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VOLUME 13 · NUMBER 3 · FALL 2018 · ISSN 1854-4231

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INDEXING AND ABSTRACTING

Management is indexed/listed in DOAJ, Erih Plus, EconPapers, and EBSCO.

SUBMISSIONS

The manuscripts should be submitted as e-mail attachment to the editorial office at mng@fm-kp.si. Detailed guide for authors and publishing ethics statement are available at www.mng.fm-kp.si.

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PUBLISHED BY

University of Primorska Press
Titov trg 4, 6000 Koper, Slovenia
zalozba@upr.si · www.hippocampus.si



Revija *Management* je namenjena mednarodni znanstveni javnosti; izhaja v angleščini s povzetki v slovenščini. Izid revije je finančno podprla Javna agencija za raziskovalno dejavnost Republike Slovenije iz sredstev državnega proračuna iz naslova razpisa za sofinanciranje izdajanja domačih znanstvenih periodičnih publikacij.



management

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ISSN 1854-4231

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Financial Performance in the Public Administration Sector: Comparison Between Hungary and Romania

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We investigate the long-run relationship between profitability, liquidity and capitalization for companies acting in the public administration and defense sector from Hungary and Romania, using firm-level data for the period 2006–2015. Our panel cointegration analysis proves the existence of a long-run relationship between the analyzed variables. The DOLS results posit in the favor of a trade-off between liquidity and profitability for Hungary, but not for Romania. At the same time, the capitalization ratio negatively impacts the profitability ratio in Romania. These results are validated by a series of robustness tests, considering different profitability indicators, and partially validated by the FMOLS analysis. Our findings have noteworthy implications for the financial management of companies acting in the field of public administration and defense, showing different financial management strategies for the companies located in the two analyzed countries.

Key words: financial performance, public administration sector, firm-level data, panel cointegration

<https://doi.org/10.26493/1854-4231.13.197-211>

Introduction

The nexus between profitability and liquidity represents a challenge for the optimization of companies' financial decisions. Previous literature shows that firms' financial management might have different approaches to increase the financial performances, or the level

of profitability. A first theory states that more liquid firms are, more they can fulfill their short-term obligations and increase their sales. This way firms may obtain higher discounts for early payments that ensure an increase of the profitability level (Deloof 2003). In addition, short-term liquidity sources help firms to deal with unexpected situations and to take advantage of investment opportunities, especially during economic downturn periods. This is more evident for financially constrained firms. The second theory states that higher liquidity means unemployed resources. Therefore, liquidity might endanger profitability, and a trade-off appears between liquidity and profitability (Bolek and Wilinski, 2012). Otherwise said, firms that look for profitability are determined to have a small amount of current assets (i.e. cash, inventories and trade receivables). Ukaegbu (2014) provides a reconciliation between these opposite theories. The author underlines the necessary distinction between fluctuating current assets (to be financed by short-term financial sources) and permanent current assets (to be financed by long-term sources). In addition, in economic downturn periods, it is important to have an acceptable liquidity level (Albulescu et al., 2016). As Korajczyk and Levy (2003) show, recessions put pressure on liquidity and firms may react differently to the macroeconomic context and new financial conditions.

The empirical literature shows mixed evidence when assessing the profitability – liquidity nexus. Most of firm-level applications consider, beside profitability and liquidity, the role of working capital. In this line, Smith and Begemann (1997) report for a set of South African firms that the current liquidity ratio and the quick liquidity ratio have no significant impact on the profitability level. Other studies (e.g. Raheman and Nasr, 2007; Gill, Bigger, and Mathur 2010) report a negative impact of the working capital and liquidity on the profitability level. Opposite findings are advanced by Akinlo (2011) who tests the existence of a long-run relationship between profitability and liquidity for 66 Nigerian firms and discovers a positive effect.

At the same time, the capitalization level might have in its turn a mixed effect on profitability. A good capitalization helps companies to fulfill their long-term obligations. Therefore, on the one hand, this can be a good sign for investors and creditors, facilitating the firms' access to finance and fostering thus the profitability. However, on the other hand, firms may encounter higher costs with dividends as compared with loans' interest. In this case, if internal financial sources imply higher costs than external ones, the level of profitabil-

ity might decrease. We further on test these opposite theories by focusing on the firms acting in public administration and defense sector from Hungary and Romania. We perform a comparison between the two countries to see how liquidity and capitalization interact with the profitability level for firms which are state-dependent for doing business, and to see which the particularities of this relationship are in the post-crisis period. For this purpose, we use firm-level data from 2006 to 2015, resorting to AMADEUS statistics.

Different from similar works, we check for the existence of a long-run relationship between profitability on the one hand, and liquidity and capitalization on the other hand (using the Kao's (1999) test for panel cointegration). This relationship is afterwards estimated via the Dynamic Ordinary Least Square (DOLS) regression developed by Kao and Chiang (2000) for homogenous panels, and by the Fully Modified Ordinary Least Square (FMOLS) regression, designed for heterogenous panels, advanced by Pedroni (2000). For robustness purposes, we use alternative metrics for the level of profitability, as well as for the liquidity level.

The rest of the paper is as follows. The next section presents a short literature review. The third section addresses the data and the methodology. The forth section presents the empirical results while the fifth section addresses the robustness analysis of our empirical findings. The last section draws the conclusions.

Literature Review

The optimization of firms' financial decisions represents one of the central focus of the financial management literature. Two main internal elements influence the companies' profitability level. On the one hand, on the assets side, the way firms operate their business influence their success. Companies should be prepared to fulfill the unexpected financial obligations, and to take advantage from investment opportunities as quick as possible. This can be achieved if a sufficient level of liquidity is ensured. A high level of liquidity is particularly important in crisis times, when the access to external financing sources is restricted, or when interesting investment opportunities appear. At the same time, if the operating assets as cash, inventory or accounts receivable are too high, important resources remain unused, and might diminished the companies' profitability level. This trade-off can be better explained comparing the situation of financially constrained and unconstrained firms (Perobelli, Famá, and Sacramento 2016).

On the other hand, the structure of financing sources may influ-

ence the level of profitability. The choice between internal and external financing sources is made considering the financing costs. The financial management usually resorts to internal sources to finance the business. In this case, a high capitalization level might be equivalent with cheaper financing sources, which help to increase financial performances. A high capitalization level, associated with a good solvability, is also a sign of financial soundness and might be useful to attract new investors in the case of listed companies. However, if the internal financing sources are more expensive compared with the external ones, given the level of dividend taxes for example, a high capitalization level and therefore the use of internal sources in the detriment of external ones as bank loans, might negatively influence the profitability level.

The empirical literature usually assesses the interdependence between liquidity and profitability, which might be considered as two conflicting goals of working capital management (Smith and Bege-
mann 1997). For example, Perobelli, Famá, and Sacramento (2016) investigate different theories for the profitability – liquidity relationship, considering 872 shares of publicly-traded Brazilian companies, between 1994 and 2013. Adhikary and Papachristou (2017) search for a panel of 114 microfinance firms from South Asia, the determinants of profitability, for the period 2003 to 2011. They show that a strong capitalization, liquidity, and an increased industry concentration, are positively related with the profitability level.

Noteworthy studies focus on the working capital as a *proxy* for the liquidity level. In this line, Raheman and Nasr (2007) and Gill, Bigger, and Mathur (2010) find a negative relationship between the working capital and the profitability level. Similar findings are reported by Wasiuzzaman (2015) who uses a sample of 160 manufacturing firms in Malaysia, and an ordinary least squares (OLS) regression technique. The author's investigation shows a negative relationship between working capital (and its components) and profitability. For a set of 66 Nigerian firms Akinlo (2011) reports on contrary, a positive long-run relationship between profitability and liquidity. These results are sustained by Akinlo (2012). For the same set of companies for the period 1997–2007, the author considers the cash conversion cycle as a comprehensive measure of working capital management and suggest that firms' profitability is reduced by lengthening the number of days accounts receivable.

The relationship between capitalization and profitability is particularly important for the banking industry, given the role of regulatory capital in banks' activity. This relationship is equally impor-

tant firms, as the capitalization ratio provides information about the structure of financing sources. At the same time, from the accounting point of view, a high capitalization ratio is associated with a small leverage ratio. Higher the leverage is, more a company depends on long-term creditors for its long-term capital (Murphy 1968). Therefore, the impact on profitability depends on the trade-off between the internal and external financing sources. Given the fact that not all the companies report the level of their loans and credits, from an empirical point of view the analysis of the capitalization impact on profitability level seems to be recommended. In this line, Ghosh (2008) discovers that by taking more debt relative to own assets, firms' profits decrease. For a sample of 21 Pakistani cement companies listed on Karachi Stock Exchange for the period 2007 to 2012, Iqbal, Mulani, and Kabiraj (2013) show that there is a strong negative relationship between leverage and profitability of the firm (or a strong positive relationship between capitalization and profitability).

However, none of the aforementioned papers addresses the case of companies from the public administration and defense sector, nor they perform a comparative analysis at international level. To fill in this gap, we compare the financial management strategies of companies from Hungary and Romania.

Data and Methodology

DATA

We use AMADEUS annual data from 2006 to 2015, considering private and public companies acting in the field of 'Public administration and defense; compulsory social security' (NACE code 84). We analyze to what extent their capacity to manage short and long-term obligations affects their profitability, drawing a comparison between Hungary and Romania. We have retained into analysis only those companies for which we found at least five years of observations (we have therefore obtained an unbalanced panel). In Hungary, 22 companies were registered in 2015 in this services field. We have found satisfactory data for half of them (11 firms). In Romania, 33 companies are recorded in this industry in 2015, out of which 17 are retained into analysis. The list of the companies is presented in table 1.

The profitability of these companies is assessed using the return on equity ratio. In the main analysis, in line with similar papers, we resort to the return on equity ratio calculated based on net income (ROEni):

$$ROEni(\%) = \frac{NI}{E} \%, \quad (1)$$

TABLE 1 List of Companies Included in the Study

Hungary	<ol style="list-style-type: none"> 1. Cordate 2. Ddrfü 3. Körösfönt 4. M3 Road 5. Magyar Alkotóművészeti Közhasznú 6. Magyar Nemzeti Filmalap Közhasznú 7. MIL-EXIM 8. Norda Észak 9. Pajzs '94' 10. Pro Rekreatiöne Közhasznú 11. Value Added Solutions Consulting
Romania	<ol style="list-style-type: none"> 1. Administratia Domeniului Public si Privat Giurgiu 2. Alfa Point Protect srl 3. AMA Consultanta si Servicii 4. Compania Nationala de Administrare a Infrastructurii Rutiere 5. Compania Stingeri si Interventii 6. Davi Comfire 7. Electromagnetica Fire 8. Falck Fire Services 9. Fireproof Team 10. Geo-Sting 11. Gepro 12. Interprev Crist 13. NEI Fire Protection 14. Parc Industrial Mija 15. Parc Tehnologic si Industrial Giurgiu Nord 16. Preventfire 17. Regia Autonoma de Servicii Publice Ploiesti

where NI represents the net income and E is the average total equity for the year.

In our robustness analysis, we use two alternative metrics for profitability, namely return on equity ratio calculated using the level of profit before tax (ROE_{pbt}), and the return on assets ratio calculated using the level of profit before tax (ROA_{pbt}):

$$ROE_{pbt}(\%) = \frac{EBIT}{E} \%, \quad (2)$$

where EBT represents the earnings before income taxes.

$$ROA_{pbt}(\%) = \frac{EBIT}{TA} \%, \quad (3)$$

where TA are the total assets of the company.

In terms of explanatory variables, we consider two alternative metrics, namely the general liquidity ratio (LR) and the current ratio (CR):

TABLE 2 Summary Statistics

Country		ROeni	ROepbt	ROapbt	LR	CR	SER
Hungary	(1)	21.32289	20.87972	7.972772	2.674272	2.972544	38.36221
	(2)	18.31500	18.95700	4.475000	1.339000	1.460000	38.83200
	(3)	98.59800	339.7150	44.49400	40.85700	45.78500	87.52600
	(4)	-76.00800	-193.7550	-7.063000	0.029000	0.029000	0.365000
	(5)	31.02288	63.29523	10.90103	6.075432	6.638432	27.79668
	(6)	0.404938	1.687614	1.321158	5.163889	5.334920	0.165771
	(7)	4.645913	14.76823	4.445159	30.79581	33.06083	1.839647
Romania	(1)	35.04374	44.64911	15.81922	1.964355	1.863652	41.84619
	(2)	31.12350	37.65400	13.19850	1.355000	1.372500	43.02350
	(3)	184.6310	236.6000	84.20600	10.51000	11.09100	93.64500
	(4)	-81.28400	-81.27900	-16.68000	0.050000	0.071000	1.212000
	(5)	34.83133	44.77107	17.49132	1.639162	1.579840	23.15735
	(6)	0.547306	0.892182	1.261623	1.874644	2.150136	0.127147
	(7)	4.865546	5.126120	5.025017	7.895040	10.70493	2.060948

NOTES Row headings are as follows: (1) mean, (2) median, (3) maximum, (4) minimum, (5) standard deviation, (6) skewness, (7) kurtosis.

$$LR(\%) = \frac{OA}{CL}, \quad (4)$$

where *OA* are the operating assets and *CL* are the current liabilities.

$$CR(\%) = \frac{CA}{CL}, \quad (5)$$

where *CA* are the current assets or the difference between operating assets and non-current assets.

Finally, the capitalization is assessed considering the shareholder equity ratio as follows:

$$SER(\%) = \frac{E}{TA}, \quad (6)$$

where *CA* are the current assets, or the difference between operating assets and non-current assets.

Table 2 presents the descriptive statistics of the sample. We notice that the profitability of the Romanian companies is higher in comparison with those from Hungary, while the liquidity is smaller. We also notice that the financial indicators' volatility is higher in Hungary. Finally, data are positively skewed but not far from the normal distribution. However, the data shows excess kurtosis for liquidity ratio, in particular for Hungary, indicating the existence of leptokurtic densities.

We start our analysis with a series of cross-sectional dependence

TABLE 3 Cross-Sectional Dependence Tests

Country	Pesaran cd Norm.	Friedman χ^2	Frees Normal			
			Test	10%	5%	1%
Romania	0.106 (0.915)	4.571 (0.995)	0.967	0.412	0.567	0.902

NOTES The null hypothesis is no cross-sectional dependence; for Hungary, the number of observations contained by the unbalanced panel is insufficient to perform cross-sectional dependence tests.

TABLE 4 Panel Unit Root Tests

Country		ROENi	ROEPbt	ROApbt	LR	CR	SER
Hungary	(1)	-9.395***	-10.60***	-11.38***	0.942	0.773	-5.726***
	(2)	-3.233***	-4.337***	-3.225***	-0.036	-0.027	-1.420*
	(3)	27.23***	32.44***	24.14***	8.135	7.996	15.51**
	(4)	22.47***	40.13***	34.14***	2.850	2.890	7.326
Romania	(1)	-10.01***	-11.90***	-1.037	-1.292*	-0.808*	-1.230
	(2)	-3.827***	-4.327***	0.562	0.756	0.882	-0.057
	(3)	66.56***	70.47***	21.35	26.71	27.21	32.95
	(4)	116.2***	121.0***	58.23***	47.55**	47.22**	65.87***

NOTES Row headings are as follows: (1) Levin, Lin, and Chu t^* , (2) Im, Pesaran, and Shin W -stat, (3) ADF – Fisher Chi-square, (4) PP – Fisher Chi-square.

tests to understand the characteristics of our panel, to apply adequate panel unit root tests (table 3). All tests (Friedman 1937; Frees 1995; Pesaran 2004) show that the cross-sectional independence can be accepted, and we may apply first-generation panel unit root tests.

For Hungary, the panel unit root tests from the first generation indicate that profitability series are stationary (table 4). However, the opposite applies for the liquidity ratios, while for the solvency ratio we document mixed findings. For Romania we obtain similar results. In this case, classic ordinary least square (OLS) regressions might generate biased results. Even if not all our series are $I(1)$ we can check the existence of a long-run relationship between profitability on the one hand, and liquidity and solvency on the other hand.

METHODOLOGY

To test for cointegration, we use Kao's (1999) test designed for strictly homogenous panels. This test assumes cross-section specific intercepts and homogeneous coefficients on the first-stage regressors. Given that our panels include companies from the same sector (companies that have similar performances and business models), we can rely on Kao (1999) to investigate the existence of a long-run relationship.

We consider a general three-term regression:

$$y_{i,t} = \alpha_{i,t} + \beta_{i,t}x_{i,t} + \gamma_{i,t}z_{i,t} + u_{i,t}, \quad (7)$$

where $i = 1, \dots, N$ are the cross-sections, $t = 1, \dots, T$ are the observations (years in our case), $\alpha_{i,t}$ are the individual constant terms $\beta_{i,t}$ and $\gamma_{i,t}$ are slope parameters, and $u_{i,t}$ are error terms.

We therefore have:

$$y_{i,t} = y_{i,t-1} + \vartheta_{i,t}, \quad (8)$$

$$x_{i,t} = x_{i,t-1} + \varepsilon_{i,t}, \quad (9)$$

$$z_{i,t} = z_{i,t-1} + \mu_{i,t}, \quad (10)$$

where $\vartheta_{i,t}$, $\varepsilon_{i,t}$ and $\mu_{i,t}$ are the stationary disturbance terms and therefore, $y_{i,t}$, $x_{i,t}$ and $z_{i,t}$ are integrated process of order 1 for all i .

The null of no cointegration ($\rho_{i=1}$) is tested performing an ADF unit root test on residuals:

$$u_{i,t} = \rho_i u_{i,t-1} + w_{i,t}. \quad (11)$$

If the long-run relationship is documented, it can be tested using a modified version of the OLS regression that produce asymptotically unbiased coefficient estimates. For this purpose, we use the DOLS, which involves augmenting the cointegrating regression with lags and leads for the explanatory variables (the choice of lags and leads is made using information criteria).

The tested equation became:

$$\begin{aligned} \text{ROENi}_{i,t} = & \alpha_{i,t} + \beta_{1,i} \text{LR}_{i,t} + \sum_{k=-k_i}^{k_i} \vartheta_{1ik} \Delta \text{LR}_{i,t} + \gamma_{1,i} \text{SOLV}_{i,t} \\ & + \sum_{k=-k_i}^{k_i} \pi_{1ik} \Delta \text{SER}_{i,t} + u_{i,t}. \end{aligned} \quad (12)$$

An alternative specification is the FMOLS designed for heterogeneous panels by Pedroni (2000). The model is:

$$\text{ROENi}_{i,t} = \alpha_{i,t} + \beta_{1,i} \text{LR}_{i,t} + \gamma_{1,i} \text{SER}_{i,t} + u_{i,t}. \quad (13)$$

Empirical Results

Kao's (1999) cointegration test shows that in all the cases the null hypothesis of no cointegration is rejected (table 2). Therefore, we admit the existence of a long-run relationship. Two models are tested for each country, namely Model 1 (considering LR) and Model 2 (considering CR for liquidity).

TABLE 5 Kao's (1999) Cointegration Test: Main Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROENİ	ADF	-2.876***	-1.542*	-2.776***	-2.785***

NOTES Notes: HO – no cointegration. *, **, and ***, mean existence of cointegration at 10%, 5% and 1%, respectively. Model 1 assumes LR for liquidity, while Model 2 considers CR.

TABLE 6 Panel DOLS: Main Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROENİ	LR	-6.611*		-0.428	
	CR		-6.834*		-1.816
	SER	-0.604	-0.558	-0.341*	-0.265

NOTES *, **, and *** mean statistic relationship significant at 10%, 5%, 1%, respectively. Pooled mean panel estimator for homogenous panels is used. Schwarz information criterion for lag and lead selection is employed. LR – liquidity ratio (general), CR – current ratio, SER – capitalization ratio.

In what follows, we apply the panel DOLS estimator and we discover that, for Hungary there is a trade-off between profitability and liquidity, and this result is obtain either we use LR or CR for estimating the liquidity level. At the same time, the solvency ratio has no significant effect on profitability. More exactly, under Model 1, an increase of liquidity ratio (LR) with 1% generates a decrease in the profitability level of 6.61 %. Opposite findings are obtained for Romania, where a higher liquidity does not necessary have a negative impact on profitability. On contrary, the solvency ratio negatively influences the level of profitability, but this result is obtained only for Model 1. In this case, an increase in the solvency ratio with 1%, generates a decrease of 0.34% in the profitability level.

