



Univerza v Mariboru

Ekonomsko-poslovna fakulteta



Letnik: 61 | Številka: 4 | 2015 |  
Volume: 61 | Number: 4 | 2015 |

**NG  
OE**

**NAŠE GOSPODARSTVO**  
Revija za aktualna ekonomska in poslovna vprašanja

**OUR ECONOMY**  
Journal of Contemporary Issues in Economics and Business

# NAŠE GOSPODARSTVO

Revija za aktualna ekonomska in poslovna vprašanja

Letnik 61, št. 4, 2015

## Izdajatelj:

Ekonomsko-poslovna fakulteta Maribor (EPF)

## Uredniški odbor:

José Ernesto Amorós (University of Desarrollo, Čile), René Böheim (Johannes Kepler University Linz, Avstrija), Jani Bekó (EPF), Jernej Belak (EPF), Samo Bobek (EPF), Josef C. Brada (Arizona State University, AZ, ZDA), Mehmet Caner (North Carolina State University, NC, ZDA), Silvo Dajčman (EPF), Ernesto Damiani (The University of Milan, Italija), Paul Davidson (University of Tennessee, Knoxville, TN, ZDA), Mark M. Davis (Bentley University, Waltham, MA, ZDA), Jörg Felfe (Helmut-Schmidt University, Hamburg, Nemčija), Lidija Hauptman (EPF), Timotej Jagrič (EPF), Alenka Kavkler (EPF), Romana Korez-Vide (EPF), Urška Kosi (Vienna School of Economics and Business, Avstrija), Monty Lynn (Abilene Christian University, Abilene, TX, ZDA), Borut Milfelner (EPF), Emre Ozsoz (Fordham University, Bronx, NY, ZDA), Peter Podgorelec (EPF), Peter N. Posch (Technical University Dortmund, Nemčija), Gregor Radonjič (EPF), Miroslav Rebernik (EPF), Kaija Saranto (University of Eastern Finland, Finska), Milica Uvalic (University of Perugia, Italija), Igor Vrečko (EPF), Martin Wagner (Technical University Dortmund, Nemčija) in Udo Wagner (University of Vienna, Avstrija)

## Glavni in odgovorni urednik:

Vesna Čančer

## Pomočnik glavnega in odgovornega urednika:

Romana Korez Vide

## Naslov uredništva:

Maribor, Razlagova 14, Slovenija,  
telefon: +386 2 22 90 112

## Elektronska pošta:

nase.gospodarstvo@um.si

## Spletna stran:

<http://www.ng-epf.si>

Revija je indeksirana v ABI/INFORM Global, EconLit in ProQuest ter vključena v EBSCO in Ulrich's Periodicals bazo.



# OUR ECONOMY

Journal of Contemporary Issues in Economics and Business

Vol. 61, No. 4, 2015

## Published by:

Faculty of Economics and Business, Maribor (FEB)

## Editorial Board:

José Ernesto Amorós (University of Desarrollo, Chile), René Böheim (Johannes Kepler University Linz, Austria), Jani Bekó (FEB), Jernej Belak (FEB), Samo Bobek (FEB), Josef C. Brada (Arizona State University, AZ, USA), Mehmet Caner (North Carolina State University, NC, USA), Silvo Dajčman (FEB), Ernesto Damiani (The University of Milan, Italy), Paul Davidson (University of Tennessee, Knoxville, TN, USA), Mark M. Davis (Bentley University, Waltham, MA, USA), Jörg Felfe (Helmut-Schmidt University, Hamburg, Germany), Lidija Hauptman (FEB), Timotej Jagrič (FEB), Alenka Kavkler (FEB), Romana Korez-Vide (FEB), Urška Kosi (Vienna School of Economics and Business, Austria), Monty Lynn (Abilene Christian University, Abilene, TX, USA), Borut Milfelner (FEB), Emre Ozsoz (Fordham University, Bronx, NY, USA), Peter Podgorelec (FEB), Peter N. Posch (Technical University Dortmund, Germany), Gregor Radonjič (FEB), Miroslav Rebernik (FEB), Kaija Saranto (University of Eastern Finland, Finland), Milica Uvalic (University of Perugia, Italy), Igor Vrečko (FEB), Martin Wagner (Technical University Dortmund, Germany), Udo Wagner (University of Vienna, Austria)

## Editor-in-Chief:

Vesna Čančer

## Co-editor:

Romana Korez Vide

## Editorial and administrative office address:

Maribor, Razlagova 14, Slovenia,  
phone: +386 2 22 90 112

## E-mail:

[our.economy@um.si](mailto:our.economy@um.si)

## WWW homepage:

<http://www.ng-epf.si>

The review is indexed in ABI/INFORM Global, EconLit and ProQuest. It is included in EBSCO and Ulrich's Periodicals Directories.

**Lektorji:** mag. Darja Gabrovšek Homšak in ServiceScape Incorporated

**Dtp:** NEBIA, d. o. o.

Letno izide: 6 (šest) števil. Letna naročnina: za pravne osebe 46 €, za fizične osebe 29 € in za tujino 57,5 €.

**ISSN 0547-3101**

Revijo sofinancira Javna agencija za raziskovalno dejavnost Republike Slovenije.

## Vsebina / Contents

Anita Dunkl, Paul Jiménez, Simona Šarotar Žižek, Borut Milfelner,  
Wolfgang K. Kallus

Similarities and Differences of Health-promoting  
Leadership and Transformational Leadership 3

---

Danijel Lebar, Iztok Kolar

Controllership Influences on the  
Restructuring of Slovenian Companies 14

---

Sonja Treven, Urška Treven, Simona Šarotar Žižek

Training Programs for Managing  
Well-being in Companies 23

---

Robert Horvat, Bojana Korošec

The Role of Accounting in a Society:  
Only a techn(olog)ical solution  
for the problem of economic measurement  
or also a tool of social ideology? 32

---



# Similarities and Differences of Health-promoting Leadership and Transformational Leadership

## Anita Dunkl

University of Graz, Institute of Psychology, Austria  
anita.dunkl@uni-graz.at

## Paul Jiménez

University of Graz, Institute of Psychology, Austria  
paul.jimenez@uni-graz.at

## Simona Šarotar Žižek

University of Maribor, Faculty of Economics and Business, Slovenia  
simona.sarotar@um.si

## Borut Milfelner

University of Maribor, Faculty of Economics and Business, Slovenia  
borut.milfelner@um.si

## Wolfgang K. Kallus

University of Graz, Institute of Psychology, Austria  
wolfgang.kallus@uni-graz.at

## Abstract

The concept of health-promoting leadership focuses on the interaction between the organization and the individual by identifying components able to positively influence employees' working conditions. In the present study, the effects of health-promoting leadership and transformational leadership on the employees' recovery–stress balance are investigated. In an online study, 212 Slovenian workers were asked about their perceptions of their direct supervisors and their work-related stress and recovery. The results showed that both leadership styles have a significant effect on employees' recovery at the workplace, which mediated the relationship between leadership and work-related stress.

**Keywords:** conditions; health-promoting leadership; transformational leadership; stress; recovery; working environment

## 1 Introduction

The success of maintaining a psychologically healthy workplace lies in a systemic approach combining individual and organizational factors (Cotton & Hart, 2003; Shain & Kramer, 2004). By identifying critical aspects on the individual and organizational levels, intervention methods for a healthy, sustainable workplace can be developed more efficiently. Mismatches between the individual and organization are the focus of the six areas of worklife (Leiter & Maslach, 1999; Maslach & Leiter, 2008). By reducing these mismatches, it is possible to reduce stress and

---

ORIGINAL SCIENTIFIC PAPER

---

RECEIVED: FEBRUARY 2015

---

REVISED: JULY 2015

---

ACCEPTED: JULY 2015

---

DOI: 10.1515/ngoe-2015-0013

---

UDK: 005.1:159.944.4

---

JEL: M12, J81

---

---

**NG  
OE**

---

NAŠE GOSPODARSTVO  
OUR ECONOMY

---

Vol. 61 | No. 4 | 2015

---

pp. 3–13

---

possible consequences such as burnout risk. Leaders can influence critical working conditions; therefore, they are often seen as important key factors in creating successful healthy workplaces (Aitken, 2007). With the help of health-promoting leadership, leaders are able to identify and reduce mismatches between individual and workplace (Jiménez, Winkler, & Dunkl, 2013).

The present paper focuses on two leadership styles (health-promoting leadership and transformational leadership) and their relation to employees' perception of stress and recovery. Stress can be seen as a process caused by an overly heavy load or demands. The experience of stress can be reduced by recovery processes that aim to re-establish personal resources and their full functional capacity. If stress at the workplace is not minimized with the right recovery strategies, major long-term consequences of stress can occur, such as burnout (Kallus, in press). Therefore, an individual is healthy if stress and recovery are kept in balance. Leadership can support health at the workplace by minimizing stress, enhancing recovery, and consequently reducing the risk of burnout.

Both, health-promoting leadership and transformational leadership are considered as leadership styles that aim to enhance positive work-related behaviors as well as reduce stress and the risk of getting burnout. Limited research exists that compares these two leadership styles in combination with organizational outcomes. In addition, the relationship between leadership and stress has been well investigated (e.g., Densten, 2005; Gill, Flaschner, & Shachar, 2006; Kanste, Kyngäs, & Nikkilä, 2007), whereas the impact on other work-related outcomes—such as recovery—has been less studied.

The purpose of this study is to investigate the impact of these two leadership styles on employees' recovery—stress balance. Another aim of this study is to compare the concepts of health-promoting leadership and transformational leadership and to identify similarities and differences.

## 2 Theoretical Background

### 2.1 Health-promoting leadership

Health-promoting leadership and its focus on enhancing healthy working conditions are based on the six areas of worklife (Leiter & Maslach, 1999; Maslach & Leiter, 2008), where mismatches between employees and their workplaces can occur. Leaders who recognize and reduce these mismatches are able to create a workplace that enhances health (Jiménez et al., 2013).

**Workload.** An increased workload is known to have a consistent relationship with emotional exhaustion, which is seen as an indicator for burnout (Maslach & Leiter, 2008). One major aspect of health-promoting leadership is to keep the workload at an adequate level, either by giving enough resources to manage increased workload or raising opportunities for recovery.

**Control.** Control has a positive effect on employee health (Schreurs, van Emmerik, Notelaers, & De Witte, 2010; Thompson & Protas, 2006). Many possibilities exist for giving control in the workplace (autonomy, being involved in decision making, etc.) (Bakker, Demerouti, & Euwema, 2005; Nahrgang, Morgeson, & Hofmann, 2011).

**Reward.** Reward is an important part of the positive relationship between leaders and employees and can be either extrinsic (e.g., financial) or intrinsic (e.g., praise). Insufficient reward can increase the risk of burnout (Kivimäki, Vahtera, Elovaino, Vitanen, & Siegrist, 2007; Maslach & Leiter, 2008). Leaders can give many forms of non-financial rewards, such as existential recognition (personal or group recognition) or recognition of work practice, job dedication, and results (Brun & Dugas, 2008).

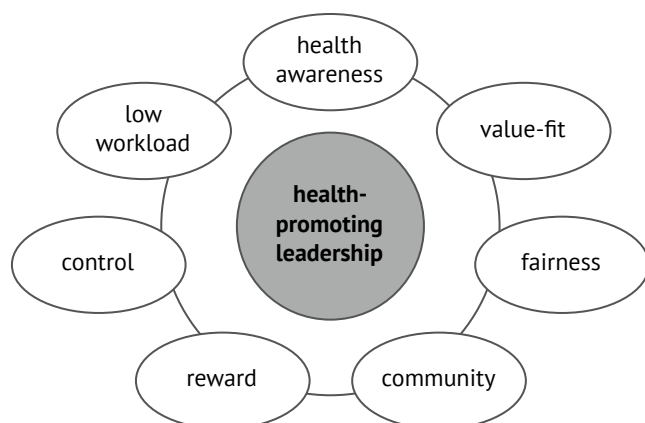
**Community.** A working climate, where employees have a positive connection with their coworkers and support each other, is another major aspect of health-promoting leadership. A positive working climate has an effect on performance, customer satisfaction, or perception of organizational justice (Schneider, Erhart, & Macey, 2013). Therefore, creating a working climate, where all employees are treated with appreciation and respect, is an essential task for leaders.

**Fairness.** Organizational fairness is one of the most important working aspects; unfairness has a negative effect on their well-being (Robbins, Ford, & Tetrick, 2012). In the sense of health-promoting leadership, employees should be treated fairly regarding decisions and procedures, and all means should be shared correctly.

**Value-fit.** Every person has different ideals and different moral concepts, which can be described as individual values. If the employees experience a gap between individual and organizational values, the risk of experiencing burnout increases (Leiter, Frank, & Matheson, 2009). Leaders can reduce differences between individual and organizational values by actively communicating the organizational norms and ideals or by ensuring that employees' tasks correspond with the organization's values.

**Health awareness.** An aspect not found in the areas of worklife but connected with employee health is the aspect

**Figure 1.** Dimensions of health-promoting leadership



of health awareness. Leaders with high health awareness tend to have more healthy employees (Franke, Felfe, & Pundt, 2014). Specific leadership behaviors involve communication about health-related topics, setting agendas for workplace health promotion, and motivating employees to participate in health-promotion activities (Gurt, Schwennen, & Elke, 2011).

By adding the health awareness dimension to the six areas of worklife, seven key aspects of health-promoting leadership can be defined (see Figure 1). Considering these dimensions, leaders are able to positively influence the working environment (i.e., the conditions) for their employees.

## 2.2 Transformational leadership

Transformational leaders are often described as charismatic leaders that are able to inspire their followers, meet their emotional needs, and/or intellectually stimulate them (Bass, 1991). The concept of transformational leadership consists of four subcategories (Bass & Steidlmeier, 1999). Inspirational motivation refers to articulating and representing a vision, which means that leaders are giving employees a positive and optimistic vision of future developments. Individualized consideration describes the degree to which leaders attend to their employees' needs. It includes listening to the employees' concerns and acting as mentors or coaches. Idealized influence (attributed or behavior) mainly focuses on charisma. A leader is attributed as charismatic and can act as a role model if he/she displays certain positive attributes, such as focusing on higher-order ideals and values. Finally, intellectual stimulation means that leaders encourage innovative and creative ideas from their employees and have a positive opinion about changing old practices if they prove to be ineffective.

Transformational leadership has been shown to be related with lower stress at work (Gill et al., 2006) and a lower burnout risk (Densten, 2005; Kanste et al., 2007). Furthermore, strong evidence has demonstrated that transformational leaders are able to influence work aspects, such as meaningful work environment, role clarity, and opportunities for development (Nielsen, Randall, Yarker, & Brenner, 2008). It is also positively related to variety (using different skills and talents), identity (completion of a "whole" piece of work), significance (having a meaningful job), autonomy (substantial freedom in decisions and actions), and feedback (Piccolo & Colquitt, 2006).

## 2.3 Health in organizations: The concept of recovery/stress imbalance

Two requirements must be fulfilled when defining organizational health: (1) Health is understood on a physical, mental, and emotional/social level, which means a holistic perspective of health (Antonovsky, 1997; Kelloway & Day, 2005) and (2) health in organizations must focus on an organizational and not only individual level by focusing on the organization as a system (Cotton & Hart, 2003; Grawitch, Gottschalk, & Munz, 2006).

Antonovsky's (1997) model of salutogenesis considers both requirements. It defines the "feeling of coherence," which consists of three components: (1) sense of comprehensibility, (2) sense of manageability, and (3) sense of meaningfulness. People with high scores on these three components have a high feeling of coherence. This leads to a flexible way to react to different demands and develop specific coping strategies for these demands.

Another concept that describes adaptation processes in the workplace is the recovery–stress balance model (Jiménez & Kallus, 2005). It is assumed that stress in particular can be considered harmful if the relationship between stress and recovery is imbalanced. The balance gets worse if prolonged stressful situations occur together with repeated shortened recovery or lacking resources. This imbalance affects negative emotional and motivational changes, which in turn leads to higher stress. Regulating the balance by developing successful recovery strategies or activating individual resources can cancel this self-reinforcing process and restore health (Jiménez & Kallus, 2005). Research shows that social support (support from coworkers or supervisors), work-related resources (e.g., autonomy, job control, and opportunity to use skills), undisturbed breaks, and leisure time are particularly able to buffer possible negative outcomes (Bakker et al., 2005; Halbesleben, 2006; Jiménez & Kallus, 2005).

## 2.4 Conceptual model and hypotheses

In the present study, two leadership strategies—health-promoting leadership and transformational leadership—are investigated. Referring to past research, we hypothesize that health-promoting leadership and transformational leadership show direct paths to both recovery and stress, influencing both aspects simultaneously. Furthermore, in line with the recovery–stress balance model (Jiménez & Kallus, 2005), recovery has an effect on stress, thereby moderating the relationship between both leadership constructs and stress.

*Hypothesis 1:* Health-promoting leadership and transformational leadership are positively related to the employees’ recovery at the workplace.

*Hypothesis 2:* Health-promoting leadership and transformational leadership are negatively related to employees’ stress.

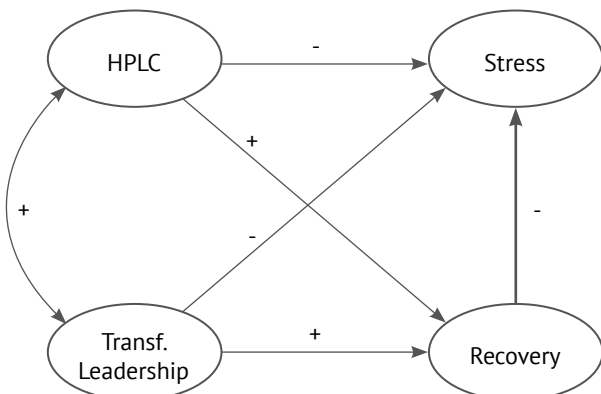
*Hypothesis 3:* Recovery moderates the relationship between health-promoting leadership/transformational leadership and stress.

We further hypothesize that the concepts of health-promoting leadership and transformational leadership are related, but can be seen as clearly different constructs and can be distinguished:

*Hypothesis 4:* The seven dimensions of health-promoting leadership and the scales of transformational leadership show low positive correlations, indicating discriminant validity.

All hypothesized relations between all variables are depicted in figure 2.

**Figure 2.** Hypothesized model of HPLC, transformational leadership, and recovery–stress balance



## 3 Methodology

### 3.1 Sample and procedure

Slovene workers were invited to participate in an online study<sup>1</sup> in cooperation with a well-known German market research company. Ultimately, 212 responses were collected. A comparison with the Slovenian working population is depicted in Table 1.

**Table 1.** Comparison of Sample Characteristics (Study Sample and Slovenian Working Population)

	Study sample	Slovenian population*
<b>Gender</b>		
male	47.2%	54.8%
female	52.8%	45.2%
<b>Age</b>		
up to 30 years	20.8%	13.3%
31–40 years	41.0%	30.7%
41–50 years	25.0%	31.2%
51 years and older	13.2%	24.9%

Note: \*Persons in employment by register

Source: Republic of Slovenia Statistical Office (2015)

The participants worked in different industrial sectors; the majority worked in manufacturing (20.8%), public sector (16.5%), education (8.0%), commerce (8.0%), and telecommunications (7.5%). The sample consisted of 52.8% women and 47.2% men. The majority of the participants (41.0%) were between 31 and 40 years old; 25.0% were between 41 and 50 years old, and 20.8% were 30 years or younger. In addition, 59.0% had a graduate degree. Finally, 42.5% had worked longer than 10 years and 26.4% worked 5 to 10 years in their current company.

