaction on firm financial performance. *Marketing Science*, *29*, 895–908.
- Ellinger, A. D., Ellinger, A. E., Yang, B., & Howton, S. W. (2002). The relationship between the learning organization concept and firm's financial performance: An empirical assessment. *Human Resource Development Quarterly*, *13*, 5–22.
- Evans, J. R., & Jack, E. P. (2003). Validating key results linkages in the Baldrige Performance Excellence Model. *The Quality Management Journal*, *10*, 7–24.
- Fitzgerald, L., Johnston, R., Brignall, T. J., Silvestro, R., & Voss, C. (1991). Performance measurement in service organizations. *Management Accounting*, 34–36.
- Flamholtz, E., & Hua, W. (2002). Strategic organizational development, growing pains and corporate financial performance: an empirical test. *European management Journal*, *20*, 527–536.
- Gerhart, B. A., & Milkovich, G. T. (1990). Organizational differences in managerial compensation and financial performance. *The Academy of Management Journal*, *33*, 663–691.
- Ghalayini, A. M., & Noble, J. S. (1996). The changing basis of performance measurement. *International Journal of Operations & Production Management*, 16, 63–80.
- Goslin, P. A. (2005). Managing employee satisfaction of volunteers in South African sport. *African Journal for Physical Health Education*, *12*, 30–40.
- Gould-Williams, J. (2003). The importance of HR practices and workplace trust in achieving superior performance: A study of public-sector organizations. *The International Journal of Human Resource Management*, 14, 28–54.
- Gross, E., & Etzioni, A. (1985). Organizations in society. Englewood Cliffs, NJ: Prentice-Hall.
- Gursoy, D., & Swanger, N. (2007). Performance-enhancing internal strategic factors and competencies: Impacts of financial success. *International Journal of Hospitality Management, 26*, 213–227.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. (2003), Well-being in the workplace and its relationship to business outcomes, A Review of the Gallup Studies, Flourishing, The Positive Person and the Good Life, Chapter 9. In Keyes, C. L. M., & Haidt, J. (Ed). (pp. 205–224). American Psychological

Association. http://www.nhsemployers.org/~/media/Employers/Documents/Retain%20and%20 improve/Harter%20et%20al%202002%20WellbeingReview.pdf

- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (2nd ed.). New York, NY: John Wiley & Sons.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, *38*, 635–672.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, *97*, 251–273.
- Jing, X., & Li, Y. (2008). The relationship between organizational learning and firms' financial performance in strategic alliances: A contingency approach. *Journal of World Business*, 43, 365–379.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*, 376–407.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard measures that drive performance. *Harvard Business Review*, 70, 71–79.
- Keegan, D. P., Eiler, R. G., & Jones, C. R. (1989). Are you performance measures obsolete? *Management Accounting*, 70, 45–50.
- Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: a unit-level, longitudinal study. *Personnel Psychology*, 54, 101–114.
- Latif, M. S., Ahmad, M., Qasim, M., Mushtaq, M., Ferdoos, A., & Naeem, H. (2015). Impact of employee's job satisfaction on organizational performance. *European Journal of Business and Management*, 7, 166–171.
- Locke, J. (1979). An essay concerning human understanding. P. Nidditch (Ed). Oxford, UK: Clarendon Press.
- Mafini, C., & Pooe, D. R. I. (2013). The relationship between employee satisfaction and organisational performance: Evidence from a South African government department. *The SA Journal of Industrial Psychology*, *39*(1). http://www.sajip.co.za/index.php/sajip/article/view/1090/1332
- Mohr, A. T., & Puck, J. F. (2007). Role conflict, general manager job satisfaction and stress and the performance of international joint ventures. *European Management Journal*, 25, 25–35.
- Munoz-Bullon, F., & Sanchez-Bueno, M. J. (2010). Downsizing implementation and financial performance. *Management Decision*, 48, 1181–1197.
- Near, J. P., Rice, R. W., & Hunt, R. G. (1980). The relationship between work and nonwork domains: A review of empirical research. *Academy of Management Review*, *5*, 415–429.
- Neely, A. (1999). The performance measurement revolution: Why now and what next? *International Journal of Operations & Production Management*, 19, 205–228.
- Niven, P. R. (2007). Balanced scorecard, Korak po korak. Masmedia: Zagreb.
- O'Boyle, E. H., Rutherford, M. W., & Pollack, J. M. (2010). Examining the relationship between ethical focus and financial performance in family firms: an exploratory study. *Family Business Review*, *23*, 310–326.
- O'Connor, J. (2007). The impact of affective factors related to work on the turnover intent of speech language pathologists in Texas. Texas A&M University. http://oaktrust.library.tamu.edu/handle/1969.1/ETD-TAMU-2494
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organizational level analysis. *Journal of Applied Psychology*, *77*, 963–974.
- Rain, J. S., Lane, I. M., & Steiner, D. D. (1991). A current look at the job satisfaction/life satisfaction relationship: review and future considerations. *Human Relations*, 44, 287–307.
- Rechner, P. L., & Dalton, D. R. (1991). CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal*, *12*, 155–160.
- Ryan, A. M., Schmitt, M. J., & Johnson, R. (1996). Attitudes and effectiveness: examining relations at an organizational level. *Personnel Psychology*, *49*, 853–882.
- Santhapparaj, A. S., & Alam, S. S. (2005). Job satisfaction among academic staff in private universities in Malaysia. *Journal of Social Sciences*, 1, 72–76.

- Schneider, B., Hanges, P. J., Smith, D. B., & Salvaggio, A. N. (2003). Which comes first: Employee attitudes or organizational financial and market performance? *Journal of Applied Psychology*, 88, 836–851.
- Schulte, M., Ostroff, C., Shmulyian, S., & Kinicki, A. (2009). Organizational climate configurations: relationship to collective attitudes. *Customer Satisfaction and Financial Performance, Journal of Applied Psychology*, 94, 618–634.
- Schwab, D. P., & Cummings, L. L. (1970). Theories of performance and satisfaction: a review. *Industrial Relations*, 9, 408–430.
- Sharma, R. D., & Jyoti, J. (2010). Job satisfaction of university teachers: An empirical study. *Journal of Services Research*, 9, 51–80.
- Škerlavaj, M., Štemberger, I. M., Škrinjar, R., & Dimovski, V. (2007). Organizational learning culture – the missing link between business process change and organizational performance. *International Journal of Production Economics*, 106, 346–367.
- Snow, C. C., & Hrebiniak, L. G. (1980). Strategy, distinctive competence, and organizational performance. *Administrative Science Quarterly*, 25, 317–336.
- Sy, T., Tram, S., & O'Hara, L. A. (2006). Relationship of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior*, 68, 461–473.
- Tait, M., Padgett, M. Y., & Baldwin, T. T. (1989). Job and life satisfaction: a re-examination of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology*, *74*, 502–507.
- Vroom, V. (1964), *Work and motivation*. New York, NY: Wiley. taken from Katz, D., Kahn, R. L. (1967), The Social Psychology of Organizations. (John Wiley&Sons).
- Wade, D., & Recardo, R. (2001). Corporate performance management, how to build a better organization through measurement-driven strategic alignment. Oxford: Butterworth Heinemann.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5, 84–94.
- Xing, Z. (2009). Impact of University's optimal human resource management practices on organizational performance. *Systems Engineering Theory & Practice*, 29, 112–122.
- Zohir, S. C. (2007). *Role of Dhaka export processing zone: Employment and empowerment*. Research Report, Bangladesh Institute of Development Studies, Dhaka, People's Republic of Bangladesh.