Table 7 presents the results of the FMOLS estimator. In this case, none of the coefficients are significant, although the signs remain the same as in the DOLS analysis. Given the reduced level of significance for the obtained coefficients reported in table 6, a series of robustness checks are applied in the next section.

Robusness Analysis

Two sets of analyses are performed to check the robustness of the previous findings. First, even if the profitability is assessed through the same ROE, we consider this time the profit before tax and not the net income in the denominator. Second, we estimate the profitability

TABLE 7 Panel FMOLS: Main Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROENI	LR	-0.325		-0.218	
	CR		-0.248		-0.178
	SER	-0.739	-0.706	-0.217	-0.224

NOTES *, **, and *** mean statistic relationship significant at 10%, 5%, 1%, respectively. Pooled mean panel estimator for homogenous panels is used. Schwarz information criterion for lag and lead selection is employed. LR – liquidity ratio (general), CR – current ratio, SER – capitalization ratio.

TABLE 8 Kao's (1999) Cointegration Test: Robustness Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROEPBT	ADF	-0.988	0.461	-2.460***	-2.451***
ROAPBT	ADF	2.266**	1.820**	-0.170	-0.201

NOTES Notes: HO – no cointegration. *, **, and ***, mean existence of cointegration at 10%, 5% and 1%, respectively. Model 1 assumes LR for liquidity, while Model 2 considers CR.

with ROA, considering the profit before tax (EBIT). We start the analysis with the Kao's (1999) cointegration test (table 7), which documents the existence of a long-run relationship between our variables, for Hungary (when ROAPBT is the dependent variable) and for Romania (when ROEPBT is the dependent variable).

We continue the analysis with the DOLS estimator, and we test the regression only for those cases where the cointegrating relationship was documented (table 9). For Hungary, we obtain similar findings with those reported in table 6. While the liquidity negatively influences the level of profitability, the capitalization ratio has no significant impact. For Romania, an opposite situation appears, confirming our main findings. While liquidity does not influence the profitability level, capitalization has a negative impact for both models. Our findings can be thus considered robust relative to the way we compute the profitability level. Therefore, these results recommend different financial management strategies for companies acting in the public administration and defense sector in Hungary and Romania.

We continue our analysis with the FMOLS estimator applied for robustness check. The FMOLS results confirm the DOLS findings for Romania, showing the negative and significant impact of capitalization ratio on profitability. This means that Romanian firms which resort to internal financing sources have a smaller level of profitability

TABLE 9 Panel DOLS: Robustness Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROEPBT	LR			1.138	
	CR				-0.634
	SER			-0.697***	-0.593**
ROAPBT	LR	-5.114**			
	CR		-5.648**		
	SER	0.000	0.045		

NOTES *, **, and *** mean statistic relationship significant at 10%, 5%, 1%, respectively. Pooled mean panel estimator for homogenous panels is used. Schwarz information criterion for lag and lead selection is employed. LR – liquidity ratio (general), CR – current ratio, SER – capitalization ratio.

TABLE 10 Panel FMOLS: Robustness Results

Variable		Hungary		Romania	
		Model 1	Model 2	Model 1	Model 2
ROEPBT	LR			0.949	
	CR				0.751
	SER			-0.499**	-0.490*
ROAPBT	LR	-0.272			
	CR		-0.242		
	SER	-0.025	-0.015		

NOTES *, **, and *** mean statistic relationship significant at 10%, 5%, 1%, respectively. Pooled mean panel estimator for homogenous panels is used. Schwarz information criterion for lag and lead selection is employed. LR – liquidity ratio (general), CR – current ratio, SER – capitalization ratio.

compared to more leveraged companies. While the FMOLS findings do not confirm the DOLS findings in our robustness analysis for Hungary, we notice that they confirm the main results reported in table 7. The FMOLS analysis shows that the liquidity and capitalization ratios have no significant influence on the profitability level for Hungary.

All in all, we may conclude that our results are robust to different metrics used to compute the profitability and liquidity level. However, the findings reported by the DOLS and FMOLS estimators are robust for Romania only.

Conclusions

This paper tests the role of liquidity and capitalization in enhancing the profitability level of firms acting in the public administration and defense sector, performing a comparison between Hungary and

Romania, two neighbors, post-communist countries. To this end, we use firm-level data for the period 2006 to 2015, considering 17 firms from Romania and 11 from Hungary.

We perform a panel cointegration analysis and we discover several differences between the analyzed countries. On the one hand, we notice a trade-off between profitability and liquidity in Hungary, but not for Romania. On the other hand, we discover that the financing structure does not influence the profitability in Hungary. However, an increased capitalization has a negative impact on profitability for companies acting in the public sector in Romania. These findings are robust to different specifications for the profitability and liquidity ratios, and partially robust when we compare the results of the DOLS and FMOLS estimators.

Our results add to previous empirical findings investigating the profitability – liquidity nexus, and shows that, in general, unemployed resources negatively influence the level of firms' profitability. At the same time, for the financial management of companies located in Hungary, and acting in the public administration and defense sector, it is important to know that an increased liquidity triggers a smaller profitability level. Therefore, we may assume that the Hungarian companies did not benefited from new investment opportunities in the post-crisis period, opportunities which usually help liquid firms to quickly adapt to new market conditions. For the Romanian companies, the level of liquidity has no significant influence on profitability (a similar result was reported by Smith and Bege-mann (1997) for a set of South African firms). However, a higher capitalization ratio for companies acting in the analyzed sector from Romania, negatively influences the level of profitability. This result shows that internal financing sources are more expensive compared with the external ones and it is opposed to the findings advanced by Ghosh (2008).

The findings of our paper should, however, be considered with caution. On the one hand, the level of coefficient significance is reduced, and the relationship between profitability and liquidity is not straightforward. On the other hand, our estimation may suffer for the omitted variable bias. As we have presented in Introduction, the relationship between the profitability and liquidity, as well as the relationship between profitability and capitalization, might be influenced by the leverage level of companies. At the same time, given the particularities of the analyzed sector, the findings may be influenced by the business cycle, public investment but also by the level of corruption characterizing these countries. The profitability of firms act-

ing in the public sector and defense sector increase when the access to public contracts is facilitated. Therefore, the institutional characteristics of these countries might influence the empirical findings and requires additional investigations.

Acknowledgements

This work was supported by a grant of the Romanian National Authority for Scientific Research and Innovation, CNCS-UEFISCDI, project number PN-II-RU-TE-2014-4-1760.

References

- Adhikary, S., and G. Papachristou. 2017. 'Determinants of Profitability in South Asian Microfinance Institutions.' *Journal of Global Economics, Management & Business Research* 8:76–87.
- Akinlo, O. O. 2011. 'Does Working Capital Cause Profitability? The Nigerian Experience.' *Journal of Modern Accounting and Auditing* 7:457–462.
- . 2012. 'Effect of Working Capital on Profitability of Selected Quoted Firms in Nigeria.' *Global Business Review* 13:367–381.
- Albulescu, C. T., S. Miclea, M. Tamasila, and I. M. Taucean. 2016. 'The Working Capital and Liquidity's Role in Explaining the Italians' Firms Profitability around the Recent Financial Crisis.' Paper presented at the 5th Review of Management and Economic Engineering International Management Conference, Cluj Napoca, 22–24 September.
- Bolek, M., and R. Wolski. 2012. 'Profitability or Liquidity: Influencing the Market Value; The Case of Poland.' *International Journal of Economics and Finance* 4:182–190.
- Deloof, M. 2003. 'Does Working Capital Management Affect Profitability of Belgian Firms?' *Journal of Business Finance and Accounting* 30:573–587.
- Frees, E. W. 1995. 'Assessing Cross-Sectional Correlation in Panel Data.' *Journal of Econometrics* 69:393–414.
- Friedman, M. 1937. 'The Use of Ranks to Avoid the Assumption of Normality Implicit in the Analysis of Variance.' *Journal of the American Statistical Association* 32:675–701.
- Ghosh, S. 2008. 'Leverage, Foreign Borrowing and Corporate Performance: Firm-Level Evidence for India.' *Applied Economic Letters* 15:607–616.
- Gill, A., N. Bigger, and N. Mathur. 2010. 'The Relationship between Working Capital Management and Profitability: Evidence from the United States.' *Business and Economics Journal* 2:1–9.
- Kao, C. 1999. 'Spurious Regression and Residual-Based Tests for Cointegration in Panel Data.' *Journal of Econometrics* 90:1–44.

- Kao, C., and M.-H. Chiang. 2000. 'On the Estimation and Inference of a Cointegrated Regression in Panel Data.' In *Advances in Econometrics: Nonstationary Panels, Panel Cointegration and Dynamic Panels 15*, edited by B. H. Baltagi and C. Kao, 179–222. Amsterdam: Elsevier.
- Korajczyk, R. A., and A. Levy. 2003. 'Capital Structure Choice: Macroeconomic Conditions and Financial Constraints.' *Journal of Financial Economics* 68:75–109.
- Iqbal, A., J. Mulani, and S. Kabiraj. 2013. 'Leverage, Size of the Firm and Profitability: A Case of Pakistani Cement Industry.' *International Journal of Business Insights & Transformation* 7:16–22.
- Murphy, J. 1968. 'Effect of Leverage on Profitability, Growth and Market Valuation of Common Stock.' *Financial Analysts Journal* 24:121–123.
- Pedroni, P. 2000. 'Fully Modified OLS for Heterogeneous Cointegrated Panels.' *Advances in Econometrics* 15:93–130.
- Perobelli, F. F. C., R. Famá, and L. C. Sacramento. 2016. 'Return and Liquidity Relationships on Market and Accounting Levels in Brazil.' *Revista Contabilidade & Finanças* 27:259–272.
- Pesaran, M. H. 2004. 'General Diagnostic Tests for Cross Section Dependence in Panels.' Cambridge Working Papers in Economics 0435, University of Cambridge, Cambridge.
- Raheman, A., and M. Nasr. 2007. 'Working Capital Management and Profitability: Case of Pakistani Firms.' *International Review of Business Research Papers* 3:279–300.
- Smith, M. B., and E. Begemann. 1997. 'Measuring Association between Working Capital and Return on Investment.' *South African Journal of Business Management* 28:1–5.
- Ukaegbu, B. 2014. 'The Significance of Working Capital Management in Determining Firm Profitability: Evidence from Developing Economies in Africa.' *Research in International Business and Finance* 31:1–16.
- Wasiuzzaman, S. 2015. 'Working Capital and Profitability in Manufacturing Firms in Malaysia: An Empirical Study.' *Global Business Review* 16:545–556.



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Could the Suitability of the Existing Accounting System be Argued?

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Accounting is a process of recording and studying financial data related to company's operations. Its aims are above all to provide information about the events in company business life in an agreed language comprehensible to accounting information users and to provide information which is vital to business decision-making. If we consider the above mentioned aims, we can establish that it is not easy to reach them. Accounting is not an exact science, which means that approximations or planned amounts are very often used as its tool. In addition, as the future is uncertain, we cannot determine the exact value an asset is about to achieve when converted into a monetary form, neither can we define the amount which is to be required to discharge a certain liability. And so we can ask ourselves if the existing accounting solutions enable us to create suitable accounting information. Our paper deals with the problem of the existing accounting system's suitability. Four questions are investigated, namely the question of accounting solutions consistency, reality of financial statements, capability of creating accounting information which provides an optimal management of the elements of the business process and accounting solutions' objectivity.

Key words: classical accounting approach, consistency of accounting solutions, objectivity of accounting solutions, reality of financial statements, business decisions

<https://doi.org/10.26493/1854-4231.13.213-225>

Introduction

Accounting is a process of recording and studying financial data related to company's operations. Its aims are above all:

- to provide information about the events in company business life in an agreed language comprehensible to accounting information users and
- to provide information which is vital to business decision-making.

The first aim of accounting relates to the past, the second to the future. However, reaching the above mentioned aims is not easy. Accounting is not an exact science, which means that approximations or planned amounts are very often used as its tool. As the future is uncertain, we cannot determine the exact value an asset is about to achieve when converted into a monetary form, neither can we define the amount which is to be required to discharge a certain liability. Therefore, the practice of accounting has some objective limitations. However, it can be questioned whether the existing accounting solutions provide the creation of suitable accounting information.

Our paper deals with the problem of the suitability of the existing accounting system. Four questions are investigated, namely the question of accounting solutions consistency, reality of financial statements, capability of creating accounting information which provides an optimal management of the elements of the business process and accounting solutions' objectivity. Finally, some possible solutions are provided.

Suitability of the Existing Accounting System

The suitability of the existing accounting system, the so called classical accounting, is assessed in this paper on the basis of four criteria by establishing:

- if the existing accounting system is consistent,
- if it provides the creation of accurate financial statements,
- if it provides accounting information that enables their users to manage the elements of the business process optimally,
- and if the accounting solutions are unbiased towards business entities.

CONSISTENCY OF ACCOUNTING SOLUTIONS

Are the solutions of classical accounting consistent, in other words, is it possible to use them consistently to disclose accounting events? Let us take a look at the following example.

The aim of the business process is creating output. However, the business process is not possible without the necessary elements which are equipment, materials, services and labour. These elements are being consumed in a business process. By valuing the expenses of those elements, the costs are obtained.

The costs are thus the expenses of business process elements expressed in price. They are defined by the following five conditions which are to be met simultaneously:

- when one of the business process elements is considered,
- when a particular element is being spent in the business process,
- when a particular element can be expressed in price or when money is needed to obtain it,
- when expenses expressed in price are logically related to creating output and
- when expenses expressed in price do not exceed reasonable amount.

According to the third condition, we can use the term costs only in cases when the depreciated element is monetized.

The elements of the business process include employees and their working abilities. Their presence in the business process is associated with labour costs. However, the value of employees is not shown among assets, which means that their value as a business process element equals zero. However, the question is how it is possible to discuss the costs of an element whose value equals zero. If we multiply any quantity of this element's expenses by its price per unit (zero) we always obtain the same result.

It can be established that classical accounting considers various elements of the business process in a different way, which means it is inconsistent. Furthermore, the labour costs occur regardless to the fact that the depreciated element has no value.

The method of treating the investments in employees, which is discussed in the following chapter, also points at the inconsistency of the existing accounting solutions.

REALITY OF FINANCIAL STATEMENTS

Do financial statements based on classical accounting approach provide true and real picture of the company's business life? Francis and Schipper (1999) established that financial statements had significantly lost their credibility. The same was established by Collins, Maydew, and Weiss (1997), Ely and Waymire (1999), Lev and Zarowin (1999) and Chang (1999). Some other authors approached the problem indirectly. For instance, Kanodia, Singh, and Spero (2005) established that the accounting disclosure of company investments is often inaccurate, which puts the reality of financial statements under the question and Himick (2015) exams the 'conditions of possibility' for workers to be considered depreciable assets. On the other hand, McCarthy and Schneider (1996), Francis and Schipper (1999), Goodwin and Ahmed (2006), Ji and Lu (2014) and

Goebel (2015) express the opinion that the value of intangible assets is shown reliable and relevant. And finally, Lev (2008) expressed criticism towards the method of valuing and disclosing intangible assets. Our own response to this question is demonstrated through an example that shows different methods being used by a certain company to treat particular investments. We disclose the method of treating the investments in tangible fixed assets and the method of treating the investments in employees.

Let us suppose that a company purchases a machine whose purchase value is sixty monetary units and whose useful life is five years. The company pays the supplier by the due date, but the payment is not directly associated with the costs as the company depreciates the purchased machine in sixty months – e.g. one monetary unit per month.

However, the situation is rather different if a company provides education and training for its employees. In this case, the company discloses the relevant costs as soon as it receives the invoice from a training provider. Would it not be more suitable to raise the value of the employee by the amount of the invoice and to depreciate this investment during the entire useful life of their acquired knowledge (e.g. within three years)? It may be assumed that due to their newly-acquired knowledge, employees will perform their work better.

Obviously, the classical accounting employs different methods to treat the investments in tangible fixed assets and different methods to treat the investments in employees. Our question is if there are any sound professional reasons for justifying the different methods in treating the investments.

In our opinion, the classical accounting approach obviously exaggerates in applying the principle of prudence in accounting, which leads to a rather high amount of hidden reserves on the balance sheet. Hidden reserves are especially present among assets. The presence of hidden reserves is useful for the long-term existence and development of a company and therefore the company owners are interested in it. Hidden reserves decrease business success which leads to a lower tax burden for the current period.

To sum up, classical accounting does not disclose investments in employees as a raised value of employees, on the contrary, those amounts are disclosed among the costs immediately as they occur. Classical accounting justifies this approach by the principle of prudence. In other words, classical accounting does not include the investments in employees into the costs because it considers them as high-risk. However, are the investments in employees in fact so risky

that they need to be treated this way? Our opinion is that the classical accounting's supposition regarding the high-risk of investments in employees has completely no ground and is very disputable from a professional point of view. In addition, investments in employees have the highest long-term return of all investments. It is also known that output with a small share of knowledge in its price are increasingly difficult to market. Knowledge is the only good that will always be in great demand and it will always be possible to market it at a reasonable price. Moreover, a company that does not invest enough in its employees risks a relatively rapid collapse.

An investment is the most common way of the transformation of assets that does not affect the value of liabilities. However, investments in employees do not lead to the transformation of resources as the reduction of one resource (e.g. money) does not result in the growth of the other resource (investments in employees are not disclosed among assets). Consequently, investments in employees knock off the equilibrium of the balance sheet in classical accounting because a shortage of resources with regard to the value of liabilities occurs. The knocked off equilibrium of the balance sheet due to the lack of assets can only be regained by reducing the capital (or by its smaller increase in comparison to disclosing investments in employees among assets).

In classical accounting, investments in employees can be compared with spending money irrationally, e.g. for lottery tickets that will not be in for the draw or similar; in other words, accounting records do not show that there are any benefits to be expected from these investments. Reduction of one asset (e.g. money spent on investments in employees) does not result in the growth of the other asset or in debt reduction (e.g. loan repayment, payment to the supplier, etc.). Furthermore, if non-disclosure of investments in employees among assets leads to capital reduction, should its disclosure lead to capital growth? The question might be absurd but it clearly illustrates the inconsistency of classical accounting regarding the disclosure of investments in employees.

It should also be noted that some authors express no doubt regarding the adequacy of the existing approach towards the question of financial statements' reality. In other words: some authors are convinced that classical accounting makes it possible for financial statements to show true, real, objective and not very distorted picture of previous business life of a company (e.g. Core, Guay, and Van Buskirk 2003; Penman 2003; Skinner 2008) and they even promote conservatism of accounting solutions (Salama and Putnam 2015).

Also other opinions could be found. Dumay (2009) for e.g. talks about 'accountingisation of intellectual capital,' Chiucchi and Dumay (2015) use the term 'intellectual capital lock-in' and similar. The main question is how to make intangible assets tangible to improve the reality of accounting statements. See also Guthrie, and Ricceri (2006), Dumay (2014) and Massingham and Tam (2015).

PROVIDING ACCOUNTING INFORMATION THAT ENABLE THEIR
USERS TO MANAGE ALL THE ELEMENTS OF A BUSINESS PROCESS
OPTIMALLY

Does classical accounting provide information that enable their users to manage all the elements of a business process optimally? Let us demonstrate our response to this question through the following example regarding employees.

It can be established that classical accounting does not provide the information on the value of employees and investments in them. This information affects:

- human resource management,
- importance of human resource management and
- planning the future value added.

Let us focus on those questions in details.

Human Resource Management

Not knowing the information about the value of employees and investments in them negatively affects human resource management: it is easier for the management to make staffing decisions on the basis of costs and value factors. The estimates of employees are only exceptionally based on quantitative methods. Therefore, not all the information needed for efficient recruitment, employment, utilization, evaluation and reward of employees are at the management's disposal. It is also more difficult for the management to establish the success of human resource management.

In short, information on the value of employees and investments in them are very important for the management of employees. However, the experts in this area obviously do not share the same opinion. There is no mentioning of the value or valuing of employees in numerous records on the human resource management, even though their value has a key role in managing employees. How can we even manage someone (or something) without knowing their value? On what basis can we decide how much to offer to an expert that wants to leave the company in order to keep him?