### 3.2 Measurement instruments

To measure the extent of health-promoting leadership, the health-promoting leadership conditions questionnaire (HPLC; Jiménez et al., 2013), including seven dimensions (i.e., health awareness, low workload, control, reward,

<sup>1</sup> Data were collected within the culture4leadership project funded by the Styria federal state within the “grenz-frei” framework.



community, fairness, and value fit) was used. The HPLC can be used as a self-assessment or objective assessment tool. In this study, only the objective assessment tool was used, where employees assess their direct supervisors. Participants answered 21 items on a 7-point Likert scale ranging from 0 = “never” to 6 = “always.”<sup>2</sup> All items are shown in Table 2.

The Multifactor Leadership Questionnaire (MLQ) measures a broad range of leadership types, from passive leaders to transformational leaders. In the present study, an adapted version of Felfe and Gohil’s (2014) questionnaire was used. Three scales that measure transformational leadership were included in the analysis: idealized attributes, inspirational motivation, and individualized consideration. The answer scale ranged from 1 = “not at all” to 5 = “frequently, if not always.”

The Recovery–Stress Questionnaire for Work (RESTQ-Work/55; Jiménez & Kallus, 2005) addresses different aspects of stress and recovery during the past seven days/nights. The 55 items can be categorized in seven sub-dimensions: social emotional stress, performance-related stress, general recovery, loss of meaning/burnout, leisure/breaks, psychosocial recovery, and work-related recovery. These seven sub-dimensions can be categorized into the stress and recovery dimensions. The scale that was used was a 7-point Likert scale ranging from 0 = “never” to 6 = “always.”<sup>3</sup>

### 3.3 Translation procedure

All questionnaires were translated into the Slovene language using three translators. First, two independent translators created their translations of the questionnaires used in this study. After receiving two different translations, discrepancies in the two translated versions were discussed by the two translators and an additional third translator. To guarantee a high-quality translation, one of the three translators was a psychologist. The translated questionnaires were used in this study for the first time.

### 3.4 Statistical analyses

To test our hypotheses, we used several different methods, including confirmatory factor analysis (CFA) and other

statistical analyses based on the assumption of interval data. The usage of 5- or 7-point Likert scales as interval scales is “the most common form of measurement used in psychological research” according to Langdrige (2009, p. 46) and is considered an acceptable procedure. The statistical requirements for all analyses were tested and fulfilled.

## 4 Results

### 4.1 Item analysis, reliability, and validity of the measures

All items of the HPLC as well as means and standard deviations are shown in Table 2. To obtain the reliability estimates for all study variables, the internal consistency assessed by Cronbach’s alpha was used (see Table 3; internal consistencies of all study variables are printed in the diagonal). The internal consistencies range between .81 and .93.

The correlation table (Table 3) shows that all dimensions measuring health-promoting leadership are positively related (.75 to .88) and show moderate positive correlations with the MLQ scales (.27 to .42). Correlations between the HPLC and the stress-related dimensions of the RESTQ-Work are low, but significant (-.11 to -.23). Higher correlation coefficients (.23 to .48) can be found when correlating the HPLC with the recovery-related dimensions of the RESTQ-Work.

For the MLQ, intercorrelations between the three scales are high, ranging from .80 to .85. The relationships between the MLQ and the stress-related dimensions of the RESTQ-Work are low, although significant (-.14 to -.27); correlations with the recovery-related dimensions of the RESTQ-Work are higher (.23 to .56). The correlation matrix as well as the means and standard deviations for each dimension can be found in Table 3.

The convergent validity, discriminant validity, and reliability were then assessed for all constructs with an exploratory factor analysis (Table 4). All factor loadings are higher than .6, and the average variance extracted (AVE) exceeded the suggested limit of .5, confirming convergent validity (Fornell & Larcker, 1981). Discriminant validity was tested with Fornell and Larcker’s (1981) recommended test, where all square roots of the AVE for a given latent construct are greater than the standardized correlation of the pairs of latent constructs (Table 5). Composite reliability was used to assess the internal consistency of the constructs. All composite reliability coefficients were higher than .8, indicating good reliability.

---

<sup>2</sup> In the HPLC, the Likert scale starts with zero to achieve a better match between verbal and numerical codes—more specifically, a better match between zero and the “never” event.

<sup>3</sup> In RESTQ-Work, the Likert scale starts with zero to achieve a better match between the verbal and numerical codes—more specifically, a better match between zero and the “never” event.

**Table 2.** Dimension, Means (M), Standard Deviations (SD), and Items of the HPLC

Dimension	N°	M	SD	Items My leader takes care that...
Health awareness	HA_1	3.28	1.77	... the health of all employees is promoted.
	HA_2	3.16	1.87	... all employees are motivated to take care of their health.
	HA_3	3.33	1.79	... the health of the employees is highly valued.
Low workload	WL_1	3.48	1.69	... there is enough time left for the work to be done.
	WL_2	3.15	1.76	... work under high pressure is not carried out over a longer period of time.
	WL_3	3.22	1.66	... work does not significantly affect private life.
Control	CT_1	3.00	1.64	... the resources and scope for personal development at work can be influenced.
	CT_2	3.95	1.60	... at work autonomous and independent action can be taken.
	CT_3	3.47	1.61	... all have the necessary scope to do their work.
Reward	RE_1	3.64	1.89	... work is appreciated.
	RE_2	3.79	1.67	... efforts do not go unnoticed.
	RE_3	3.51	1.79	... all contributions are being acknowledged.
Community	CM_1	3.79	1.67	... work colleagues support each other.
	CM_2	3.18	1.62	... there is a good cooperation between all work colleagues.
	CM_3	3.73	1.70	... work colleagues talk openly to each other.
Fairness	FA_1	3.01	1.89	... all resources are fairly distributed.
	FA_2	3.53	1.92	... all employees are treated in a fair manner.
	FA_3	3.50	1.99	...one's career depends on competencies and not on the connections someone has.
Value fit	VA_1	3.21	1.65	... the employees share the company's values.
	VA_2	3.81	1.62	... the employees' daily activities correspond with the company's objectives.
	VA_3	3.31	1.69	... personal career interests are in line with the objectives of the company.

Note: Answer scale: 0 = "never" to 6 = "always"

**Table 3.** Means, Standard Deviations, Internal Consistencies, and Correlations among the Dimensions of the HPLC, MLQ, and RESTQ-Work; Internal Consistencies (Cronbach's Alpha) in the Diagonal

No.	Dimension	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	HPLC: health awareness	3.26	1.68	.92																	
2	HPLC: low workload	3.28	1.51	.78*	.87																
3	HPLC: control	3.48	1.37	.75*	.82*	.81															
4	HPLC: reward	3.65	1.57	.79*	.75*	.82*	.86														
5	HPLC: community	3.57	1.46	.77*	.84*	.88*	.83*	.85													
6	HPLC: fairness	3.35	1.74	.78*	.82*	.79*	.87*	.88*	.88												
7	HPLC: value fit	3.44	1.44	.87*	.78*	.83*	.81*	.84*	.81*	.85											
8	MLQ: idealized attributes	2.96	1.15	.27*	.29*	.35*	.33*	.36*	.38*	.34*	.93										
9	MLQ: inspirational motivation	3.36	0.97	.33*	.34*	.42*	.38*	.39*	.40*	.40*	.81*	.82									
10	MLQ: individual consideration	2.97	1.06	.36*	.37*	.41*	.38*	.41*	.42*	.40*	.85*	.80*	.84								
11	RESTQ-W: social emotional stress	2.05	1.26	-.22*	-.17*	-.17*	-.17*	-.18*	-.15*	.15*	-.14*	-.14*	-.16*	.91							
12	RESTQ-W: performance-related stress	2.17	1.12	-.19*	-.23*	-.19*	-.15*	-.17*	-.18*	-.14*	-.15*	-.15*	-.19*	.81*	.87						
13	RESTQ-W: general recovery	3.40	0.99	.39*	.37*	.37*	.37*	.41*	.39*	.38*	.34*	.36*	.37*	-.48*	-.47*	.86					
14	RESTQ-W: loss of meaning/burnout	2.12	1.14	-.16*	-.19*	-.17*	-.11*	-.18*	-.13*	-.11*	-.22*	-.24*	-.27*	.75*	.76*	-.41*	.92				
15	RESTQ-W: leisure/breaks	2.90	1.07	.26*	.36*	.27*	.26*	.31*	.30*	.23*	.18*	.23*	.27*	-.47*	-.52*	.66*	-.44*	.83			
16	RESTQ-W: psychosocial recovery	3.17	1.32	.29*	.27*	.35*	.34*	.42*	.34*	.32*	.23*	.30*	.30*	-.26*	-.25*	.66*	-.17*	.57*	.86		
17	RESTQ-W: work-related recovery	3.19	1.23	.34*	.37*	.48*	.44*	.48*	.43*	.44*	.48*	.56*	.53*	-.28*	-.24*	.66*	-.22*	-.52*	.61*	.90	

Note: + significant correlation ( $p < 0.05$ ); \* significant correlation ( $p < 0.01$ )

**Table 4.** Second-order Constructs, Their Loadings, Composite Reliabilities (CR), and Average Variance Extracted (AVE)

Second-order item	Item	Loadings (lambdas)	CR	AVE
HPLC	HPLC: health awareness	.82	.97	.80
	HPLC: low workload	.89		
	HPLC: control	.93		
	HPLC: reward	.88		
	HPLC: community	.95		
	HPLC: fairness	.89		
	HPLC: value fit	.90		
Transf. Leadership	MLQ: idealized attributes	.92	.93	.83
	MLQ: inspirational motivation	.87		
	MLQ: individual consideration	.93		
Stress	RESTQ-W: social emotional stress	.91	.91	.78
	RESTQ-W: performance-related stress	.90		
	RESTQ-W: loss of meaning/burnout	.84		
Recovery	RESTQ-W: recovery	.88	.87	.62
	RESTQ-W: leisure/breaks	.76		
	RESTQ-W: psychosocial recovery	.74		
	RESTQ-W: work-related recovery	.76		

**Table 5.** Square Root of the AVE and Correlations among the Second-order Constructs

	Transf. Leadership	HPLC	Stress	Recovery
Transf. Leadership	<b>.91</b>			
HPLC	.45	<b>.89</b>		
Stress	-.22	-.20	<b>.88</b>	
Recovery	.48	.49	-.53	<b>.79</b>

Note: Square root of the AVE in the diagonal and bolded.

#### 4.2 Structural equation modeling (SEM)

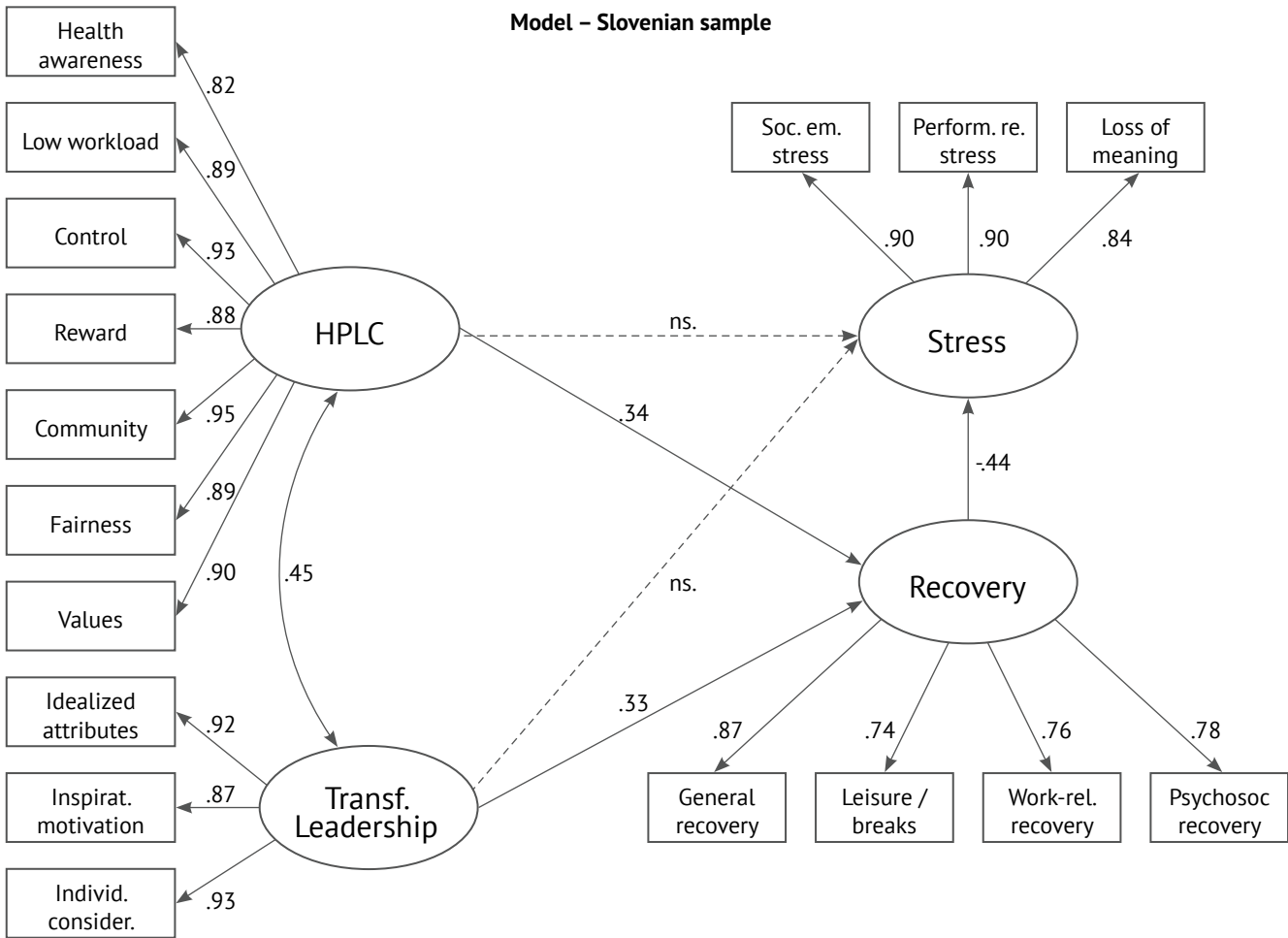
In the structural equation modeling (conducted with maximum likelihood method of estimation), health-promoting leadership (HPLC), transformational leadership (MLQ), and recovery and stress were included as latent factors, operationalized by their assigned dimensions as manifest variables. For this analysis, only data without any missing values were analyzed, resulting in a data set of 187 cases.

The model reached an acceptable fit, indicating that the hypothesized model fits with the empirical found data. The chi-square statistic was statistically significant ( $\chi^2(104) = 195.270$ ,  $p < .001$ ), and the fit indices show good values (AGFI = .84, GFI = .89, CFI = .97, RMSEA = .07). The AGFI and GFI do not exceed the recommended value of .85 and .90, respectively, but are relatively close to these

recommendations, which can be regarded as acceptable (e.g., Hu & Bentler, 1999; Schermelleh-Engel & Moosbrugger, 2003).

Most of the predicted paths are in the expected direction (Figure 3). Health-promoting leadership (HPLC) and transformational leadership are correlating positively (.45). HPLC is negatively related to the experience of recovery ( $\beta = .34$ ,  $p < .001$ ) and recovery in turn has a negative effect on stress ( $\beta = -.44$ ,  $p > .001$ ), which makes recovery the mediator in the HPLC-stress relationship. Mediating impacts presented in Table 6 were tested as proposed by Baron and Kenny (1986). The significance of indirect effects was assessed with bootstrapping (Preacher & Hayes, 2008). As observed from Figure 3, HPLC has a significant indirect negative impact on stress through recovery ( $\beta = -.15$ ,  $p < .01$ ). Transformational leadership is not directly related to stress, showing only a significant path to recovery ( $\beta = .33$ ,  $p < .001$ ).

**Figure 3.** Regression coefficients for the HPLC model



Note:  $N = 187$ ; non-significant regression coefficients removed, other regression coefficients significant with  $p < 0.001$ ;  $\chi^2 = 195.270$ ,  $df = 104$ ,  $p < 0.001$ , AGFI = .84, GFI = .89, CFI = .97, RMSEA = .07

**Table 6.** Direct, Indirect, and Total Impact for the HLPC Model

	Direct impact	Sig.	Indirect impact	Sig.	Total impact	Sig.
HPLC --> Recovery	.34	$p < .01$	n/A	n/A	.34	$p < .01$
HPLC --> Stress	.00	ns.	-.15	$p < .01$	-.15	ns.
Transf. Leadership --> Stress	-.05	ns.	-.15	$p < .01$	-.19	$p < .05$
Transf. Leadership --> Recovery	.34	$p < .05$	n/A	n/A	.34	$p < .05$
Recovery --> Stress	-.44	$p < .05$	n/A	n/A	-.44	$p < .05$

## 5 Discussion

The aim of the present study was to take a closer look at the relationship between two leadership styles—health-promoting leadership and transformational leadership—and the employees’ recovery–stress balance. The results indicate that both health-promoting leadership and transformational leadership have a positive effect on recovery at the workplace (H1). This is in line with the findings of Nielsen et al.

(2008) and Piccolo and Colquitt (2006), where leaders are able to change work characteristics in a positive way. The second hypothesis, suggesting that both leadership styles are directly related to the employees’ experience of stress, was not supported by our results. The third hypothesis, where recovery should moderate the relationship between both leadership styles and stress, could only be partially confirmed, as we did not find a moderator but a mediator instead, which is in line with the recovery–stress balance

model (Jiménez & Kallus, 2005). This indicates that both leadership styles mainly aim to enhance recovery strategies instead of reducing stress.

The second aim of the study was to compare the concepts of health-promoting leadership and transformational leadership and to identify similarities and differences. Hypothesis H4 was confirmed, as the tests of discriminant validity indicated that we are dealing with four different constructs. Looking at the underlying dimensions, correlations between both constructs are low to moderate. The lowest correlations were found between the seven health-promoting leadership dimensions and idealized attributes (MLQ). This suggests that the aim of transformational leadership, where leaders should act as a charismatic role model focusing on higher-order ideals and values do not overlap with the aim of health-promoting leadership, where reducing mismatches between the individual and the organization is a key element. Higher correlations can be found with the scale individual consideration (attending to the employees' needs by listening to their problems or helping to develop their strengths). This kind of leadership behavior can also be found in the concept of health-promoting leadership, more specifically in the dimensions control, community, and fairness.

It is the organization's responsibility to keep employees healthy and maintain them in the organization. Therefore, it is important for organizations to recognize the important role of leaders in creating a healthy workplace by giving them the possibilities to lead in a health-promoting way. Especially with the seven dimensions of health-promoting leadership, it is possible to positively change the working conditions and reduce employee stress and other negative outcomes, such as burnout.

The role of leaders in creating a healthy workplace is also very important in Slovenia. In 2011, the amendments to the Act on Occupational Safety and Health added the area of health promotion and management of psychosocial risks at the workplace. Article 32 of the Law on Safety and Health at Work (ZVZD-1, 2011) stipulated that employers have to plan and implement workplace health promotion. If leaders want to be successful in the preparation and implementation of health promotion at work, they should use health-promoting leadership. Seminars to train health-promoting leadership have already been tested in pilot applications (Jiménez, Dunkl, & Eibel, 2013). The implementation of health-promoting leadership contributes to employees' commitment to activities in work–health promotion as well as to the effectiveness of the program.

## References

1. Aitken, P. (2007). 'Walking the talk': the nature and role of leadership culture within organisation culture/s. *Journal of General Management*, 32(4), 17–37.
2. Antonovsky, A. (1997). *Salutogenese. Zur Entmystifizierung der Gesundheit*. Tübingen: dgvt-Verlag.
3. Bakker, A. B., Demerouti, E., & Euwema, M. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2), 170–180. <http://dx.doi.org/10.1037/1076-8998.10.2.170>
4. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
5. Bass, B. M. (1991). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19–31. [http://dx.doi.org/10.1016/0090-2616\(90\)90061-5](http://dx.doi.org/10.1016/0090-2616(90)90061-5)
6. Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, 10(2), 181–217. [http://dx.doi.org/10.1016/S1048-9843\(99\)00016-8](http://dx.doi.org/10.1016/S1048-9843(99)00016-8)
7. Brun, J., & Dugas, N. (2008). An analysis of employee recognition: Perspectives on human resources practices. *The International Journal of Human Resource Management*, 19(4), 716–730. <http://dx.doi.org/10.1080/09585190801953723>
8. Cotton, P., & Hart, P. M. (2003). Occupational wellbeing and performance: A review of organisational health research. *Australian Psychologist*, 38(2), 118–127. <http://dx.doi.org/10.1080/00050060310001707117>
9. Densten, I. L. (2005). The relationship between visioning behaviours of leaders and follower burnout. *British Journal of Management*, 16(2), 105–118. <http://dx.doi.org/10.1111/j.1467-8551.2005.00428.x>
10. Franke, F., Felfe, J., & Pundt, A. (2014). The impact of health-oriented leadership on follower health: Development and test of a new instrument measuring health-promoting leadership. *Zeitschrift für Personalforschung*, 28(1–2), 139–161.
11. Felfe, J., & Gohl, K. (2014). Deutscher Multifactor Leadership Questionnaire (MLQ). In D. Danner & A. Glöckner-Rist (Eds.), *Zusammenstellung sozialwissenschaftlicher Items und Skalen*. <http://dx.doi.org/10.6102/zis22>
12. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18, 39–50. <http://dx.doi.org/10.2307/3151312>
13. Gill, A. S., Flaschner, A. B., & Shachar, M. (2006). Mitigating stress and burnout by implementing transformational leadership. *International Journal of Contemporary Hospitality Management*, 18(6), 469–481. <http://dx.doi.org/10.1108/09596110610681511>
14. Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace. A critical review linking healthy workplace practices, employee well-being, and organizational improvements. *Consulting Psychology Journal: Practice and Research*, 58(3), 129–147. <http://dx.doi.org/10.1037/1065-9293.58.3.129>

15. Gurt, J., Schwennen, C., & Elke, G. (2011). Health-specific leadership: Is there an association between leader consideration for the health of employees and their strain and well-being? *Work & Stress*, 25(2), 108–127. <http://dx.doi.org/10.1080/02678373.2011.595947>
16. Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, 91(5), 1134–1145. <http://dx.doi.org/10.1037/0021-9010.91.5.1134>
17. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <http://dx.doi.org/10.1080/10705519909540118>
18. Jiménez, P., Dunkl, A., & Eibel, K. (2013). Razvoj in vrednotenje protistresnih programov za ohranjanje oz. izboljšanje dobrega počutja zaposlenih. In S. Šarotar-Žižek, S. Treven, P. Jiménez, & A. Potočnik (Eds.), *Premagovanje stresa kot sredstvo za zagotavljanje dobrega počutja* (pp. 109–116). Maribor: Univerzitetna knjižnica Maribor.
19. Jiménez, P., & Kallus, W. (2005). Stress and recovery of social care professionals: Development of a screening version of the recovery-stress-questionnaire for work. In C. Korunka & P. Hoffmann (Eds.), *Change and quality in human service work* (pp. 311–323). Munich: Hampf.
20. Jiménez, P., Winkler, B., & Dunkl, A. (2013, May). *Health relevant leadership dimensions. Development of a questionnaire to measure healthy leadership*. Poster presented at the 16<sup>th</sup> Congress of the European Association of Work and Organizational Psychology, Münster.
21. Kallus, K. W. (in press). Introduction. In K. W. Kallus & M. Kellmann (Eds.), *The recovery-stress questionnaires: User manual*. Frankfurt: Pearson Assessment.
22. Kanste, O., Kyngäs, H., & Nikkilä, J. (2007). The relationship between multidimensional leadership and burnout among nursing staff. *Journal of Nursing Management*, 15(7), 731–739. <http://dx.doi.org/10.1111/j.1365-2934.2006.00741.x>
23. Kelloway, K. E., & Day, A. (2005). Building healthy workplaces: Where we need to be. *Canadian Journal of Behavioural Science*, 37(4), 309–312. <http://dx.doi.org/10.1037/h0087265>
24. Kivimäki, M., Vahtera, J., Elovainio, M., Virtanen, M., & Siegrist, J. (2007). Effort-reward imbalance, procedural injustice and relational injustice as psychosocial predictors of health: complementary or redundant models? *Occupational and Environmental Medicine*, 64(10), 659–665. <http://dx.doi.org/10.1136/oem.2006.031310>
25. Langdrige, D. (2009). *Introduction to research methods and data analysis in psychology*. London: Pearson Prentice Hall.
26. Leiter, M. P., & Maslach, C. (1999). Areas of worklife: A model of the organizational context of burnout. *Journal of Health and Human Services Administration*, 21(4), 472–489.
27. Leiter, M. P., Frank, E., & Matheson, T. J. (2009). Demands, values, and burnout. Relevance for physicians. *Canadian Family Physician*, 55(12), 1224–1225.
28. Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498–512. <http://dx.doi.org/10.1037/0021-9010.93.3.498>
29. Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94. <http://dx.doi.org/10.1037/a0021484>
30. Nielsen, K., Randall, R., Yarker, J., & Brenner, S. (2008). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress*, 22(1), 16–32. <http://dx.doi.org/10.1080/02678370801979430>
31. Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *The Academy of Management Journal*, 49(2), 327–340. <http://dx.doi.org/10.5465/AMJ.2006.20786079>
32. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <http://dx.doi.org/10.3758/BRM.40.3.879>
33. Republic of Slovenia Statistical Office. (2015). *Podatkovni portal SI-STAT, Aktivno prebivalstvo - letni podatki*. Retrieved from [http://pxweb.stat.si/pxweb/Database/Dem\\_soc/07\\_trg\\_dela/05\\_akt\\_preb\\_po\\_regis\\_virih/01\\_07753\\_aktivno\\_preb\\_letno\\_povp/01\\_07753\\_aktivno\\_preb\\_letno\\_povp.asp](http://pxweb.stat.si/pxweb/Database/Dem_soc/07_trg_dela/05_akt_preb_po_regis_virih/01_07753_aktivno_preb_letno_povp/01_07753_aktivno_preb_letno_povp.asp)
34. Robbins, J. M., Ford, M. T., & Tetrick, L. E. (2012). Perceived unfairness and employee health: A meta-analytic integration. *Journal of Applied Psychology*, 97(2), 235–272. <http://dx.doi.org/10.1037/a0025408>
35. Schermelleh-Engel, K., & Moosbrugger, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23–74.
36. Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64(1), 361–388. <http://dx.doi.org/10.1146/annurev-psych-113011-143809>
37. Schreurs, B., van Emmerik, H., Notelaers, G., & De Witte, H. (2010). Job insecurity and employee health: The buffering potential of job control and job self-efficacy. *Work & Stress*, 24(1), 56–72. <http://dx.doi.org/10.1080/02678371003718733>
38. Shain, M., & Kramer, D. M. (2004). Health promotion in the workplace: framing the concept; reviewing the evidence. *Occupational and Environmental Medicine*, 61(7), 643–648. <http://dx.doi.org/10.1136/oem.2004.013193>
39. Thompson, C. A., & Prottas, D. J. (2005). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology*, 10(4), 100–118.
40. Zakon o varnosti in zdravju pri delu/The Law on Safety and Health at Work (ZVZD-1). (2011). *Uradni list*. Retrieved from <http://www.uradni-list.si/1/content?id=103969>

## Authors

**Mag. Anita Dunkl** is a research associate at the University of Graz in the Work, Organizational, and Environmental Psychology Department. Anita graduated with a master's degree in work and organizational psychology, focused on job satisfaction. She continued her research at the University of Graz, working in different fields of work and organizational psychology. Her main field of research includes health-promoting leadership, workplace health promotion, burnout and work-related strain, and stress and recovery.

**Dr. Paul Jiménez** works at the University of Graz in the Work, Organizational, and Environmental Psychology Department and is a consultant in the workplace health promotion field. Currently, his main field of research is work-related stress and recovery, as well as job satisfaction, burnout, and leadership. He is a delegate of the Austrian Federation of Psychologists for Austria and the leader of the Work, Industrial, and Organizational Psychology Division of the Austrian Federation of Psychologists.

**Dr. Simona Šarotar Žižek** is an assistant professor at the University of Maribor's Faculty of Economic and Business. She is the author and/or co-author of several articles published in various international and Slovenian journals and/or presented at scientific and expert conferences. She has prepared several scientific monographs and chapters in scientific and expert monographs. On several occasions she has been invited to present her papers at scientific and expert conferences. She is also active in preparing and implementing projects.

**Dr. Borut Milfelner** is an assistant professor of marketing and tourism at the University of Maribor, Slovenia, Faculty of Economics and Business. He received his Ph.D. degree at the University of Ljubljana, Faculty of Economics in 2010. His research interests include the areas of marketing research, internal marketing, consumer behavior, tourism marketing, and resource-based theory. His scientific bibliography consists of 25 published scientific articles (10 of them in JCR-indexed journals), 28 scientific conference contributions, 3 scientific monographs, and participation in several research projects. He is also a member of the editorial board of three scientific journals in the field of marketing and management and a reviewer for several domestic and international scientific journals.

**Prof. DDr. K. Wolfgang Kallus** started his career researching stress and biological psychology before he switched to work psychology, focusing on critical psychological states, recovery, and performance. In 1998 he was appointed as a professor in the Work, Organizational, and Environmental Psychology Department at the University of Graz. The research includes developing methods that are important for the analysis, evaluation, and design of work and organizational processes. One of his main areas of research is the measurement of psychological states with physiological methods (ECG, EEG, EDA, EOG, etc.).

## Podobnosti in razlike med vodenjem s poudarkom na upravljanju zdravja zaposlenih in transformacijskim vodenjem

### Izveček

Koncept vodenja s poudarkom na upravljanju zdravja se osredotoča na interakcijo med organizacijo in posameznikom ter na določanje dejavnikov, ki lahko pozitivno vplivajo na delovne pogoje zaposlenih. V študiji so bili raziskani vplivi vodenja s poudarkom na upravljanju zdravja in vplivi transformacijskega vodenja na okrevanje, stres in – ravnovesje zaposlenih. V spletni anketi je sodelovalo 212 slovenskih zaposlenih. Odgovarjali so na vprašanja o svojem zaznavanju neposredno nadrejenih, o stresu, ki je povezan z njihovim delom, in o okrevanju. Rezultati so pokazali, da imata oba stila vodenja značilen vpliv na okrevanje zaposlenih po stresu na delovnem mestu. Okrevanje na delovnem mestu je mediator pri vplivu vodstva na stres, povezan z delom.

**Ključne besede:** delovni pogoji, vodenje s poudarkom na upravljanju zdravja, transformacijsko vodenje, stres, okrevanje, delovno okolje

# Controllership Influences on the Restructuring of Slovenian Companies

**Danijel Lebar**

Gregorčičeva ulica 1, 9231 Beltinci, Slovenia  
danijel.lebar@gmail.com

**Iztok Kolar**

University of Maribor, Faculty of Economics and Business, Slovenia  
iztok.kolar@um.si

## Abstract

Controllership, as an informational activity, is becoming a multidimensional function, about which numerous doubts exist as to whether to increase its independency and integrate it tightly with the decision-making process. Financial knowledge and business-analytical capabilities of carriers of controllership activity can offer support for operational, financial, and strategic restructuring. This is important when facing frequent business dynamics in order to enhance competitiveness and especially achieve short-term as well as strategic goals.

**Keywords:** controllership, controller, restructuring, financial knowledge, business-analytical capabilities.

## 1 Defining the Problem

In the process of searching for the right solutions for restructuring Slovenian companies, there is a priority objective to improve their ability to react to problems appropriately based on the existing challenges, such as optimizing unprofitable production and sales programs, reversing negative financial and business trends, and finding solutions for overly fragmented and diversified investment programs. Senior management is trying to achieve turnaround in business performance and efficiency through restructuring in order to enhance stability in the process of business development, representing fundamentals for ongoing existence and the development of individual companies (Altman & Hotchkiss, 2006).

In this context modern designed controllership also plays a role as it is becoming an activity with multidimensional jurisdictions and obligations. The majority of its traditional tasks have become automatized, leaving room to integrate its working field with business analytics, strategic planning, and internal consultancy. All this can contribute to incorporating it more into a company's strategic management (Smith & Graves, 2005).

Zoni and Merchant (2007) noted that companies hesitate when deciding whether to integrate controllership tightly with the process of operational and strategic management decision making. On the other hand, Mass (2007) emphasized that the inclusion of active controllership in the process of management's decision making by itself does not bring about the desired results and synergies.



Among the critical factors for successful restructuring and a company's turnaround, some authors (e.g., Zoni & Merchant, 2007) have also included financial knowledge and business analytical competencies of employees who work on the field of controllership. We try to find an answer about how the identified individual factors of controllership influence the overall success of the restructuring process in Slovenian companies and to compare findings with foreign research.

## 2 Hypotheses

Based on our initial questions and the research of Zoni and Marchant (2007) and Mass (2007), we formed the following hypotheses:

- H<sub>1</sub>: The success of a company's restructuring process is connected with the level of financial knowledge held by the controller.
- H<sub>2</sub>: The better the business analytical competencies of the controller are, the greater the possibility for success of a company's restructuring process.

## 3 Theoretical Review of Literature

Lindhart and Sundqvist (2004) asserted that controllership has recently gone through dynamic changes in reporting, personal responsibility, and its influence on a company's long-term financial position. According to Melavc and Novak (2007), the controller's activity is focused on objectives and provides professional support to management in enhancing business profitability and economics. They explained that controllership is divided according to roles and strategic assignments. Its fundamental role is to provide professional support to increase business efficiency and profitability as well as maintain the company's long-term liquidity and capital adequacy. It further helps with formulating proposals of business measures that can help in management decision making (Perovič, Neradžič, & Todorović, 2012). Zoni and Merchant (2007) and Mass (2007) defined controllership as an integral part of financial-informational activity in evaluating business programs through performance and profitability. Dimov and Iliev (2010) saw its role from the view of internal consultancy, which can help management develop the company's mission, fundamental objectives, and strategies. Furthermore, controllership plays a role in identifying discrepancies between realized costs and budgeted costs and can help build fast responses in the managerial decision-making process by assembling coherent

reports, which represent the most essential input. Nevertheless, Thammatucharee (2011) explained that the purpose of controllership is establishing and ensuring well-performing internal controls. Such assignments are also related with monitoring the internal reporting system, where a sequence of duties, authorities, and responsibilities of employees are crucial for driving optimal information cycles through different organizational and managerial levels. In research, we define this as an informational activity for which process information promotes effective and efficient management decision making.

Restructuring (Keidel, 1994) connects with comprehensive directed changes, which are carried out with greater intensity in a short time and are also riskier for overall turnaround processes. According to Bowman and Singh (1993), reorganizing or downsizing units and layoffs of employees typically refers to activity within the economic framework whose purpose is to provide the organization's survival as a whole. Restructuring usually cannot be performed only in a particular field or function inside the company, but in coordinated changes of multiple structures that can help manage crises at a more comprehensive and efficient level. Yet Schmitt (2009) emphasized that there is a greater risk for a company to go bankrupt, and then more activities must follow in order to improve its financial position. Pearce and Robbins (2008) approached restructuring from its strategic role that must be based on decisions for which organizational and business parts are essential for a company's ongoing business, development breakthroughs, and future existence. Such an approach required defining the "healthy core" of the business in order to empower its resources and capabilities accordingly with the challenges of the economic crisis. In our case, we connected it with radical changes on the strategic level that can lead to long-term business stability, especially in Slovenian companies. Dubrovski (2011) associated the restructuring process with implementing changes in the field of program, innovation, production and reporting processes, where those dimensions represent the main core of restructuring operations; from this point, measures must be taken comprehensively on all the aforementioned fields.

## 4 Research: Sample and sampling methods

The sampling procedure in our research was executed based on the following criteria, which are logically connected with Zoni and Merchant's (2007) and Mass's (2007) research:

- The companies included are Slovenian companies with headquarters in Slovenia and Slovenian or foreign ownership that are doing business in Slovenia and are led by Slovenian management.

- The companies have a developed system of governance and well-defined management hierarchy.
- Within the companies, controllership is established either as an independent department or under the governance of other departments.

Selection criteria for identifying companies in the sampling process were applied regardless of whether regional headquarters were established within Slovenia or the stock market quotes of the company's shares. However, entrepreneurs, small firms with less developed governance and defined organizational structures, and those companies outsourcing the controllership activity were excluded. From this point of view, we might not be able to generalize the results to the whole population of Slovenian companies based on the sampling criteria restrictions. Data on the samples were obtained from the websites of the Agency of the Republic of Slovenia for Public Legal Records and Related Services, the Slovenian phone book, and the companies themselves. Information were also gathered through a structural questionnaire, whose validation was done with the help of a correlation matrix for structured factors, which demonstrated the strength of their interdependencies and influential significance. The sample included 40 companies; each received two questionnaires. Thus, approximately 80 questionnaires were sent by e-mail: 40 to employees overseeing controllership and recipients of its reports (chief executive officer, members of the board of directors, and senior management) and 40 to employees actively executing the tasks of controllership, known as controllers. The questionnaire response rate was 22 (27.5%), which means those questionnaires were correctly fulfilled and properly returned; these included 14 (35%) controllers and 8 (20%) management staff. It is a small sample, so this research is considered a pilot project. All data were analyzed using the SPSS program.

The sample comprised 59% men and 41% women. The majority of them (68%) were between the ages of 34 and 51. In addition, 64% of them had obtained college or university degrees. Furthermore, 45% of companies deal with food processing or the production of materials, 18% with sales and marketing activities, and 14% with financial business. In terms of regional location, 23% of companies in the sample are from the Central Slovenian region and 14% are from the Zasavje region. The most common defined working title was member of board of senior management (23%), followed by chief financial officer and controllers (14%).

Zoni and Merchant (2007), in their research, presented the main purpose for including controllership more often in management's decision-making process. They also tried to identify how individual factors influence controllership's

integration with the decision-making process and whether connections are statistically significant in terms of business success. Their research was conducted on a population of Italian companies using an already-made structural questionnaire. The sampling selection was based on criteria to include companies:

- whose annual income did not exceed 150 million €;
- connected with industry, where those with service activities were excluded; and
- that have headquarters in Italy, are in Italian ownership, and are led by Italian management.

As a result of the selection criteria, 22 of the 30 companies in the sample (73%) confirmed participation in research. Two questionnaires were sent to each participating company, resulting in 44 questionnaires being sent: 22 to employees in controllership activities and 22 in senior management. Of these, 17 questionnaires (77%) were correctly completed and returned from controllers and 14 (64%) from senior management.

Mass (2007) addressed a similar problem from a different perspective. He referred to the connection between controllers' involvement in management processes with the performance measurement system of the individual company. In this study, 314 interviewees were included in selection and 123 (39.17%) fully participated: 80.3% men and 19.7% women. The average age of interviewees was 37. The average length of work experience was 5.6 years in the present position and 7.4 years in control overall. Among the included companies, 29.3% were in manufacturing and 25.2% in financial business. Questionnaires were sent by e-mail. Their content was divided into five themes that measured the influence of factors on a 7-point Likert scale. Sampling criteria focused on a population of controllers who have officially recognized certificates and professional titles. Among the 121 participants in the survey who defined their education, 51.5% were certified public accountants and 48% had obtained a certified controller certificate. Non-profit companies were excluded from the selection.

## 5 Findings and Discussion

In modern society, formal education plays a great role as it defines the controllership's financial knowledge. Nevertheless, it often seems that complex practical economic issues are quite different from theoretical backgrounds (Smith, 2005).