Importance of Human Resource Management

Not knowing the information on the value of employees and investments in them, negatively affects the management of employees. The role of human resource management is small in today's companies. Its operation is usually considered as unproductive and expensive, therefore, the companies aim to minimize it. In some cases, human resource management is regarded as a luxury that only the most successful companies can afford. This attitude towards the human resource function is due to the fact that it is very difficult to assess its impact on business performance.

Since human resource management is considered to be unproductive, its budget gets reduced first when a company performance decreases. Under such circumstances, the value of investments in employees gets reduced as well, which has a negative influence on a company performance in the long run. The amount of the damage caused by doing this remains hidden.

Planning the Future of Value Added

Not knowing the information on the value of employees and investments in them makes it difficult for the management to plan the amount of value added in a company. Namely, the term employees is closely related to the term of value added.

Value added is defined as the increase of the market value of output caused by the increase of their quality. It is assessed by calculating the difference between the market value of output and the purchase value of consumed elements. Value added is considered as wealth – it is a unit of measurement for the achievements realized by the investors, management and employees.

The amount of value added in a company otherwise depends on technical and technological equipment, however, it depends even largely on the value of employees and investments in them.

We are aware of the fact that evaluation of employees is a very complex issue and that searching for an acceptable professional solution would require great efforts. According to Steen, Welch, and McCormack (2011, 300):

Numerous authors establish that evaluation of employees includes a greater degree of subjectivity than evaluation of tangible assets; this is also true for reporting on employees.

Although the solution of this important professional issue requires great efforts we should not be discouraged from trying to solve this issue. Furthermore, numerous authors establish that the informa-

tion on employees is very important for the users (Barth, Beaver, and Landsman 2001; Schiemann and Gunther 2007; Wyatt 2008; Gamerschlag and Moller 2011; Mention 2011; Vafei, Taylor, and Ahmed 2011; Abhayawansa and Guthrie 2012; Uyar and Kilic 2012; Gamerschlag 2013).

BIAS OF ACCOUNTING SOLUTIONS

Are the solutions of classical accounting unbiased, in other words, do they provide an equal treatment of individual economic agents according to their operating characteristics? Hereby, we define operating characteristics as:

- composition of assets and
- possibilities of debt financing.

Composition of Assets

The question regarding the influence of the composition of assets of a company on their value disclosed on financial statements is related to the previously discussed question of the reality of financial statements. Let us observe this on an example of intangible assets.

An intangible asset can be disclosed among assets only if it is separately identifiable (it can be separated from the company, sold, transferred, rented, exchanged and similar) or if it arises from contractual and other legal rights. At the same time, there must also be a probability of future economic benefits related to it and a possibility to accurately measure its purchase value (Mirza, Holt, and Orrell 2006). For better understanding of the existing accounting system in relation to the discussed question, we demonstrate a simplification through an example.

A company has two basic options to obtain an intangible asset. The first option is to purchase it, which means, for example, that a company purchases knowledge that is protected by a patent. This way, the purchase value of the intangible asset is disclosed among the assets. The second option is that a company creates the knowledge by itself, e.g. in its own laboratory or similar. In this case, disclosing these items among the assets is associated with numerous limitations.

For example, the research costs that occur inside a company do not have the characteristics of intangible assets. This also applies to internally generated brands, goodwill and similar items. However, the development costs that occur inside a company can be disclosed among intangible assets if several conditions are cumulatively ful-

filled. In short, the disclosure of intangible assets that occur inside a company is regulated in a very conservative way.

We are not familiar with the results of the research on this topic but we are convinced that most part of the necessary intangible assets are created by the company itself. It is hard to imagine a global company, operating in the area of pharmacy, microelectronics or similar, buying essential knowledge to be able to perform its activities. This means that the share of intangible assets acquired by a company through purchasing is materially less important. The result of the before mentioned conservative regulation is that most part of these assets in companies is not disclosed among assets.

It can be established that the composition of assets significantly influences their value disclosed on financial statements. If an important share of company's assets is intangible, it is very likely for their value not to be disclosed on the balance sheet or to be disclosed only to a lesser extent.

The experts in this field do not provide a unanimous answer to the question regarding the influence of the composition of a company's assets on their value disclosed on financial statements. Lev (2008, 210) cites a number of studies which prove that the influence is significant and that the book values of technology companies (companies with a large share of intangible assets among assets) are much undervalued. This option is recognized also by Skinner (2008, 7). On the other hand, Penman (2007) believes that classical accounting provide the disclosure of the total value of intangible assets on the balance sheet.

Possibilities of Debt Financing

Do classical accounting's solutions provide equal possibilities of debts financing for all companies? Let us observe this on the following example.

Company A and Company B dispose of the same asset value but significantly differ by the composition of assets. The assets of Company A are mainly tangible while the assets of Company B are mainly intangible. Both companies have the same value of debts. Do they have similar possibilities to obtain debt financing sources, in other words, can they borrow in a comparable way?

Capital is a positive difference between assets and debts. Considering the fact that both companies have the same value of debts, the value of their capital depends only on the value of their assets (disclosed on the balance sheet). In this respect, there is an important difference between the companies. The assets of Company A

are mainly tangible, which means that almost total value of their assets is disclosed in the balance sheet. On the contrary, the assets of Company B are mainly intangible, therefore, only a small share of them is disclosed in the balance sheet. The threshold of technological feasibility that enables the capitalization of the research and development costs is set to a very high level. This also means that that the value (disclosed on the financial statement) of the capital of Company A is much higher than the one of Company B.

Capital is a means of protection for creditors, therefore, it is obvious that Company A has better possibilities of debt financing than Company B. In short, the classical accounting solutions do not provide equal possibilities of debt financing for all companies. The advantage is obviously on the side of the companies that have a large share of tangible assets and a small share of intangible assets among their assets. On the other hand, micro and small innovative companies are disadvantaged as they have almost no tangible assets; therefore, their possibilities of debt financing are low.

However, some authors do not share the same opinion. Skinner (2008, 15), for example, mentions several cases of successful technological companies with a larger share of intangible assets, which can be in his opinion considered as a proof that money (lending) market works well. Furthermore, in Skinner's opinion, the cases of companies like Microsoft, Intel, Cisco, Dell and Google clearly show that all companies are treated equally in the money market.

Conclusion

Are the solutions of classical accounting suitable, in other words, do they reflect economic reality? Do they provide the necessary accounting information for users?

In our opinion, classical accounting is in a serious crisis. It is not just the crisis of the process of implementation; the true crisis of accounting arises from its basic assumptions. Accounting has become a strictly rational and increasingly technical activity with very little space for new ideas. In comparison to the 50's and the 60's of the previous century, the decades that follow seem to be in a deep stagnation. The origins of almost all the ideas realized in the last few decades can be traced back to very old records. This situation is most likely due to a general belief that the accounting profession has already reached its peak and that all we need is just technical upgrading of the established ideas. Cost hierarchy, triple-entry bookkeeping and similar ideas are simply neglected by most accountants. The same is true for human resource accounting.

References

- Abhayawansa, S., and J. Guthrie. 2012 'Intellectual Capital Information and Stock Recommendations: Impression Management.' *Journal of Intellectual Capital* 13 (3): 398–415.
- Barth, M. E., W. H. Beaver, and W. R. Landsman. 2001 'The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting Another View.' *Journal of Accounting and Economics* 31 (1–3): 77–104.
- Chang, J. 1999. 'The Decline in Value Relevance of Earnings and Book Values.' Working paper, University of Pennsylvania, Philadelphia, PA.
- Chiucchi, M. S., and J. Dumay. 2015. 'Unlocking Intellectual Capital.' *Journal of Intellectual Capital* 16 (2): 305–30.
- Collins, D., E. Maydew, and I. Weiss. 1997. 'Changes in the Value-Relevance of Earnings and Book Values Over the Past Forty Years.' *Journal of Accounting and Economics* 27 (4): 39–67.
- Core, J. E., W. R. Guay, and A. Van Buskirk. 2003. 'Market Valuations in the New Economy: An Investigation on What Has Changed.' *Journal of Accounting and Economics* 33 (1): 43–67.
- Dumay, J. 2009. 'Intellectual Capital Measurement: A Critical Approach.' *Journal of Intellectual Capital* 10 (2): 190–210.
- . 2014. '15 Years of the Journal of Intellectual Capital and Counting: A Manifesto for Transformational IC Research.' *Journal of Intellectual Capital* 15 (1): 2–37.
- Ely, K., and G. Waymire. 1997. 'Accounting Standard Setting Organizations and Earnings Relevance: Longitudinal Evidence from NYSE Common Stocks, 1927–93.' *Journal of Accounting Research* 35 (3): 293–317.
- Francis, J., and K. Schipper. 2013. 'Have Financial Statements Lost Their Relevance?' *Journal of Accounting Research* 3 (3): 319–52.
- Gamerschlag, R. 2013. 'Value Relevance of Human Capital Information.' *Journal of Intellectual Capital* 4 (2): 325–45.
- Gamerschlag, R., and K. Moller. 2011. 'The Positive Effects of Human Capital Reporting.' *Corporate Reputation Review* 14 (2): 145–55.
- Goebel, V. 2015. 'Estimating a Measure of Intellectual Capital Value to Test Its Determinants.' *Journal of Intellectual Capital* 16 (1): 101–20.
- Goodwin, J., and K. Ahmed. 2006. 'Longitudinal Value Relevance of Earnings and Intangible Assets: Evidence from Australian Firms.' *Journal of International Accounting, Auditing and Taxation* 15, (1): 72–91.
- Guthrie, J., R. Petty, and F. Ricceri. 2006. 'The Voluntary Reporting of Intellectual Capital: Comparing Evidence from Hong Kong and Australia.' *Journal of Intellectual Capital* 7 (2): 254–71.
- Himick, D. 2015. 'Human Depreciation Accounting and the Emergence

- of Industrial Pensions.' *Accounting, Auditing and Accountability Journal* 28 (2): 242–62.
- Ji, X., and W. Lu. 2014. 'The Value Relevance and Reliability of Intangible Assets: Evidence from Australia before and after Adopting IFRS.' *Asian Review of Accounting* 22 (3): 182–216.
- Kanodia, C., R. Singh, and A. E. Spero. 2005. 'Imprecision in Accounting Measurement.' *Journal of Accounting Research* 43 (3): 487–519.
- Lev, B. 2008. 'A Rejoinder to Douglas Skinner's Accounting for Intangibles: A Critical Review of Policy Recommendations.' *Accounting and Business Research* 38 (3): 209–13.
- Lev, B., and P. Zarowin. 1999. 'The Boundaries of Financial Reporting and How to Extend Them.' *Journal of Accounting Research* 37 (3): 353–85.
- Massingham, P. R., and L. Tam. 2015. 'The Relationship between Human Capital, Value Creation and Employee Reward.' *Journal of Intellectual Capital* 16 (2): 390–418.
- McCarthy, M., and D. Schneider. 1996. 'Evidence from the US Market of the Association of Capitalized Non-Goodwill Intangibles to Firm Equity Value.' *Advances in International Accounting* 9:111–27.
- Mention, A. L. 2001. 'Exploring Voluntary Reporting of Intellectual Capital in the Banking Sector.' *Journal of Management Control* 22 (3): 279–310.
- Mirza, A. A., G. J. Holt, and M. Orrell, M. 2006. *International Financial Reporting Standards (IFRS): Workbook and Guide*. Hoboken, NJ: John Wiley & Sons.
- Penman, S. H. 2003. 'The Quality of Financial Statements: Perspectives from a Recent Stock Market Bubble.' *Accounting Horizons* 17:77–96.
- . 2007. 'Financial Reporting Quality: Is Fair Value a Plus or a Minus?' *Accounting and Business Research* 37 (Special Issue): 33–44.
- Salama, F. M., and K. Putnam. 2015. 'Accounting Conservatism, Capital Structure, and Global Diversification.' *Pacific Accounting Review* 27 (1): 119–38.
- Schiemann, F., and T. Gunther. 2007. 'The Information Content of Human Capital and Tangible Capital Related Measures: An Empirical Analysis for German Companies.' *Dresden Papers of Business Administration* 129, Dresden University of Technology, Dresden.
- Skinner, D. J. 2008. 'Accounting for Intangibles: A Critical Review of Policy Recommendations.' *Accounting and Business Research* 38 (3): 191–204.
- Steen, A., D. Welch, and D. McCormack. 2011. 'Conflicting Conceptualizations of Human Resource Accounting.' *Journal of Human Resource Costing & Accounting* 15 (4): 299–312.
- Uyar, A., and M. Kilic. 2012. 'Value Relevance of Voluntary Disclosure: Evidence from Turkish Firms.' *Journal of Intellectual Capital* 13 (3): 363–76.

- Vafei, A., D. Taylor, and K. Ahmed. 2011. 'The Value Relevance of Intellectual Capital Disclosures.' *Journal of Intellectual Capital* 12 (3): 407–29.
- Wyatt, A. 2008. 'What Financial and Non-Financial Information on Intangibles is Value Relevant? A Review of the Evidence.' *Accounting and Business Research* 38 (3): 217–56.



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Challenges and Opportunities of Finnish Defence Equipment Projects: Changes over a Decade

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The objective of this study is to examine success factors of defence equipment projects in the Finnish Defence Forces. The outline of established success factors for projects and performance measurement is based on the literature review. The strength of this study is that it incorporates a longitudinal design of success factor changes from 2006 to 2018. The main research question is 'How challenges and opportunities of Finnish defence equipment projects have changed from 2006 to 2018?' The results of the empirical data offer a unique opportunity to explore changes over a decade in the Finnish defence equipment projects. The challenges and opportunities of defence equipment projects are determined by theory, swot analysis and the findings of the research process. In conclusion, the critical success factors have remained unchanged, despite the environmental and organizational changes in the Finnish Defence Forces.

Key words: critical success factors, project management, defence industry, project success

<https://doi.org/10.26493/1854-4231.13.227-245>

Introduction

The global economic situation means that nearly all European countries are faced with the need to limit public spending. Limited funds must be focused on where they will deliver most benefit. Every country is still trying their best to keep the country secure and providing Armed Forces with the equipment and capabilities they need to operate in a rapidly changing security environment. Without the right

equipment Armed Forces cannot fulfil their duties and national interest might be at risk. In this changing security environment, the European Union has taken the first step towards funding defence research and joint capability development by releasing the European Defence Action Plan (EDAP) in 2016. One of the main objectives is to be able to pool national resources with a view to financing joint capability development projects under the umbrella of Permanent Structured Cooperation (PESCO) secretariat by the European Defence Agency (EDA) and the EEAS (European External Action Service), including the European Union Military Staff commission. It is estimated that the EU could be financing €1.5 billion per year (EEAS 2018a). In the year 2018 EU agreed to the launching of seventeen defence projects (EEAS 2018b). In 2017 France and Germany decided on the jointly development of a new fighter aircraft in order to replace their existing fleets of rival warplanes. This new fighter should be the European alternative for US F-35. These new fighters are made by Airbus and Dassault and they should be operational in 2035–2040. Finland has launched a defence project that will replace the F/A-18 Hornet multirole combat aircraft in the next decade. Likewise, the Finnish Navy has started a project named ‘Fleet 2020’ that will include four new battle ships. The estimated cost of these two defence projects is 7–11 billion euros (Puolustusvaliokunta 2017, 10).

Consequently, defence equipment projects can worth billions of euros and new fighter aircrafts can cost hundreds of billions; therefore, successful management and understanding of the rationale behind a project’s fail or success are the key elements for delivering efficient and cost-effective projects. The defence equipment projects’ success is crucial in an era of decreasing budgets, where nations and governments carefully decide on the allocation of financial resources. Effective procurement and support regarding defence equipment is not a ‘nice to have’ but an essential part of national defence.

Since the 1960s, researchers have been trying to identify which factors lead to project failure or success (Cooke-Davies 2002, 185). Most of the literature has focused on the private sector, whereas studies on the public sector have been limited. In addition to that, the overwhelming majority of the project literature take the industry delivery project viewpoint instead that of government procurement project. Regarding the field of defence equipment projects, studies are even more limited. Identifying and examining a project’s success factors is important for the evaluation and effectiveness of different projects in both the private and public sector (Neilimo and Uusi-

Rauva 2005). This development starting from the 1980s is known as a New Public Management (Hood 1995, 93).

Since the 1980s, the public sector has used various measurements of performance regarding organisations and projects. The reason behind this has been the need for reduction in project expenses and increase in quantity and quality of services (Arnaboldi, Azzone, and Savoldelli 2004, 213).

Objectives

Identifying a project's critical success factors is vital for the understanding of why defence equipment projects may fail or succeed. This paper focuses on the critical success factors of the Finnish Defence Forces' equipment projects from 2006 to 2018. There have been various changes since 2006, including a reduction in budget, setting up a centralized purchasing unit instead of each service purchasing their own equipment and changes in materiel policies, including a transition to MOTS (Military off-the-Shelf). One objective is to find out whether time and changes also altered success factors or whether they been unchanged. The critical success factors are also important for the management of project-related performance. Effective management depends on the comprehension of these fundamental factors that can be responsible for the success or failure of a project. Managerial implications/management recommendations of changes imply either a stable or evolving agenda. The objective of this research is to provide management recommendations for future defence material acquisition projects in the Finnish Defence Forces. The main research question is 'How challenges and opportunities of the Finnish defence equipment projects have changed from 2006 to 2018?' The secondary research questions are (1) How are the critical success factors of the Finnish Defence Forces' equipment projects developed from 2006 to 2018? (2) How factors of success and failure in defence equipment projects have developed from 2006 to 2018?

Literature Review

SUCCESS FACTORS AND CRITICAL SUCCESS FACTORS

Early research on the success criteria suggests that the main success factors are based on the so-called 'iron triangle or golden triangle of time, cost and quality' (Atkinson 1999, 338; Westerveld 2003, 412; Howsawi, Eager, and Bagia 2011, 620; Cserhádi and Szabó 2014, 613). However, more recently, researchers have suggested that a project's success is far more complex. There are more potential factors that

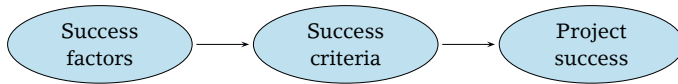


FIGURE 1 Presentation of Critical Success Factors, Success Factors and Success Criteria (adapted from Ikonen 2017, 133)

can be identified. Project management research indicates that it is impossible to have a universal checklist of success factors that applies to all projects. Success factors will be variable in every project (Westerveld 2003, 412; Wateridge 1998, 60; Mir and Pinnington 2014, 203; Cserhádi and Szabó 2014, 622). Each project has several variables and each project is unique by nature. Nevertheless, creating a framework for project success help project managers to lead their specific projects to success

There is often some confusion in relation to the terms: success criteria, success factors and critical success factors. Success criteria are used to measure the success, whilst success factors are the set of circumstances or facts that contribute to a project's outcome. Success criteria should be defined at planning phase and beginning of the project (Baccarini 1999, 26). Success factors are the influential forces responsible for failure or success. Critical success factors are part of the success factors (Belassi and Tukel 1996, 146). Critical success factors can be defined as 'things that must be done right if a company wants to be successful' (Ingram et al. 2000, 107) or another definition is 'those inputs to the management system that leads directly or indirectly to the success of the project or business' (Cooke-Davies 2002, 185). Critical success factors include various areas where good performance and skilled management are necessary to ensure the achievement of a project's goals (Fortune and White 2006, 1; Amade et al. 2015, 13).

There is a long tradition of measuring and observing financial success factors such as profitability and cost. Since the late 1990s researchers have published studies on critical factors and have identified several non-financial aspects (Kaplan and Norton 1996, 6–7; Neely et al. 2000, 206; Toivanen 2001, 5). Traditionally most of critical factors have been tangible and physical, like volumes, whereas non-financial factors like employee satisfaction, a skilled manager and good project atmosphere can be described as intangible and non-physical (Lönnqvist 2004). The literature on project management and success, such as success factors and critical success factors is extensive. Fortune and White (2004) identified 63 publications on

TABLE 1 Critical Success Factors in Literature

Pinto and Slevin (1989)	Fortune and White (2004)	Kuan (2005)	Gunathilaka, Tuuli, and Dainty (2013)
Top management support	Support from senior management	Management leadership and support	Top management support
Communication	Good communication/feedback	Culture	Effective communication
Personnel recruitment	Clear realistic objectives	IT	Clearly defined goals and objectives
Monitoring and feedback	Strong/detailed plan kept up to date	Strategy and purpose	Project monitor and feedback
Client consultation	User involvement	Measurement	Clients consultation and involvement
Technical tasks	Well allocated resources	Resources	Allocation of sufficient resources
Characteristics of the project leader	Competent project manager	Motivational aids	Projects manager competence
Trouble-shooting	Skilled/suitable qualified team	Organisational infrastructure	Effective project team formation
Client acceptance	Effective change management	Processes and activities	Financial stability & adequate funding
Power and politics	Sound basis for project	Training and education	Motivation and incentives
Environment events	Good leadership	HRM	Established budget and monitoring
Urgency	Realistic schedule	Strategy and purpose	The level of technology

critical success factors and outlined 27 different critical success factors in their article. Other scholars found 11 different critical success factors (Kuan 2005), whereas Pinto and Slevin (1989) identified 12 and Gunathilaka, Tuuli, and Dainty (2013) 21 critical success factors. Critical success factors, project success and success criteria were under intensive research from mid90s to late 2000s. The most recent literature hasn't created new theoretical implications (Cserháti and Szabó 2014; Amade et al. 2015; Osei-Kyei and Chan 2015; Patanakul et al. 2016; Aguilani et al. 2017)

In table 1 top management support is a mutual top-ranked critical success factor across all authors. Communication and a competent project manager also rank highly in all but Kuan (2005). Kuan's list appears to be more universal compared to other more detailed

lists of critical success factor. There are variations in the definition of the factors. In particular the importance of the project manager is defined by factors such as characteristics (Pinto and Slevin 1989) and competence (Fortune and White 2004; Gunathilaka, Tuuli, and Dainty 2013). Hence it is not easy to compare those factors directly and that makes general theory building more challenging.

SUCCESS FACTORS AND CRITICAL SUCCESS FACTORS IN DEFENCE PROJECTS

A study of defence projects in Israel (Tishler et al. 1996; Lipovetsky et al. 1997) identified several factors that lead to success. Tishler et al. (1996) analysed 110 defence projects completed in Israel starting from the mid-1970s to the mid-1990s. This research identified eight critical success factors regarding defence material projects, of these urgency of need and technological feasibility were found to be unique to defence project environment.

Kwak and Smith (2009) published an article about the risk management of major defence projects in the United States. According to this study, all parties involved in the project should have a risk management strategy and expertise in risk management processes and practices, because complex projects encompass technical, legal and political risks.

The main reason for a defence material project delay, overcoming a project's budget and suspending a project is the failure to recognize the risks. The risks are not acknowledged because a comprehensive risk management plan has not been made, but typically the risks are transferred solely to the supplier. The study acknowledges that eliminating the risks associated with risk management would require a thorough transformation at a ministerial level. However, the study suggests that a way to improve a projects' success would be the training of the project personnel and the formation of a good working environment.

Mazur et al. (2014) researched the Australian defence sector and looked at how project managers' capacity to interact with stakeholders affects the success of major projects and how a project manager's qualities contribute to the successful management of internal and external stakeholders. The emotional intelligence and cognitive flexibility of project managers, i.e. the ability to change their activities in different environments and situations, were important elements of the development, quality and effectiveness of stakeholder relations, which made the project more successful. On the other hand, systematic thinking, i.e. simultaneous consideration of the interests of

TABLE 2 Critical Success Factors in Defence Projects

Tishler et al. (1996)	Frinsdorf, Zuo, and Xia (2014)	Rodriguez-Segura et al. (2016)
Senior management's support	Senior management support	Project management
Project team adequacy and preparation	Communication	Project policies
Adequacy of the user	Capability of the organisation	Process policy
Leadership of the project manager	Project scope is well-defined and understood	Customer-end user
Human resources	Resources	External environment
Management policy		

individuals, groups, project organizations and stakeholders, did not show any connection to the success of stakeholder relationships or projects.

Frinsdorf, Zuo, and Xia (2014) published an article about the effectiveness of defence sector projects. According to this study an effective project is the one where external pressures can be minimized by identifying major delays or obstacles in relation to the project. In order to achieve the project's effectiveness, the defence industry cannot only focus on managing the internal factors of the projects (e.g. clear goal, quality, action cohesion). The external factors of the project (e.g. organizational project portfolio, stakeholder management, project co-operation, organizational culture) should also be considered, so that the project will not be a mere integral part of the organization. In the defence sector, structural factors, such as bureaucracy and security constraints are hampering the success of the projects.

Rodriguez-Segura et al. (2016) published a study on aerospace and defence sector projects that examined 29 major defence material projects. The required level of investment varied from two million to hundreds of millions of dollars. The results of this study indicated that the influence of the customer and the end-user was more weighted on the supplier's future than the supplier's commercial or project management success.

Most of the authors of defence project success factors take the viewpoint of the defence industry and define the success factors from the industry delivery project point of view. Only Kwak and Smith (2009) explicitly take the viewpoint of the procurement project success factors in his study of Department of Defence documents. Also, Tishler et al. (1996) interviewed representatives from both procurement and industry's delivery project, however, without drawing

any conclusions regarding the possible differences in success factors between the viewpoints.

Methods

The results of this paper are based on a longitudinal study design, where similar case studies were conducted with a 12-year interval in between by using the same research protocol. This study involved major defence equipment projects where the follow-up study was chosen to correspond to the initial study in terms of content, size and significance in the Finnish Defence Forces. The initial case study conducted in 2006 examined three major defence equipment projects using material from questionnaires, interviews and official project documents. The framework for questionnaires and interviews which was created in stage 1 (figure 1) was based on an extensive systematic literature review of project success and success factors. In the end 38 articles were identified from the literature review. The follow-up case study conducted in 2018 examined five major defence equipment projects by repeating the methodology.

The questionnaires and interviews were directed to managers and owners of the studied projects; twelve project managers or owners gave their insights in the initial study and eleven project managers or owners in the follow-up study. A total of eight case projects was counted for this research. In case studies, there is not an ideal number of cases, but a number between 4 and 10 cases is enough to guarantee the quality of the research (Yin 1984; Eisenhardt 1989). A valid case study method demands a triangulation of the data, as Eisenhardt (1989), Tellis (1997) and Rothbauer (2008) suggest. But in some cases, the data is collected from two or even four different sources (Eisenhardt 1989). In this research the data sources are the initial case study, questionnaires and official documents. During the data-triangulation process, the researchers studied several sources of information to find common elements regarding the subject under research. Data triangulation in this research also involved the verification and analysis of these sources.

The study in 2006 identified various potential factors of success or failure of defence equipment projects as well as elucidating factors through a SWOT framework. The most critical factors were bundled into four categories and found to be influential for the project's success. The four success factor categories were project team, quality and performance, leadership and resources (Ikonen 2017). The follow-up study repeated the accordingly; various potential factors of success or failure for defence equipment projects were identified

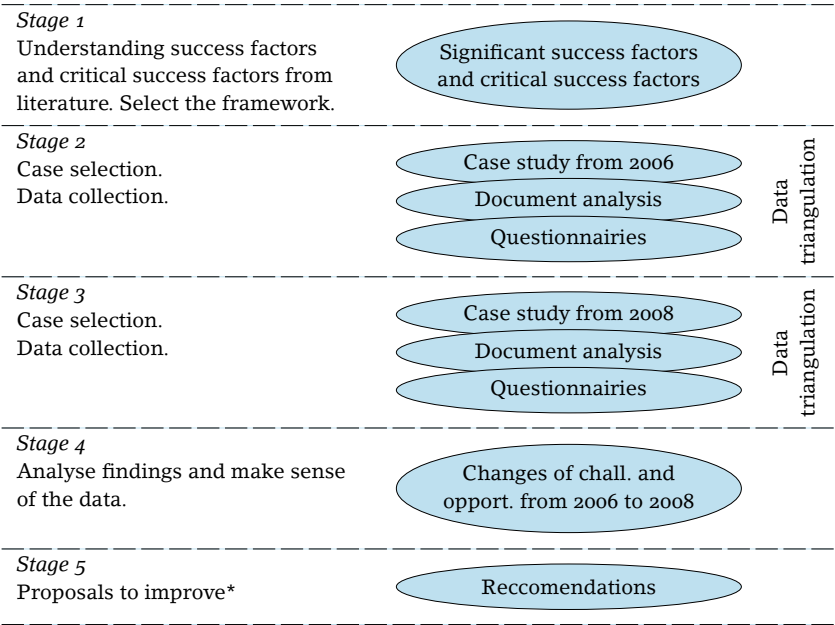


FIGURE 2 The Research Design (* defence material project management practices)

and the most influential factors were bundled into categories. The findings of the follow-up study were compared to the findings of the initial study to illustrate whether the findings add up or differ from one another. All critical success factors were created during the analysis of the first six cases. By this time all the factors were emerged from the data. In the last two cases new data only repeated and enriched the current factors. This is an indication that theoretical saturation was achieved within the eight cases (Eisenhardt 1989). The research design of the study is presented in figure 2.

Results

The analysis of the questionnaire and interview data revealed emerging categories of project success factors. These were divided into internal and external factors according to Frinsdorf, Zuo, and Xia (2014). In addition to that they were divided into positive and negative factors. Then these success factors could be placed in a swot matrix similarly to the initial case study. Strengths and weaknesses represent the most influential internal factors in the defence equipment projects' success, whereas opportunities and threats represent a project's external factors. The success factors of each element of

TABLE 3 Comparison of the swot Matrixes of Defence Equipment Projects Success Factors between the Follow-up Study and the Initial Study

Item	Strenghts	Weaknesses	Opportunities	Threats
Same	Commitment of personnel Meaningful project	Inadequate budget Lack of time		Political guidance Cuts of budget Changing personnel Changing requirements
Similar meaning	Professionalism of person- nel Organized project group Permanence of key person- nel Support of management Defined objectives Industrial peace	Budget's supremacy Requirements not measurable	Final product Quality control Co-operation	Failure of the supplier
Follow-up study	Commercial know-how Project experience Sufficient number of personnel	Poorly selected personnel Support organization	Long-term planning Use of referenced supplier Full-time key personnel Possibility to modify contracts	Delays in delivery Inadequate contracts Cultural differences Effects of bargained price
Initial study	Limited key personnel Project group cohesion	Product "under development" Email management Project manager as negotiator	Fast and solid decisions Improved working technics	Team member collaboration

the swot matrix are listed in table 3. The first row illustrates factors that were found exactly the same in both studies. The second-row lists factors that that were found to be similar to the meaning in both studies. The third row illustrates factors that were found only in the follow-up study. Finally, the fourth-row lists factors that appeared only in the initial study.

According to the participants, the greatest strength of a project lies in its personnel. The personnel of the successful project is to be committed, professional (i.e. capable of taking the project forward), qualified and well-organized and the number of personnel should add up to the project's size and requirements. Management support

and defined responsibilities are needed to enhance the level of performance of the project group. The commitment of the personnel was considered as a shared strength in defence equipment projects. The initial study did not find previous commercial know-how, project experience or sufficient number of personnel as the main strengths of a project. Furthermore, the follow-up study did not find limited key personnel or project group cohesion to be vital strengths as such.

Both case studies showed that the defence equipment projects' major weaknesses arise from the two tangible dimensions of The Iron Triangle; time and cost. Budget's overruling effect over technical and commercial matters was mentioned several times and undefined responsibilities as well as poorly constructed requirements were found to prevent the project success. Poorly or wrongly selected personnel and the role of organizational support were not experienced as important weaknesses in the initial study. Then again purchasing a product in a development phase (development project), email management and that the project manager becomes a negotiator were not considered as main weaknesses in the follow-up study.

The opportunities identified in both studies were that the final product meets the requirements and that the project recognizes the risks e.g. through the implementation of quality control and mutual co-operation with different project participants. The 2018 data also highlighted the long-term planning as an opportunity to coordinate scarce resources and underlined the importance of selecting a previously referenced supplier in order to avoid unexpected challenges. Furthermore, the possibility of key personnel to contribute to the project full-time without having to perform other duties aside was also mentioned as an important element of success. Fast and solid decision-making and improved working technics were not given emphasis in the most recent study

The supplier failing to deliver the requested final product was considered as the main threat for the project success. Other threats revealed in the data were the influence of political guidance restricting the project, especially during the bidding phase, and delivering unexpected cuts and changes in the budget. Changing personnel and requirements during the project were also mentioned as threats. Delays in the delivery of the end product, inadequate contracts leading to inflexibilities, previously unseen costs cultural differences with the supplier, especially if the supplier is foreign, and possible negative side effects that bargaining may deliver were identified in the 2018 study, while failing collaboration among team members did not emerge as substantial.

TABLE 4 Comparison of the Factors of Success and Failure in Defence Equipment Projects between the Follow-up Study and the Initial Study

Item	Successful equipment project	Failed equipment project
Same	Realistic time schedule Systematic documentation plan Interesting project Co-operation among personnel	Changing and constraining budget Inconsistent political guidance Personnel turnover Non-documented verbal agreements
Similar	Clearly defined objectives Open interaction between stakeholders Flexible budget Committed personnel Measurable requirements Support from the organization Personal responsibilities Constant evaluation	Unrealistic project plan Changing objectives during project Incompetent personnel Failed specification of requirements
Follow-up study	Competent and financially stable supplier Decision-making in the project level	Insufficient number of personnel Unskilled supplier
Initial study	Good project management	Too many experts in a project group Inflexible project management Bureaucracy

The analysis of the data revealed a set of factors that promote a successful or failed equipment project. The factors that are considered to enable project success or causing project to fail are listed in table 4. The first row illustrates factors that were found exactly the same in both studies. The second-row lists factors that that were found to be similar to the meaning in both studies. The third row illustrates factors that were found only in the follow-up study. Finally, the fourth-row lists factors that appeared only in the initial study.

The data summarized in table 4 revealed that a realistic time schedule, systematic documentation plan, co-operation skills of personnel and experience among the personnel recurred unambiguously. Clearly defined project objectives, realistic, feasible and well-standardized project plan, open and imminent interaction between different stakeholders of the project, secure and flexible budgeting and committed personnel were found to be similar in both studies when considering project success. Furthermore, a successful equipment project should have carefully written and measurable requirements together with a qualified personnel with personal responsibilities. What was interesting was that the data of the follow-up study pointed out the need for a competent, financially stable and referenced supplier, whereas the initial study did not emphasize on the role of the supplier as such. Good project management was found to be a direct success factor in the initial study but considered as

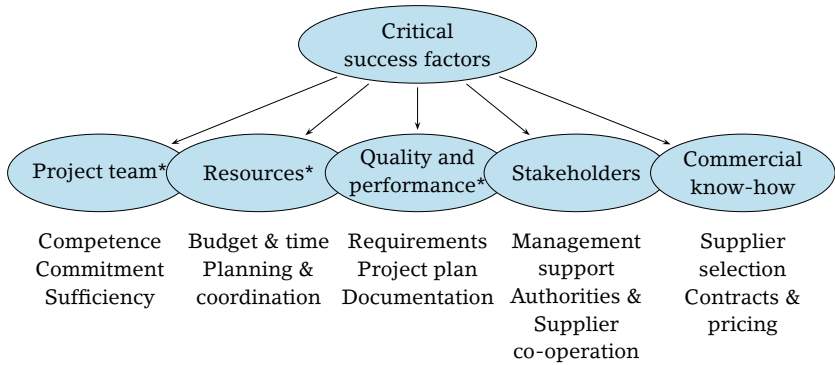


FIGURE 3 Critical Success Factors in Defence Equipment Projects
(* categories found in both case studies)

an integrated, embedded part of other factors in the follow-up study.

Changes and constraints in budget, inconsistent political guidance, tight or unrealistic time schedule, personnel turnover and making an agreement were only verbally repeated in the data. Unrealistic project planning, changing the objectives during the project, incompetent personnel and failed specification of requirements were perceived as failing factors. The study in 2018 pointed out as a threat when the number of personnel does not add up to the size and requirements of a project. The role of the supplier was brought up again by indicating that a failed equipment project has an unskilled supplier – a factor that was not emphasized in the initial study. What was then again missing in the follow-up study compared to the initial study was that a failed equipment project involves too many experts in a project group and that makes cooperation among experts more challenging, together with inflexible project management and too much overall bureaucracy.

Of those success factors found in tables 3 and 4 a total of 13 were assessed to be critical success factors i.e. appeared most often. This is one more compared to the study in 2006. Once the critical success factors were found, they were grouped into categories in order to build a critical success factor framework. A total of five categories were found in the follow-up study which results in one extra category compared to initial study. Project team, resources as well as quality and performance categories appeared identically in both studies. Stakeholders and commercial know-how were identified as new critical success factors categories, whereas leadership, as an independent category, disappeared (figure 3).

In the initial study (see Ikonen 2017) the people of the project, an open environment and good atmosphere were grouped as critical success factors under the project team category. However, in the follow-up study the project team category involved competence, commitment and sufficiency of personnel as critical success factors. Resources repeated similarly, though planning and coordination were emphasized over an efficient use of resources. Quality and performance were repeated identically. A category of stakeholders involves critical success factors of support from the management and conversational co-operation with not only management but also authorities and suppliers. Furthermore, a category of commercial know-how is divided into supplier selection, contracting and pricing issues. The leadership category's critical success factors such as a good project manager, clear objectives and support from superiors were embedded into other success factors.

Discussion

The case studies conducted similarly in 2006 and 2018 revealed that the biggest challenge of defence equipment projects has been the inadequate resources especially in terms of time and budget. As the resources are expected to gradually decrease, it is obvious that a project's ability to use the given scarce resources will be highlighted in the future. Another challenge present in the study is inconsistent political guidance that may restrict a projects' ability to achieve its objectives. The study highlights the necessity of qualified, sufficient, committed and carefully chosen personnel. In the Finnish Defence Forces' equipment projects there is a growing need for commercial know-how and conversational stakeholder co-operation among authorities, management and suppliers.

Regarding the results of the 2006 and 2018 studies, the most important changes are the increased significance of adequate resources and the delivery capability of the supplier while the importance of project management is not mentioned as such. This may indicate the increased project management competencies through e.g. project education and training. The Finnish Defence Forces have started to educate personnel for project management more intensively. It is recommended that the education of project management and commercial dimension will be increased further since we regard it as the best way to answer to the challenge of decreasing budgets and increasing costs of defence equipment projects. Nevertheless, the majority of the critical success factors have remained unchanged between 2006 and 2018 despite the organizational and procedural

changes during that period. These critical success factors are more durable and are not situational or project specific

The environment has changed rapidly due to the growing need of both financial and process-related efficiency. The Finnish Defence Forces organization has been revised in the early 2010s and there has been a transition within materiel politics from developing projects to purchasing already tested, validated products (MORS), and setting up a centralized purchasing unit. We argue that the changes in success factors found in the longitudinal design could relate to environmental and organizational changes. On the other hand, it is possible that there are reliability issues e.g. in classifying the questionnaire data. However, the reliability is strengthened by congruence since the research methods used in both case studies were similar to each other. The reliability may on the other hand be weakened to some degree due to subjectivity and continuity issues. For example, the follow-up study did not find project manager as a critical success factor as such, but it cannot be argued that the impact of project manager has been decreased.

Conclusions

Many project success factors like top management support (Pinto and Slevin 1989; Fortune and White 2006; Kuan 2005; Gunathilaka, Tuuli, and Dainty 2013; Tishler et al. 1996; Frinsdorf, Zuo, and Xia 2014; Rodriguez-Segura et al. 2016; Aguilani et al. 2017), clear and realistic objectives (Fortune and White 2006; Gunathilaka, Tuuli, and Dainty 2013; Frinsdorf, Zuo, and Xia 2014; Rodriguez-Segura et al. 2016), allocation of resources (Fortune and White 2006; Kuan 2005; Gunathilaka, Tuuli, and Dainty 2013; Frinsdorf, Zuo, and Xia 2014) and competence of the project manager (Pinto and Slevin 1989; Tishler et al. 1996; Fortune and White 2006; Gunathilaka, Tuuli, and Dainty 2013; Mir and Pinnington 2014) and the project team (Fortune and White 2006; Gunathilaka, Tuuli, and Dainty 2013; Cserhádi and Szabó 2014; Rodriguez-Segura et al. 2016; Aguilani et al. 2017) are reported in our study, however the viewpoint of procurement alters these perceptions. For example, failure to meet the final user expectations and customer project team preparation (Rodriguez-Segura et al. 2016) do not appear as defence equipment success factors since the final user and customer is the project organization itself. Nor does client consultation, trouble-shooting and client acceptance (Pinto and Slevin 1989), effective management change (Fortune and White 2006; Aguilani et al. 2017), motivational aids or culture (Kuan 2005; Aguilani et al. 2017) appear as such. The clearest distinction

between defence equipment projects and industry delivery projects this paper illustrates is that the defence equipment projects are of procurement nature whereas industry delivery projects operate as production or manufacturing projects. In other words, the defence equipment projects viewpoint differs from that of companies. Accordingly, the viewpoint success factors perceived in the defence equipment context differ.