$H_1$ : The success of a company's restructuring process is connected with the level of financial knowledge held by controllership carriers.

Controllershship carriers' (controllers) financial knowledge is an independent variable defined by the following factors:

- level of financial education
- experience with a company's financial turnaround
- use of financial tools
- involvement in a system of financial risk management
- understanding of the role of solvency and financial liquidity
- evaluation of the financial performance of investments
- management of the cash flow of sectors or organizational units
- maintenance of budget constraints
- markets' macroeconomics and profitability

We tested the first hypothesis using factor analysis because we wanted to discover interdependencies among the factors, defining controllers' financial knowledge. We assumed that level of financial knowledge have a major impact on the overall restructuring performance, what is similar to the research done by Zoni and Merchant (2007).

**Table 1.** Kaiser-Meyer-Olkin Measure and Bartlett's Test of Sphericity of First Hypothesis

<b>Kaiser-Meyer-Olkin Sampling Adequacy</b>	.594
	adjusted chi-square 65.317
<b>Bartlett's test of Sphericity</b>	degrees of freedom 45
	significance .025

Source: Authors' research

The Kaiser-Meyer-Olkin index gives analytical information about connections between variables and whether using a

factor analysis is reasonable from a methodical point of view. When its value is above 0.5, then usefulness of the factor analysis is reasonable, and we can reject the null hypothesis. This is similar to Bartlett's test, where we can reject the null hypothesis with a risk under the 0.05 threshold, saying that the correlation matrix is not the same as the matrix of a particular unit. In this case, risk is smaller than 0.05 (0.025), meaning that we confirmed the research hypothesis that controllers' financial knowledge influences the company's restructuring performance.

In our case, four factors have an eigenvalue above 1. These factors explain the majority (74.787%) of controllers' financial knowledge influence on restructuring. As previously mentioned, the purpose of the factor analysis is to reduce the previous number of variables on a specific number of factors. As shown in Table 2, the first factor represents financial education and has the highest eigenvalue of 3.340, thus explaining 33.403% of the total variance. This means that this factor contributes the most when it comes to explaining the connection with the overall performance of the company's turnaround. The second factor represents experience with a company's financial turnaround, which explains 15.840% of the variance not explained by the first factor. Controllers' financial knowledge cumulative explained 49.243% of those two factors of influence on the success of the implemented structural programs.

Varimax method interdependencies between factors were eliminated in order to present the influence of a particular factor by using so-called factor weights. A higher value indicates more influence associated with an individual variable when it comes to explaining the total variance between the controller's financial knowledge and company's restructuring performance. After the rotation, the four most important

**Table 2.** Eigenvalue Analysis of Controllershship's Financial Knowledge

Component	Eigenvalue			Extraction sums of squared loadings		
	absolute	% variance	cumulative %	absolute	% variance	cumulative %
1	3.340	33.403	33.403	3.340	33.403	33.403
2	1.584	15.840	49.243	1.584	15.840	49.243
3	1.358	13.584	62.827	1.358	13.584	62.827
4	1.196	11.961	74.787	1.196	11.961	74.787
5	.781	7.806	82.593			
6	.574	5.743	88.336			
7	.466	4.664	93.000			
8	.313	3.132	96.132			
9	.220	2.203	98.335			
10	.166	1.665	100.000			

Source: Authors' research

factors explained 74.787% of the total variance. In our case, the level of financial education (-0.780) and financial risk management (0.766) have relatively high factor weight values. After the rotation, the first factor, financial education, explained 22.338% of the total variance. The second factor, experience with crisis issues, has high weights in connection

with markets' macroeconomics and profitability (0.869) and the maintenance of budget constraints (0.766). After rotation, it explained 19.353% of the total variance. The third factor, use of financial tools, has high factor weight values at searching for alternative financial sources (0.855) and the use of financial tools (-0.763), explaining 19.254% of the total

**Table 3.** Factor Weights Extracted with Varimax Method

	Component			
	1	2	3	4
Financial education	-.780	.062	-.094	.434
Experience with crisis issues	.742	.302	-.167	.269
Use of financial tools	-.096	.148	-.763	-.170
Managing financial risk	.766	-.003	.376	.087
Solvency and financial liquidity	-.013	-.083	.008	.920
Financial performance of investments	.605	.506	.074	-.303
Managing cash flow of sectors or units	.320	.412	.614	-.317
Maintenance of budget constraints	.071	.766	.212	.091
Help searching for alternative financial sources	-.005	.211	.855	-.122
Markets' macroeconomics and profitability	.082	.869	-.083	-.160

Source: Authors' research

**Table 4.** Correlation Matrix of Controllers Financial Knowledge with Companies' Restructuring

	Financial education	Experience	Financial tools	Financial risk management	Solvency and financial liquidity	Financial performance of investments	Managing cash flow of units	Maintenance of budget constraints	Help searching for alternative financial sources	Markets' macroeconomics and profitability
Financial education	1.000	-.417	.178	-.444	.361	-.558	-.325	-.086	-.119	-.079
Experience	-.417	1.000	-.046	.414	.078	.356	.123	.231	-.038	.338
Financial tools	.178	-.046	1.000	-.188	-.078	.015	-.227	-.125	-.481	.130
Financial risk management	-.444	.414	-.188	1.000	.068	.439	.551	.126	.280	-.005
Solvency and financial liquidity	.361	.078	-.078	.068	1.000	-.216	-.269	-.054	-.098	-.206
Financial performance of investments	-.558	.356	.015	.439	-.216	1.000	.501	.375	.203	.488
Managing cash flow of units	-.325	.123	-.227	.551	-.269	.501	1.000	.366	.584	.361
Maintenance of budget constraints	-.086	.231	-.125	.126	-.054	.375	.366	1.000	.220	.437
Help searching for alternative financial sources	-.119	-.038	-.481	.280	-.098	.203	.584	.220	1.000	.166
Markets' macroeconomics and profitability	-.079	.338	.130	-.005	-.206	.488	.361	.437	.166	1.000

Source: Authors' research

variance after the rotation. The fourth factor, financial risk management, is relatively strongly connected with understanding the role of solvency and financial liquidity (0.920).

The correlation between professional financial education and experience with challenges of crisis showed a negative sign (-0.417) and is relatively strong. The explanation for this fact can be found in discrepancies between theoretical solutions and real economic issues that professionals in control functions face nowadays. Similarly, in the correlation between financial risk management and professional financial education, we see a negative sign (-0.444). In both of these cases, professional education represents fundamentals for gaining experience for dealing with challenges and solving issues of economic crises. It is also important for implementing control and surveillance over the company's risk management system. Experience from crisis management can lead to opportunities for improving the structure of surveillance over financial risk, which can be seen from the correlation (0.414). The controllership's role is compatible with its capability for evaluating the financial performance of investments. This concrete correlation has a positive sign 0.439; thus, it can lead to such an interpretation. A more profound correlation (0.551) exists in relation with financial risk and cash flow management.

Zoni and Merchant (2007) noted that a 0.560 correlation exists between controllership carriers' financial knowledge and the needs of Italian management decision-making process. In addition, the correlation between the controllership's integration and a company's performance was confirmed. Performance was evaluated through the operating margin (0.200) and net profit margin for the previous five-year period (0.580).

## 6 Empirical Analysis of Controllership's Business Analytical Capabilities and Its Influence on the Process of Restructuring

Controllership and its abilities are becoming the informational basis for building and managing the company's intellectual capital. Its values lie in discovering new, innovative business concepts that can provide a stable market position and sufficient operating flexibility in dealing with business challenges (Thammatucharee, 2011).

H<sub>2</sub>. The better business analytical competencies of controllership carriers are, the greater the possibility for success in the company's restructuring process.

For this hypothesis, our main assumption is the positive correlation among the included variables. The chances for successful restructuring represent the dependent variable,

although it can go in the opposite direction, where successful restructuring can influence the improvement of the controller's business analytical abilities. These are expressed through individual factors, such as:

- business forecasts;
- use of analytical tools;
- marketing and development business perspective;
- simulations of the reorganizational process;
- causal correlations among the measures adopted;
- informational flow management;
- reports for strategic management;
- evaluations of cost efficiency;
- avoidance of conflict situations; and
- creative solving problems.

The use of factor analysis is reasonable and useful for testing the influence of controllers' business analytical abilities in the success of restructurings. This can be seen from the Kaiser-Meyer-Olkin index, which is above the 0.5 threshold. In addition, the level of significance is 0.012, which means there is a 1.2% of risk that indicated that differences among variables are not a result of their causal connection during the analytical evolution.

Making business forecasts was the first factor and had the highest eigenvalue, which helps define the variance of each individual factor. The first factor explains 33.443% of the total variance when it comes to defining its correlation with successful outcomes of overall restructuring process. The next factor is the use of analytical tools; its eigenvalue is 1.698 and it explains 16.976% of the variance not explained by the first factor. On a cumulative basis, these factors together explained 50.419% of the total variance. The third factor, making simulations of reorganizational processes, explained 11.980% of the variance.

The first factor (making business forecasts) has a high factor weight at marketing and development business perspective (0.911) and defines 21.451% of the total variance after rotation. The use of analytical tools represents the second factor and has high weights at creative solving problems (0.824) and avoiding conflict situations (0.813); this factor defined 20.644% of the variance after rotation.

**Table 5.** Kaiser-Meyer-Olkin Measure and Bartlett's Test of Sphericity Test of Second Hypothesis

<b>Kaiser-Meyer-Olkin Sampling Adequacy</b>	.591
	adjusted chi-square 69.111
<b>Bartlett's test of Sphericity</b>	degrees of freedom 45
	significance .012

Source: Authors' research

**Table 6.** Eigenvalue Analysis of Controllers' Business-analytical Abilities

Component	Eigenvalue			Extraction sums of squared loadings		
	absolute	%variance	cumulative%	absolute	% variance	cumulative%
1	3.344	33.443	33.443	3.344	33.443	33.443
2	1.698	16.976	50.419	1.698	16.976	50.419
3	1.420	14.196	64.615	1.420	14.196	64.615
4	1.198	11.980	76.596	1.198	11.980	76.596
5	.763	7.629	84.225			
6	.478	4.781	89.005			
7	.426	4.262	93.267			
8	.264	2.638	95.905			
9	.222	2.220	98.125			
10	.187	1.875	100.000			

Source: Authors' research

**Table 7.** Factor Weights Extracted with Varimax Method

	Component			
	1	2	3	4
Making business forecasts	.020	.134	.031	.930
Use of analytical tools	.454	-.407	.425	.429
Marketing and development business perspective	.911	-.017	.096	-.167
Making simulations at reorganizational process	.749	.163	.116	.438
Causal correlations between taken measures	.646	.570	.125	.056
Informational flow management	.306	.395	.520	.136
Reporting for strategic managing	.107	-.048	.789	.228
Evaluating cost efficiency	.027	.172	.854	-.225
Avoiding conflict situations	-.031	.813	-.075	.346
Creative solving problems	.154	.824	.265	-.135

Source: Authors' research

The marketing and development business perspective is a research field, which is the third factor, and has high values at evaluating cost efficiency (0.854) and reporting the needs of strategic management (0.789); it defines 19.183% of the total correlation between controllers' business analytical abilities and restructuring performance. Making simulations at the reorganizational process is last the most influential factor with a high value at making business forecasts (0.930). This factor defines 15.318% of the total variance after rotation.

In comparing the interdependencies among the individual factors, it can be seen that making business forecasts is statistically correlated with simulations and their execution in the process of a company's reorganization. This correlation is also confirmed as statistically significant (0.399), which is relatively weak. Yet this connection can enhance added

value when it comes to making simulations for the needs of restructuring the number of jobs and optimizing governance structures. In order to decrease potential risks that can derive from incorrect business forecasts and predictions, which can lead to inappropriate decisions, management can help with simulation tools, which had a relatively strong correlation intensity (0.583). Making simulations is correlated with causal connections among measures whose execution prioritized business stability (sig = 0.008). Making simulations in reorganizational processes is positively correlated (0.527) with causal connections among measures, which play a key role in reversing negative financial and business trends. Avoiding conflict situations has a positive influence (0.537) on creative problem solving.

Mass (2007) noted that the controllership's integration in management's decision-making process is positively

**Table 8.** Correlation Matrix of Influence of Controllers' Business-analytical Abilities on Restructuring Performance

	Business forecast	Use of analytical tools	Marketing and development business perspective	Simulations at reorganizational processes	Causal connections between measures	Informational flows management	Reporting for strategic management	Cost efficiency	Avoiding conflict situations	Creative problem solving
Business forecast	1.000	.272	-.084	.399	.189	.190	.239	-.131	.337	.000
Use of analytical tools	.272	1.000	.331	.428	.103	.348	.360	.161	-.160	-.135
Marketing and development business perspective	-.084	.331	1.000	.583	.507	.203	.211	.159	-.049	.188
Simulations at reorganizational processes	.399	.428	.583	1.000	.527	.324	.281	.128	.288	.198
Causal connections between measures	.189	.103	.507	.527	1.000	.503	.180	.198	.357	.517
Informational flows management	.190	.348	.203	.324	.503	1.000	.215	.416	.210	.438
Reporting for strategic management	.239	.360	.211	.281	.180	.215	1.000	.516	-.012	.208
Cost efficiency	-.131	.161	.159	.128	.198	.416	.516	1.000	.064	.293
Avoiding conflict situations	.337	-.160	-.049	.288	.357	.210	-.012	.064	1.000	.537
Creative problem solving	.000	-.135	.188	.198	.517	.438	.208	.293	.537	1.000

Source: Authors' research

connected (0.424) to identifying the goals of a particular business unit. At the same time, it was found that conflicts in a workplace has a negative effect (-0.407) on a controller's integration with the performance measurement system.

## 7 Conclusions

In analyzing the relationship between controllers' financial knowledge and performance of restructuring programs, the correlation and dependency were statistically confirmed, thereby supporting this hypothesis. Financial knowledge plays a role as an important ingredient in formulating strategic as well as operational plans in Slovenian companies. The parallel relationship between controllers' business analytical abilities and possibilities for companies' successful turnaround was also tested. Our research provides statistical evidence from which we can confirm a significant correlation and accept this hypothesis. This fact can contribute

to preparing meaningful, accurate, and useful business recommendations and reports from the needs of strategic and operational management. Although the literature describes controllership as an essential part of providing the appropriate strategic course of a company in the research, it has been found that this function is still not quite as developed as it could be expected from a theoretical standpoint. Findings about the influence of the controller's financial knowledge and business analytical competencies on overall performance of restructuring can help companies' owners and management take early actions to identify critical areas as well as necessary changes that must be taken to prevent acute crisis, liquidity, and financial unbalances that can, in the long term, lead to bankruptcy, which is commonly cited in professional literature on these issues. Both groups must consider the further integration of controllership in a management system when it comes to the questions of its analytical, consulting, and proactive role in co-creating business solutions for new economic and innovative breakthroughs, especially in the company's restructuring process.

## References

1. Altman, E. I., & Hotchkiss, E. (2006). *Corporate financial distress and bankruptcy*. Hoboken, NJ: Wiley.
2. Bowman, E. H., & Singh, H. (1993). Corporate restructuring: Reconfiguring the firm. *Strategic Management Journal*, 14, 5–14. Retrieved from <http://www.jstor.org/stable/2486417> <http://dx.doi.org/10.1002/smj.4250140903>
3. Dimov, O., & Iliev, P. (2010). Controlling—A modern system of management and control. *Sofija: University of National and World Economy, Economics and Organization*, 7(2), 253–262.
4. Dubrovski, D. (2011). *Razsežnosti kriznega managementa*. Celje: Mednarodna fakulteta za družbene in poslovne študije.
5. Keidel, R. W. (1994). Rethinking organizational design. *The Academy of Management Executive*, 8(4), 12–30. Retrieved from <http://www.jstor.org/stable/4165220> <http://dx.doi.org/10.5465/ame.1994.9412071698>
6. Linhardt, M., & Sundqvist, S. (2004). *The role of the controller*. Lulea: University of Technology.
7. Maas, V. S. (2007). *The effect of controller involvement in management performance measurement system gaming*. Amsterdam: Faculty of Economics and Business.
8. Melavc, D., & Novak, A. (2007). *Controlling*. Maribor: Založba Moderna organizacija. Univerza v Mariboru, Fakulteta za organizacijske vede Kranj.
9. Pearce, J. A., & Robbins, K. D. (2008). Strategic transformation as the essential last step in the process of business turnaround. *Business Horizons*, 121–130. Retrieved from <http://www.sciencedirect.com> <http://dx.doi.org/10.1016/j.bushor.2007.11.003>
10. Perović, V., Neradžić, B., & Todorović, A. (2012). Controlling as a useful management instrument in crisis times. *Novi Sad: AIBM*, 6, 2101–2106.
11. Schmitt, A. (2009). *Innovation and growth in corporate restructurings*. Frankfurt/Main: Springer Science + Business Media. <http://dx.doi.org/10.1007/978-3-8349-9462-2>
12. Smith, D. (2005). Business (not) as usual: crisis management, service recovery and the vulnerability of organisations. *Journal of Services Marketing*, 309–320.
13. Smith, M., & Graves, C. (2005). Corporate turnaround and financial distress. *Managerial Auditing Journal*, 20(3), 304–320. <http://dx.doi.org/10.1108/02686900510585627>
14. Thammatucharee, Y. (2011). *A financial leader's guide to enhancing long-term business stability: Controller focus model*. Bangkok: Accounting and Finance Central Marketing Group.
15. Zoni, L., & Merchant, K. A. (2007). Controller involvement in management: an empirical study in large Italian corporations. *Journal of Accounting & Organizational Change*, 3(1). <http://dx.doi.org/10.1108/18325910710732849>

## Authors

**Danijel Lebar** was born 1.5.1989 in Murska Sobota. As a student of business and economic science, he completed accounting, auditing, and taxation courses at the Faculty of Business and Economics in Maribor. He obtained his master's degree and completed research on the impact of controlling activities on the restructuring in Slovenian companies. As a member of Young Perspective Staff at Pomurje, he contributes to various projects and workshops under surveillance of the regional agency RRA Mura. At the same time, he was enrolled in youth exchange projects and in volunteering activities at the Voluntary Fire Brigade of Beltinci.

**Iztok Kolar, Ph.D.**, works as an assistant professor of accounting and auditing at the University of Maribor, Faculty of Economics and Business. He is the head of the Accounting, Auditing and Taxation Institute. His main interest and topics of lecture are financial statement analysis, strategic management accounting, controllership, forensic accounting, and crime investigation in business. He has published several national and international articles and other publications (see IZUM - SICRIS, 19612).

# Vpliv kontrolinga na prestrukturiranje slovenskih podjetij

## Izveček

Kontroling kot informacijska dejavnost postaja večdimenzionalna funkcija. Strateški menedžment se sprašuje, ali povečati neodvisnost kontrolinga in ga tesneje integrirati v proces sprejemanja odločitev ali ne. Finančno znanje in poslovnoanalitične sposobnosti nosilcev dejavnosti kontrolinga lahko deloma podpirajo operativno, finančno in strateško prestrukturiranje. To je pomembno pri soočanju z izzivi hitre poslovne dinamike, dvigu konkurenčnosti ter doseganju kratkoročnih in strateških ciljev.

**Ključne besede:** kontroling, kontrolerji, prestrukturiranje, finančno znanje, poslovnoanalitične sposobnosti



# Training Programs for Managing Well-being in Companies

## Sonja Treven

Faculty of Economics and Business, University of Maribor, Slovenia  
sonja.treven@um.si

## Urška Treven

PaX Stabil GmbH, Gabersdorf, Austria  
treven.urska@gmail.com

## Simona Šarotar Žižek

Faculty of Economics and Business, University of Maribor, Slovenia  
simona.sarotar@um.si

## Abstract

This paper discussed the significance of well-being (WB) and well-being management (WBM). As successful WBM requires the implementation of different training programs, such programs are presented in detail. The cause-effect relationship between training and individual/organizational performance is researched as well. The aim of the research to support this article was to present WBM, its training programs, as well as the determination of WBM activities concerning the mentioned programs implemented in Slovenian organizations.