It is to noted, though, that it may be difficult to compare different lists of success factors and critical success factors between one another, since there is no solid universal definition of concepts. The lack of definitions may cause terminology issues and for that reason one word may be interpreted differently by authors and researchers.

As the literature review reveals, most of the success factor studies focus on industry delivery projects, whereas procurement projects like defence equipment projects are rarely distinctively explored. Studies of possible differences between the procurement and industry delivery projects' success and critical success factors are rare and this study offers an opportunity for further research

As indicated in the literature review, it is impossible to illustrate such success factors that fit into every project at any given time. It may be that projects with virtually identical settings experience different success factors from one another. At the opposite extreme it could be stated that a proper definition of success cannot be given. The question under discussion is why to explore success, success factors or criteria in the first place? Even if we have not found the philosopher's stone, our results contribute to the discussion of perceived success in defence equipment projects and to distinguish the defence equipment projects from projects in the private sector and within industries.

References

- Aquilani, B., C. Silvestri, A. Ruggieri, and C. Gatti. 2017. 'A Systematic Literature Review on Total Quality Management Critical Success Factors and the Identification of New Avenues of Research.' *The TQM Journal*, 29 (1): 184–213.
- Amade, B., E. C. Ubani, E. O. M. Omajeh, and U. A. P. Njoku. 2015. 'Critical Success Factors for Public Sector Construction Project Delivery: A Case of Owerri, Imo State.' *International Journal of Research in Management, Science and Technology* 3 (1): 11–21.
- Arnaboldi, M., G. Azzone, and A. Savoldelli. 2004. 'Managing a Public Sector Project: The Case of the Italian Treasury Ministry.' *International Journal of Project Management* 22 (3): 213–23.
- Atkinson, R. 1999. 'Project Management: Cost, Time and Quality, Two

- Best Guesses and a Phenomenon, Its Time to Accept Other Success Criteria.' *International Journal of Project Management* 17 (6): 337–42.
- Baccarini, D. 1999. 'The Logical Framework Method for Defining Project Success.' *Project Management Journal* 30 (4): 25–32.
- Belassi, W., and O. I. Tukel. 1996. 'A New Framework for Determining Critical Success/Failure Factors in Projects.' *International Journal of Project Management* 14 (3): 141–51.
- Cooke-Davies, T. 2002. 'The "Real" Success Factors on Projects.' *International Journal of Project Management* 20 (3): 185–90.
- Cserhádi, G., and L. Szabó. 2014. 'The Relationship between Success Criteria and Success Factors in Organisational Event Projects.' *International Journal of Project Management* 32 (4): 613–24.
- EEAS. 2018a. 'Defending Europe: European Defence Fund.' https://eeas.europa.eu/sites/eeas/files/defence_fund_factsheet_o_o.pdf
- . 2018b. 'Permanent Structured Cooperation: PESCO Deepening Defence Cooperation among EU Member States.' https://eeas.europa.eu/sites/eeas/files/pesco_factsheet_09-03-2018_o.pdf
- Eisenhardt, K. M. 1986. 'Building Theories from Case Study Research.' *The Academy of Management Review* 14 (4): 532–50.
- Frinsdorf, O., J. Zuo, and B. Xia. 2014. 'Critical Factors for Project Efficiency in a Defence Environment.' *International Journal of Project Management* 32 (5): 803–14.
- Fortune, J., and D. White. 2006. 'Framing of Project Critical Success Factors by a Systems Model.' *International Journal of Project Management* 24 (1): 53–65.
- Gunathilaka, S., M. M. Tuuli, and A. R. J. Dainty. 2013. 'Critical Analysis of Research on Project Success in Construction Management Journals.' Paper presented at the 29th Annual ARCOM Conference, Nottingham, 2–4 September.
- Hood, C. 1995. 'The "New Public Management" in the 1980s: Variations on a Theme.' *Accounting, Organizations and Society* 20 (2–3): 93–109.
- Howsawi, E. M., D. Eager, and R. Bagia. 2011. 'Understanding Project Success: The Four-Level Project Success Framework.' Paper presented at the 2011 IEEE International Conference, Singapore, 6–9 December.
- Ikonen, I. 2017. 'Critical Success Factors of Defence Equipment Projects.' Paper presented at the 6th International Scientific Conference on Project Management in the Baltic Countries, Riga, 27–8 April.
- Ingram, H., K. Biermann, J. Cannon, J. Neil, and C. Waddle. 2000. 'Internalizing Action Learning: A Company Perspective; Establishing Critical Success Factors for Action Learning Courses.' *International Journal of Contemporary Hospitality Management* 12 (2): 107–14.
- Kaplan, R., S. and D. P. Norton. 1996. 'The Balanced Scorecard: Translating Strategy into Action.' Boston, BA: Harvard Business Scholl Press.

- Kuan, Y. W. 2005. 'Critical Success Factors for Implementing Knowledge Management in Small and Medium Enterprises.' *Industrial Management and Data Systems* 105 (3): 261–79.
- Kwak, Y. H., and B. M. Smith. 2009. 'Managing Risks in Mega Defence Acquisition Projects: Performance, Policy, and Opportunities.' *International Journal of Project Management* 27 (8): 812–20.
- Lipovetsky, S., A. Tishler, D. Dvir, and A. Shenhar. 1997. 'The Relative Importance of Project Success Dimensions.' *R&D Management* 27 (2): 97–106.
- Lönnqvist, A. 2004. *Measurement of Intangible Success Factors: Case Studies on the Design, Implementation and Use of Measures*. Tampere: Tampere University of Technology.
- Mazur, A., A. Pisarski, A. Chang, and N. M. Ashkanasy. 2014. 'Rating Defence Major Project Success: The Role of Personal Attributes and Stakeholder Relationships.' *International Journal of Project Management* 32 (6): 944–57.
- Mir, F. A., and A. H. Pinnington. 2014. 'Exploring the Value of Project Management: Linking Project Management Performance and Project Success.' *International Journal of Project Management* 32 (2): 202–17.
- Neely, A., J. Mills, K. Platts, H. Richards, M. Gregory, M. Bourne, and M. Kennerley. 2000. 'Performance Measurement System Design: Developing and Testing a Process-Based Approach.' *International Journal of Operations & Production Management* 20 (10): 1119–45.
- Neilimo, K., and E. Uusi-Rauva. 1997. *Johdon laskentatoimi*. Helsinki: Edita.
- Osei-Kyei, R., and A. P. Chan. 2015. 'Review of Studies on the Critical Success Factors for Public-Private Partnership (PPP) Projects from 1990 to 2013.' *International Journal of Project Management* 33 (6): 1335–46.
- Patanakul, P., Y. H. Kwak, O. Zwikael, and M. Liu. 2016. 'What Impacts the Performance of Large-Scale Government Projects?' *International Journal of Project Management* 34 (3): 452–66.
- Piercy, N., and W. Giles. 1989 'Making swot Analysis Work.' *Marketing Intelligence & Planning* 7 (5–6): 5–7.
- Pinto, J. K., and D. P. Slevin. 1989. 'Critical Success Factors in R&D Projects.' *Research Technology Management* 32 (1): 31–5.
- Puolustusvaliokunta. 2017. 'Valiokunnan mietintö PuVM 4/2017.' https://www.eduskunta.fi/FI/vaski/Mietinto/Documents/PuVM_4+2017.pdf
- Rodriguez-Segura, E., I. Ortiz-Marcos, J. J. Romero, and J. Tafur-Segura. 2016. 'Critical Success Factors in Large Projects in the Aerospace and Defense Sectors.' *Journal of Business Research* 69 (11): 5419–25.
- Rothbauer, P. 2008. 'Triangulation.' In *The SAGE Encyclopedia of Qualitative Research Methods*, edited by Lisa M. Given, 1:892–4. Thousand Oaks, CA: California.

- Tellis, W., M. 1997. 'Application of a Case Study Methodology.' *The Qualitative Report* 3 (3), 1–19.
- Tishler, A., D. Dvir, A. J. Shenhar, and S. Lipovetsky. 1996. 'Identifying Critical Success Factors in Defense Development Projects: A Multi-variate Analysis.' *Technological Forecasting and Social Change* 51 (2): 151–71.
- Toivanen, J. 2001. *Balanced Scorecard in implementointi ja käytön nykytila Suomessa*. Acta Universitatis Lappeenrantaensis 108. Lappeenranta: Lappeenranta teknillinen korkeakoulu.
- Wateridge, J. 1998. 'How Can IS/IT Projects be Measured for Success?' *International Journal of Project Management* 16(1): 59–63.
- Westerveld, E. 2003. 'The Project Excellence Model? Linking Success Criteria and Critical Success Factors.' *International Journal of Project Management* 21 (6): 411–8.
- Yin, R. K. 1984. *Case Study Research: Design and Methods*. Applied Social Research Methods Series 5. London: Sage.



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The Influence of Parents on Female Entrepreneurs in Three Career Development Phases

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We examine female entrepreneurs in three different life stages and the influence parents have on them through human and social capital. The results from the web survey sent to 10.000 women entrepreneurs in Slovenia, with the 3.4% response rate, were analyzed using Chi square statistics and ANOVA. Female entrepreneurs of different age groups have parents with different occupational and educational background, they differently evaluate their parents as role models and also their instrumental support, while emotional and moral support of parents is fairly important to all women entrepreneurs. In the future consideration of support and encouragement of female entrepreneurship, parents, especially mothers, should be seen as possible catalysts for their daughters to decide on what they have been dreaming off, but traditionally might have not been brave enough to make their dreams come true.

Key words: entrepreneurship, female entrepreneurs, parents influence, life stages

<https://doi.org/10.26493/1854-4231.13.247-263>

Introduction

In this paper, we examine the difference of the influence parents have on female entrepreneurs in three different life stages through human capital in the form of previous experience in the family business and social capital in the form of emotional and instrumental capital. There is a limited emphasis on childhood education and family background in the research of new business foundation (Jayawarna, Jones, and Macpherson 2014). Heinz (2002) argues that an individual's future outcomes arise from personal, family and work histories, not so from education. Since most personal qualities are established at early stages in life, 'entrepreneurs are a product of their upbringing,' and being born in a family with the 'right kind of parents' is important to the pursuit of successful entrepreneurial careers (Douglas and Shepherd 2000, 233). Jayawarna, Rouse, and

Macpherson (2014) developed Bourdieu's (1986) view that there is a variety of capitals available to help individuals successfully navigate the complexity of society and improve their life chances, through the resource-based life course model of entrepreneur transition (p. 292). They argue that the opportunities to start a business are significantly influenced by the traditional resources of education, family status and wealth. The recent study of students' career intentions across the globe shows the importance of perceived parents' performance in entrepreneurship as an important factor for young people while choosing entrepreneurship as their career path (Criaco et al. 2017).

Koellinger, Minniti, and Schade (2013) believe that the reason for a smaller number of women entrepreneurs is in their attitude towards entrepreneurship, which is reflected in a lower degree of self-confidence in entrepreneurial abilities, risk predisposition and in various social networks. Those are also reasons to believe that women will less likely switch from 'wanting' to 'doing' into entrepreneurship (Verheul et al. 2011). Caliendo, Fossen, and Kritikos (2014) also found the greatest difference between women and men is in their relation to risk taking. In accordance with the theory of planned behavior (Ajzen 1991), the entrepreneurial intention and behavior of a woman will depend on her attitude to negative or positive attitude towards entrepreneurship. Subjective norms represent a sociological factor, which in the case of female entrepreneurship is about perceiving the pressure of the society to a certain behavior, namely being entrepreneur. Cultural and social norms shape the attitude of women towards entrepreneurship as their career choices. Instead of discussing the differences between men and women, many researchers suggest the promotion of women entrepreneurship and their involvement in entrepreneurship, research of entrepreneurial experiences, values and choices of women through qualitative methods (Ahl 2002; Kyrö and Hyrsky 2008). This knowledge could also help to change the negative impact of employment ratio between women and men on life expectancy at birth (Novak, Čepar and Trunk 2015), giving women the chance to earn better living and step out of the low paid labour. Caliendo and Kritikos (2011) suggest that more research should focus on studying cognitive qualities and tendencies that may change with time due to different entrepreneurial experiences.

Following the researchers notes that the effects of cultural and social factors on entrepreneurial development remain understudied (Thornton, Ribeiro-Soriano, and Urbano 2011) and that the im-

pact of family on entrepreneurial orientation has not been fully understood yet (Cruz and Nordqvist 2011), we examine the different aspects of social capital and family capital respectively within the three groups of female entrepreneurs. Forms and types of social and human capital differ through the different stages of life of women's businesses (Roomi 2009). Jayawarna, Rouse, and Macpherson (2014) argue that there are likely to be common life course pathways to business creation. On that basis we assume that the needs of women entrepreneurs could be much better understood by examining differences in social and human capital and their influence on aspirations and motivations through the life stages. We apply the three life stages of women, connecting the life and career responsibilities, developed by O'Neill and Bilimoria (2005).

Literature Review and Hypotheses Development

The family embeddedness in the entrepreneurial process is seen through the norms, values, relations to entrepreneurship, family situation, possibilities of obtaining different types of assets as illustrated by Aldrich and Cliff (2003). Aldrich and Kim (2007) consider that parents influence the entrepreneurial decisions of their children by raising and being a role model in the childhood and by adapting certain values in adolescence, while the influence of parents on entrepreneurship in adulthood is insignificant. Having an entrepreneur as a parent means support and help, but can also be a barrier to the realization of an entrepreneurial idea (Aldrich and Cliff 2003). Children born to entrepreneurs, with parents higher up the occupational ladder, are more likely to start a business (Jayawarna, Rouse, and Macpherson 2014). Having a parent involved in running a small enterprise during childhood is a powerful predictor of start-up (Schoon and Duckworth 2012; Jayawarna, Rouse, and Macpherson 2014).

One of important factors of entrepreneurial success and also the motivation for entrepreneurial start-up is human capital in the form of past experience, gained in the business owned by a family member (Zellwegger, Sieger, and Halter 2011; Fairlie and Robb 2007). Family businesses provide an important opportunity for family members to acquire human capital related to operating a business. However it has an independent effect on small business outcome. The strong effect of previous work experience in a family member's business on small business outcomes suggests that family businesses provide an important opportunity for family members to acquire human capital related to operating a business (Fairlie and

Robb 2007). Accordingly to the above, we propose the first hypothesis.

- H1 *Female entrepreneurs in different life stages have different human capital in the form of previous employment in family business.*

It is believed that social capital in the form of cultural capital, norms, life style, habits, beliefs and entrepreneurial spirit is even more important than working experience in the family business (Fairlie and Robb 2007; Gupta et al. 2009; Shane 2012). Parents in business pass valuable experiences, confidence and other elements of managerial human capital to their offspring, thus increasing the likelihood that they will pursue entrepreneurial careers (Zellwegger, Sieger, and Halter 2011). Jayawarna, Jones, and Macpherson (2014a) suggest that the capacity of parents to foster the potential of their children through gifting resources, direct educational support and indirect transmissions of the human capital is important for the development of childhood human capital, which forms the capability to pursue entrepreneurial careers.

Parents, especially the mother, act as gatekeepers for their children's education (West et al., 1998). Flouri and Buchanan (2002) suggest that maternal employment is a significant risk for poor intellectual development and educational attainment of children. On the other hand, higher educated mothers support the entrepreneurial status of their daughters as shown in the study of female entrepreneurs in Slovenia (Vadnjaj 2008). Fairlie and Robb (2007) found that those business owners with parents who owned businesses were significantly more likely to enter business themselves. It is supposed that self-employed parents can provide more financial and social support to their children to start their own business, but Dunn and Holtz-Eakin (2000) study is suggesting the strongest parental influence is human capital rather than finance and this intergenerational link is even stronger along gender lines. According to Dunn and Holtz-Eakin (2000) second generation entrepreneurs are two to three times more likely to work in the same occupation as their fathers. Schoon and Duckworth (2012) also found a positive relationship with a father's occupational class. Similarly, Jayawarna, Rouse, and Macpherson (2014) found that business entry is directly associated with a father's occupation and reduced by every step down the occupational ladder. Having a father in manual work particularly reduces the chance of start-up. Having parents with higher professional managerial occupations is positively associated with

business founding. The lower is parents' occupational status the lower is the chance of starting a business. Children of self-employed parents, however, are more likely to enter entrepreneurship, than children, which have parents from any other occupational group. Sharma (2014) on the other hand, claims that father's occupation of the respondents in their study was seen to have no influence on the career intention of students, which is in conflict with several of the earlier studies (Lindquist, Sol, and van Praag 2012; Carr and Sequeira 2007) and in line with the study in Turkey (Cetindamar et al. 2012). There is a significant relationship with household income in childhood and startup (Schoon and Duckworth 2012; Jayawarna, Rouse, and Macpherson 2014). Another measure of the childhood socio-economic status found to be significant by Schoon and Duckworth (2012) was parent's education. On that basis we propose the next two hypotheses.

- H2 *Female entrepreneurs in different life stages have parents with different employment status at the time of their entrepreneurial start-up.*
- H3 *Female entrepreneurs in different life stages have parents with different level of education.*

Female entrepreneurs consider business networks less favorable than their personal networks, in which family, friends and relatives are included (Bogren et al. 2013). Strong ties with family and friends form important social capital at the beginning of the entrepreneurship helping women entrepreneurs with start-up capital and emotional support (Uzzi 1997; Vадnjal and Vадnjal 2007). Entrepreneurial role models are important as inspiration and motivation factors, they raise self-confidence, provide support and teach by example (Bosma et al. 2012). Parents' opinion can have significant influence on final decision about entrepreneurship path (Carr and Squeira 2007). According to Ajzen (2002) the final decision can be influenced by both, previous experience and the opinion of the close ties, and it may be that due to the parents' bad experience with entrepreneurship, the potential entrepreneur takes a different path. Parents also act as role models for entrepreneurs (Bosma et al. 2012; Fairlie and Robb 2007) through every day communication when the tacit knowledge, which cannot be obtained through education, but can replace the lack of working experience, is given on to off-springs (Davidsson and Honig 2003). Working habits, life patterns like hard work, the need for independence, discipline are learned from parents (Dunn and Holtz-Eakin 2000). Mungai and

Velamuri (2011) found the effect of this role-modelling most significant in early adulthood (ages 18 to 21) and conditional on parental success. Accordingly, we propose the next hypothesis.

- H4 *Parents as role models have different impact on female entrepreneurs in different life stages.*

Social reinforcement and instrumental social capital are important factors in the process of new venture creation (Samuelsson and Davidsson 2009). Encouragement from the social environment is considered as an emotional support and approval, which is associated with a cognitive dimension of social capital (Liao and Welsch 2003; Samuelsson and Davidsson 2009). Social support and security, which is passed through cognitive capital, is an important factor in encouraging the entrepreneur who wants to break certain social norms in the process of risk, which is necessary for the development of a new venture (Liao and Welsch 2003). Access to instrumental social capital should facilitate the venture creation process via access to more accurate and relevant information; contacts with prospective customers and resource providers, and therefore also better access to the various types of resources needed in the process (Samuelsson and Davidsson 2009). Bogren et al. (2013) found, that support from parents is important both in the form of instrumental support as well as moral support for all female entrepreneurs. Those who are more willing to grow their business find the support from close ties even more important. Being from a supportive family background and having a solid start in education, but not necessarily being a high academic achiever, is a strong initial pathway to entrepreneurship (Jayawarna, Jones, and Macpherson 2014). We observe two dimensions of social capital, namely, emotional support and incentive and instrumental social capital and formulate the next hypothesis.

- H5 *The female entrepreneurs in different life stages consider the importance of their parents' support for their venture creation differently.*

Research Methodology

The data for this study was collected from female entrepreneurs in Slovenia. The on line questionnaire was sent to 10.000 addresses of businesses in at least 50% ownership of women. The addresses were provided by Bisnode Slovenia where they developed algorithm to identify the businesses owned by women. Out of 45.000 identified companies there were 10.000 with valid e addresses to which

TABLE 1 The Occupation of Parents (in %)

Occupation	Age of entrepreneur						Total	
	<35 years		35-45 years		>45 years		F	M
	F	M	F	M	F	M		
Unemployed or unskilled	2.4	9.8	1.9	6.5	0.7	18.9	1.5	12.7
Farmers or skilled workers	30.5	30.5	28.3	36.1	36.7	37.8	32.5	35.5
Employee	2.4	6.1	7.5	11.1	6.1	9.5	5.7	9.2
Retired	2.4	3.7	6.6	5.6	6.1	8.1	5.4	6.2
Craftsman or self-employed	18.3	8.5	17.	6.5	10.2	3.4	14.3	5.6
Professionals with their own practice	4.9	6.1	4.7	2.8	4.1	1.4	4.5	3.0
Highly paid professionals employed on top positions	13.4	25.6	15.1	21.3	17.	12.8	15.5	18.6
Top managers or entrepreneurs	24.4	7.3	10.4	2.8	9.5	1.4	13.4	3.3
Other	1.2	2.4	8.5	7.4	9.5	6.8	7.2	5.9
Total (%)	100	100	100	100	100	100	100	100
Total (N)	82	82	106	108	147	148	335	338

the questionnaires were sent. The response rate to the questionnaire which obtained questions about human capital and social capital and took 25 minutes to complete was 3.4 %, which is in line with the suggestions (Zikmund 2010; Callegaro, Manfreda, and Vehovar 2015). The data for this study was analyzed with Chi-square test and ANOVA test according to the type of questions.

Results and Discussion

Among all the entrepreneurs, 22% have been employed in the business owned by their parents or close relatives before establishing their own business. Only 17% of older female entrepreneurs had such an experience, whereas in the youngest group there was 26.8 % of entrepreneurs that worked for a family member. The difference among the three groups is not statistically significant, so we can't confirm the hypothesis H1. One might conclude that a low percentage of previous working experience in family business is due to the short entrepreneurial history in Slovenian economy, however, the study in the United States shows that there is more than a half of entrepreneurs who had a self-employed family member, but less than 50% of that group actually worked for that family member (Fairlie and Robb 2007).

As shown in the table 1, the biggest difference between female

entrepreneurs of different ages is in the entrepreneurial status of fathers. Among the elderly women entrepreneurs most fathers were farmers and skilled workers (36.7 %), followed by experts in demanding and well-paid jobs (17 %). Only 2.4 % of fathers of the youngest entrepreneurs were employees. The Chi-square is slightly above the significant statistical difference ($p = 0.06$; $df = 16$; $\chi^2 = 25.627$). More than one-third of mothers of all female entrepreneurs were farmers or skilled workers (35.5%) followed by experts in a demanding and well-paid job (18.6%), while only 3% of female entrepreneurs had mothers who were professionals with their own practice. The entrepreneurs in the eldest group are to a greater extent daughters of unemployed or unskilled workers (18.95%), while the proportion of those among the youngest group is 9.8% and even smaller in the middle group, only 6.5%. Among the youngest, there is a larger share of daughters of directors and entrepreneurs (7.3%), with only 2.8% in the age group from 35 to 45 years and even less (1.4%) in the group of 45 years and over. Among the younger entrepreneurs, there are more daughters of experts in a very demanding and well-paid job, 25.6% among the youngest group and 20% in the group from 35 to 45 of age, and only 12.8% in the older group. On the basis of Chi-squared test, it can be argued that there are statistically significant differences in the employment status of mothers of different age groups ($p = 0.009$; $df = 16$; $\chi^2 = 32.353$). We can conclude that younger entrepreneurs follow entrepreneurial path of parents, especially of mothers. The parents of the older women did not even have the same chance to develop entrepreneurial skills due to the socio-economic system in the country. Thus, the larger share of entrepreneurial parents of younger female entrepreneurs is expected. A smaller proportion of mother entrepreneurs compared to fathers is likely to be due to less developed female entrepreneurship in Slovenia in the past. The results are consistent with the findings of previous studies (Fairlie and Robb 2007; Carr and Sequiera 2007; Lindquist, Sol, and van Praag 2012), which emphasize the impact of family business on the entrepreneurial activity of young people. Sharma (2014) found that children of small entrepreneurs in India and Pakistan do not want to become entrepreneurs, and argue that young people are influenced more by external factors, especially the business environment, than by family. Given the relatively large proportion of female entrepreneurs of all age groups whose parents were farmers or skilled workers, the motive of Slovenian women entrepreneurs may also be highly related to the desire for a better income from working conditions from parents and to the family income, which is

TABLE 2 The Education of Parents (in %)

Occupation	Age of entrepreneur						Total	
	<35 years		35-45 years		>45 years		F	M
	F	M	F	M	F	M		
Vocational	24.4	29.3	32.7	28.7	32.7	54.10	35.5	39.9
Secondary	41.5	32.9	36.4	35.2	36.4	28.40	35.5	31.7
More than secondary	34.1	37.8	30.8	36.1	30.8	17.60	29.0	28.4
Total (%)	100	100	100	100	100	100	100	100
Total (N)	82	82	107	108	107	148	335	338

close to findings of Cetindamar et al. (2012). A fairly large proportion of mothers who were experts in a well-paid workplace indicate the great influence of mothers on daughters with the desire for autonomy and self-realization.

In the table 2 we see that more than one third of fathers of women entrepreneurs had completed secondary school. The share of better educated fathers is clearly higher among the youngest female entrepreneurs. While the shares of fathers of female entrepreneurs between the age 35 and 45 are evenly distributed among vocational, secondary and higher secondary education, fathers with vocational education are predominant (43.8%) in the age group older than 45. According to Chi-square there is a statistically significant difference in the formal education of fathers among female entrepreneurs of different age groups ($p = 0.055$; $df = 4$; $\chi^2 = 9.289$). The structure of maternal education is quite similar to the education of fathers. The largest proportion of mothers of all female entrepreneurs has vocational education or less (39.9%). The mothers of older female entrepreneurs are predominantly less educated (54.1% with less than secondary school). More than one third of women entrepreneurs under the age of 45 have mothers with college or university degree. According to Chi-square test, there is a statistically significant difference in the formal education of mothers of female entrepreneurs in different age groups ($p = 0.000$; $df = 4$; $\chi^2 = 25.032$).

When asked whether her mother was an entrepreneur, 14.8% of the youngest female entrepreneurs and only 1.9% of the oldest female entrepreneurs responded positively. There are statistically significant differences between the entrepreneurial status of mothers of female entrepreneurs in different age groups according to Chi-square test ($p = 0.006$; $df = 6$; $\chi^2 = 18.079$). There is a much greater likelihood for the daughter to decide on entrepreneurship following the mother's example, and the son following his father (Dunn

and Holtz-Eakin 2000; Lindquist, Sol, and van Praag 2012). The increasing share of female entrepreneurs whose mothers have been entrepreneurs may indicate this in Slovenia. However, this trend cannot be confirmed yet because of the short history of entrepreneurship, as older entrepreneurs' parents mostly did not have entrepreneurial experience.

One third of the respondents had a father who was an entrepreneur. Fathers of the respondents in the youngest age group have been entrepreneurs for more than ten years in 41.5% of cases, while the share of long-term entrepreneurial fathers falls to 28.7% in the age group from 35 to 45 years to only 12.8% in the age group 45 and over. The vast majority of the oldest female entrepreneurs (79.7%) answered that their fathers were not entrepreneurs. According to Chi-square test, there are statistically significant differences in the entrepreneurial status of fathers of female entrepreneurs of different age groups ($p = 0.000$; $df = 8$; $\chi^2 = 30.601$). Less than half of all respondents whose fathers were entrepreneurs answered that they were working in his company before establishing their own. It seems that fathers have greater impact on younger entrepreneurs. However, we can also find explanation for the above results in only recent development of entrepreneurship in Slovenia while the survey among German entrepreneurs shows the difference in the influence of the father's entrepreneur on children, where the sons of entrepreneurs are more influenced by their fathers while women entrepreneurs are more influenced by their mothers (Georgellis and Wall 2005).

Parents served as entrepreneurial role models for entrepreneurs in their entrepreneurial beginnings. The majority of entrepreneurs older than 45 years (97.3%) claimed that they were influenced by parents while entering to entrepreneurship, even if parents were not entrepreneurs. Younger entrepreneurs were influenced by other persons in more cases. According to Chi-square test there is a statistically significant difference in the influence of parents on the entrepreneurial decision among female entrepreneurs of different age groups ($p = 0.000$, $df = 2$; $\chi^2 = 21.846$).

The agreements with statements regarding the influence of parents as their role models were rated on the five point Likert scale. ANOVA test shows the statements which measured the influence and motivation ($p = 0.042$; $F = 3.272$), learning by example ($p = 0.001$; $F = 7.587$) and support ($p = 0.002$; $F = 6.668$) were statistically different among the three age groups of female entrepreneurs, all scores being the highest among the youngest entrepreneurs. As much as

94.4% of all respondents chose one of the parents as the most important role model after the start-up phase, while the Dutch entrepreneurs mentioned parents as role models only in 22% of cases (Bosma et al. 2012). Younger Slovenian female entrepreneurs indicating persons outside the strong ties network as role models suggests that the results might be different in the coming years. The youngest entrepreneurs evaluated the support provided by their parents as 'strong.' ANOVA shows statistically significant difference in the parental support rating ($p = 0.004$; $F = 5.528$) between the youngest and the oldest female entrepreneurs. We assume that the older group was raised in the times when entrepreneurship was not appreciated, and regular employment meant security for the family, as well as financial security for a woman, so the decision for entrepreneurship for their daughters meant unpredictable path.

We asked entrepreneurs about evaluation of the opinion of their strong ties network on their entrepreneurial beginnings and the average estimation for their parent's opinion was between the 'neither negative nor positive' and 'positive' (3.65) with no significant difference between the three groups. The youngest female entrepreneurs rated this influence to their actions the highest (3.76 on the 7-point Likert scale), the entrepreneurs over 45 years the lowest (2.89). ANOVA and post hoc test ($p = 0.028$; $F = 3.628$) show a statistically significant difference between the responses of female entrepreneurs of different age groups. The parents' view of entrepreneurship has obviously changed in the positive direction during the entrepreneurial action of their daughters. The estimates of entrepreneurs about the opinion of their parents on entrepreneurship are now higher than at the beginning of their entrepreneurial path. The average rating of all on the five-point Likert scale reached 4.23. The opinion of parents today is much more uniform for all female entrepreneurs and there are no statistically significant differences between the three groups ($p = 0.61$; $F = 1.348$). For the youngest group the parents' opinion seems to be more important today than at the start-up stage. They evaluated the influence of their parents' opinion to be 4.12 on the seven-point Likert scale as opposed to the average evaluation of all respondents at 3.27. Based on ANOVA and post hoc test the influence of parents' opinion is significantly different between the three age groups ($p = 0.000$; $F = 6.997$). Only the youngest group answered that they 'sometimes' seek entrepreneurial advice from parents, the other two groups seem to do that much less, and ANOVA and post hoc test show the statistically significant difference among the three groups regarding

TABLE 3 Parents' Support in the Last 12 Months (in %)

Type of support	Age group			Total	χ^2	df	P
	(1)	(2)	(3)				
Getting new business contacts	22.4	4.8	0.70	7.1	36.980	2	0
Obtaining information at offices and institutions	13.2	4.8	0.70	5.0	16.320	2	0
Business training	9.2	2.9	0	3.1	14.203	2	0.001
Acquisition of financial resources	17.9	2.9	1.4	5.8	27.690	2	0
Acquisition of business assests	10.7	3.8	0	3.7	15.652	2	0
Acquisition of buisness servicess	9.1	3.9	0	3.4	12.679	2	0.002
Finding personel	3.9	3.8	0	2.2	5.656	2	0.059
Moral and emotional support	64.1	40.6	17.2	35.9	49.920	2	0
Unpaid work	17.1	14.7	2.80	9.9	15.345	2	0

NOTES Column headings are as follows: (1) up to 35 years, (2) 36 to 45 years, (3) 45 years and more.

this question ($p = 0.000$; $F = 45.168$) as well as the question about the importance of business information provided by their parents ($p = 0.000$; $F = 35.653$). As older entrepreneurs do not have parents who would still be involved in business their answers could be expected.

While asked about the types of support from their parents in the last 12 months, all the respondents received mostly emotional and moral support and some support in the form of unpaid work. Chi-square test shows the statistically significant difference between the female entrepreneurs of different age groups in their parents' help in other forms of business activities as seen in table 3. Both the instrumental as well as emotional and moral support of the parents stand out among the youngest female entrepreneurs, although they believe that the parents did not influence their entrepreneurial decisions. The results show that the influence of parents on entrepreneurs decreases over the years, as well as the importance of their help. The importance of moral and emotional support is relatively high also in the older group. The importance of parents as role models and mentors, which in fact play an important role as entrepreneurial accelerators in the early stages of their children's entrepreneurship, is also pointed out by Bosma et al. (2012), who consider that this role has been overlooked so far and should be con-

sidered as a good alternative to some expensive government-funded programs for entrepreneurs.

Conclusions

The hypothesis stating that female entrepreneurs in different life stages have different human capital in the form of previous employment in family business was not supported. Younger entrepreneurs were working for a family member more often, but we could not confirm the statistically significant difference. The results are in line with a recent survey of intergenerational transmission of entrepreneurship which shows the importance of social comparison and a perceived parental performance in entrepreneurship (Criaco et al. 2017) suggesting that not all offsprings would like to follow their parents into entrepreneurship even if this can still be their career choice. The second hypothesis suggesting that female entrepreneurs in different life stages have parents with different employments status at the time of their entrepreneurial start-up, was accepted. We can conclude that younger female entrepreneurs follow entrepreneurial path of parents, especially of mothers. The parents of the older women did not have the same chance to develop entrepreneurial skills due to the socio-economic system in the country. A smaller proportion of mother entrepreneurs compared to fathers is likely to be due to less present female entrepreneurship in Slovenia. We believe that this will gradually change. The results suggest that also motivational factors of women entrepreneurs differ. One might believe that the eldest group wanted to make better living as their mothers did, while the youngest group in already following their mothers as role models with better jobs. The third hypothesis proposing that female entrepreneurs in different life stages have parents with different levels of education is confirmed. We believe that more educated mothers support their daughters' entrepreneurial aspirations therefore we expect growing number of female businesses by developing the public awareness of its importance and entrepreneurial programs on all levels of schooling. The hypothesis H4 suggesting that parents as role models have different impact on female entrepreneurs in different life stages and the hypothesis H5 naming that female entrepreneurs in different life stages consider the importance of their parents' support for their venture creation differently are also accepted. The confirmation of both hypotheses prove again that parents and their influence as role models play crucial role in the initial and further thinking of an individual about her entrepreneurial path. In the future consideration

of support and encouragement of female entrepreneurship, parents and mostly mother should be seen as possible catalysts for their daughters to decide what they have been dreaming off but traditionally might have not been brave enough to make their dreams come true.

References

- Ahl, H. J. 2002. 'The Making of the Female Entrepreneur: A Discourse Analysis of Research Texts on Women's Entrepreneurship.' Doctoral dissertation, Internationella Handelshögskolan, Jönköping.
- Ajzen, I. 1991. 'The Theory of Planned Behavior.' *Organizational Behavior and Human Decision Processes* 50 (2): 179–211.
- Aldrich, H. E., and J. E. Cliff. 2003. 'The Pervasive Effects of Family on Entrepreneurship: Toward a Family Embeddedness Perspective.' *Journal of Business Venturing* 18 (5): 573–596.
- Aldrich, H. E., and P. H. Kim. 2007. 'A Life Course Perspective on Occupational Inheritance: Self-Employed Parents and their Children.' In *The sociology of Entrepreneurship*, edited by M. Ruef and M. Lounsbury, 33–82. Bingley: Emerald.
- Bogren, M., Y. von Friedrichs, Ø. Rennemo, and Ø. Widding. 2013. 'Networking Women Entrepreneurs: Fruitful for Business Growth?' *International Journal of Gender and Entrepreneurship* 5 (1): 60–77.
- Bosma, N., J. Hessels, V. Schutjens, M. Van Praag, and I. Verheul. 2012. 'Entrepreneurship and Role Models.' *Journal of Economic Psychology* 33 (2): 410–24.
- Bourdieu, P., ed. 1986. *The Forms of Capital*. New York: Greenwood.
- Caliendo, M., F. Fossen, and A. S. Kritikos. 2014. 'Personality Characteristics and the Decisions to Become and Stay Self-employed.' *Small Business Economics* 42 (4): 787–814.
- Caliendo, M., and A. Kritikos. 2011. 'Searching for the Entrepreneurial Personality: New Evidence and Avenues for Further Research.' IZA Discussion Paper 5790, IZA, Bonn.
- Callegaro, M., K. L. Manfreda, and V. Vehovar. 2015. *Web Survey Methodology*. London: Sage.
- Carr, J. C., and J. M. Sequeira. 2007. 'Prior Family Business Exposure as Intergenerational Influence and Entrepreneurial Intent: A Theory of Planned Behavior Approach.' *Journal of Business Research* 60 (10): 1090–98.
- Cetindamar, D., V. K. Gupta, E. E. Karadeniz, and N. Egriçan. 2012. 'What the Numbers Tell: The Impact of Human, Family and Financial Capital on Women and Men's Entry into Entrepreneurship in Turkey.' *Entrepreneurship and Regional Development* 24 (1–2): 29–51.
- Criaco, G., P. Sieger, K. Wennberg, F. Chirico, and T. Minola. 2017. 'Parents' Performance in Entrepreneurship as a "Double-Edged Sword"

- for the Intergenerational Transmission of Entrepreneurship.' *Small Business Economics* 49 (4): 841–64.
- Cruz, C., and M. Nordqvist. 2012. 'Entrepreneurial Orientation in Family Firms: A Generational Perspective.' *Small Business Economics* 38 (1): 33–49.
- Davidsson, P., and B. Honig. 2003. 'The Role of Social and Human Capital among Nascent Entrepreneurs.' *Journal of Business Venturing* 18 (3): 301–31.
- Douglas, E. J., and D. A. Shepherd. 2000. 'Entrepreneurship as a Utility Maximizing Response.' *Journal of Business Venturing* 15 (3): 231–52.
- Dunn, T., and D. Holtz-Eakin. 2000. 'Financial Capital, Human Capital, and the Transition to Self-employment: Evidence from Intergenerational Links.' *Journal of Labor Economics* 18 (2): 282–305.
- Fairlie, R. W., and A. Robb. 2007. 'Families, Human Capital, and Small Business: Evidence from the Characteristics of Business Owners Survey.' *Industrial & Labor Relations Review* 60 (2): 225–44.
- Flouri, E., and A. Buchanan. 2002. 'Childhood Predictors of Labor Force Participation in Adult Life.' *Journal of Family and Economic Issues* 23 (2): 101–20.
- Georgellis, Y., and H. J. Wall. 2005. 'Gender Differences in Self-Employment.' *International Review of Applied Economics* 19 (3): 321–42.
- Gupta, V. K., D. B. Turban, S. A. Wasti, and A. Sikdar. 2009. 'The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur.' *Entrepreneurship Theory and Practice* 33 (2): 397–417.
- Heinz, W. 2002. 'Transition Discontinuities and the Biographical Shaping of Early Work Careers.' *Journal of Vocational Behavior* 60 (2): 220–40.
- Jayawarna, D., O. Jones, and A. Macpherson. 2014. 'Entrepreneurial Potential: The Role of Human and Cultural Capitals.' *International Small Business Journal* 32 (8): 918–43.
- Jayawarna, D., J. Rouse, and A. Macpherson. 2014. 'Life Course Pathways to Business Start-up.' *Entrepreneurship & Regional Development* 26 (3–4): 282–312.
- Koellinger, P., M. Minniti, and C. Schade. 2013. 'Gender Differences in Entrepreneurial Propensity.' *Oxford Bulletin of Economics and Statistics* 75 (2): 213–34.
- Kyrö, P., and K. Hyrsky. 2008. 'Woman Entrepreneurship Programme Breaks Government's Gender Neutrality in Finland.' *International Journal of Entrepreneurship and Innovation Management* 8 (6): 607–22.
- Liao, J., and H. Welsch. 2003. 'Social Capital and Entrepreneurial Growth Aspiration: A Comparison of Technology and Non-technology-based Nascent Entrepreneurs.' *The Journal of High Technology Management Research* 14 (1): 149–70.