**Keywords:** Training, well-being, employee diversity, stress

## 1 Introduction

Well-being (WB) is a central motivational goal for many people. It is important for individuals, but it is even more important for employers and organizations. In organizations, all processes need to work in ways that enable employees' WB to be sustained. This means the organizations need to find ways of enabling employees in order to enhance their well-being.

WB plays a key role in delivering most of the important outcomes associated with successful, highly performing organizations. Individuals who feel well have a lot of advantages as leaders, managers and employees (Robertson & Tinline, 2008). WB is also a platform for low rates of sickness and absence, optimal levels of employee turnover, and high productivity. Furthermore, from a talent management perspective, an organization with a reputation for WB among its employees is also more likely to be able to attract the best from the talent pool of potential employees.

Thus, organizations need effective management of WB, as the positive consequences of WB are evident. An important part of well-being management (WBM) training programs is discussed in this paper, which is the objective in the theoretical part of the article; objectives in the empirical part cover the measurement of WBM activities in Slovenian organizations.

---

ORIGINAL SCIENTIFIC PAPER

---

RECEIVED: NOVEMBER 2014

---

REVISED: JUNE 2015

---

ACCEPTED: JUNE 2015

---

DOI: 10.1515/ngoe-2015-0015

---

UDK: 005.32:331.101.32

---

JEL: M12

---

---

**NG  
OE**

---

NAŠE GOSPODARSTVO  
OUR ECONOMY

---

Vol. 61 | No. 4 | 2015

---

pp. 23 – 31

---

## 2 Definition of Well-being (WB)

WB research is especially prominent in the current empirical psychology field and provided the basis for building “positive psychology”—in other words, the movement in psychology that studies the preconditions, conditions, and processes that contribute to the optimal functioning of people, groups, and organizations. Ross Rijavec and Miljković (2006) found that research within positive psychology can be divided into three sections:

- positive subjective experiences
- positive individual characteristics
- positive institutions/organizations

According to Ryan and Deci (2001), the current WB research has been derived from two general perspectives. The first perspective is the hedonic approach, which focuses on happiness and defines WB in terms of pleasure attainment and pain avoidance. In the hedonic tradition, psychologists have concentrated on the assessment of subjective WB, which consists of three elements: (1) life satisfaction; (2) the presence of positive mood; and (3) the absence of negative mood. All this together is summarized as happiness (Ryan & Deci, 2001). The second perspective is the eudaimonic approach, which focuses on meaning and self-realization and defines WB in terms of the degree to which a person is fully functioning. The eudaimonic perspective assesses how well people live in relation to their true selves (Waterman, 1993). Psychological WB integrates six distinct components of positive psychological functioning.

In combination, these dimensions encompass a breadth of wellness that includes positive evaluations of oneself and one's past life (Self-Acceptance), a sense of continued growth and development as a person (Personal Growth), the belief that one's life is purposeful and meaningful (Purpose in Life), the possession of quality relations with others (Positive Relations With Others), the capacity to manage effectively one's life and surrounding world (Environmental Mastery), and a sense of self-determination (Autonomy). (Ryff & Keyes, 1995, p. 719)

Ryan and Deci (2001) mentioned that the eudemonic theorists argue that WB and happiness are distinct, for not all sources of pleasure foster WB. They presented the self-determination theory, which posits that there are three basic psychological needs—autonomy, competence, and relatedness—and theorizes that fulfillment of these needs is essential for psychological growth and WB.

These two views have given rise to different research focuses and a basis of knowledge that is in some areas divergent and in others complementary.

## 3 Managing Well-being in Work Settings

WBM in organizations is more important on a day-to-day basis. As the main goal is to ensure employees' WB, organizations have to manage their human resources well, including functions such as the planning of personnel, development and training, performance evaluation, remuneration, and labor relations, (Potocan, Mulej, & Nedelko, 2013; Šarotar Žižek, Treven, Mulej, & Vaner, 2011). A number of writers have stressed the importance of actively managing the human resources of a company (e.g., Beardwell & Claydon, 2007; Gomez-Meija, Balkin, & Cardy, 2007). They exposed that human capital has the potential to generate “economic rent” and that employees are an asset, not just a cost.

Employees cannot be healthy and feel well in their work settings if they face stressful situations on a daily basis. Hence, an important part of successful WBM in organizations is also stress management (Andre, 2008; Pettinger, 2002). Stress management, which can be defined as stress prevention, covers many factors with which employees have to cope in their work environment; the related programs include stress management workshops and programs in techniques for relaxation like meditation, yoga, and time management (Treven, Treven, & Šarotar Žižek, 2011).

Employee diversity management (EDM) in organizations is another part of WBM that integrates (a) an appreciation of differences and (b) the creation of a setting where everyone feels valued and accepted (Treven & Mulej, 2007). An organization's progress in EDM managers can be monitored via organizational surveys of attitudes and perceptions, among other means. EDM assumes that groups will retain their own characteristics and will shape the company as well as be shaped by it, creating a common set of values that will—namely, strengthening ties with customers, enhancing recruitment, and the like. EDM is sometimes resisted due to a fear of change and discomfort with differences (Schermerhorn, Hunt, & Osborn, 2004). In order to improve employees' WB, managers can carry out various diversity management programs.

We have already mentioned that organizational training programs can help employees improve their WB through the formation of various training programs that support their WB and prevention of stress. Such programs are presented in the next chapter.

## 4 Training Programs for Managing Well-being

Preparing special training programs for managing WB in organizations can help employees develop self-respect and

feel well and valued in their work settings, without regard to their culture, religion, ethnicity, gender, age, disability, or other individual differences. The most often applied programs for managing the employees' well-being include the following:

- Stress management programs
- Diversity management programs
- Wellness programs
- Employee assistance programs
- Programs for personal growth

#### 4.1 Stress management programs

The intention of stress management programs is to teach the individual how to reduce stress in his or her life effectively. Such programs might include various workshops in order to introduce employees to topics of stress and stress management. Such workshops can give the employees general knowledge about the causes of stress, its consequences, and stress management methods; alternatively, they can be oriented to the training of employees in a particular method, such as yoga, meditation, and breathing and relaxation techniques.

##### General stress management workshop

Employees who attend general stress management workshops benefit in many ways. First, they are acquainted with the nature of stress and how humans respond physically and psychologically to stressful situations. Second, employees are informed about the specific stressors and symptoms that cause to them the most difficulty in their lives and work settings. Third, they are educated about the possible consequences of stress.

Stress has its origins in the demands of organizational and personal life. The stress response occurs as a result of the individual's interaction and reaction to the stressor (Davis, McKay, & Robbins Eshelman, 2000). Several responses to the demands faced can be observed. The behavioral response to the demand is the set of specific observable actions taken in response to the demand. In addition to the behavioral response, the individual will have a psychological response that takes the form of cognitive and emotional reactions. Employees can be influenced by specific stressors and symptoms related to the organization or job as well as factors relating to other aspects of their lives. Therefore, we can distinguish between work-related causes of stress and causes of stress from outside of work.

Employees who attend general stress management workshops are educated about the possible consequences of stress as well. Stress causes a variety of different health problems, including

medical (heart disease and stroke, backache and arthritis, ulcers, etc.), behavioral (smoking, drug and alcohol abuse, violence, etc.) and psychological problems (family conflict, sleep disturbance, sexual dysfunction, depression, etc.).

##### Relaxation training

Relaxation is a form of meditation and a state of concentration. By using the mind to focus upon an object, image, or thought, one cancels out the distraction associated with everyday life. The relaxation response has been shown to counter-balance the stress response (Šarotar Žižek, Treven, & Mulej, 2015).

Training programs in techniques for relaxation can include various workshops in order to acquaint employees with particular techniques, like meditation, yoga, deep breathing, and progressive muscle relaxation, or teach them to use relaxation techniques sequentially. Such workshops can give the employees general knowledge about relaxation, together with instructions for applying specific relaxation techniques. General information about relaxation can include the four basic elements of the relaxation response, information about what employees will experience during relaxation, and information about the effects after relaxation. In addition, workshops in relaxation techniques can provide instructions on how to apply the specific relaxation technique.

#### 4.2 Diversity management programs

Diversity management programs can be divided into two categories: awareness-based diversity training and skill-based diversity training. The aim of these programs is to make interactions between diverse groups of people easier and more effective. When employees pay attention to each other, the road to the improvement of productivity based on employees' creative energies is provided (Treven & Mulej, 2007).

Diversity training helps managers understand and value individual differences and develop strong diagnostic skills. The dissemination of factual information might change some beliefs, but more emotion-oriented persuasive techniques and long-term educational efforts might be needed to alter them (Greenberg & Baron, 2000).

##### Awareness-based diversity training

Specifically, awareness-based diversity training is designed to raise people's awareness of diversity issues in the workplace and to help them recognize the underlying assumptions they make about people. It is a very basic orientation—and

one that takes a cognitive approach. It usually involves teaching people about the business necessity of valuing diversity, making them sensitive to their own cultural assumptions and biases. This can involve various experiential exercises as well as real-life case studies that help people view others as individuals, not stereotyped members of groups.

#### **Skill-based diversity training**

Skill-based diversity training builds on the awareness approach to develop people's skills in managing diversity. As such, it goes beyond raising awareness to develop the tools needed to interact effectively with others. Four main tools are involved in this process:

- Cross-cultural understanding: Understanding the cultural differences responsible for different co-workers' behaviors on the job (Klarič, 2005).
- Intercultural communication: Learning to overcome verbal and nonverbal barriers to communication across cultures.
- Facilitation skills: Training in helping others to alleviate misunderstandings that might result from cultural differences.
- Flexibility and adaptability: Cultivating the ability to patiently take new and different approaches when dealing with others who are different.

#### **4.3 Wellness programs**

Wellness programs have been developed in organizations to help employees (including managers) maintain their physical and mental health. A healthy employee can manage stress more easily than one suffering from phobias, nightmares, a lack of appetite, heart disease, or other health troubles (Treven et al., 2011). Such programs consist of workshops that train employees to use some stress-reducing behaviors, such as losing weight, exercising, and giving up smoking. Although organizations provide the relevant know-how, the individual employees are responsible for controlling their own lives. Organizations that implement wellness programs for their employees consider such programs a sensible investment that generate positive organizational and financial effects. The employees able to manage stress effectively enjoy better health and achieve well-being, which in turn means a reduced absence from work because of illness and greater productivity.

#### **4.4 Employee assistance programs**

Employee assistance programs support employees facing many kinds of problems, such as family problems, problems raising children, moving into a new residence, career

planning, and financial and legal advice. Such programs have been in use for quite some years in the United States and is also increasing in the European Union and Slovenia (Hellriegel & Slocum, 2004; Treven et al., 2011).

#### **4.5 Programs for personal growth**

Personal growth includes the growth of an individual's personal traits—a combination of personal characteristics, values, inclinations, motives, attitudes, and interests that, along with one's skills, knowledge and work results, environment, and willpower, create a requisitely holistic person. Such an individual is the result of psycho-sociological and economic-material influences, factors, and experiences acquired from being active in one's family as well as his/her educational and social environments. What follows is the presentation of the four key personal growth programs (Šarotar Žižek, 2012).

##### **Programs for a positive mindset**

Positive mental attitude purifies the intellect and brings about experiences of wisdom (Čertalič, 1998). Keller (2001) defined the concept of positive mental attitude as mental glasses through which an individual observes the world around him/her. Some people observe the world through rose-tinted spectacles; others through the dimmed ones. The former are characterized by a positive attitude while the latter by negative ones. The first one usually thinks "I can" and the other "I cannot."

##### **Programs for focusing on the present moment**

The present moment is the moment when a person resides or simply: is. An awareness of the present moment is rather an exception than a norm, as thoughts can often take people back to their past (how they have been hurt by others, what failure they have experienced, how they have been cheated, etc.) or their future (what position to achieve, what material assets to purchase, what status to obtain). An individual should be thinking of both the future and the past in a limited way and only when necessary.

##### **Programs for the control of thoughts and feelings**

A theory of emotional intelligence developed in the 1990s by Salovey and Mayer (summarized in Goleman, 2001) refers to the capacity to control one's own emotions and feelings and the ability to listen to the feelings that guide human thought and action. Possible interventions aimed to increase

emotional intelligence can be found in the workplace. Many such programs are already known and established as trainings, such as those fostering better relations between people, increased motivation, stress management, and conflict resolution (Salovey, Mayer, & Caruso, 2002).

### **Programs for achieving higher levels of awareness**

An individual can achieve spiritual maturity through the implementation of techniques for spiritual growth, such as meditation, yoga, logo therapy, and practical Buddhist principles to achieve balance. An important factor in raising awareness is meditation, in which the focus moves from rational thought through irrational or intuitive thinking to transcendental contemplation. To achieve higher levels of awareness, it is also important to strengthen spiritual intelligence (Zohar & Marshall, 2004).

### **Cause–effect relationship between training and individual/organizational performance**

Managers would likely agree that employees make a critical difference when it comes to innovation, organizational performance, competitiveness, and—ultimately—business success. Yet what can organizations do to attract and keep creative, dedicated, and thriving employees who make organizations flourish? What working conditions motivate employees to be engaged, give their best, go the extra mile, and persist in the face of difficulties? Modern organizations focus on the management of human capital, not the traditional organizational structures that heavily rely on management control and economic principles of cost reduction, efficiency, and cash flow (Bakker & Schaufeli, 2008).

Becker and Gerhart (1996) described why human resource management (HRM) decisions are likely to have important and unique influences on organizational performance. Delaney and Huselid (1996) also mentioned that progressive HRM practices, including selectivity in staffing, training, and incentive compensation, are positively related to the perceptual measures of organizational performance.

WB is quite applicable to business. As managers and employees focus on satisfying their basic human needs in the workplace, clarifying the desired outcomes and increasing opportunities for individual fulfillment and growth can help them increase opportunities for the success of their organization (Harter, Schmidt, & Keyes, 2006). Thus, a theoretical framework to describe why this might occur is provided. Data from Harter and coauthors (2006) indicate that workplaces with engaged employees do a better job, on average, of keeping employees and satisfying customers; hence, they

are more productive and profitable. Therefore, WB in the workplace and performance are not independent, but rather complementary and interdependent components of a financially and psychologically healthy workplace.

Wright and Cropanzano (2000) researched the happy–productive worker and hypothesis that job satisfaction doesn’t impact only on performance but also on employee’s well-being.

On these bases, the applied research was conducted.

## **5 Empirical Research**

### **5.1 Methodology**

#### **Hypothesis development**

The central research question is whether Slovenian organizations conduct programs to manage employees’ WB. Our hypothesis is: Slovenian organizations provide above-average value in their programs for managing employees’ well-being.

#### **Measuring instrument**

A quantitative (structured survey) research method was deemed appropriate to allow for the calculation of the actual measures of the tested concepts. We developed and validated a measurement instrument that ultimately consisted of 22 Likert-type questions measuring WB programs in organizations, which are a part of HRM.

#### **Procedure**

This research was a part of the project entitled “A requisitely holistic model of measuring employees’ well-being in transitional organizations as compared with both innovative and less innovative ones,” a research project created for the Public Agency of the Republic of Slovenia for Research Activity. We collected data on HRM in organizations in Slovenia from April 1, 2011, until June 20, 2011. We also measured WB programs as an important part of HRM in organizations.

#### **Data collection and participants**

In the third phase, a computer-assisted web interview was used to collect data from 2409 randomly selected organizations from all organizations with more than 10 employees in

Slovenia. Only organizations with more than 10 employees were chosen as we assumed that those with fewer employees have not developed HRM efforts. The population of companies was determined from the database of the Agency of the Republic of Slovenia for Public Legal Records and Related Services. First, as the main informants, CEOs or members of the board of directors responsible for HRM were identified in each organization and then contacted by phone. Informants were provided with the web link to the questionnaire and asked to complete it. A total of 320 usable responses were obtained from the managers, representing a response rate of 13.3%.

**Table 1.** Descriptive Statistics of Respondents

Type of market	Frequency
Mainly providing end-customer services	67
Mainly providing B2B services	108
Mainly providing end-customer products	40
Mainly providing B2B products	101
Missing	4
<b>Total</b>	<b>320</b>
Size	
Large	23
Medium	74
Small	221
Missing	2
<b>Total</b>	<b>320</b>
Industry	
Manufacturing	79
Real estate, renting and business activities	20
Construction	50
Other community, social and personal service activities	12
Wholesale and retail trade	77
Hotels and restaurants	6
Transport, storage and communication	16
Missing	60
<b>Total</b>	<b>320</b>
Title of the respondent	
CEO	148
Board member	21
Executive director	14
Director/Head of HRM department	26
Director/Head of general department	37
Did not want to answer	74
<b>Total</b>	<b>320</b>

## 5.2 Research results

Below we present results of the examination of HRM activities that organizations perform to ensure WB and that are part of previously mentioned training programs.

Table 2 presents HRM activities that organizations offer to raise employees' WB. The indicator with the highest mean is "We ensure technical security of workplace and process." High means (over 4) were also achieved by "We ensure that employees understand their duties and responsibilities," "We care for good relations and good organizational climate," and "We ensure economic security of the workplace." The lowest mean occurred for "Within working hours we organize aerobic exercises."

The highest dispersion of responses (standard deviation), meaning respondents differ most on this factor, was for "We care about babysitting for employees' children." The lowest value of standard deviation was for: "We provide technical security of workplace and process."

Positive values of asymmetry coefficient have nine indicators. The highest value is shown by the indicator "Within working hours we organize aerobic exercises" and the lowest one by "We create opportunities for older adults to maintain participation and engagement within the organization."

All other indicators have negative values of asymmetry coefficient; their asymmetric distributions are shown along the left side of the table. The indicator "We provide technical security of workplace and process" has the highest negative value of asymmetry coefficient whereas the highest positive value is for "Within working hours we organize aerobic exercises."

Negative values of the kurtosis coefficient are found for seven indicators. The highest value belongs to the item "We have established intergenerational cooperation" and the lowest negative value to the item "We offer employees flexible working hours and the appropriate distribution of work." Thus, the distribution of these indicators is flattened, while the other indicators are characterized by a tapered distribution. The indicator "We provide technical security of workplace and process" has the thorniest distribution while the flattest one belongs to "We have established intergenerational cooperation."

An analysis of the HRM activity to provide WB showed that organizations that are above average in providing technical security for the workplace and process as well as caring that employees understand their duties and responsibilities are perceived as well-being organizations. In

addition the indicators “We take care of a good relationship and a good working environment,” “We ensure economic security of workplace,” “We care for the good communication and flow of information within the organization,” “We offer employees free days and rest days,” and “Work and processes are organized to minimize uncertainty” exceed

the average value of 4.30. Organizations are also above average in providing the necessary training to employees who work well and are satisfied to receive the necessary assistance. The same applies to the possibility of reconciliation of work and family life, flexible working hours, and adequate allocation of work as well as career development.

**Table 2.** Descriptive Statistics of HRM Activities Concerning Well-being Management

	N	Mean	Median	Standard deviation	Skewness		Kurtosis	
					Statist.	Std. error	Statist.	Std. error
We ensure technical security of workplace and process.	318	4,64	5,00	0,633	-2,251	0,137	7,145	0,273
We ensure that employees understand their duties and responsibilities.	317	4,46	5,00	0,638	-0,917	0,137	0,464	0,273
We take care of good relationships and a good working environment.	317	4,44	5,00	0,716	-1,405	0,137	2,808	0,273
We ensure economic security of workplace.	317	4,41	5,00	0,744	-1,385	0,137	2,544	0,273
We ensure good communication and flow of information within the organization.	316	4,39	4,50	0,728	-1,338	0,137	2,724	0,273
We offer to employees free days and rest days.	317	4,34	5,00	0,867	-1,285	0,137	1,331	0,273
Work and processes are organized in such a way that the uncertainty is as small as possible.	316	4,32	4,00	0,744	-1,052	0,137	1,340	0,273
We offer employees the necessary training to work well and satisfied.	317	4,23	4,00	0,860	-0,936	0,137	0,432	0,273
In case of problems, we offer necessary help (financial, psychological, legal advice, assistance with relocation, etc.).	318	4,03	4,00	0,987	-0,962	0,137	0,713	0,273
We offer the possibility of reconciling work and family life.	318	4,00	4,00	0,938	-0,675	0,137	-0,118	0,273
We offer to employees flexible working hours and appropriate distribution of work.	318	3,93	4,00	1,071	-0,798	0,137	-0,014	0,273
We assist employees in career development.	318	3,91	4,00	0,993	-0,751	0,137	0,226	0,273
We have established intergenerational cooperation.	313	2,88	3,00	1,392	-0,013	0,138	-1,245	0,275
We create opportunities for older adults to maintain participation and engagement within the organization.	316	2,38	2,00	1,357	0,512	0,137	-1,024	0,273
We care about babysitting for employees' children.	317	2,33	2,00	1,475	0,640	0,137	-1,059	0,273
We care about physical performance of employees by hiring a gym, fitness center, or other forms of a regular weekly recreation.	316	2,12	2,00	1,369	0,927	0,137	-0,435	0,273
We organize training about healthy ways of living (workshops on healthy eating, smoking cessation, the importance of physical activity, etc.).	316	1,96	2,00	1,192	1,116	0,137	0,217	0,273
We co-finance employees' recreation.	314	1,92	1,00	1,322	1,199	0,138	0,105	0,274
We have implemented programs to increase happiness of employees (employees learn to take over properties of happy people).	317	1,64	1,00	1,023	1,633	0,137	2,049	0,273
We co-finance employees' wellness services.	317	1,47	1,00	0,946	2,284	0,137	4,828	0,273
We organize aerobic exercise within working hours.	316	1,35	1,00	0,781	2,461	0,137	5,975	0,273
Valid	296							

Measured on Likert scale: 1 = never, 5 = always

Source: Authors.

The responding organizations were shown to be below average in the following WBM items:

- Creating opportunities for older adults to maintain participation and engagement within the organization
- Care about babysitting for employees
- Organizing training about methods for stress relief
- Caring for the physical performance of employees by hiring a gym, fitness center, or other forms of regular weekly recreation
- Co-financing of recreation to employees
- Establishing a program to increase happiness of employees
- Financing wellness services
- Organizing aerobic services within working hours

## 6 Concluding Remarks

Training is an important function of HRM and, as such, it is strongly connected with other functions, like planning staff, recruiting and selection, and rewards. Given the strong need for successful WBM in enterprises, training that contributes to achieving that aim is of the utmost significance. In this paper, some WBM training programs, such as stress management programs, diversity management programs, wellness programs, employee assistance programs, and programs for personal growth, were thus presented. Some results from our research were also presented in order to demonstrate the connection between training and individual/organizational performance and highlight conditions for checking the hypothesis that Slovenian organizations provide above-average value in programs managing employees' well-being. We confirmed this as 13 of 22 activities showed a higher value than average.

Future research should measure the efficiency of WBM training and its impact on the organization's performance.

## References

1. Andre, R. (2008). *Organizational behavior*. New York: Pearson Education.
2. Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29, 147–154. <http://dx.doi.org/10.1002/job.515>
3. Beardwell, J., & Claydon, T. (2007). *Human resource management*. Harlow: Prentice Hall.
4. Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), 779–801. <http://dx.doi.org/10.2307/256712>
5. Čertalič, V. (1998). *Joga uma in telesa (Yoga of mind and body)*. Ljubljana: Mladinska knjiga.
6. Davis, M., McKay, M., & Robbins Eshelman, E. (2000). *The relaxation and stress reduction workbook*. Oakland, CA: New Harbinger Publications Inc.
7. Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949–969. <http://dx.doi.org/10.2307/256718>
8. Goleman, D. (2001). *Čustvena inteligenca na delovnem mestu (The emotionally intelligent workplace)*. Ljubljana: Mladinska knjiga.
9. Gomez-Meija L. R., Balkin D. B., & Cardy, R. L. (2007). *Managing human resources*. New York: Pearson.
10. Greenberg, J., & Baron, R.A. (2000). *Behavior in organizations*. New Jersey: Prentice Hall International.
11. 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. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the life well lived* (pp. 205–224). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10594-009>
12. Hellriegel, D., & Slocum, J. W., Jr. (2004). *Organizational behavior*. Mason, OH: Thomson South-Western.
13. Keller, J. (2001). *Miselna naravnost je vse*. Ljubljana: Lisac & Lisac.
14. Klarič, Š. (2005). *Skrb za izseljene managerje v procesu kulturne prilagoditve* (Unpublished M.A. thesis). University of Maribor, Faculty of Economics and Business, Maribor.
15. Pettinger, R. (2002). *Stress management*. Oxford: Capstone Publishing (A Wiley Company).
16. Potocan, V., Mulej, M., & Nedelko, Z. (2013). The influence of employees' ethical behavior on enterprises social responsibility. *Systemic practice and action research*, 26(6), 497–511 <http://dx.doi.org/10.1007/s11213-013-9299-3>
17. Robertson, I., & Tinline, D. (2008). Understanding and improving psychological well-being for individual and organisational effectiveness. In A. Kinder, R. Hughes, & C. L. Cooper (Eds.) *Employee well-being support* (pp. 39–51). Chichester: John Wiley & Sons Ltd. <http://dx.doi.org/10.1002/9780470773246.ch3>
18. Ross Rijavec, M., & Miljković, D. (2006). Pozitivna psihologija: Psihologija čije vrijeme (ponovno) došlo. *Društvena istraživanja*, 15(4–5; 84–85), 621–641.
19. Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. <http://dx.doi.org/10.1146/annurev.psych.52.1.141>
20. Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727. <http://dx.doi.org/10.1037/0022-3514.69.4.719>



21. Salovey, P., Mayer, J. D., & Caruso, D. (2002). *The positive psychology of emotional intelligence. Handbook of positive psychology*. Oxford: Oxford University Press.
22. Schermerhorn, Jr., J. R., Hunt, J. G., & Osborn, R. N. (2004). *Core concepts of organizational behavior*. Hoboken, NJ: Wiley.
23. Šarotar Žižek, S., Treven, S., Mulej, M., & Vaner, M. (2011). The integrative and innovative model of HRM in Slovenian tourism. *Academica turistica*, 4(2), 33–49.
24. Šarotar Žižek, S. (2012) *Vpliv psihičnega dobrega počutja na temelju zadostne in potrebne osebne celovitosti zaposlenega na uspešnost organizacije (Influence of psychical well-being on success of organization on a basis of requisite personal holism of an employee, in Slovene only)* (Unpublished doctoral dissertation). University of Maribor, Faculty of Economics and Business, Maribor.
25. Šarotar Žižek, S., Treven, S., & Mulej, M. (2015). The conceptual model of well-being management based on achieving requisite personal holism. *Cybernetics and Systems*, forthcoming. <http://dx.doi.org/10.1080/01969722.2015.1012379>
26. Treven, S., & Mulej, M. (2007). The systemic approach to the encouragement of innovativeness through employee diversity management. *Kybernetes*, 36(2), 144–156. <http://dx.doi.org/10.1108/03684920710741198>
27. Treven, U., Treven, S., & Šarotar Žižek, S. (2011). Effective approaches to managing stress of employees. *Review of Management Innovation and Creativity*, 4(10), 46–57.
28. Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678–691. <http://dx.doi.org/10.1037/0022-3514.64.4.678>
29. Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5(1), 84–94. <http://dx.doi.org/10.1037/1076-8998.5.1.84>
30. Zohar, D., & Marshall, I. (2004). *Duhovna inteligenca*. Tržič: Učila International.

## Authors

**Sonja Treven**, Ph.D., is a professor in the field of human resource management at the School of Business and Economics at the University of Maribor in Slovenia. She is the head of the Department of Management and Organization and of the Institute of Organization and Information Systems. She is the author/co-author of 13 books as well as more than 80 scientific articles. She has participated in more than 100 domestic and international conferences with her papers as an author or co-author.

Mag. **Urška Treven**, law graduate, is employed in the international company PaX Stabil in Austria in the field of marketing. Since 2006, she has gained extensive experience in the field of justice, international projects, and the field of international cooperation with customers as well as the field of scientific research. She has actively participated in many national and international conferences and has co-authored one book and several international scientific articles.

**Simona Šarotar Žižek**, Ph.D., is an assistant professor at the University of Maribor's Faculty of Economic and Business. She is the author and/or co-author of several articles published in various international and Slovenian journals and/or presented at scientific and expert conferences. She has prepared several scientific monographs and chapters in scientific and expert monographs. On several occasions she has been invited to present her papers at scientific and expert conferences. She is also active in preparing and implementing projects.

# Programi usposabljanja za zagotavljanje dobrega počutja v podjetjih

## Izvleček

V prispevku najprej osvetljujemo pomen dobrega počutja (WB), nato pa izpostavljammo menedžment dobrega počutja (WBM). Uspešen WBM zahteva izvajanje različnih programov usposabljanja, zato te programe predstavljamo še podrobneje. Raziskujemo tudi vzročno-posledični odnos med usposabljanjem in uspešnostjo posameznikov/organizacije. Namen raziskave, na kateri temelji prispevek, je zato bil: predstaviti WBM in programe usposabljanja zanj ter strinjanje z izvajanjem dejavnosti navedenih programov v slovenskih organizacijah.

**Gljučne besede:** usposabljanje, dobro počutje, raznolikost zaposlenih, stres

---

REVIEW PAPER

---

RECEIVED: MAY 2015

---

REVISED: JULY 2015

---

ACCEPTED: JULY 2015

---

DOI: 10.1515/ngoe-2015-0016

---

UDK: 657.1:338

---

JEL: M40, M41, M48

---

---

**NG  
OE**

---

NAŠE GOSPODARSTVO  
OUR ECONOMY

---

Vol. 61 | No. 4 | 2015

---

pp. 32–40

---

# The Role of Accounting in a Society: Only a techn(olog)ical solution for the problem of economic measurement or also a tool of social ideology?

**Robert Horvat**

University of Maribor, Faculty of Economics and Business, Slovenia  
robert.horvat@um.si

**Bojana Korošec**

University of Maribor, Faculty of Economics and Business, Slovenia  
bojana.korosec@um.si

## Abstract

The contribution juxtaposes the traditional neutralistic view on the role of accounting in a society as an activity of independent and unbiased measurement and presentation of real economic phenomena with the extended view on accounting as a socio-political practice and ideology. It also shows how the latter view impacts the understanding of the role of accounting and its reactions in light of the recent global financial crisis.

**Keywords:** accounting, auditing, social practice

## 1 Introduction

The onset of the latest global financial and economic crisis has promoted the formation of a number of critical views on accounting together with the appeals for thorough changes. These views and appeals have come not only from the government representatives of the strongest world economies (see, for example, Zhang & Andrew 2014) and world-renowned economists (see, for example, Krugman, 2009), but also from within the accountancy profession itself. Both pressures for changes of individual accounting solutions and questions regarding the (co)responsibility of the profession for the very emergence of the crisis have arisen, particularly regarding the roles of fair value accounting, auditing, off-balance sheet financing, and accounting regulation (see, for example, Arnold, 2009; Cooper, 2015; Laux & Leuz, 2009; Magnan, 2009; Sikka, 2009). In addition, the confidence in the competence of accounting standard setters worldwide has been seriously undermined (Walker, 2010).

The profession has responded to critics and pressures triggered by the crisis with changes directed mainly toward greater reporting transparency, better operationalization of existing solutions (e.g., regarding fair value measurements), and the strengthening of the harmonization processes for the internationally most influential conceptual accounting solutions (see, for example, Arnold, 2012; Cooper, 2015; Henry & Holzmann, 2009; Mala & Chand, 2012; Nölke, 2009; Power, 2010). The fundamental question of our contribution related to these issues is how

to understand the role of accounting in the context of this crisis and its response to it. The easiest way would probably be to simply reject the reproaches against accounting in relation to the latest crisis by concluding that “it merely played the role of the proverbial messenger that is now being shot” (Turner, 2008, and Vernon, 2008, as cited in Laux & Leuz, 2009, p. 826). However, this is only one of many possible views based on the premise of accounting as an independent and unbiased observer and reporter of economic reality. Apart from this view, a number of other, alternative views based on much broader definitions/understanding of accounting as a social and institutional practice exist. One of them sees accounting as an active social agent in terms of politics and ideology (see, for example, Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980; Cooper & Sherer, 1984; Dillard, 1991; Francis, 1990; Gomes, 2008; Tinker, 1980; Walters, 2004). From this perspective, the perception of the role of accounting in the crisis may be quite different. The aim of this paper is, therefore, to juxtapose traditional representative realism’s views on accounting with the alternative socio-political views and, thus, to broaden the understanding of its role and actions in relation to the recent global financial and economic crisis.

## 2 Role and Importance of Accounting in a Society: Traditional views

According to the accounting profession and the widespread and prevalent definitions, accounting is understood primarily as an unbiased observer and the objective reproducer of some independent economic reality that is important to its users (Solomons, 1991). This is an explicitly technical-mechanical view that understands and defines accounting as a mere techn(ological) solution (accounting as method/methodology, accounting as technique/technology, etc.) for the techn(ological) problem of measurement and control of business operations (Gomes, 2008). It is thus presented as a fundamental factor that provides rational and independent market participants with the economic information needed for their decision making, and, consequently, plays a decisive role in efficient functioning of markets by directing them toward their optimum balance (i.e., balance in the case of perfect information) (Arnold, 2009). In addition, the roles of confirming or providing assurances about the “true and fair view” of market participants’ financial data and of the provision of data and information for the needs of national accounts are emphasized (see, for example, Laux & Leuz, 2009; Mala & Chand, 2012). Within the management accounting framework, the support for management in business operations analysis, business planning, and budgeting as well as in the preparation of business decisions in times of uncertainty are highlighted (see, for

example, Anthony & Govindarajan, 2006). Of course, the list of potential uses of accounting is long, but the stated ones here present the core of what we usually think of when we talk about accounting.

Accounting theory and accounting practice as reflections and applications of a certain (predominant) economic thought (see, for example, Klamer & McCloskey, 1992) are thus defined mainly as neoclassical and as based on marginalist theory, highlighting their classical political and economic foundations and the nature/status as an economic science. The economic explanation of an accounting phenomenon is thus the only correct one and, consequently, accounting is perceived primarily as an economic decision-making model. In the words of Dillard (1991, p. 12) “[t]he functionalist paradigm is the dominant perspective for looking at accounting, as well as the dominant one in social science. The language in which we think about, and communicate, accounting is that of functionalism” (see also Napier, 2006, pp. 451–452). The ideology of abstract, non-contingent, context-free, and value-free variables is the primary focus of this positivistic research tradition (see, for example, Parker 1999, p. 17). Accounting is thus perceived as merely the task of techn(ological) transformation of some independent, objective economic reality into accounting data and information. The fundamental ontological assumption of the prevailing conceptual frameworks of financial accounting is therefore “that the relationship between financial accounting and economic reality is unidirectional, reflecting or faithfully reproducing relationship: economic reality exists objectively, intersubjectively, concretely and independently of financial accounting practices; financial accounting reflects, mirrors, represents, or measures this pre-existing reality” (Hines, 1991, pp. 315–316).

In essence, we deal with the neutralist perception of accounting, which can be ontologically best defined also as realism/objectivism (regarding both the nature of the world that accounting is to present and the nature or status of accounting itself). Within this framework, accounting is predominantly presented and understood as a mathematical model (variables, relations between variables, etc.) and a methodology for the measurement and analysis of independent economic reality, while any other impacts of accounting are not taken into consideration. From this perspective, the reaction of the profession to the criticisms of accounting during the financial crisis as “it merely played the role of the proverbial messenger that is now being shot” (Turner, 2008, and Vernon, 2008, as cited in Laux & Leuz, 2009, p. 826) is totally logical and understandable.

Furthermore, if we consider that the societal orientation of the functionalist view is a status quo preservation, presuming that the momentum of society is moving toward

equilibrium and conflict is viewed as a temporary local disruption (Dillard, 1991), we can understand how accounting grounded in a functionalist paradigm reacts in times of crisis. Indeed, it reacts by mere touch-ups within the existing conceptual solutions in order to make them function better (Cooper, 2015). A good illustration of this is the concept of fair value measurement. Although the credibility of the efficient market theory as the foundation of a substantial part of accounting theory (including the fair value measurement) has been shaken in the latest financial crisis (see, for example, McSweeney, 2009), it still remains one of the key premises on which the proposals for changes and the reactions of accounting professionals to these changes are founded (Arnold, 2009; Cooper, 2015). Regarding the institutional accounting solutions, the concept of fair value has not only been retained, but also actually been strengthened with more detailed specifications of its determination and measurement (see IASB, 2011; Laux & Leuz, 2009; Mala & Chand, 2012). A higher level of transparency and more detailed rules of measurement would help establish the desired social balance. In times of crisis, mainstream accounting, which is based on this perception, can merely—as expressed nicely by Arnold (2009, p. 805)—“cling to the disfunc-tion notion that more transparency will somehow revive confidence in financial markets and enable them to function efficiently once again.”

An in-depth social critique within such understanding of accounting is extremely difficult to make because this view makes it impossible to define accounting as having any (autonomous) stakeholder interest given that it is perceived as only a technical solution for a technical problem. The mistakes or irregularities in the implementation (e.g., accounting fraud, negligence) are the only areas that can be subject to criticism. Thus, there is very little room for any deeper social discourse. The dimensions that can most likely carry the biggest social potential of accounting are not identified. They might be revealed only by a fundamentally different and broader view on accounting as a social and institutional practice, particularly a view that perceives accounting as a political practice and ideology.

### 3 Accounting as Political Practice and Ideology

Since the late 1970s, alternative views on accounting have emerged in accounting research, perceiving accounting not as a mere technical solution for a technical problem, but rather as a cultural phenomenon, a product of social relationships, frictions and interests, and simultaneously as an active participant in their creation. Accounting is thus regarded as a social and institutional practice (Miller, 1994, and Hopwood, 1992, in Potter, 2005).

Among the metaphors used in the discussions of accounting as a social practice, we emphasize those that describe accounting as social construction (Hines, 1988), history (Morgan, 1988), economics (Klamer & McKloskey 1992; Morgan, 1988), politics (Burchell et al., 1980; Cooper & Shere, 1984; Francis, 1990; Lehman & Tinker, 1987), ideology and domination (Tinker et al., 1982, as cited in Bryer, 2012; Cooper & Sherer, 1984; Dillard, 1991; Francis, 1990; Walters, 2004), legitimization (Tinker et al., 1982, as cited in Arnold, 2009; Richardson, 1987), or partisan (Arnold, 2009; Neu & Taylor, 1996; Tinker, 1991). These approaches to the accounting research are all characterized by a more critical, often reformist thinking about its role, significance, and functioning in society (see, for example, critical accounting or radical accounting).<sup>1</sup> They are based on the critical theory tradition,<sup>2</sup> which serves as the foundation of and driving force behind their thinking.