- Lindquist, M. J., J. Sol, and M. van Praag. 2012. *Why Do Entrepreneurial Parents Have Entrepreneurial Children?* Bonn: IZA.
- Mungai, E., and S. R. Velamuri. 2011. 'Parental Entrepreneurial Role Model Influence on Male Offspring: Is it Always Positive and when does it Occur?' *Entrepreneurship Theory and Practice* 35 (2): 337-57.
- Novak, A., Ž. Čepar, and A. Trunk. 2015. 'Status of Women in Society and Life Expectancy at Birth.' *Management* 10 (1): 61-77.
- O'Neil, D. A., and D. Bilimoria. 2005. 'Women's Career Development Phases: Idealism, Endurance, and Reinvention.' *Career Development International* 10 (3): 168-93.
- Samuelsson, M., and P. Davidsson. 2009. 'Does Venture Opportunity Variation Matter? Investigating Systematic Process Differences between Innovative and Imitative New Ventures.' *Small Business Economics* 33 (2): 229-55.
- Roomi, M. A. 2009. 'Impact of Social Capital Development and Use in the Growth Process of Women Owned Firms.' *Journal of Enterprising Culture* 17 (4): 473-95.
- Schoon, I., and K. Duckworth. 2012. 'Who Becomes an Entrepreneur? Early Life Experiences as Predictors of Entrepreneurship.' *Development Psychology* 48 (6): 1719-26.
- Shane, S. 2012. 'Reflections on the 2010 AMR Decade Award: Delivering on the Promise of Entrepreneurship as a Field of Research.' *Academy of Management Review* 37 (1): 10-20.
- Sharma, L. 2014. 'Impact of Family Capital & Social Capital on Youth Entrepreneurship: A Study of Uttarakhand State, India.' *Journal of Global Entrepreneurship Research* 4 (1): 1-18.
- Thornton, P. H., D. Ribeiro-Soriano, and D. Urbano. 2011. 'Socio-Cultural Factors and Entrepreneurial Activity: An Overview.' *International Small Business Journal* 29 (2): 105-18.
- Uzzi, B. 1997. 'Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness.' *Administrative Science Quarterly* 42 (1): 35-67.
- Vadnjal, M. 2008. 'Družina kot dejavnik pri odločitvi žensk za podjetništvo.' Magistrsko delo, Univerza v Ljubljani, Ekonomska fakulteta.
- Vadnjal, M., and J. Vadnjal. 2007. 'The Role of Family Support in Women's Start-ups.' Paper presented at the conference International Entrepreneurship: Stimulating Smarter Successful Small Businesses, Glasgow, 7-9 November.
- Verheul, I., R. Thurik, I. Grilo, and P. van der Zwan. 2011. 'Explaining Preferences and Actual Involvement in Self-Employment: Gender and the Entrepreneurial Personality.' *Journal of Economic Psychology* 33 (2): 325-41.
- West, A., P. Noden, A. Edge, and M. David. 1998. 'Parental Involvement in Education in and out of School.' *British Educational Research Journal* 24 (4): 461-84.

Zellweger, T., P. Sieger, and F. Halter. 2011. 'Should I stay or should I Go? Career Choice Intentions of Students with Family Business Background.' *Journal of Business Venturing* 26 (5): 521–36.

Zikmund, W. G. 2010. *Business Research Methods*. 7th ed. New Delhi: South-Western Cengage Learning.



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Organizational Values as the Basis for Business Excellence

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Organizational values play an increasingly important role in contemporary organizations – they intertwine all segments of business and greatly affect the direction of the organization's business strategy. The purpose of this paper is to note that the organizational values that permeate all business segments under modern business conditions form the foundation for the excellence of business organizations. In this regard, we first introduce Kanji's Business Excellence Measurement System (KBEMS) as a starting point for understanding business excellence. According to KBEMS, business excellence is determined by measuring the satisfaction level of customers, employees and other stakeholders to obtain a comprehensive assessment of organizational performance. Specifically, KBEMS consists of two main aspects-leadership and organizational values. In the central part of the paper, we present a case study of Yum! Brands, one of the world's largest fast food companies. Particular emphasis is placed on the detailed presentation and explanation of the basic organizational values of Yum! Brands Company based on two sources of information-espoused values listed on the official web site of the company and various external sources of information from which external stakeholders assess the company's value orientation. Finally, we analyzed the organizational values of Yum! Brands from the perspective of KBEMS. This case study shows that organizational values are the real foundation for business excellence in Yum! Brands. In this context, we considered the relationship between organizational values and key components of KBEMS. This study can therefore serve as an example of putting organizational values into the function of increasing organizational performance, with the ultimate goal of creating organizational excellence.

Key words: organizational values, business excellence, Kanji's Business Excellence Measurement System, organizational performance, Yum! Brands Company

<https://doi.org/10.26493/1854-4231.13.265-279>

Introduction

Values have always played an important role in the lives of people. Values have built not only relationships between people but among society as a whole. Along with the development of society, business have also evolved, and thus, business relations have been increasingly permeated with values that prevail in societies. Ultimately, the importance of managing organizational values, to a large extent, was identified in the 21st century, during which organizations acted under the conditions of globalization and business expansion around the world. Globalization is one of the main reasons why contemporary organizations need to adapt to different cultures and value systems.

As social values relate to an individual and society as a whole, organizational values apply to employees individually and to the company as a whole. The existence of organizational values largely governs the relationships within organizations. Organizational values determine the ways in which employees work in certain situations, so they can also accelerate business processes and decision-making. It is known that organizational goals are a very important element of modern organizations. When management sets goals, it is very important that these goals are aligned with the organizational values that have been established and with which each organization's member must comply.

All of the above-mentioned points show that organizational values play an increasingly important role in the business activities of modern organizations. Organizational values are an important element of an organization's excellence in business. Business excellence, which is currently manifested by achieving top results in all areas of the business, would not be possible without clearly defined principles that all of an organization's members must follow and apply in everyday activities. Therefore, the importance of organizational values in contemporary business is clear.

Organizational values and business excellence are related concepts because without organizational values that run every-day work activities and are manifested through day-to-day business practice, it is impossible to achieve business excellence in any business segment. Organizational values are the guiding principle for management and employees and have the aim of achieving top results and greater effectiveness. The role of balanced organizational values is particularly emphasized, with the aim of satisfying the interest of different stakeholders at the same time, which is, in some way, based on business excellence itself. Achieving top performance in all seg-

ments of business is an important challenge for modern organizations, which also helps them achieve the goal of being recognized for overall business excellence.

In this paper, we first consider the concept of organizational values and contemporary trends in organizational values research. Then, we present the concept of business excellence based on organizational values. Finally, we analyze the organizational values of the Yum! Brands Company from the perspective of the concept of business excellence and present conclusions and implications for further research.

Literature Review

DETERMINING THE CONCEPT OF ORGANIZATIONAL VALUES

Values have been studied by many people throughout history. However, the first scientific research that recognized certain rules and the impact of organizational values on businesses was performed recently. In establishing the value dimension as an important link in business success, Rokeach (1973) made a special contribution to the literature. According to Rokeach, values are persistent beliefs that certain modes of behavior, or the ultimate social condition, are more acceptable than the opposite behaviors and/or states. Schwartz (1992) defines values as desirable goals of different importance and as priorities that transcend specific situations, where the same priorities act as guiding principles in human life. From these two definitions, it is clear that values are the foundation of a company or individual when they are making decisions or taking certain actions.

When we look at an organization as an entity, we can say that each organization has and develops its own specific values. Organizational values can be defined as a set of ideas and beliefs that an organization's members should take to achieve organizational goals and ideas on behaviors that they should follow (Sikavica, Bahtijarević-Šiber, and Pološki Vokić 2008). Enz (1988) agreed with this view and states that organizational values are the beliefs of an organizations' members about the goals and means that organizations must identify in business. Lencioni (2002) claims that organizational values are the basic principles that govern all organizational activities. We can therefore conclude that organizational values play an important role in the business of modern organizations; the acceptance of organizational values as the fundamental principles of business is the basis for the success of achieving organizational goals.

CONTEMPORARY TRENDS IN THE STUDY OF ORGANIZATIONAL VALUES

Viewing organizational values with greater importance gradually led to a change in research on this topic, resulting in a typology of organizational values with several different types of values. Organizational values can be divided into (at least) seven characteristic types (according to Malbašić 2011): (1) goals and the methods of their achievements (terminal and instrumental values); (2) importance for the organization (core and operational values); (3) organizational tendency for organizational changes (defensive, stabilizing and growth values); (4) acceptance within an organization (espoused, actual and desired values); (5) representation, i.e., uniformity in an organization (prevailing or shared and additional values); (6) their historical context (old and new values); and (7) the level of formalization (implicit and explicit values).

One of the most important classifications of organizational values is the classification according to whether the organizational values are espoused, actual or desired values. Espoused organizational values are those for which organizations state that they govern their business activities (Hultman and Gellerman 2002). These values can often be found in organizational acts or are highlighted on the company's website. On the other hand, actual organizational values are the values that actually govern the current organizational behavior. Regardless of whether they are clearly stated in organizational acts or whether organizations are not aware of them, they really affect day-to-day business activities (Malbašić 2011). Desired organizational values are the values to which an organization wants to move towards and that the organization seeks to be the future foundation on which it will build its business. Desired organizational values can also be read from an organizational vision that depicts the direction in which the organization is going, and for that reason, these values are a great help to organizations that have defined good visions (Hultman and Gellerman 2002).

From contemporary research on organizational values, we must mention a growing research interest in balanced organizational values. The concept of balanced organizational values is based on the stakeholder approach suggested by Freeman (1984), the main idea of which lies in the need to meet the interests of various stakeholders, and to meet these interests, organizational values must be balanced. There are several models of organizational values through which different authors have tried to explain the basic idea of balanced orga-

nizational values. A recent approach is a Mission-based model of organizational values (Malbašić, Rey, and Potočan 2015.). This model is based on the idea of Cardona and Rey (2008). The basic categories of organizational values under this model are: business values, relational values, development values, and contribution values. The Mission-based model of organizational values assumes that, to some extent, values from all four fundamental categories should be represented in a particular organization, given that each category of values is directed towards specific stakeholders. The same principle is based on the development of an organizational mission that communicates messages to different stakeholders.

Since it has been recognized that organizational values are increasingly becoming the foundation of modern business, future research on organizational values should connect the concept of organizational values and business excellence, which is one of the new trends in the study of organizational values. One of the first authors who connected organizational values and business excellence is Kanji – his business excellence measurement system is based on two important aspects: leadership and organizational values (Kanji 2002). In that sense, Kanji's system plays an important role in connecting organizational values and business excellence.

BUSINESS EXCELLENCE BASED ON ORGANIZATIONAL VALUES

It is evident that organizational values play an increasingly important role in modern business organizations. Organizational values are intertwined with all segments of business activities and greatly affect the direction of the business. By incorporating organizational values across all segments of business, values under modern business conditions for the foundation for business excellence (Kanji 2002; Kanji and Moura e Sá 2002; Zdrilić and Dulčić 2016).

Business excellence can be defined as a high level of maturity of the management of an organization and its achievement of results (Zdrilić and Dulčić 2016, 147). Excellent organizations are those that are trying to satisfy all interested parties via their achievements, how they achieve their goals and what they can achieve in the future. To achieve business excellence, it is important to focus on both financial and non-financial performance measurements. Likewise, to achieve business excellence, it is important that organizations apply the principles of total quality management (TQM) (Zdrilić and Dulčić 2016).

Kanji (1998) defined business excellence as a way of measuring the satisfaction of customers, employees and other stakeholders to

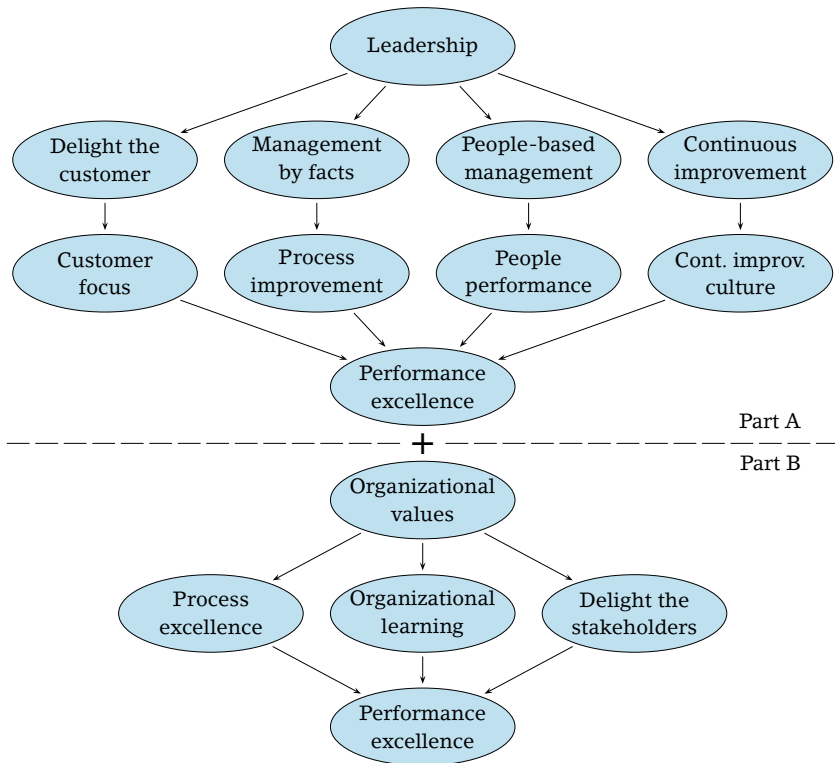


FIGURE 1 Kanji's Business Excellence Measurement System
(adapted from Kanji 2002, 1117)

obtain a comprehensive assessment of organizational success. In this regard, he also developed Kanji's Business Excellence Measurement System (KBEMS). Kanji's system is another important contribution to measuring business excellence, along with well-known models, such as the EFQM Excellence Model, Balanced Scorecard (BSC), Deming Circuit, Ericsson's Business Excellence Model, and many others. This system, besides being recognized as another important system in a multitude of business excellence models, has also contributed to connecting the concepts of organizational values and business excellence.

KBEMS is based on Kanji's Business Excellence Model (KBEM) and Kanji's Business Scorecard (KBS). This system specifically takes external and internal stakeholders of organizations into account in a special way through two fundamental aspects: leadership and organizational values. Figure 1 shows Kanji's Business Excellence Mea-

surement System. KBEMS consists of two main parts—one part is focused on leadership (Part A) and the other part on organizational values (Part B). Through a customer focus, process improvement, people performance and a culture of continuous improvement, leadership leads to excellent performance, which means that leaders are the most important driving force for achieving business excellence.

On the other hand, through process excellence, organizational learning and pleasing stakeholders, organizational values also lead to excellent performance. Both parts—leadership and organizational values—should be applied simultaneously because they form a complementary model of business excellence. The difference between these two parts in KBEMS lies in the fact that leadership is more concentrated on internal stakeholders, while organizational values are more concentrated on issues relevant to external stakeholders of organizations. In order for a given organization to have a finite index of business excellence, it is necessary to sum both parts (leadership and organizational values), divide by two, and multiply by ten. From this model, it is clearly seen that organizational values, together with the variables of leadership, are the foundation for achieving business excellence. Moreover, the organization will hardly be excellent if its business excellence measurement system is not related to or based on organizational values (Kanji 2002).

A Case Study of a Company Whose Business is Based on Values and Business Excellence: Yum! Brands, Inc.

ABOUT YUM! BRANDS, INC.

Yum! Brands is one of the world's largest fast food companies. In addition to doing business in the United States, the company also operates in 130 countries around the world, with over 60,000 employees and 1.5 million associates. This multinational company was founded in 1997 by a spin-off of three fast-food chains from Pepsi Co, Inc. The fast food chains that emerged from the company were run under three distinct brands: KFC, Taco Bell and Pizza Hut. To ensure the successful business activities of these chains in the market after the spin-off process, it was necessary to set up a new company that would unify the business operations of all three chains; thus, Yum! Brands was created. The headquarters of the newly founded company is in Louisville, Kentucky. David Novak was appointed executive director of the company until the end of 2013, when he was replaced by Greg Creed (see <http://www.yum.com>). In 2017, accord-

ing to data from its annual report, the company took 472nd place on the Fortune 500 list of the largest companies in the world.

ESPOUSED ORGANIZATIONAL VALUES OF YUM! BRANDS INC.

For a long time, Yum! Brands has devoted considerable attention to communicating its core values. For this purpose, Yum! Brands have developed a special brochure representing their organizational values and explanations of what each value means for the company. The organizational values that drive Yum! Brands have become the main driving force of all their business activities as well as of other socially responsible businesses. Table 1 shows the espoused organizational values of Yum! Brands, along with explanations of what each organizational value means for the company.

Based on the espoused values of Yum! Brands, we can recognize six core organizational values-trust in employees, an orientation toward customers, aspiration to success, knowledge-based business, teamwork, and recognition of the best employees. Yum! Brands is a multinational company, and for that reason, it is very important that it has defined universal organizational values pertaining to all of its branches and restaurants around the world so that the defined organizational values help achieve success and business excellence. Yum! Brands is trying to make both its employees and customers aware of these organizational values.

Aside from presenting organizational values, the Yum! Brands company's website shows many examples of how these values are lived in everyday practice. Since 2012, the company has participated in an international study named Great Place to Work (GPTW), which examines certain segments of work and employees' relationships in organizations, all with the aim of examining employees' satisfaction. In 2014, 91% of Yum! Brands employees participated in the survey, and 81% of the participants said that Yum! Brands is a great place to work. To provide the professionalism of its employees in providing quality services, Yum! Brands has introduced training and mentoring programs. Furthermore, Yum! Brands argues that focus, thinking, and action are the three elements that are important for achieving successful results with employees (see <http://www.yum.com>).

FURTHER INFORMATION OF THE VALUES OF YUM! BRANDS, INC.

For a more complete picture of Yum! Brands' organizational values and to assess the extent to which the company's activities are consistent with the values that they promote, it is also necessary to consider some external sources of information. This approach allows for

TABLE 1 Espoused Organizational Values of Yum! Brands, Inc.

Organizational Explanation of organizational value	
Believe in all people	We trust in positive intentions and believe everyone has the potential to make a difference. We actively seek diversity in others to expand our thinking and make the best decision. We coach and support every individual to grow to their full capability.
Be restaurant and customer maniacs ... now!	We love running great restaurants, and our customers rule. We act with urgency to ensure every customer sees it and feels it in every restaurant. We make sure we have great mgms who build great teams. We are maniacal about the rigorous execution of our core processes to deliver our Brand Standards as our #1 brand building initiative. It's the foundation for making customer mania come alive.
Go for breakthrough	We begin by asking ourselves, 'What can I do now to get breakthrough results in my piece of Yum?!' Our intentionality drives step change thinking. We imagine how big something can be and work future-back, going full out with positive energy and personal accountability to make it happen.
Build know how	We grow by being avid learners, pursuing knowledge and best practices inside and outside our company. We seek truth over harmony every step of the way. We consistently drive outstanding execution by scaling our learnings into process and tools around what matters most. Breakthroughs come when we get people with knowledge thinking creatively.
Take the hill teamwork	We team together to drive action versus activity. We discuss the undiscussable, always promoting healthy debate and healthy decisions. Our relationships allow us to ask the earth of each other. We make specific verbal contracts to get big things done with urgency and excellence.
Recognize! Recognize! Recognize!	We attract and retain the best people and inspire greatness by being world famous for recognition. We love celebrating the achievement of others and have lots of fun doing it!