One of the most important findings emerging from this extension of the understanding of accounting to the social and institutional practice is undoubtedly the one that perceives accounting as essentially a political practice (Arnold, 2009). As Cooper and Sherer (1984, p. 208) asserted,

any accounting contains a representation of a specific social and political context. Not only is accounting policy essentially political in that it derives from the political struggle in a society as a whole but also the outcomes of accounting policy are essentially political in that they operate for the benefit of some groups in society and to the detriment of others.

Consequently, one of the main themes in the socio-critical accounting research is the research of political and economic foundations of modern accounting and the revelation and criticism of accounting as a type of political and economic thought itself (see, for example, Laughlin, 1999). When we consider accounting as a political and economic thought, we primarily consider its fundamental socio-political and economic stance as depicted in the reasoning and the activities of its main protagonists regarding the issues related to the (optimum) social order, the fairness of relations, and distribution within society (see, for example, Sikka, 2012), the issues related to (optimum) social development paradigms, the fundamental economic purposes, goals and factors, issues of ethics (Dillard, 1991), and the attitude

<sup>1</sup> For a detailed definition of critical (previously terms as “radical”) accounting, see Laughlin (1999).

<sup>2</sup> The school of thought founded in the idealism of Kant and Hegel. In terms of accounting, it is well depicted in the following quotation: “A critique indicated from whence accounting is coming from and therefore provides an opportunity to break the cycle of the dominant social system producing accounting, and accounting in turn reproducing and reifying the dominant social system” (Dillard, 1991, p. 9).

toward the environment and social responsibility in general (see, for example, Gray, 2006) as well as issues of power and government (see Cooper & Sherer, 1984; Tinker, 1980) that permeate through all of the above. Critical theoreticians and other researchers of accounting who are inspired by critical theory (Arnold, 2009; Baker, 2005; Bryer, 2012; Burchell, Clubb, & Hopwood, 1985; Burchell et al., 1980; Collison, 2003; Cooper, 2015; Cooper & Sherer, 1984; Dillard, 1991; Funnell, 2007; Hopwood, 1990; Rudkin, 2007; Sikka, 2001; 2012; Tinker, 1980; Zhang & Andrew, 2014)<sup>3</sup> explain accounting's political economy primarily as the prevailing value system of the discipline, including its fundamental cultural and ideological foundation, identity, and motivation; through this, a basic social as well as technological and institutional background is necessary for a complete understanding and explanation of accounting as a social and sociological phenomenon. As Dillard (1991, p. 9) put it:

Accounting is a technology [...] that is not ideologically sterile [...]. For accounting, in spite of its apparent objectivity, there are no 'physical absolutes' upon which to base, and verify, the technology. The framework is a social construction. The technology is framed by ideology. The interpretation of events, and even the specification of what constitutes an event, are functions of the socio-political point of view.

Consequently, we can understand accounting as a partisan practice, implicated in distributive transfers of wealth between social classes (Tinker, 1991), shaping and being shaped by power relations within the political economy in which it operates (Arnold, 2009). By connecting accounting to its broader social context, we can thus see that accounting is deeply ideological (Baker, 2005; Dillard, 1991; Zhang & Andrew, 2014). Or, in the words of Tinker (2012), reviving the critiques of marginalism from the 1990s, "accounting results are decided, not by matters of efficiency, but political and social aspects" (p. 126). Moreover, the rhetoric of the accounting profession itself with regard to their service to the public interest "reveals a type of self-interested ideology, that is principally concerned with maintaining the economic interests of the public accounting profession" (Baker, 2005, pp. 695–696).

The political-economic view of accounting therefore strives primarily to understand and evaluate the functions of accounting within the context of the economic, social, and political environment in which it operates (Cooper & Sherer, 1984) and is influenced directly or indirectly by Marxist thought (Arnold, 2009). Therefore, to better understand the significance, role, and effects of accounting in a society as well as establish the reasons for them being the way they are, we should first understand the very nature and origin

of core methodological solutions, theory, and policy of accounting. In relation to this, Funell (2007, p. 23) asserted that accounting actually "has no virtue outside that which the social, legal and economic frameworks in which it operates allows it... [and that the] relevance of accounting to a society depends upon the aims of that society". Thus, if society is organized around the principles of competition, the sanctity of private property, and self-interest, then the purposes accounting serves will be the same (Funnell, 2007). We do not need to search far to establish that this is actually true. Equations such as capital equals assets minus liabilities, profit and loss equal revenue minus expenses, and profit and loss are added to capital (unless the owners have previously divided it among themselves) are examples of basic mathematics of conventional accounting. Profit maximization, shareholder value maximization, capital as a primary factor of production, and market as the only real and fair measure of value are fundamental economic postulates/metaphors and the prevailing ideological mantra. There is just a small step from here to the realization that accounting as prevailingly being taught and practiced is actually a capitalist idea/ideology. As Tinker et al. (1982, p. 173, as cited in Rudkin, 2007, p. 13) stated,

The very accounting calculus, assets minus liabilities equals owners' equity [thus] sets about the privileging of capital by accounting and has implied and reinforces [a particular] ordering of society. The accounting equation is expressed in terms of equity as opposed to for example in terms of creditors or labour. It is argued that accounting is exposed as an ideology that fosters capitalism and is complicit in wider social struggles.

Similarly, Collison (2003, p. 861) wrote:

Attention to the interests of shareholders above all other groups is implicit in much of what is taught. [...] The very construction of a profit and loss account [...] is a continual, and usually unstated reminder that the interests of only one group of stakeholders should be maximised. Indeed, it may be very difficult [...] to even conceive of another way in which affairs could be ordered [...] even at the algebraic level, let alone the moral.

Concerning this issue, Cooper (2015, p. 17) concluded that "[a]ccounting is an integral part of the symbolic universe of neo-liberalism [and] accounting technologies animate and inform individual short-term wealth maximising strategies which have served to enrich the few at the expense of the majority." Furthermore, accountancy firms have even been subjected to criticism that, through the sale of tax avoidance schemes, they have facilitated a skewed distribution of income and wealth (Sikka, 2012).

Capitalism is thus instituted as the political and economic foundation of traditional accounting. It is a dominant theoretical

---

<sup>3</sup> This list is by no means comprehensive.

and ideological influence that decisively determines current accounting thought and practice and, via the latter two, also prevailing economic understanding, thinking, and behavior of people. Accounting is, thus, seen as essentially political (Arnold, 2009) and the language of capitalist accounting as a means of providing the foundation of capitalist ideology (Bryer, 2012). In this respect, accounting is presented as both constructing the society and as being constructed by society at the same time, which “aids to stabilizing the social structures from which it emanated” (Dillard, 1991, p. 9) and “embraces a [capitalist] moral structure in that it embeds a privileging of capital over other interests such as labour or credit in accounting measurement” (Rudkin, 2007, p. 17). The world views embedded within accounting practices prioritize the interests of capital and have little regard for interests of labor or the state (Sikka, 2012), and the accountancy regulatory structures are captured by the international capital and primary function to advance its interests (Sikka, 2001). Moreover, from this perspective, accountancy is not only captured by financial capital that acts as the tool of the ideology of the governing social elites, but also increasingly acts as a strong interest group of capital. The latter is seen in its increasingly commercial orientation (Baker, 2005; Boyce, 2014; Sikka, 2009).

We see that the criticisms of accounting are numerous and unrelenting. Accounting is being attacked mainly as the tool/instrument/technology of capitalist hegemony and as the means for the dissemination of the principles of capitalism. It is seen as “a symbolic, cultural and hegemonic force, in struggles over the distribution of social income” (Lehman & Tinker, 1987, p. 503), as “an ideological [...] apparatus, helping the hegemony of the capitalist State to reproduce [its] political structure” (Gallhofer and Haslam, 1991, as cited in Funnell, 2004, p. 60), or as “an ideology, a way of rationalising or explaining away the appropriation of the production of one class by members of another [which makes it] an intellectual and pragmatic tool in social domination” (Tinker, 1985, as cited in Dillard, 1991, p. 21). It is therefore becoming increasingly clear that financial capital is a dominant force and that it is given far from negligent support by accounting in its dominance. This is especially apparent in light of the criticisms that the adaptation of global accounting regulations has in part lubricated and legitimized the movement toward neoliberalism and the financialization of the global economy (see, for example, Biondi & Suzuki, 2007; Boyer, 2007; Hopwood, 2009; McSweeney, 2009; Roberts & Jones, 2009, Zhang & Andrew, 2014).

A logical question here is where accounting gets this enormous power and influence from. Where does all this faith in its ability to influence social relationships originate from? Furthermore, how can such a simple technological practice play any significant socio-political role at all as the

level of difficulty of its operations rarely surpasses the most basic operations of addition, subtraction, multiplication, division, and maybe a few other ones?

The majority of theoreticians following the tradition of critical theory are convinced that it actually can play such a role. They also point to some possible explanations. For example, Suzuki (2003, p. 74) stated that

what has been understood as the objective representation of [...] reality may be, in fact, a rhetorical construct of what has been vaguely recognised as the economy. In other words, no reality is actually re-presented with any accuracy, but rather the economy emerges through the act of accounting rhetoric.

Accounting is thus a language! It is a discourse or communication (Burchell et al., 1980; Francis, 1990; Funnell, 2007), and a rhetoric (Walters, 2004). The representation of economic reality can be viewed as a mechanism for enabling economic discourse with respect to these activities and events (Burchell et al., 1980). Although these representations might seem real, they are in essence accounting interpretations/narratives/metaphors as well as a peculiar ideological pedagogy. The language of accounting and its use in everyday economic communication, which are at the heart of the attention from the poststructuralist views on accounting, are therefore a primary dissemination channel of ideology. As Bryer (2012, p. 513) claimed, it is not only the “language of real life that provides symbolic structures for social action, [that is] a language of praxis in business,” but also the language as a possibly integrating and distorting ideology (Bryer, 2012). With reference to the calls for greater control, responsibility, efficiency, and effectiveness, such presentations serve as the prevalent accounting social/economic rhetoric (or political discourse) and the primary source of its social attraction. Thus, assets, liabilities, costs, revenues and expenses, profit and loss, and capital—as real economic and as linguistic variables/metaphors—decisively determine our understanding of economic matters, direct our thinking, and convey to us what is important and what is not, what is right and what is not, what the goals are, and how to measure them. All of these are social constructs in the sense that they are not based on any natural laws or irreversible reasoning/logic; nevertheless, they are an increasingly important element of our daily economic rationalizations and understanding of the world. They are therefore the products of the agreed-upon technologies, methodologies, theories, and mathematics that enable accounting to communicate a set of values, ideals, expected behavior, and what is approved and disapproved (Funnell, 2007) at least to the same degree as they enable it to communicate independent reality. Thus, accounting is “constructing, sustaining and legitimising political and economic arrangements, institutions and ideological themes” (Guthrie & Parker, 1990, 166,

as cited in Funnell, 2007, p. 23). As Macintosh (2009, p. 168) concluded, “accounting language is not a transparent medium but rather is the material used to manufacture accounting ‘truths.’” This mechanism is explained in more detail by Walters (2004, p. 163), who stated that:

the exclusivity of a single metaphor by its favoritism and privilege [...] leads to effacement and forgetting of its metaphorical nature and thereby its eventual ‘truth’ status. Privileged metaphors become frequently used as a consequence of their exclusivity, familiar and unobtrusive as a result of habitual usage, hard and fixed as a consequence of unwitting compulsion, and ultimately, by custom or convention, are accordingly afforded the status of truth concepts.

Accounting is just such a metaphor. Numbers, spreadsheets, equations, and the like give the appearance of exactness and conviction of absolute reality. One can doubt the implementation only, but never the theoretical and methodological principles because they are scientific. The ideological effect of such a metaphor, therefore, is not just in its fundamental communicativeness, but also in the fact that it “forecloses other narratives and value positions” (Neu & Taylor, 1996, p. 437) with its privileged status. “By restricting the language of discussion, social relations are reified and objectified and thus become viewed as an objective and unalterable environment, within which all action takes place” (Dillard, 1991, p. 19). “[P]revalent accountings displace alternative accountings which might transform the consciousness of many social actors and perhaps contribute to a challenging of the capitalist system of power relations” (Gallhofer & Haslam, 1991, p. 492, as cited in Funnell, 2004, p. 60). This completes the circle of economic truth, and accounting is appointed as its principal and exclusive narrator.

What kind of light does this view shed on the role of accounting in the recent global financial crisis? In essence, it points to yet another agreement between capital and accounting. Due to the fact that the recent crisis was intensified by significant amounts of investment in extreme forms of fictitious capital, the accounting profession’s adoption of financial economic rationalities has helped animate the form of financialized neo-liberalism that dominated at the time of the crisis (Cooper, 2015). Thus “accounting—when shaped, employed, and analysed in ways which rely on financial market failure denial—reinforced the conditions which created the crisis” (McSweeney, 2009, p. 844) and accounting technologies “have enabled, legitimised, hidden and animated the [speculative] activities of business in general and financial institutions in particular in the run up to and since the crisis” (Cooper, 2015, p. 1). Correspondingly, the convergence project between the conceptual frameworks and standards of the two internationally most important financial reporting authorities (i.e., IASB and US FASB)

should be understood, according to Zhang and Andrew (2014), “through an emphasis on its ideological underpinnings—its capacity to refocus accounting practice towards the needs of speculators in capital markets” (p. 24). In this regard, actually, as in the field of financial capital, nothing much has changed in the field of accounting (Cooper, 2015). Accounting continues to support and legitimize discourses that erode workers’ share of national income and wealth and, thus, fuels the economic crisis (Sikka, 2012). The implemented changes merely reinforce the illusion that they can substitute for stronger forms of oversight and constraints on financial speculation (Arnold, 2012). Furthermore, they still continue to contribute to financial instability by providing ideological support for dangerous levels of financial speculation and minimal regulation (Arnold, 2012). Moreover, as discussed by Arnold (2009, p. 808), “seemingly neutral accounting practices facilitated, and continue to facilitate, the massive wealth transfers that mark this extraordinary financial crisis.” Institutional accounting could also be seen as being complicit in this crisis (Cooper, 2015). If we consider that accounting regulations of international scope are set by privately funded organizations, the most important players in financialized capitalism, we should not be surprised in this respect. As Cooper (2015, p. 1) explained, “the institutional structures of accounting mean that it is susceptible of being captured by the most powerful in the society.” With regard to the recent crisis, Cooper further commented rather resignedly that “institutional structures of accounting standard setting mean that the kind of rules needed to help regulate markets and curtail some of the more dangerous forms of speculation so desperately needed before (and since the crisis) can never be forthcoming” (2015, p. 13).

## 4 Conclusion

The recent global crisis, in which accounting was faced both with pressure to change and reproaches for being co-responsible for the emergence of the crisis, offers us the opportunity to reflect on the different possibilities of understanding the role of accounting in a society as well as its political and economic foundations. Mainstream accounting and institutional accountancy have responded to the pressures and challenges induced by the crisis from the traditional, functional, and neutralist view on accountings’ role in the society (Arnold, 2012; Cooper, 2015; Henry & Holzmann 2009; Mala & Chand, 2012; Nölke, 2009; Power, 2010). This means persisting on the existence and possibility of faithful representation of the independent and objective economic reality, seeing accountants as innocent messengers of the bad news (Magnan, 2009) and accounting merely as a socially neutral technical solution for a technical problem (Laux & Leuz, 2009).

Broader views on accounting as a social (and institutional) practice stem from the fundamental idea (Hines, 1991) that there is no such thing as an independent and unbiased accounting and that there is no such thing as an independent and objective economic reality. The political and economic view of accounting (Arnold, 2009; Baker, 2005; Bryer, 2012; Burchell et al., 1980; 1985; Collison, 2003; Cooper, 2015; Cooper & Sherer, 1984; Dillard, 1991; Funnell, 2007; Hopwood, 1990; Rudkin, 2007; Sikka, 2001; 2012; Tinker, 1980; Zhang & Andrew, 2014) thus reveals that the background of accounting technology is always ideological and that accounting both reflects prevailing socio-economic relationships and changes alongside them. This view not only reveals current mainstream accounting as the tool/technology of capitalist hegemony and as the means for the dissemination of the principles of capitalism, but also rather critically draws attention to the entrapment of institutional accounting and the accountancy profession in these principles.

The recent global financial crisis did not represent any major shock for (mainstream) accounting. This crisis probably did not change accounting much as accounting merely received minor touch-ups (Arnold, 2009; Cooper, 2015) in the form of further strengthening of auditing, perfecting of the rules of fair value measurement, and strengthening of the idea about the transparency of reporting with the increasingly

harmonized accounting standards. In essence, this was in fact yet another agreement between capital and accounting. Moreover, the interconnectedness of accounting and capital or the integration of international accounting standard setters and accounting firms in the capitalist business model (Baker, 2005; Boyce, 2014; Sikka, 2001; 2009) is probably one of the reasons why the recent financial crisis is not perceived in major accounting circles as the crisis of accounting. In fact, this crisis actually presents an opportunity for accounting. The debates about more control, more regulation, more transparency, and responsibility (Henry & Holzmann, 2009; Mala & Chand, 2012) are namely the language and the business model of the existing institutionalized accounting (see, for example, Power, 1999). In this respect, accounting is more or less just the reflection of the prevailing social climate and relationships and is focused on the maintenance and support of capitalist control over means of production (Dillard, 1991). In other words, the political economy of accounting always belongs to the elites of the prevailing social order (Dillard, 1991; Tinker, 1980; 1991). If and when they change, accounting will undoubtedly follow suit. By spreading the awareness of the role of institutionalized accounting and through self-criticism concerning its entrapment by capital, a critical stance and the activities of the non-mainstream academic accounting sphere could accelerate such processes a bit. But that is another story.