NOTES Adapted from Yum! Brands (<http://www.yum.com>).

a more objective consideration of organizational values, and in this way, we can test the extent to which the espoused values match the actual values, i.e., the values that really affect the organizational behavior and the decisions that are made in the company.

One of main organizational values of Yum! Brands is its orientation towards customers. This organizational value represents that customers are most important factor, and the company's goal is meet customers' needs and ensure a pleasant stay for them in their restaurants. This organizational value also refers to removing and remedying the disadvantages associated with the inconvenience that customers might encounter in the company's restaurants. Over the

years, Yum! Brands experienced some inconveniences on several occasions, such as what happened in Mississippi in 2014, when the family of a girl who had been attacked by a dog accused a restaurant employee of forcing them to leave the restaurant. Since news of the incident rapidly spread to the public through social networks, management reacted quickly with a public apology to the family, initiated an internal investigation, and committed to pay a certain amount of money to treat the girl (Fray 2016). In this way, the company wanted to show concern for their customers because for Yum! Brands, feelings toward their customers are important and they want to ensure that customers feel comfortable when visiting their restaurants, regardless of their physical appearance or any disease. Although the investigation showed that the reported incident did not occur and the family refused to receive money for the treatment of the girl, Yum! Brands donated money to the foundation of one plastic surgeon who offered medical assistance to the girl (Fray 2016). This case shows great care for its customers by Yum! Brands and how this company seeks to compensate for and remedy the consequences of possible damage to its customers.

An important business segment of Yum! Brands is also talent management. This concept appeared in the professional literature at the beginning of the 1990s. This concept is largely oriented towards the development of human resources in enterprises. To keep up with global trends, Yum! Brands has embedded this concept into its business and is trying to develop the human potential of employees (Sinha and Kumar 2012). By developing human resources, Yum! Brands seeks to contribute to better development and to increase its competitiveness on the market. By placing an emphasis on human resource development, Yum! Brands ensures a better development of the entire business and obtains a greater ability to adapt to new trends that occur in the market.

Yum! Brands also saw a great opportunity for sharing information through social networks (Sinha and Kumar 2012). Using social networks is particularly useful for sharing information between the company's employees and communicating ideas and values that show that Yum! Brands cares for existing and potential customers. Using social networks has the great advantage of allowing communication between employees in different countries. In this way, communication between employees becomes simpler and cheaper for the company.

An important segment in the company's business is also the leadership that is responsible for making the most important decisions.

There is a large problem for the company in regard to a change in leadership because there are problems with introducing a leadership change and there is the possibility of conflict between employees and the new leadership. To eliminate the problems associated with a leadership change, Yum! Brands conducts so-called executive leadership development. This method of leadership development is based on the fact that existing managers are involved in the development of future managers, i.e., current managers are the mentors of future managers (Groves 2007). Through the use of this model of future leadership development, the company prevents the potential difficulties of new leadership in running the company and reduces possible conflicts between employees and new leadership. The advantage of this method is that it is based on mentoring, or more precisely, existing managers help future managers to develop the skills that they need to perform certain managerial jobs.

In addition to trying to create additional value for its shareholders, Yum! Brands is striving to help endangered people around the world. To achieve this goal, Yum! Brands has been a partner of the World Food Program (WFP) since 2007 (Kraak et al. 2012). The fundamental objective of this organization is to fight hunger in all parts of the world. Yum! Brands helps this organization through donations to one of its programs – World Hunger Relief Campaign, which has provided more than 148 million meals, and in the period from 2007 to 2014, secured a donation in the amount of more than 185 million dollars (Emberland 2014). This support shows that Yum! Brands is actively participating in helping the most vulnerable people around the world and to create a better society. By engaging in socially responsible activities, Yum! Brands wants to show its human side and wants to contribute to the company's betterment.

BUSINESS EXCELLENCE OF YUM! BRANDS BASED ON VALUES

The previous section provides an analysis of the espoused organizational values of Yum! Brands, which are recognized through the activities that the company undertakes. Yum! Brands achieves business excellence in all areas of their business operations, as indicated by achieving top business results, social responsibility and care for employees and customers. The business excellence of Yum! Brands is also oriented towards external and internal stakeholders. Therefore, the business excellence of Yum! Brands can best be described through KBEMS, which is based on leadership and organizational values and thus focuses on internal and external stakeholders.

Leadership has a major role in achieving business excellence, and

Yum! Brands is a company that devotes great attention to leadership through the introduction of executive leadership development in which the existing leadership is involved in the development of future leadership through mentoring. On the other hand, leadership plays an important role in customer orientation, managing talent, human resource development and fostering a culture of continuous improvement. This role is manifested through customer care and efforts to overcome any inconvenience that may arise with customers, as shown in the example of the girl who was attacked by a dog. Furthermore, management also cares about their employees and their career development, which led 81% of employees in the survey conducted in 2014 to express satisfaction with their work at Yum! Brands. The company's overall business is focused on a culture of continuous improvement that is reflected in the leadership's dedication to facilitating work and communication within the company, monitoring trends in information and communication technology and introducing social networking for employees across the globe.

Another important aspect of Yum! Brands business excellence is reflected in its organizational values, which are the foundation of the company's business. Yum! Brands highlights six fundamental organizational values: trust in employees, customer orientation, aspiration to success, knowledge-based business, teamwork, and recognition of the best employees. Organizational values are intertwined with the core philosophy of leadership that emphasizes employees, customers, learning and teamwork. In the previous section, there are several examples that confirm that these values are actually present in the organization and affect the company's decision-making. The organizational values are also strongly influenced by the achievement of the satisfaction of all stakeholders, which is particularly evident through the company's socially responsible business. Namely, Yum! Brands devotes a large amount of attention to humanitarian work and environmental protection. The company is actively involved in making donations to the most vulnerable people in the world who are struggling with poverty and hunger. Likewise, Yum! Brands is actively involved in reduced environmental pollution by utilizing spent fuel oil from fryers.

All of the above evidence suggests that Yum! Brands' business excellence is based on strong leadership and organizational values. Based on the evidence presented, the Yum! Brands business excellence model is shown in figure 2. The model clearly shows two fundamental aspects of business excellence-leadership and organi-

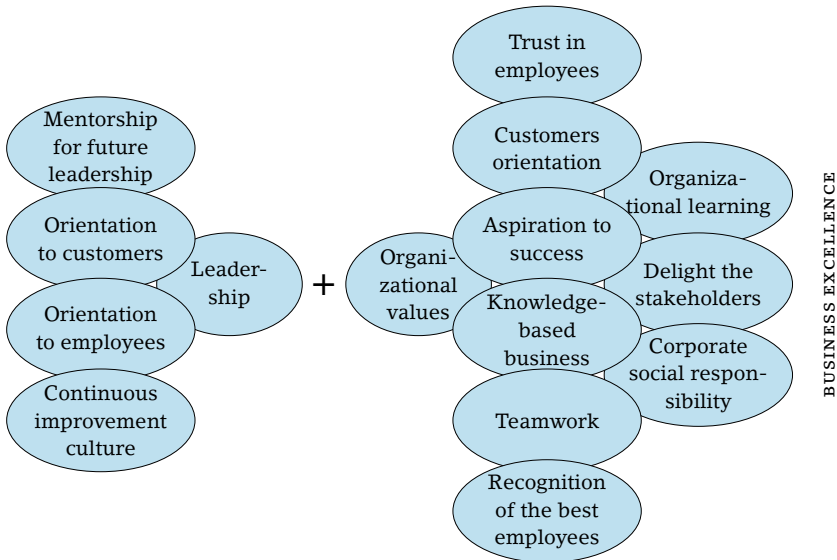


FIGURE 2 Yum! Brands Business Excellence Model

zational values, and within these two aspects, the underlying principles that affect the company's business excellence are presented. Leadership through mentorship of future leadership, orientation to customers, orientation to employees and a continuous improvement culture, along with the six organizational values that lead to organizational learning, pleasing the stakeholders and taking corporate social responsibility, ultimately produce business excellence.

This business excellence model is manifested through a successful business, satisfied employees and responsible membership in the community.

Conclusion

Organizational values are the subject of much research in contemporary management practice as well as in the business world. Organizational values play an important role in the business activities of modern organizations because they influence a business' strategy and its way of making decisions, which ultimately greatly influences its organizational effectiveness. Contemporary research places an increasing emphasis on balanced organizational values that are aimed at satisfying the needs of all stakeholders of organizations. Organizational values play a key role in achieving full excellence in all areas of business.

This paper contribute by recognizing the connection between the concept of organizational values and business excellence, which is based on the KBEMS. The KBEMS combines two main aspects- leadership and organizational values-as two key elements that have an impact on achieving business excellence in the organization. Therefore, in this paper, the case of the American company Yum! Brands is presented as an example of a company whose business is based on organizational values and business excellence.

By analyzing the espoused organizational values of Yum! Brands, as well as by taking into consideration some external sources of information, we created Yum! Brands business excellence model, which is based on strong leadership and six core organizational values. Leadership through mentorship of future leadership, orientation to customers, orientation to employees and a continuous improvement culture are the organizational values that are the foundation for organizational learning, pleasing the stakeholders and taking corporate social responsibility-all of which lead to Yum! Brands' business excellence. This business excellence is manifested through a successful business, satisfied employees and a responsible member of the community.

Yum! Brands is a good example of how organizational values can be used to achieve excellence in all areas of business. The business model of Yum! Brands, which is based on organizational values and business excellence, can also serve as an example for other organizations that want to improve their business and operate in accordance with the concept of business excellence to achieve top business results and the satisfaction of all stakeholders.

References

- Cardona, P., and C. Rey. 2008. *Management by Missions*. Basingstoke: Palgrave Macmillan.
- Emberland, A. 2014. 'Yum! Brands' World Hunger Relief Has a Record-Breaking Year.' World Food Programme, 13 January. <https://www.wfp.org/stories/yum-world-hunger-relief-has-record-breaking-year-fighting-world-hunger>
- Enz, C. A. 1988. 'The Role of Value Congruity in Intraorganizational Power.' *Administrative Science Quarterly* 33 (2): 284-304.
- Fray, C. 2016. 'A Nearly Perfect Handling of a Crisis: KFC, a Little Girl, and a Little White Lie.' http://convergedmediamanagement.com/wp-content/uploads/KFCCrisis_ChelseaFray.pdf
- Freeman, R. E. 1984. *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.
- Groves, K. S. 2007. 'Integrating Leadership Development and Succes-

- sion Planning Best Practices.' *Journal of Management Development* 26 (3): 239–60.
- Hultman, K., and B. Gellermann. 2002. *Balancing Individual and Organizational Values: Walking the Tightrope to Success*. San Francisco: Jossey-Bass.
- Kanji, G. K. 1998. 'Measurement of Business Excellence.' *Total Quality Management* 9 (7): 633–43.
- . 2002. 'Business Excellence: Make It Happen.' *Total Quality Management* 13 (8): 1115–24.
- Kanji, G. K., and P. Moura e Sá. 2002. 'Kanji's Business Scorecard.' *Total Quality Management* 13(1): 13–27.
- Kraak, V. I., P. B. Harrigan, M. Lowrence, P. J. Harrison, M. A. Jackson, and B. Swinburn. 2012. 'Balancing the Benefits and Risks of Public-Private Partnership to Address the Global Double Burden of Malnutrition.' *Public Health Nutrition* 15(3): 503–17.
- Lencioni, P. M. 2002. 'Make Your Values Mean Something.' *Harvard Business Review* 80 (7): 113–7.
- Malbašić, I. 2011. 'Tipologija organizacijskih vrijednosti.' *Ekonomski pregled* 62 (7–8): 421–42.
- Malbašić, I., C. Rey, and V. Potočan. 2015. 'Balanced Organizational Values: From Theory to Practice.' *Journal of Business Ethics* 130 (2): 437–46.
- Rokeach, M. 1973. *The Nature of Human Values*. New York: Free Press.
- Schwartz, S. H. 1992. 'Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries.' *Advances in Experimental Social Psychology* 25:1–65.
- Sikavica, P., F. Bahtijarević-Šiber, and N. Pološki Vokić. 2008. *Temelji menadžmenta*. Zagreb: Školska knjiga.
- Sinha, S. B., and S. Kumar. 2012. 'Innovative HR Practices: Key Methods for Effective Talent Management.' Paper presented at the national seminar Inclusive Growth and Innovative Practices in Management, Ghaziabad, 15 April.
- Zdrilić, I., and Ž. Dulčić. 2016. 'Business Excellence as a Success Factor for the Performance of Large Croatian Enterprises.' *Management: Journal of Contemporary Management Issues* 21 (1): 145–62.



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Abstracts in Slovene

Finančna uspešnost v sektorju javne uprave: primerjava Madžarske in Romunije

*Matei Tămășilă, Ilie Mihai Tăucean, Alin Emanuel Artene
in Claudiu Tiberiu Albulescu*

Raziskujemo dolgoročno razmerje med profitabilnostjo, likvidnostjo in kapitalizacijo za podjetja, ki delujejo v sektorju javne uprave in obrambe na Madžarskem in v Romuniji, z uporabo podatkov na ravni podjetij za obdobje 2006–2015. Naša panelna kointegracijska analiza dokazuje obstoj dolgoročnega razmerja med analiziranimi spremenljivkami. Rezultati *DOLS* se glede likvidnosti in profitabilnosti nagibajo v pozitivno smer za Madžarsko, ne pa tudi za Romunijo. Hkrati koeficient kapitalizacije negativno vpliva na razmerje donosnosti v Romuniji. Ti rezultati so potrjeni z vrsto testov robustnosti, ki upoštevajo različne kazalnike profabilnosti in so delno potrjeni s *FMOLS* analizo. Naše ugotovitve imajo pomembne posledice za finančno upravljanje podjetij, ki delujejo na področju javne uprave in obrambe in kažejo različne strategije finančnega upravljanja podjetij iz obeh analiziranih državah.

Ključne besede: finančna uspešnost, sektor javne uprave, podatki na ravni podjetij, panelna kointegracija
Management 13 (3): 197–211

Ali je mogoče razpravljati o ustreznosti obstoječega računovodskega sistema?

Franko Milost in Žiga Čepar

Računovodstvo je proces evidentiranja in proučevanja finančnih podatkov, ki se nanašajo na poslovanje družbe. Njegovi cilji so predvsem posredovanje informacij o dogodkih v poslovnem življenju podjetja v dogovorjenem jeziku, ki je razumljiv uporabnikom računovodskih informacij, pa tudi zagotavljanje informacij, ki so bistvenega pomena za sprejemanje poslovnih odločitev. Če upoštevamo zgoraj navedene cilje, lahko ugotovimo, da jih ni lahko doseči. Računovodstvo ni natančna znanost, kar pomeni, da se približki ali načrtovani zneski pogosto uporabljajo kot orodje. Ker je prihodnost negotova, ni mogoče določiti natančne vrednosti, ki jo bo sredstvo doseglo, ko bo preoblikovano v denarno obliko, niti zneska, ki bo potreben za izpolnitev določene obveznosti. Zato se lahko vprašamo, ali nam obstoječe računovodske rešitve omogočajo ustvarjanje in pridobivanje ustreznih računovodskih informacij. Prispevek obravnava problem primernosti obstoječega računovodskega sistema. Preučujemo štiri vprašanja – in sicer vprašanje skladnosti računovodskih rešitev, realnosti finančnih izkazov, zmožnosti ustvarjanja računovodskih informacij, ki bi zagotavljale optimalno

upravljanje elementov poslovnega procesa in objektivnosti računovodskih rešitev.

Ključne besede: klasični računovodski pristop, skladnost računovodskih rešitev, objektivnost računovodskih rešitev, realnost računovodskih izkazov, poslovne odločitve

Management 13 (3): 213–225

Izzivi in priložnosti finskih projektov obrambne opreme: spremembe v okviru desetletnega obdobja

Ilkka Ikonen, Lauri Kananoja in Juha-Matti Lehtonen

Cilj te študije je preučiti dejavnike uspeha projektov obrambne opreme v finskih obrambnih silah. Pregled ugotovljenih dejavnikov uspeha za projekte in merjenje uspešnosti temelji na pregledu literature. Prednost te študije je, da vključuje longitudinalno zasnovano sprememb faktorjev uspeha od leta 2006 do leta 2018. Glavno raziskovalno vprašanje je: »Kako so se izzivi in priložnosti finskih projektov obrambne opreme spremenili od leta 2006 do leta 2018?« Rezultati empiričnih podatkov nudijo edinstveno priložnost za raziskovanje sprememb v desetletnem obdobju izvajanja finskih projektov obrambne opreme. Izzive in priložnosti projektov obrambne opreme določajo teorija, swot analiza in ugotovitve raziskovalnega procesa. Mogoče je zaključiti, da so kritični dejavniki uspeha ostali nespremenjeni kljub okoljskim in organizacijskim spremembam v finskih obrambnih silah.

Ključne besede: kritični dejavniki uspeha, projektno vodenje, obrambna industrija, uspeh projekta *Management* 13 (3): 227–245

Vpliv staršev na podjetnice v treh obdobjih poklicnega razvoja

Mateja Vadnjal

Proučujemo podjetnice v treh različnih življenjskih obdobjih in vplivu, ki so ga preko človeškega in socialnega kapitala na njih imeli njihovi starši. Rezultati spletne ankete, poslane 10.000 podjetnicam v Sloveniji, s 3,4-odstotnim odzivom, so bili analizirani s pomočjo Chi-kvadrat statistike in analize variance. Podjetnice različnih starostnih skupin imajo starše z različno poklicno in izobrazbeno strukturo, ki jih različno ocenjujejo kot vzornike in kot svojo instrumentalno podporo. Čustvena in moralna podpora staršev je za vse ženske podjetnice precej pomembna. V prihodnjih raziskavah podpore in spodbujanja ženskega podjetništva je potrebno starše, še posebej matere, obravnavati kot možne dejavnike vzpodbude za svoje hčerke, ki pomagajo pri odločitvi o uresničevanju njihovih sanj, čeprav same tradicionalno morda niso bile dovolj pogumne, da bi uresničile svoje.

Ključne besede: podjetništvo, podjetnice, vpliv staršev, življenjska obdobja

Management 13 (3): 247–263

Organizacijske vrednote kot osnova poslovne odličnosti*Ivan Malbašič, Bruno Belužič in Nikolina Posarić*

Organizacijske vrednote imajo v sodobnih organizacijah vedno večjo vlogo – prepletajo vse segmente poslovanja in močno vplivajo na usmeritev poslovne strategije organizacije. Namen tega prispevka je utemeljiti, da so organizacijske vrednote, ki prežemajo vse poslovne segmente v sodobnih poslovnih pogojih, temelj odličnosti poslovnih organizacij. V zvezi s tem najprej predstavimo Kanjijev merilni sistem poslovne odličnosti (Kanji's Business Excellence Measurement System – KBEMS) kot izhodišče za razumevanje poslovne odličnosti. Po njem poslovno odličnost določamo z merjenjem zadovoljstva strank, zaposlenih in drugih deležnikov, z namenom pridobitve celovite ocene organizacijske uspešnosti. V njem prevladujeta dva glavna vidika – vodstvene in organizacijske vrednote. V osrednjem delu prispevka predstavljamo študijo primera blagovne znamke Yum! Brands, enega največjih svetovnih podjetij za hitro prehrano. Poseben poudarek je na podrobni predstavitvi in razlagi osnovnih organizacijskih vrednot Yum! Brands, ki temelji na dveh virih informacij – vrednotah, ki jih zagovarjajo in so navedene na uradni spletni strani družbe, ter na različnih zunanjih virih informacij, na temelju katerih zunanje interesne skupine ocenjujejo usmeritev vrednot podjetja. Nazadnje analizirane organizacijske vrednosti Yum! Brands z vidika KBEMS. Ta študija primera kaže, da so organizacijske vrednote pravi temelj poslovne odličnosti v podjetju Yum! Brands. V tem kontekstu smo upoštevali razmerje med organizacijskimi vrednotami in ključnimi sestavnimi elementi KBEMS. Ta študija lahko torej služi kot primer uporabe organizacijskih vrednot za doseganje povečanja organizacijske uspešnosti, s končnim ciljem ustvarjanja organizacijske odličnosti.

Ključne besede: organizacijske vrednote, poslovna odličnost, Kanjijev merilni sistem poslovne odličnosti (KBEMS), uspešnost organizacije, Yum! Brands

Management 13 (3): 265–279