## References

1. Anthony, R., & Govindarajan V. (2006). *Management control systems*. New York: McGraw-Hill.
2. Arnold, P. J. (2009). Global financial crisis. The challenge to accounting research. *Accounting, Organizations and Society*, 34(6/7), 803–809. <http://dx.doi.org/10.1016/j.aos.2009.04.004>
3. Arnold, P. J. (2012). The political economy of financial harmonization: The East Asian financial crisis and the rise of international accounting standards. *Accounting, Organizations and Society*, 37(6), 361–381. <http://dx.doi.org/10.1016/j.aos.2012.05.001>
4. Baker, C. R. (2005). What is the meaning of "the public interest"? *Accounting, Auditing & Accountability Journal*, 18(5), 690–703.
5. Biondi, Y., & Suzuki T. (2007). Socio-economic impacts of international accounting standards: An introduction. *Socio-Economic Review*, 5(4), 585–602. <http://dx.doi.org/10.1093/ser/mwm011>
6. Boyce, G. (2014). Professionalism, the public interest, and social accounting. In S. Mintz (Ed.), *Accounting for the public interest, advances in business ethics research* (pp. 115–139). Dordrecht: Springer. [http://dx.doi.org/10.1007/978-94-007-7082-9\\_6](http://dx.doi.org/10.1007/978-94-007-7082-9_6)
7. Boyer, R. (2007). Assessing the impact of fair value upon financial crises. *Socio-Economic Review*, 5(4), 779–807. <http://dx.doi.org/10.1093/ser/mwm018>
8. Bryer, R. (2012). Americanism and financial accounting theory—Part 1: Was America born capitalist? *Critical Perspectives on Accounting*, 23(7/8), 511–555. <http://dx.doi.org/10.1016/j.cpa.2012.09.003>
9. Burchell, S., Clubb, C., & Hopwood, A. G. (1985). Accounting in its social context: Towards a history of value added in the United Kingdom. *Accounting, Organizations and Society*, 10(4), 381–413. [http://dx.doi.org/10.1016/0361-3682\(85\)90002-9](http://dx.doi.org/10.1016/0361-3682(85)90002-9)
10. Burchell, S., Clubb, C., Hopwood, A., Hughes, J., & Nahapiet, J. (1980). The roles of accounting in organizations and society. *Accounting, Organizations and Society*, 15(1), 5–27. [http://dx.doi.org/10.1016/0361-3682\(80\)90017-3](http://dx.doi.org/10.1016/0361-3682(80)90017-3)
11. Collison, J. D. (2003). Corporate propaganda: Its implications for accounting and accountability. *Accounting, Auditing & Accountability Journal*, 16(5), 853–886. <http://dx.doi.org/10.1108/09513570310505989>
12. Cooper, C. (2015). Accounting for the fictitious: A Marxist contribution to understanding accounting's roles in the financial crisis. *Critical Perspectives on Accounting*. Retrieved from <http://dx.doi.org/10.1016/j.cpa.2014.08.002>
13. Cooper, D. J., & Sherer, M. J. (1984). The value of corporate accounting reports: Arguments for a political economy of accounting. *Accounting, Organizations and Society*, 9(3/4), 207–232. [http://dx.doi.org/10.1016/0361-3682\(84\)90008-4](http://dx.doi.org/10.1016/0361-3682(84)90008-4)
14. Dillard, F. J. (1991). Accounting as a critical social science. *Accounting, Auditing & Accountability Journal*, 4(1), 8–28. <http://dx.doi.org/10.1108/09513579110143849>



15. Francis, R. J. (1990). After virtue? Accounting as a moral and discursive practice. *Accounting, Auditing & Accountability Journal*, 3(3), 5–17. <http://dx.doi.org/10.1108/09513579010142436>
16. Funnell, W. (2004). Accounting and the pursuit of utopia: The possibility of perfection in Paraguay. *Accounting Historians Journal*, 31(1), 57–92.
17. Funnell, W. (2007). Accounting and the virtues of anarchy. *The Australasian Accounting Business & Finance Journal*, 1(1), 18–27.
18. Gomes, D. (2008). The interplay of conceptions of accounting and schools of thought in accounting history. *Accounting History*, 13(4), 479–509. <http://dx.doi.org/10.1177/1032373208095480>
19. Gray, R. (2006). Social, environmental and sustainability reporting and organisational value creation? Whose value? Whose creation? *Accounting, Auditing & Accountability Journal*, 19(6), 793–819. <http://dx.doi.org/10.1108/09513570610709872>
20. Henry, E., & Holzmann, O. J. (2009). FASB, IASB respond to financial crisis. *Journal of Corporate Accounting & Finance*, 20(3), 71–75. <http://dx.doi.org/10.1002/jcaf.20487>
21. Hines, R. D. (1988). Financial accounting: In communicating reality, we construct reality. *Accounting, Organizations and Society*, 13(3), 251–261. [http://dx.doi.org/10.1016/0361-3682\(88\)90003-7](http://dx.doi.org/10.1016/0361-3682(88)90003-7)
22. Hines, R. D. (1991). The FASB's conceptual framework, financial accounting and maintenance of the social world. *Accounting, Organizations and Society*, 16(4), 313–331. [http://dx.doi.org/10.1016/0361-3682\(91\)90025-A](http://dx.doi.org/10.1016/0361-3682(91)90025-A)
23. Hopwood, A. G. (1990). Accounting and organization change. *Accounting, Auditing & Accountability Journal*, 3(1), 7–17. <http://dx.doi.org/10.1108/09513579010145073>
24. Hopwood, A. G. (2009). The economic crisis and accounting: Implications for the research community. *Accounting, Organizations and Society*, 34(6/7), 797–802. <http://dx.doi.org/10.1016/j.aos.2009.07.004>
25. International accounting standards board (IASB) (May 2011). *IFRS 13 Fair value measurement. Project summary and feedback statement*. Retrieved from [http://www.ifrs.org/Current-Projects/IASB-Projects/Fair-Value-Measurement/IFRS-13-Fair-Value-Measurement/Documents/FairValueMeasurementFeedbackstatement\\_May2011.pdf](http://www.ifrs.org/Current-Projects/IASB-Projects/Fair-Value-Measurement/IFRS-13-Fair-Value-Measurement/Documents/FairValueMeasurementFeedbackstatement_May2011.pdf)
26. Klamer, A., & McCloskey, D. (1992). Accounting as a master metaphor of economics. *European Accounting Review*, 1(1), 145–160. <http://dx.doi.org/10.1080/09638189200000008>
27. Krugman, P. (2009, December 28). The big zero. *The New York Times*. Retrieved from <http://economistsview.typed.com/economists-view/2009/paul-krugman-the-big-zero.html>
28. Laughlin, R. (1999). Critical accounting: Nature, progress and prognosis. *Accounting, Auditing & Accountability Journal*, 12(1), 73–78. <http://dx.doi.org/10.1108/09513579910259942>
29. Laux, C., & Leuz, C. (2009). The crisis of fair-value accounting: Making sense of the recent debate. *Accounting, Organizations and Society*, 34(6/7), 826–834. <http://dx.doi.org/10.1016/j.aos.2009.04.003>
30. Lehman, C., & Tinker, T. (1987). The “real” cultural significance of accounts. *Accounting, Organizations and Society*, 12(5), 503–522. [http://dx.doi.org/10.1016/0361-3682\(87\)90033-X](http://dx.doi.org/10.1016/0361-3682(87)90033-X)
31. Macintosh, N. B. (2009). Accounting and the truth of earnings reports: Philosophical considerations. *European Accounting Review*, 18(1), 141–175. <http://dx.doi.org/10.1080/09638180802327073>
32. Magnan, M. L. (2009). Fair value accounting and the financial crisis: Messenger or contributor? *Accounting Perspectives*, 8(3), 189–213. <http://dx.doi.org/10.1506/ap.8.3.1>
33. Mala, R., & Chand, P. (2012). Effect of the global financial crisis on accounting convergence. *Accounting and Finance*, 52(1), 21–46. <http://dx.doi.org/10.1111/j.1467-629X.2011.00418.x>
34. McSweeney, B. (2009). The roles of financial asset market failure denial and the economic crisis: Reflections on accounting and finance theories and practices. *Accounting, Organizations and Society*, 34(6/7), 835–848. <http://dx.doi.org/10.1016/j.aos.2009.04.007>
35. Morgan, G. (1988). Accounting as reality construction: Towards a new epistemology for accounting practice. *Accounting, Organizations and Society*, 13(5), 477–485. [http://dx.doi.org/10.1016/0361-3682\(88\)90018-9](http://dx.doi.org/10.1016/0361-3682(88)90018-9)
36. Napier, C. J. (2006). Accounts of change: 30 years of historical accounting research. *Accounting, Organizations and Society*, 31(4/5), 445–507. <http://dx.doi.org/10.1016/j.aos.2005.12.004>
37. Neu, D., & Taylor, A. (1996). Accounting and the politics of divestment. *Critical Perspectives on Accounting*, 7(4), 437–460. <http://dx.doi.org/10.1006/cpac.1996.0046>
38. Nölke, A. (2009). The politics of accounting regulation: Responses to the subprime crisis. In E. Helleiner, S. Pagliari, & H. Zimmermann (Eds.), *Global finance in crisis: The politics of international regulatory change* (pp. 37–55). London: Routledge
39. Parker, D. L. (1999). Historiography for the new millennium: Adventures in accounting and management. *Accounting History*, 4(2), 11–42. <http://dx.doi.org/10.1177/103237329900400204>
40. Potter, B. N. (2005). Accounting as a social and institutional practice: Perspectives to enrich our understanding of accounting change. *ABACUS*, 41(3), 265–289. <http://dx.doi.org/10.1111/j.1467-6281.2005.00182.x>
41. Power, M. (1999). *The audit society: Rituals of verification*. Oxford: OUP. <http://dx.doi.org/10.1093/acprof:oso/9780198296034.001.0001>
42. Power, M. (2010). Fair value accounting, financial economics and the transformation of reliability. *Accounting and Business Research*, 40(3), 197–210. <http://dx.doi.org/10.1080/00014788.2010.9663394>
43. Richardson, A. J. (1987). Accounting as a legitimating institution. *Accounting, Organizations and Society*, 12(4), 341–355. [http://dx.doi.org/10.1016/0361-3682\(87\)90023-7](http://dx.doi.org/10.1016/0361-3682(87)90023-7)

44. Roberts, J., & Jones, M. (2009). Accounting for self-interest in the credit crisis. *Accounting, Organizations and Society*, 12(4), 856–867. <http://dx.doi.org/10.1016/j.aos.2009.03.004>
45. Rudkin, K. (2007). Accounting as myth maker. *The Australasian Accounting Business & Financial Journal*, 1(2), 13–24.
46. Sikka, P. (2001). Regulation of accountancy and the power of capital: Some observations. *Critical Perspectives on Accounting*, 12(2), 199–211. <http://dx.doi.org/10.1006/cpac.2001.0466>
47. Sikka, P. (2009). Financial crisis and the silence of the auditors. *Accounting, Organizations and Society*, 34(6/7), 868–873. <http://dx.doi.org/10.1016/j.aos.2009.01.004>
48. Sikka, P. (2012, May 9–11). *Bad distribution of income and economic crisis: The hand of accountancy*. Paper presented at the 35<sup>th</sup> European Accounting Association conference, Ljubljana.
49. Solomons, D. (1991). Accounting and social change: A neutralist view. *Accounting, Organizations and Society*, 16(3), 287–295. [http://dx.doi.org/10.1016/0361-3682\(91\)90005-Y](http://dx.doi.org/10.1016/0361-3682(91)90005-Y)
50. Suzuki, T. (2003). The accounting figuration of business statistics as a foundation for the spread of economic ideas. *Accounting, Organizations and Society*, 28(1), 65–95. [http://dx.doi.org/10.1016/S0361-3682\(02\)00033-8](http://dx.doi.org/10.1016/S0361-3682(02)00033-8)
51. Tinker, T. (1980). Towards a political economy of accounting: An empirical illustration of the Cambridge controversies. *Accounting, Organizations and Society*, 5(1), 147–161. [http://dx.doi.org/10.1016/0361-3682\(80\)90031-8](http://dx.doi.org/10.1016/0361-3682(80)90031-8)
52. Tinker, T. (1991). The accountant as partisan. *Accounting, Organizations and Society*, 16(3), 297–310. [http://dx.doi.org/10.1016/0361-3682\(91\)90006-Z](http://dx.doi.org/10.1016/0361-3682(91)90006-Z)
53. Tinker, T. (2012). Towards a political economy of accounting. An empirical illustration of the Cambridge controversies—An update. *African Journal of Accounting, Auditing and Finance*, 1(2), 113–129. <http://dx.doi.org/10.1504/AJAAF.2012.048051>
54. Walker, M. (2010). Accounting for varieties of capitalism: The case against a single set of global accounting standards. *The British Accounting Review*, 42(3), 137–152. <http://dx.doi.org/10.1016/j.bar.2010.04.003>
55. Walters, M. (2004). Alternative accounting thought and the prison-house of metaphor. *Accounting, Organizations and Society*, 29(2), 157–187. [http://dx.doi.org/10.1016/S0361-3682\(02\)00054-5](http://dx.doi.org/10.1016/S0361-3682(02)00054-5)
56. Zhang, Y., & Andrew, J. (2014). Financialisation and the conceptual framework. *Critical Perspectives on Accounting*, 25(1), 71–95. <http://dx.doi.org/10.1016/j.cpa.2012.11.012>

## Authors

**Robert Horvat** is a senior lecturer at the Faculty of Economics and Business at the University of Maribor. He received his M.Sc. degree from the Faculty of Economics and Business at the University of Maribor in 2003. His areas of research are accounting, auditing, and ethics in accounting and auditing. His bibliography consists of 32 articles, conference papers, discussion papers, and other scientific and professional contributions. He teaches several courses at the undergraduate level in the areas of financial accounting, cost accounting and managerial accounting.

**Bojana Korošec, Ph.D.**, is an associate professor for accounting and auditing and, since 2005, has been the chair of the Department for Accounting and Auditing at the Faculty of Economics and Business at the University of Maribor. Her research refers in particular to areas in managerial accounting and financial reporting, valuation of economic categories (including intangibles), and behavioral issues in accounting and auditing.

# Vloga računovodstva v družbi: Samo tehnična rešitev za problem ekonomskega merjenja ali tudi orodje družbene ideologije?

## Izvleček

V prispevku soočamo tradicionalni nevtralistični pogled na vlogo računovodstva v družbi kot na dejavnost neodvisnega in nepristranskega merjenja in prikazovanja realnih ekonomskih pojavov s pogledom nanj kot na družbenopolitično prakso in ideologijo. Pokažemo tudi, kako takšna razširitev pogleda vpliva na razumevanje njegove vloge in njegovih odzivov v luči zadnje globalne finančne krize.

**Ključne besede:** računovodstvo, revizija, družbena praksa

## NAVODILA AVTORJEM

Revija **Naše gospodarstvo / Our Economy** objavlja znanstvene članke iz vseh področij ekonomije in poslovnih ved. Avtorje vabimo, da v uredništvo revije pošljejo originalne prispevke, ki še niso bili objavljeni oziroma poslani v objavo drugi reviji. Avtorji podeljujejo lastniku revije ekskluzivno pravico za komercialno uporabo članka, ki stopi v veljavo na osnovi sprejetja članka v objavo. Avtorji v celoti odgovarjajo za vsebino prispevka. Objavljamo samo članke, ki dobijo pozitivno oceno naših recenzentov.

Prispevki naj bodo napisani v angleškem jeziku. Na posebni strani navedite ime avtorja, njegov polni habilitacijski in znanstveni naziv ter ustanovo, kjer je zaposlen. Prva stran naj vsebuje naslov, izvleček (maksimalno 650 znakov) in ključne besede, vse troje v slovenskem in angleškem jeziku. Dodajte tudi trimestno kodo JEL klasifikacije, ki jo najdete na <https://www.aeaweb.org/econlit/jelCodes.php?view=jel>.

Za besedilo članka uporabljajte praviloma pisave Times, Times New Roman CE, SL Dutch in podobne v velikosti od 10 do 12 pik (points). V tabelah in slikah obvezno uporabljajte pisavo brez serifov (Helvetica, Arial, Arial CE, SL Swiss ali podobno). Za poudarke v besedilu uporabljajte poševni tisk, ne krepkega ali podčrtanega tiska.

Morebitne tabele in slike naj bodo oštevilčene ter naslovljene nad, opombe in viri pa pod tabelo oziroma sliko. V tabelah uporabljajte enojne okvirje, debeline pol pike (1/2 point). Sprotne opombe naj bodo oštevilčene in navedene pod tekstem pripadajoče strani. Oštevilčite tudi morebitne enačbe.

Vire v tekstu in v seznamu virov je potrebno urediti skladno z APA standardom – navodila na <http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>.

Nekaj osnovnih napotkov:

*Navedbe virov v tekstu*

Primer 1a: Another graphic way of determining the stationarity of time series is correlogram of autocorrelation function (Gujarati, 1995).

Primer 1b: Another graphic way of determining the stationarity of time series is correlogram of autocorrelation function (Gujarati, 1995, p. 36).

Primer 2a: Engle and Granger (1987) present critical values also for other cointegration tests.

Primer 2b: Engle and Granger (1987, p. 89) present critical values also for other cointegration tests.

*Navedbe virov v seznamu virov*

Primer 1 – Knjiga: Gujarati, D. N. (1995). *Basic Econometrics*. New York: McGraw-Hill.

Primer 2 – Članek v reviji: Engle, R. F., & Granger, C. W. J. (1987). Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55(2), 251-276.

Primer 3 – Poglavlje v knjigi, prispevek v zborniku: MacKinnon, J. (1991). Critical Values for Cointegration Tests. In R. F. Engle & C.W. J. Granger, (Eds.), *Long-Run Economic Relationships: Readings in Cointegration* (pp. 191-215). Oxford: University Press.

Primer 4 – Elektronski vir: Esteves, J., Pastor, J. A., & Casanovas, J. (2002). Using the Partial Least Square (PLS): *Method to Establish Critical Success Factors Interdependence in ERP Implementation Projects*. Retrieved from <http://erp.ittoolbox.com/doc.asp?i=2321>

Prispevek naj ne bo daljši od avtorske pole (30.000 znakov). Stran naj bo velikosti A4, s tricentimetrskimi robovi in oštevilčenimi stranmi. Izpis naj bo enokolonski z 1,5 razmika med vrsticami. Elektronsko verzijo prispevka pošljite v MS Word obliki na e-naslov [our.economy@um.si](mailto:our.economy@um.si) ali [nase.gospodarstvo@um.si](mailto:nase.gospodarstvo@um.si).

S prispevkom pošljite za avtorja in vse soavtorje še celotni naslov, elektronski naslov in telefonsko številko, preko katere je dosegljiv uredništvu. Dodajte tudi kratek CV (obsega od 500 do 550 znakov, upoštevajoč presledke).

## INSTRUCTIONS FOR AUTHORS

The journal **Naše gospodarstvo / Our Economy** publishes original scientific articles covering all areas of economics and business. Authors are invited to send original unpublished articles which have not been submitted for publication elsewhere. Authors are completely responsible for the contents of their articles. Only articles receiving a favorable review are published. The authors grant the Journal Owner the exclusive license for commercial use of the article throughout the world, in any form, in any language, for the full term of copyright, effective upon acceptance for publication.

Please write your text in English (American or British usage is accepted, but not a mixture of these). The cover page should include the author's name, academic title or profession, and affiliation. The first page must contain the title, an abstract of no more than 650 characters, and key words, all in English. Add also three-character codes of JEL classification (<https://www.aeaweb.org/econlit/jelCodes.php?view=jel>).

Manuscripts should be prepared on a word processor in a font such as Times, Times New Roman CE, or SL Dutch in size 10 to 12 points. Tables and figures are to be presented in fonts without serifs (Helvetica, Arial, Arial CE, SL Swiss or similar). Emphasized parts of the text should be in italics, not bold or underlined.

Figures and tables should be numbered with a title above and notes and sources below. Figures should be in 1/2 point single-line frames. Footnotes should be numbered consecutively and placed at the bottom of the relevant page. Equations should also be numbered.

References in the text and in the list of references should be arranged according to APA style – see <http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>.

Some elementary directions:

*References in the text*

Example 1a: Another graphic way of determining the stationarity of time series is correlogram of autocorrelation function (Gujarati, 1995).

Example 1b: Another graphic way of determining the stationarity of time series is correlogram of autocorrelation function (Gujarati, 1995, p. 36).

Example 2a: Engle and Granger (1987) present critical values also for other cointegration tests.

Example 2b: Engle and Granger (1987, p. 89) present critical values also for other cointegration tests.

*References in the list of references*

Example 1 – Book: Gujarati, D. N. (1995). *Basic Econometrics*. New York: McGraw-Hill.

Example 2 – Journal article: Engle, R. F., & Granger, C. W. J. (1987). Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55(2), 251-276.

Example 3 – Book chapter or article from conference proceedings: MacKinnon, J. (1991). Critical Values for Cointegration Tests. In R. F. Engle & C.W. J. Granger, (Eds.), *Long-Run Economic Relationships: Readings in Cointegration* (pp. 191-215). Oxford: University Press.

Example 4 – Web source: Esteves, J., Pastor, J. A., & Casanovas, J. (2002). Using the Partial Least Square (PLS): *Method to Establish Critical Success Factors Interdependence in ERP Implementation Projects*. Retrieved from <http://erp.ittoolbox.com/doc.asp?i=2321>

The size of the article should not exceed 30,000 characters and should be prepared on A4 paper with 3 cm margins and numbered pages. The text should be in single column layout, with 1.5 line spacing. Send the electronic version of article in MS Word to the following address: [our.economy@um.si](mailto:our.economy@um.si) or [nase.gospodarstvo@um.si](mailto:nase.gospodarstvo@um.si).

For the author and co-authors please add their postal address, e-mail address, telephone number as well as their CV (which range from 500 to 550 characters including spaces) in one paragraph.

NG  
OE

LETNIK  
VOLUME **61**